GUIDE TO PORT ENTRY

NATIONS
L – Z

Produced by
Colin L. Pielow

SHIPPING GUIDES LTD.

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1977-78

VOLUME 2

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COLIN L. PIELOW

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WARNING

Every effort has been made to ensure that the information contained in this *Guide* is correct. However, it will be clearly understood that this book is intended as a guide only, that the information cannot be *Guaranteed* correct and that final responsibility must (as always) rest with the Shipmaster.

At certain ports, items of navigational routeings and aids have been included as a means of general guidance only. Shipmasters should have in mind that full and due reference MUST ALWAYS be made to corrected charts of the area, to the appropriate Notices to Mariners, and all or any other navigational notices, warnings or amendments issued by proper Authorities and/or navigational aid services.

The sketch maps are included for general interest and must not be used for navigational purposes.

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LATE REPORTS

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BRAZIL	Porto Alegre		Lavan Island
	Sao Luiz		Sirri Island
BULGARIA	Bourgas	IRAQ	General
	Varna	JAPAN	Shimizu
CHINA	Tsingtao	KUWAIT	Shuaiba
COLOMBIA	Tumaco	LEBANON	Sidon
CONGO	Pointe Noire	MEXICO	Puerto Madero
EGYPT	Ain Sukhna	NETHERLANDS ANTILLES	Brazil (Bonaire Terminal)
ELLICE ISLAND	Funafuti		
GHANA	General	NIGERIA	General
	Takoradi	SAUDI ARABIA	Jeddah
GREECE	Kali Limenes	SWEDEN	Klintehamn
INDONESIA	Bekapai Terminal	U.A.E.	Port Rashid
	Senipah Terminal	UNITED KINGDOM	Gloucester
			Hound Point
			Sharpness

LATE PLANS

ARGENTINA	Bahia Blanca (Galvan)	FRANCE	Sete
	Bahia Blanca (Ing White)	INDONESIA	Tandjong Lepee (2 plans)
CONGO	Djeno	IRAN	Lavan Island
DENMARK	Svendborg	MEXICO	Puerto Madero
FINLAND	Kotka	SYRIA	Tartous

Lebanon

BEIRUT (Beyrouth): 33.54 N. 35.30 E.

DOCUMENTS:

Manifests should be visaed by Lebanese Consul at ports of shipment, or at any port *en route* where there is a Lebanese Consul. If on account of non-existence of Lebanese Consul at ports of shipment or at any of these *en route* the manifests are not visaed, then such consular visa dues are collected at Beirut.

5 Copies of Cargo Manifests.
2 Store Lists.
5 Passenger Lists.
2 Lists of Cigarettes and Tobacco. (See "Customs Allowances").

PILOTAGE: Agent arranges Pilot via Harbour Master. Agent therefore to be kept well informed of ETA, 48 hrs. and 24 hrs. prior arrival. Pilot boat white with red funnel. Sound signals, 2 long and 1 short or conctact can be made via VHF to Harbour Master. Pilot boards outside main breakwater. Assistance of Pilot outside daily normal hours, Sundays and official holidays, will be cost calculated at 100% more. Offical normal working hrs. for pilotage station as follows: from 1st October up to 30th April, 0700 till 1700 hrs.; from 1st May up to 30th September, 0700 till 1800 hrs., For tankers outside harbour, the pilotage dues will be 100% extra.

ANCHORAGE: In roads outside breakwater.

RESTRICTIONS: No particular restrictions. Pilot normally available between sunrise and sunset otherwise by special agreement.

MAX. SIZE: Max. draft in port 13 m. No limitation to breadth or length.

HEALTH: Health Authorities board in roads. Health form obtainable from Agent or doctor. Smallpox and yellow fever certificates required for ships coming from Far East and Red Sea. Owners should check with Agents respecting any recent imposition of anti-epidemic regulations and requirements for additional injections for crew members.

RADIO: Cables via Beirut Radio to and from Agent.

VHF: VHF Channels 13 and 16, Frequency 156.6 and 156.7.

TUGS: Tugs of 1,000 h.p. join vessel inside port when necessary. Ship's lines to be used.

BERTHING: If port congested priority given to vessel already registered. Passenger-tourist vessel and cargo for army have priority. Harbour capable of berthing 24 ships simultaneously and 3 moored on buoys, discharging into barges. All discharging is by ship's gear.

Dock No. 1. Surrounded by quays Nos. 1,2,3. Depth of water varies between 3 and 8 m. Parts of quay No. 1 and quay No. 2 with 3 m. depth of water are reserved for floating units of port company and for launches of Harbour Master and pilotage service. Slipway of 1,000 tons capacity and workshops.

Dock No. 2. Surrounded by quays Nos. 4,5,6,7, with water depths varying between 8 and 10.5 m. On quay No. 5 berthing priority is given to passenger ships, while the other quays are for cargo vessels.

Dock No. 3. Surrounded by quays Nos. 8,9,10,11, with depths varying between 10.5 and 13 m. All these quays can berth ships bringing general cargo. At quay No. 8 of 13 m. depth, priority of berthing is given to grain ships.

Grain Silo At the present time bulk grain ships are unloaded by means of removable suction machines, which can be installed on the ships and deliver the grain to lorries for direct transport. There is a 60,000 metric tons capacity silo. Ships will be unloaded by means of 2 gantry type suction machines, mobile on rails with a capacity of 6×100 t.p.h. An eventual extension is already designed which would increase capacity of silo to 105,000 tons.

STEVEDORES: Ordered by Agent. No ETA to Stevedores necessary. Working hours, 0800-1200, 1300-1600. Otherwise overtime on Sundays and on official holidays.

MEDICAL: Master to advise Agent by cable prior to arrival if medical attendance required.

DENSITY: 1025

FRESH WATER: The port company has equipped all quays with hydrants. Ships moored on buoys can also be supplied with water from cistern barge. By shore installation or by barge. Delivery rate 20/25 t.p.h. Outside harbour double price per barge.

FUEL: Fuel, gas oil, diesel obtainable. 48 hrs. notice required.

FIRE PRECAUTIONS: Special berths for tankers.

DEVELOPMENTS: Discussions about a fourth basin.

GANGWAY/DECK WATCHMEN: Available and recommended.

OPENING/CLOSING HATCHES: For liners, by stevedores, otherwise per agreement.

CUSTOMS ALLOWANCES: (Tobacco) 40 cigarettes per crew member. Customs very strict, and will search crew cabins. Regulations are as follows:

1. That the quantity of tobacco to be allowed on board vessels upon their arrival at a Lebanese port, will be fixed on the basis of two packets per crew member, passenger per day and to be calculated on a max. period of 4 months, if the vessel emanates from an American, Asian or African port -not central Africa; and for 2 months if the vessel last port of call is in Europe, Central Africa or Mediterranean, which will be deducted from the quantity, and, on the same basis the consumption by the crew members and passengers during their trip, and this to start from the last port of call, until arrival at a Lebanese port. That the number of passengers to be taken into account on a tourist vessel, will be the number of berths the vessel can accommodate and not the number of passengers actually on board. As to cargo vessels, the actual number to be accounted for will only be the crew members and the Master of the vessel.

2. In the event that it is the first call of the vessel at a Lebanese port and not aware of such regulations, and it was found onboard her an excess quantity to the actual one allowed, as indicated above, a Proces Verbal will be established for the excess quantity found and the cigarettes placed under seal. An undertaking is also to be obtained from either the Owners and/or her Agents to the effect that they will submit a certificate, within 1 month, to be issued by the relevant Customs Authorities of the next port of call of the vessel after a Lebanese port. While the seizure on the vessel will be lifted when a Bank Guarantee equalling the amount of fine and dues is placed, or a personal guarantee from the Agent – if solvable – and in the event that the undertaking is not fulfilled the usual penalties will be inflicted according to the Law.

3. In the event the vessel is aware of such restriction, and for one reason or another, she is carrying an excess quantity, this excess must be, as per offical regulations, shown on the manifest legalised and issued at the last port of call touched by the vessel prior to Beirut. Any excess found over and above such declaration will be considered as smuggling and the law will be applied.

Wine and/or Spirits: 1 bottle per crew member. Captain allowed 3/4 bottles.

CARGO GEAR: Ship's gear to be used but mobile cranes can be hired. Shore cranes except for mobile cranes only available at quay No. 9 and 11. Floating crane of 120 tons available.

IDENTIFICATION CARDS: Shore pass given to each crew member. Passport and seaman's book to remain in Captain's care.

CONSULS: Most countries have consulates.

REPAIRS: Most types of repairs carried out.

DRY DOCKS: None except for 500/1,000 tonner.

REPATRIATION: Very good facilities for repatriation.

AIRPORT: About 10km. distant, served by regular airlines.

TIME: GMT plus 2 hrs. Summertime, GMT plus 3 hrs.

HOLIDAYS:

Holidays	*Date*	*Days*
New Year's Day	January 1	1
Al-Adha (Kurban Bairam)	Varies	2
Ashoura	"	1
New Year (Islamic)	"	1
Arab League Day	March 22	1
Good Friday	Varies	1
Easter Monday	"	1
Good Friday (Orthodox)	"	1
Easter Monday (Orthodox)	"	1
Labour Day	May 1	1
Martyr's Day	May 6	1
Ascension Day	Varies	1
Mohamed's Birthday	"	1
Assumption Day	August 15	1
All Saints' Day	November 1	1
Independence Day	November 22	1
Ramadan	Varies	2
Christmas Day	December 25	1

Port closes completely: New Year's Day, Al-Adha, Easter Monday, Labour Day, Independence Day, 1st day of Ramadan and Christmas Day. On other holidays, day work in port carried out against overtime payment.

POLICE/AMBULANCE/FIRE: Telephone numbers: Police 16, Ambulance 18, Fire 17.

TELEPHONES: On request by shipping agency, berthed ships can be connected to telephonic network of city.

SERVICES: Tank-cleaning equipment. Facilities for discharge of tank-washings, compass adjusting, laundry, etc., available.

SHORE LEAVE Crew allowed onshore.

DELAYS: 1. Unavailability of berth or barges due congestion mainly during Winter months (December to April). 2. Vessel already registered will lose turn if not returned to port in time. 3. Barge ordered for bunkering might be occupied if vessel's arrival delayed.

AGENT: Gulf Agency Co. (Lebanon) Ltd., PO Box 4392, Beirut, Lebanon. Cable address: "Gacship". Telex 20906 (Answerback "GAC 20906 LE" or Athens 216344. Telephones, 296733, 256516 AO 453957. Office in El Arz Street, Modern Building.

CHEKAA: 34.20 N. 35.43 E.

Port is used for cement loading and discharge of sulphates.

ANCHORAGE: Safe anchorage in Chekaa Bay.

MAX. SIZE: Draft up to 26 ft. 6 ins. (in calm weather) alongside quay. In event of swell, vessel required to leave quay and anchor in bay.

LOAD/DISCHARGE: 800/1,000 metric tons per 24 hours.

AGENT: See "Beirut".

RAS SELAATA: 34.16 N. 35.39 E.

Port is used for discharge of sulphates and sulphuric acid.

MAX. SIZE: Up to 21 ft. draft (in calm weather) alongside pier which has 2 cranes.

AGENT: See "Beirut".

SIDON: 33.30.04 N. 35.20.31 E. (See Plan)

OPERATORS: Trans-Arabian Pipe-line Company, Sidon Terminal. The Company transports crude oil from Saudi Arabia via pipe-lines and exports from terminal South of Sidon (Saida). Terminal operates 24 hrs. a day, 7 days a week.

FLAG: All vessels required to fly Lebanese Ensign on foremast during daylight hours. Lebanese flags may be obtained from ship's Agent.

LOCATION: Sidon Terminal is open, unsheltered roadstead, situated immediately North of Zahrani River, about 5 miles South of city of Sidon (Saida), Lebanon. It is approximately 35 miles South of Beirut, and 17 miles North of Tyre.

DESCRIPTION: Terminal's Tank Farm consists of 23 storage tanks situated East of terminal at 360 ft. (average) above sea level. Marine and administrative offices, a laboratory for testing stocks, 3 large and 3 small storage tanks all located within area just above sea level. An "L"-shaped pier for harbouring Company's marine craft extends approximately 1,000 ft. from shore near Southern end of berthing area.

NAVIGATIONAL AIDS: Terminal sea buoy approximately 1 mile Westward of mooring berths in 98 ft. of water. Position 33° 32′ 02″ N.; 35° 19′ 16″ E. Buoy painted white and exhibits flashing white light every 4 seconds (flash 0.3 seconds, eclipse 3.7 seconds). Lantern 11 ft. above water and visible 8 miles. Mooring Master will board vessels within 2 miles to Westward of this buoy. Vessels should not enter inside restricted area described by a line joining South-west buoy and North-west buoy with terminal sea buoy unless so directed by Mooring Master.

Radio beacon tower located 1,200 ft. back from beach, South-east of moorings. Occulting red light (about 30 flashes per minute) mounted on top, elevation 184 ft. above sea level; position 33° 30′ 04″ N.; 35° 20′ 31″ E. Tower also marked with 2 sets fixed red lights located respectively 45 and 90 ft. below occulting red light. Radio beacon is automatic and operates on 24 hr. basis on frequency of 296.5 kc/s, with "SAD" as the identifying call sign. It will signal 2 times over a 10-second period and then give a constant 1,000 cycle tone for 72 seconds. Tower is of cage-type construction, painted red and white. About 2.5 miles South-west of terminal sea buoy and approximately 2 miles offshore is rocky shoal with approximately 32 ft. of water over it. Outside this shoal is a lighted buoy, painted red, in 51 ft. of water, showing flashing red light every 4 seconds (flash 0.3 seconds, eclipse 3.7 seconds). This buoy moored in 33° 30′ 21″ N.; 35° 18′ 04″ E. Lantern 11 ft. above water and visible 5 miles. Vessels approaching from Southward should keep offshore until radio beacon tower bears 100° true before hauling-in.

"Sailing Directions for the Mediterranean" (U.S. Navy Hydrographic Office Publication No. 154A Vol. IV) reads in part:

> "*Caution:* As the coast between Saida and Tyre, 20 miles South-South-westward, is bordered in places by rocks and shoal water extending as far as 1 mile offshore, it should not be approached closer than 1.5 miles, nor within depths of less than 16 fathoms."

Unlighted, white painted spar buoys mark North-west and South-west corners of restricted area. North-west buoy in 78 ft. of water and located approximately 33° 33′ 35″ N.; 35° 21′ 13″ E. South-west buoy in 57 ft. of water and located approximately 33° 30′ 20″ N.; 35° 19′ 36.5″ E. During darkness terminal range lights and mooring buoy marker lights may be visible. These lights are located inside the restricted area.

A conspicuous water tank (painted in black and white vertical bands) on a tower located 33° 29′ 27″ N.; 35° 21′ 10″ E., the top of which has elevation of 460 ft. above sea level. Location is seaward of centre oil storage tanks.

There are a number of smaller radio towers to North-west and South-west of beacon tower. South of terminal, at Medreco Refinery, is a conspicuous black stack located 33° 29′ 31″ N.; 35° 20′ 08″ E. A little further North-west from this stack is a tall pipe painted aluminium with a flare on top at 33° 29′ 35″ N.; 35° 20′ 03″ E.

DOCUMENTS:

Health Declaration: International Health Form to be filled out by Master on arrival.

Cargo Manifest: No cargo arrival manifest required, as same usually prepared by local Agent.

Clearance: No clearance required.

Crew List: 4 copies required on arrival.

Passenger Manifest: If any passengers on board.

Store List: 2 copies.

Bonded Store List: 2 copies. Present regulations at Sidon Terminal allow each seaman to retain in his possession a maximum of 40 cigarettes or the equivalent weight of tobacco or cigars. The balance of all smoking items must be collected and carefully listed prior arrival. This list will be checked by Customs before sealing lockers. If any discrepancies, vessel subject to a fine.

PILOTAGE: Vessels to be moored at Sidon will be boarded by Mooring Master of Company within 2 miles to seaward of terminal sea buoy. Mooring Master will advise Ship's Master on approaches to berth, mooring, unmooring, connecting and disconnecting submarine hoses and in all other operations within berthing area. All manoeuvring of ships within berthing area shall be done only in accordance with advice of a Tap-line Mooring Master, subject to the understanding that in all cases and circumstances Master of the vessel being manoeuvred shall remain solely responsible, on behalf of vessel's owner, for safety and proper manoeuvring of vessel. Ship's Master or qualified deck officer must be on bridge at all times while ship is manoeuvring.

Vessels must have a pilot ladder safely and securely rigged, and all vessels over 45,000 d.w.t. should have an accommodation ladder rigged in combination with pilot ladder for safe boarding of Mooring Master and Government officials. Pilot ladder should be abaft and close to accommodation ladder so that Mooring Master, after climbing a few steps, can use accommodation ladder for remaining climb. Since hoses handled on port side at Sidon, it is advisable to rig ladders on starboard side. If at night, adequate lighting must be rigged over-side for Mooring Master to approach side of ship and climb ladder safely.

Note: Vessels having special rigs, such as hoisting equipment on short sections of pilot ladder, are not required to rig pilot/accommodation ladders per the above.

ANCHORAGE: For vessels awaiting berth, good anchorage just W.S.W. of terminal sea buoy in 16 to 20 fathoms, sandy bottom. Vessels should under no circumstances anchor North of terminal sea buoy as depths are excessive for safe anchoring.

MAX. SIZE: Berths Nos. 1 and 4 depths 47 ft., and berths Nos. 2 and 3 depths approx. 67 ft. Tankers up to 150,000 d.w.t. or approx. 55 ft. draft are considered max. size which should be handled during Winter months at Sidon, and then only if vessel meets all of below recommended requirements. Otherwise, vessels of over 100,000 d.w.t. should not be nominated for liftings at Sidon during period November-March.

Based on previous experience, sudden and severe storms of long duration are not expected from April through October. Vessels over 150,000 d.w.t. may, therefore be accommodated during this period. However, prior to acceptance of nomination of vessels over 150,000 d.w.t. Tapline requires advance information regarding max. draft, vessel's equipment and location of manifold in reference to distance from stern of vessel which should not exceed 450 ft. Acceptance or rejection will be made after evaluation of above data by Sidon Marine personnel.

Summary of Recommendations for Vessels over 40,000 d.w.t.:

1. Capable, efficient and reliable anchor windlass(es).
2. Fifteen shots on starboard chain – thirteen shots on port chain are satisfactory.
3. Mooring wire winches, 1 on aft well deck, 3 on poop deck, 200 fathoms wire on each, with adequate number of manila or synthetic ropes to double up as needed.
4. Capability of lifting 16 in. hose string – 6.5 tons static weight.
5. Suitably located hang-off bits.
6. Capability of keeping vessel in a reasonable safe ballast condition (November-March) by permanent ballast or loading while deballasting, or a combination of both.
7. Ship's manifold located not more than 400 ft. from stern.

HEALTH: Rules governing quarantine of vessels are same as found in other ports.

RADIO: *(a) Facilities.* Tapline has own ship-to-shore radio telegraph, and VHF radio telephone station at terminal. This station is not open to commercial traffic. Services limited to traffic between Tapline and tankers within 3 days' sailing time from terminal. Messages to or from tanker agents classed as "Commercial" and must be routed via Radio Orient, a commercial radio station. Its call sign is ODR.

Sidon Radio, call sign ODA 3, transmits (CW) on 8502.5 kHz at 0700, 1100 GMT, the traffic list; 12840 kHz at 0730, 1130 GMT, the traffic list; 424 kHz for traffic upon request. Listens on 8534-8374 kHz for replies and calls and on 8374 for traffic. Will listen on 8476 kHz for traffic upon request; 12531-12561 kHz for replies and calls; 425, 454, 468 and 480 kHz upon request. Keeps watch only between 0500-1300 GMT on 500 kHz.

Radio Orient Beirut, call sign ODR, transmits (CW) on 8702 kHz and 13101 kHz simultaneously half-past each hour beginning at 0630 until 2130 hrs. GMT, the traffic list; 524 kHz each hour beginning at 0600 hrs. until 2100 hrs. GMT, the traffic list. Listens on 8534–8374 kHz and 12531–12561 kHz for replies and calls each hour from half-past the hour until the hour; 500 kHz 0600 to 2200 hrs. GMT and 425, 454, 468 and 480 kHz from the hour until half-past the hour for replies and calls. Keeps watch only between 0600–2200 hrs. GMT on 500 kHz.

(b) Advice of Arrival. It is important that ships establish radio contact with Tapline Station ODA3 when 3 days distant from Sidon and maintain this contact at regular intervals until just prior to arrival at the terminal. All ships should send a 72-hour ETA message to Tapline, giving the best estimate of ship's arrival time, a statement of bunker requirements and other relevant information. Shorter notice may result in berthing delay. Further ETA messages should be sent when vessel is 24 hours and 12 hours distant and to cover any other time changes occurring in the original ETA or those subsequent thereto. The 12-hour ETA should include a statement regarding "ship's readiness to load" on arrival, and time required to discharge clean ballast after ship is moored. A further contact when 4 hours away is desirable for exchange of weather data and mooring schedule. Vessels failing to give minimum of 12 hours arrival notice may be subject to delays in acceptance.

(c) Ship-to-Shore Communications. Ship-to-shore communications, while ships are in moorings, will be by portable VHF radio units used by the Mooring Master only. The use of the ship's radio station (except Channels 16-14) and/or battery charging equipment is prohibited for safety reasons during cargo transfer operations.

In the event of normal ship-to-shore communications failure, the (ship's) emergency whistle signal should be used.

(d) Radio Message. Upon first contact with inbound tanker, ODA3 will transmit a detailed message of advice.

It is important that a reply to this message be sent soonest after receipt. Also requested that all vessels forward their local weather observations to this station while approximately 100 miles and again 50 miles Westward of Sidon when approaching and also upon departure during period November 1 to March 31. This data is used to assist in preparation of terminal weather forecasts and radio contact may be useful in event Tapline needs to furnish any information to vessel after its departure.

VHF: Tapline VHF radio telephone system operates on international Channels 14 and 16, 156.7 mc/s and 156.8 mc/s respectively. Channel 16 used to establish contact while all traffic handled on Channel 14. Tapline guards these channels on a 24 hour basis, and contact can generally be made at distances up to 100 miles from terminal. Conversations on these channels will be carried out in English language only.

Mooring Master only will be in direct charge of portable VHF ship-to-shore radio communications.

BERTHING: 5 buoys in berth No. 1 and 7 buoys in each of berths No. 2, 3 and 4. During winter months vessels over 40,000 d.w.t. usually moored in berths No. 2 or No. 3. These berths approx. 1 mile to 1.5 miles from shore. Berths numbered 1 to 4 from South to North. Vessels moored on 1 heading (West) basis using both bow anchors with max. possible spread of anchors to increase ship's anchor beam holding components. Ship's stern moored to cylindrical buoys fitted with release hooks, using 7 ropes (or wires) to respective mooring buoys. Permanent moorings consist of 7 steel cylindrical buoys in each berth. (5 buoys in No. 1 berth.)

Certain mooring buoys in all berths fitted with 1.5 in. diameter preventer wires, one end of which is secured to mooring buoys. When required, other end is brought on board vessel by a messenger line after ship moored in position. Preventer wires supplemental to ship's regular moorings during adverse conditions. Ships should have chain stoppers for handling these wires.

BALLAST: Masters are warned that no dirty ballast or bilge water may be discharged within an area extending 100 nautical miles seaward of the Lebanese coastline. All pipe-lines, sea suctions, strainers and pumps that are to be used for the discharge of clean ballast must be flushed clean prior to entering the 100 mile zone. Except for oil retrieved under "load-on-top" procedures, Masters must assure themselves that all oil tanks, pipe-lines and pumps are free of all traces of oil.

The terminal has no facilities for receiving oily ballast. A vessel must have sufficient ballast for safe manoeuvring. However, by carefully watching the weather, especially in the Summer months, by frequent interchange of weather information and berthing instructions, and, by a knowledge of the behaviour of his own vessel, a Master may desire to arrive at the terminal with min. ballast thereby lessening any possibility of infringement of the pollution restrictions of this section, and also reducing time in berth.

As soon as practicable after arrival and prior to acceptance, all the vessel's tanks will be inspected for evidence of oil in ballast tanks. Inspection will continue during discharge of ballast. If evidence of oil appears at either of these inspections, the ship must return at once to a point not less than 100 miles from the coastline and there accomplish the necessary tank cleaning. Any vessel required to return to a position at least 100 miles offshore for the purpose of discharging dirty ballast, cleaning tanks or for any similar reason, automatically nullifies any Notice of Readiness already tendered, and at the same time loses any priority held for loading. On return from sea, vessel will be entered for loading at the time of the second arrival, when a new Notice of Readiness will be tendered.

Vessels discharging dirty ballast within the prohibited 100 mile zone may be subjected to action by the Lebanese Government. In addition, ship's owners and charterers will be promptly notified of any violation.

Masters are also warned that ship's garbage or trash should not be dumped within 50 miles from the Lebanese coast.

LOADING: *(a) Readiness:* Tenders to load will normally be accepted and berths assigned to vessels in order of arrival, provided vessels have nominations for cargo valid at the time, carry clean ballast and are in all respects equipped and ready to moor. In event berthing delayed on account weather, vessels will ordinarily keep their loading priority in order of arrival. Vessels required to leave port area on account of weather (port closed), should keep in contact with terminal via radio in order that they will be available when weather moderates. Company will make every effort to load vessels on arrival, or as promptly as berth is available, weather permitting. Notice of readiness will not be accepted unless vessel ready to load. Arrival time will be considered as time Mooring Master boards vessel underway or time vessel anchors, whichever occurs first.

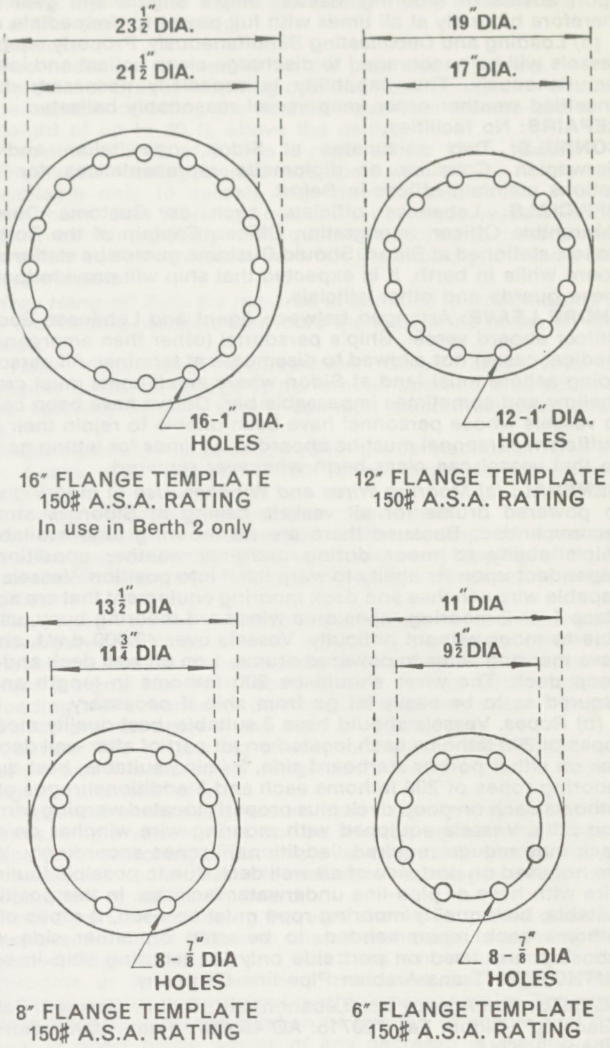
(b) Connecting-up. Ships loaded by means of submarine pipe-lines. Weight of the 16 in. hose in No. 2 berth about 6.5 tons; weight of 12 in. hose in No. 3 berth about 5 tons; and weight of 12 in. hoses in No. 1 and No. 4 berths about 4 tons. Hoses lifted by ship's gear on port side. Detail of flange templates shown in drawings below. Ships should provide manifold fittings to allow connection of flanges shown.

Mooring Master advises ship's personnel in lifting, connecting, disconnecting and lowering of hoses. A ship's deck officer must be present, and must direct ship's crew in all hose handling. There must be sufficient crew on deck to perform this work.

(c) Rates: Loading is by gravity flow from tank farm which is approximately 360 ft. above sea level. Loading rates as follows (approximate maximum):

	Rates (BPH)	
Berth	*With 1 Hose*	*With 2 Hoses*
1	17,000	29,000 (12 in. hoses)
2	40,000	70,000 (16 in. hoses)
3	27,000	43,000 (12 in. hoses)
4	25,000	37,000 (12 in. hoses)

DETAIL OF 16", 12", 8" & 6" HOSE CONNECTIONS FROM SUBMARINE HOSE TO SHIP



16" FLANGE TEMPLATE
150# A.S.A. RATING
In use in Berth 2 only

12" FLANGE TEMPLATE
150# A.S.A. RATING

8" FLANGE TEMPLATE
150# A.S.A. RATING

6" FLANGE TEMPLATE
150# A.S.A. RATING

Order save ship's time and to ballast vessel as quickly as possible, as well as to make berth available for others, it is requested that ships receive oil as fast as it can be delivered, with due regard for safety. The removal of any restrictions, such as strainers, etc., is recommended.

MEDICAL: Neither medical nor hospital facilities provided by Tapline. Private doctors and hospital facilities available at Sidon and Beirut. Agents acquainted with situation and can make necessary arrangements.

If unable make radio contact, then vessels requiring emergency medical assistance should hoist International Code Flag "W" in daylight, and at night, send "W" (·– –) on blinker light to attract immediate attention, the same signal "W" (·– –) should be given on ship's whistle in either day or night hours. Signal should be repeated until acknowledged visually by either another ship in berth; from shore station or from Company launch. As soon as signal is received, terminal officials will advise ship's Agent as soon as possible of the emergency medical aid required.

DENSITY: Salinity of the sea is same as open Atlantic Ocean. Temperature ranges from 60°F. to 85°F. (15.6°C to 29.4°C.) depending on season.

FRESH WATER: Not available.

FUEL: Bunker fuel loaded at rate of 3,000–5,000 b.p.h. through 8 in. deck hose. Bunker connection should be located near ship's cargo manifold. Ships calling at Sidon to load crude oil should arrange for bunker fuel nominations through one of the offtaker companies well in advance of arrival. Bunker fuel will not be delivered until Tapline has received a firm nomination. Bunker fuel will be loaded as promptly as circumstances permit, but Tapline assumes no liability for any delays incurred by a vessel in berthing or loading bunker fuel. Maritime lubricants available, through marketing representatives in Beirut by arrangement through Agents.

PRECAUTIONS: *(a) Valve Control.* Ship's valves must not be closed against the oil stream.

(b) Emergency Signal. When, and if normal ship-to-shore communications fail, the emergency signal to stop oil flow will be a continuous blast on ship's whistle, until oil ceases to flow. Steam or air should never be shut off from the whistle during loading. Whenever emergency whistle is used, all loading operations in all berths will be shut down until communications can be established with vessel giving the signal. For this reason, it is requested that ships in the area refrain from using their whistles for other purposes.

(c) Readiness to Leave Berth. Port is considered an "open roadstead", and under no circumstances may engine be shut down

for repairs while ships moored in submarine berths. Vessels in submarine berths must be able to clear, and shall clear immediately upon advice of Mooring Master. Ship's engine and gear must therefore be ready at all times with full power for immediate use.

(d) Loading and Deballasting Simultaneously. Properly equipped vessels will be encouraged to discharge clean ballast and load oil simultaneously. This capability is especially necessary during unsettled weather order keep vessel reasonably ballasted.

REPAIRS: No facilities.

CONSULS: Two consulates at Sidon, one Italian and one Norwegian. Consular or diplomatic representatives for most nations maintain offices in Beirut.

OFFICIALS: Lebanese officials, such as Customs Director, Quarantine Officer, Immigration Officer, Captain of the Port and Police, stationed at Sidon. Should Customs guards be stationed on board while in berth, it is expected that ship will provide food for these guards and other officials.

SHORE LEAVE: Arranged between Agent and Lebanese Security Officer aboard vessel. Ship's personnel (other than emergency or medical cases) not allowed to disembark at terminal. All personnel going ashore must land at Sidon where small boats must cross a shallow and sometimes impassable bar. Delays have been caused to vessels whose personnel have been unable to rejoin their ship. Sufficient personnel must be aboard at all times for letting go lines so that vessel can clear berth whenever required.

GENERAL: *(a) Mooring Wires and Winches.* Use of mooring wires to powered drums for all vessels calling at Sidon is strongly recommended. Because there are no mooring tugs available, a ship's ability to moor during marginal weather conditions is dependent upon its ability to warp itself into position. Vessels with capable wire winches and deck mooring equipment that are able to place 1 or 2 mooring ropes on a windward mooring buoy, usually able to moor without difficulty. Vessels over 40,000 d.w.t. should have mooring wires to powered drums, 1 on aft well deck and 3 on poop deck. The wires should be 200 fathoms in length and so secured as to be easily let go from ship if necessary.

(b) Ropes. Vessels should have 2 suitable, best quality mooring ropes of 200 fathoms each located on aft part of after well deck for use on either port or starboard side, 3 (min.) suitable, best quality mooring ropes of 200 fathoms each and 3 additional ropes of 150 fathoms each on poop deck plus properly located warping winches and bitts. Vessels equipped with mooring wire winches on poop deck may reduce required "additional" ropes accordingly. Wires are not used on port side of aft well deck due to possible fouling of wire with hose or pipe-line underwater facilities. In this position a suitable, best quality mooring rope must be used. 2 ropes of 200 fathoms each recommended, to be used on either side while mooring, and used on port side only for securing ship in berth.

AUTHORITY: Trans-Arabian Pipe-line Company.

AGENTS: Gulf Agency Co. (Lebanon) Ltd., Sidon, Lebanon. Cables: "Gacship", Sidon. Tel. 720715. AO 453957. Telex: 20906 Beirut or Athens 216344.

For communication and operational reasons address all your correspondence and cables to head-office in Lebanon: Gulf Agency Co. (Lebanon) Ltd., POB 4392, Beirut, Lebanon. Telephones: 256516, 296733. Cables: "Gacship", Beirut. Telex: 20906 (answer back: GAC 20906 LE.) or Athens 216344.

TRIPOLI: 34.28 N. 35.49 E. (See Plan)

(a) DRY-CARGO PORT.

Manifests should be visaed by Lebanese Consul at ports of shipment, or at any port *en route* where there is a Lebanese Consul. If on account of non-existence of Lebanese Consul at ports of shipment or at any ports *en route* the manifests are not visaed, then such consular visa dues are collected at Beirut.

DOCUMENTS:

1 Legalised copy of Cargo Manifests.
5 copies of Cargo Manifests.
2 Store Lists.
5 Passenger Lists.
2 Lists of Cigarettes and Tobacco (see "Customs allowances").

PILOTAGE: Agent arranges with Harbour Master, therefore keep Agent closely advised ETA. Harbour Master may also be contacted on VHF Channel 13 (frequency 156.6) and 16 (frequency 156.7).

ANCHORAGE: Good anchorage.

MAX. SIZE: Depth at entrance 22.5 ft. Max. draft alongside berth 22 ft. 6 in.

HEALTH: Health authorities board in roads. Health form obtainable from Agent or doctor. Smallpox and yellow fever certificates required for ships coming from Far East and Red Sea. Owners should check with Agents respecting any recent imposition of anti-epidemic regulations and requirements for additional injections for Crew members.

RADIO: Cables via Beirut Radio to and from Agent.

BERTHING: New pier about 600 m. length. Two berths. 4 shore cranes suitable for vessels up to about 7,000 tons only. Two heavy-lift cranes, capacities 25 and 50 tons. Lighters available for discharging alongside vessel. Ship's gear often used for discharging.

STEVEDORES: Ordered by Agent. No ETA to stevedores necessary. Working hours, 0800–1200, 1300–1600, otherwise overtime included on Sundays and on official holidays.

MEDICAL: Master to advise Agent by cable prior to arrival if medical attendance required.

DENSITY: 1025.

GANGWAY/DECK WATCHMEN: Available and recommended.

OPENING/CLOSING HATCHES: For liners by stevedores, otherwise per agreement.

CUSTOMS ALLOWANCES: Tobacco. 40 cigarettes per crew member. Customs very strict, checking crew cabins. Regulations are as follows:

1. That the quantity of tobacco to be allowed on board vessels upon their arrival at a Lebanese port will be fixed on the basis of 2 packets per crew member, passenger per day, and to be calculated on a maximum period of 4 months, if the vessel emanates from an American, Asian or African port – not Central Africa; and for 2 months if the vessel's last port of call is in Europe, Central Africa or Mediterranean, which will be deducted from the quantity, and on the same basis the consumption by the crew members and passengers during their trip, and this to start from the last port of call until arrival at a Lebanese port.

That the number of passengers to be taken into account on a tourist vessel will be the number of berths the vessel can accommodate and not the number of passengers on board. As to cargo vessels, the actual number to be accounted for will only be the crew members and the Master of the vessel.

2. In the event that it is the first call of the vessel, at a Lebanese port and not aware of such regulations, and it was found on board her an excess quantity to the actual one allowed, as indicated above, a Proces Verbal will be established for the excess quantity found and the cigarettes placed under seal. An undertaking is also to be obtained from either the Owners and/or her Agents to the effect that they will submit a certificate, within one month, to be issued by the relevant Customs Authorities of the next port of call of the vessel after a Lebanese port. While the seizure of the vessel will be lifted when the Bank guarantee equalling the amount of fine and dues is placed, or a Personal Guarantee from the Agent – if solvable – and in the event that the undertaking is not fulfilled, the usual penalties will be inflicted according to the law.

3. In the event the vessel is aware of such restriction, and for one reason or another she is carrying an excess quantity, this excess must be, as per official regulations, be shown on the manifest legalised and issued at the last port of call touched by the vessel prior to Beirut.

Any excess found over and above such declaration will be considered as smuggling and the law will be applied.

Wine and/or spirits: 1 bottle per crew member; Captain allowed 3/4 bottles.

CARGO GEAR: Ship's gear to be used. A floating crane maximum lift 50 tons is available.

IDENTIFICATION CARDS: Shore pass given to each crew member. Passport and seaman's book to remain in Captain's care.

CONSULS: Most countries have consulates in Beirut.

AIRPORT: Beirut.

TIME: GMT plus 2 hours. Summertime, GMT plus 3 hours.

HOLIDAYS:

Holidays	*Date*	*Days*
New Year's Day	January 1st	1
Al-Adha (Karban Bairam)	Varies	2
Ashoura	Varies	1
New Year (Islamic)	Varies	1
Arab League Day	March 22nd	1
Good Friday	Varies	1
Easter Monday	Varies	1
Good Friday (Oriental)	Varies	1
Easter Monday (Oriental)	Varies	1
Labour Day	May 1st	1
Martyr's Day	May 6th	1
Ascension Day	Varies	1
Mohamed's Birthday	Varies	1
Assumption Day	August 15th	1
All Saint's Day	November 1st	1
Independence Day	November 22nd	1
Ramadan	Varies	2
Christmas Day	December 25th	1

AGENT: Gulf Agency Co. (Lebanon) Ltd., Customs Street, Tripoli, Lebanon. Cables: "Gacship", Tripoli/Lebanon. Telephone: 625771 after hours 625930, 453957. Telex: 20906 Beirut or Athens 216344. Head Office: Beirut (which see).

(b) OIL TERMINAL.

OPERATORS: Iraq Petroleum Company.

DOCUMENTS: See "Section A – Dry-cargo Port".

PORT LIMITS: Iraq Petroleum Company Limited have placed three spar-buoys to indicate the limits of the Company's Sea Terminal boundaries.

The location of these buoys is as follows:

1st, Lat. 34° 30′ 03″ N. Long. 35° 52′ 30″ E.
2nd, Lat. 34° 29′ 42″ N. Long. 35° 52′ 26″ E.
3rd, Lat. 34° 29′ 03″ N. Long. 35° 51′ 04″ E.

PILOTAGE: The company's Mooring Masters will meet tankers two miles N.E. of Tripoli Breakwater Head. Tankers of 40,000 d.w.t. and over should have rigged, when in light condition, an accommodation ladder lowered to about 12 ft. above water. This can be adjusted to suit conditions. A pilot ladder should be rigged immediately abaft the accommodation ladder, to within 2 ft. above the water. This will enable Pilot to ascend pilot ladder clear of launch and then step on to the lower platform of the accommodation ladder. United Kingdom Merchant Shipping (Pilot Ladders) Rules are relevant.

ANCHORAGE: Good anchorage immediately W.N.W. of No. 4 sea berth buoys.

MAX. SIZE: Least depth of water available in berth, and swinging circle, after deducting 6 ft. for the height above sea bed of the sea line and cradle is as follows: No. 1 Berth, 62 ft.; No. 2 Berth, 66 ft.; No. 3 Berth, 53 ft.; No. 4 Berth, 38 ft. The swinging circle is defined as 1.5 ship's lengths from dropping position of ship's inshore anchor. The approximate draft limits quoted are based on an under-keel clearance, in the berths, of 6 ft.

VLCC's will be handled in Berth No. 2 and loaded to a draft of 60 ft. During the period April to October, and subject to the Master and Mooring Master being satisfied that weather conditions permit loading to a reduced under-keel clearance of 4 ft., then the loaded draft may be increased to 62 ft.

HEALTH: See "Section A – Dry-cargo Port".

RADIO: The Iraq Petroleum Company Limited, must be informed 48 hours prior to arrival of a vessel's ETA, quantity of cargo required, maximum loading rate, SWL of derrick for lifting hoses and confirming that the ballast for discharge in port waters is clean. Communication with Iraq Petroleum Company, Limited, should be by cable addressed to "Petriraq, Tripoli, Lebanon", or direct to Tripoli Terminal Radio Station.

Tripoli Terminal Radio Station. Call Sign – ODC 8.

Waveband	*Hours (GMT)*	*Watch Details*
	0800–0830	ODC 8 Broadcast Traffic List and calls ships on 8514 kc/s. Listens on 8354–8374.
	1200–1230	Will transmit on 12831 kc/s. on request.
High Frequency	1600–1630	
	2230–2300	
	0000–2400	Monitor 500 kc/s. for calls and answers only.
	0730	Broadcast on 500 kc/s. QSW 442 kc/s.
	0730–0800	Transmit Traffic List on 442 kc/s., receives ship frequencies – 425, 454, 468, 480 and 512 kc/s.
	1130	Broadcast call on 500 kc/s., QSW 442 kc/s.
	1132–1200	Transmit Traffic List on 442 kc/s., receives on normal ship frequencies – 425, 454, 468, 480 and 512 kc/s.
Medium Frequency	1530	Broadcast call on 500 kc/s., QSW 442 kc/s.
	1532–1600	Transmit Traffic List on 442 kc/s., receive on normal ship frequencies – 425, 454, 468, 480 and 512 kc/s.
	2200	Broadcast call on 500 kc/s., QSW 442 kc/s.
	2202–2230	Transmit Traffic List on 442 kc/s., receive on normal ship frequencies – 425, 454, 468, 480 and 512 kc/s.
	2232	Broadcast call QSY QSX 500 kc/s.

Cables to Agents may be routed through Beirut radio.

VHF: Tripoli:

Equipment: Fixed Station sited in Terminal Building and used by Control Room.
Call sign: Tripoli Control
Range: Approximately 15 miles.
Frequency: Transmitting on 163.6 mc/s.
Receiving on 159.1 mc/s.
Watches: Continuous.

Mobile Station

Equipment: Portable, battery operated, carried aboard vessel with Mooring Master.
Call sign: Ship's name (before mooring), or Berth No. (after mooring).
Range: Approximately 8 miles.
Frequency: Transmitting on 159.1 mc/s.
Receiving on 163.6 mc/s.
Watches: Continuous, whilst Mooring Master on board.

Notes

1. Tripoli also keeps a continuous watch on the international calling frequency of 158.8 mc/s. This has a range of approximately 15 miles and its call sign is "Tripoli Control".
2. The VHF System is not connected to the main telephone switchboard and only selected shore stations have access to it.

TUGS: There is no tug at Tripoli.

BERTHING: *Sea Line Berths.* Four berths numbered from N.E. to S.W. specifications as follows:

Berth No.	*Max. t.p.h.*	*Fixed Sea Line*	*Strings of Flexible Hoses*	*Approximate Limits Draft*	*Deadweight*
1	5,000	Two 24"	Two 16"	56'	140,000
2	7,000	One 32"	Two 16"	50'	250,000
3	6,000	One 32"	Two 16"	47'	87,000
4	1,500	Two 12"	Two 12"	32'	25,000

As loading is by gravitation, the maximum rates are dependent upon availability of suitable shore tanks and loading lines.

LOADING:

1. *Readiness to Load,* will be received by the Mooring Master, who is the Company Representative on board. The advice from the vessel which states she is ready to receive cargo is considered as final, and as indicating that every operation necessary aboard the vessel has been completed. As soon as possible after such a signal has been received, and without further advice, loading will commence. Damage to hoses can occur if ship's valves are not open at the start of loading.

2. *Derricks*

(a) Two hoses are connected on the port side amidship.
(b) Derricks or cranes reaching over the hose connection should be capable of lifting the flexible hose from the sea-bed to a height of up to 30 ft. above the deck.
(c) A minimum SWL of 5 tons is required for 12 in. hoses.
(d) The faster loading berths equipped with 16 in. hoses are available only to vessels with derricks and tackle with a minimum "Safe Working Load of 7 tons". Such vessels will be given berthing priority when queuing occurs and these berths are free but other vessels have not the capacity to handle the larger hoses.

3. *Hose Hang-off Bitts* are required at about 10 ft. from the ship's rail at the loading manifold to secure the submarine hoses on the port side.

4. *Hose Connection/Disconnection.* Ship's crew with a responsible officer in charge to perform all operations as advised by the Mooring Master, to lift, connect, disconnect and lower hoses.

5. *Ship's manifold* – to be prepared for the connection of 12 in. or 16 in. hoses with flanges of 150 series, dependent on berth allocation.

6. *Loading – Supervision and Commencement*

(a) All operations in connection with starting of loading, discharging, switching of tanks on board and topping-off must be directly and personally supervised by a responsible ship's officer.
(b) The advice from the vessel that she is ready to receive cargo is considered as final, and as indicating that every operation necessary aboard the vessel has been completed. As soon as such a signal has been received, and without further advice, loading will commence. Damage to hoses can occur if ship's valves are not open at the start of loading.
Caution: The oil loading stream to the ship is controlled on shore and it is extremely dangerous if a ship's valve is closed against the flow of oil.
To prevent excessive pressure from surge in ship and shore lines, ship's valves must not be shut-off against the stream, and when switching tanks, ship's valves must be closed slowly. Vessels will be held liable for damages resulting from any mal-operation of valves on board.

7. *Tank Dips.* During loading frequent checks should be made by the responsible ship's officer to ensure that cargo is entering the designated cargo tanks only and that there is no escape of oil into pump-rooms or through sea and overboard discharge valves. Particular care must be exercised by ship's personnel in "Topping-off" tanks and towards completion of loading to ensure that the terminal is given timely advice of any decrease in loading rate required. Adequate "standby" notice must be given before the final "stop".

8. *Loading Operations*

(a) The Mooring Master will not transmit any loading instructions to the shore until the responsible ship's officer is satisfied that the hoses are connected correctly and that all valves have been set for receiving cargo.
(b) Loading rates requested by the vessel or quoted by the terminal will be the peak or maximum rate at any time during the loading period.
(c) While in berth, ships should be ready to move under their own power in the event of their breaking adrift, catching fire, fire in adjacent berths or other emergency. No repair should be carried out while in berth which would immobilize the ship or impair her fire-fighting efficiency.
Failure to vacate the berth on completion of loading may result in delays to other vessels, demurrage, and loss of throughput which shall be accountable to the vessel.
(d) The Mooring Master will advise the Master of the ship as to any signals needed for local requirements.
(e) The Mooring Master brings a portable radio on board for ship to shore communication.

DENSITY: 1025.

FRESH WATER: May be available at anchorage before berthing, but it is expensive.

FUEL: Fuel oil is available at Berths 2 and 3. The 12 in. bunker hose is raised on the port side of the vessel. Bunkering rates are 300 to 400 t.p.h.

CUSTOMS ALLOWANCES: See "Section A – Dry-cargo Port".

GENERAL:

1. *Ballast*

(a) Vessels should arrive with sufficent clean ballast for safe handling of vessel under prevailing weather conditions.
(b) Ballast water must be clean and a declaration signed by the Master and delivered to the terminal to this effect. Vessel's scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard.
(c) *Pollution of the sea – warning.* It is an offence to discharge dirty ballast or pump out bilges. The authorities are very strict and your attention is drawn to the Lebanese Notice to Mariners No. 23/1 of 29th July 1965, and to the volume entitled "International Conference on Prevention of Pollution of the Sea by Oil", issued by IMCO London.
In the event of your vessel discharging dirty ballast or spilling oil, cost for cleaning the pollution, third party claims and port fines shall be borne by the vessel.

It is recommended that vessels carry an adequate amount of dispersants with means of application in case of oil spills.

2. *Gear to be provided by the ship*

(*a*) Anchor to be fitted with marker buoys and 20 fathoms line.

(*b*) Four good mooring lines of not less than 150 fathoms each and of suitable size for the vessel. Two additional 150 fathoms lines securely tailed to the first lines for cases where 150 fathoms may not reach to the stern buoys initially.

(*c*) For vessels of 50,000 d.w.t. and larger, powered mooring winches with 200 fathoms of wire rope.

(*d*) Four suitable rope stoppers to be available aft.

(*e*) Two good chain stoppers for use on 5.5 in. circumference wires (preferably carpenter's patent stoppers).

(*f*) Two good 4.5 in. circ. boat ropes 200 ft. long placed one on each side of the vessel.

(*g*) Two good ropes, 15 fathoms × 3.5 in. circ. and two heaving lines for lowering hoses.

3. *Lighting.* Manifold and poop mooring areas should be adquately lit to enable night mooring and loading operations to be carried out with safety. Sea area around the ship to be illuminated.

4. *Deck Watch.* A deck watch must be maintained at all times the vessel is in berth. In addition to its normal duties, the watch must inspect the hose connections and area around the ship against oil spillage, pollution, and prevent unauthorised persons from boarding your vessel.

5. *Boarding of vessel.* The control of persons boarding your vessel is the ship's responsibility. Boarding should be restricted to Company employees on duty and to persons authorised by the Port Authorities as advised by your Agents.

6. *Stores/Provisions* or other items should not be received or discharged whilst loading is in progress. Launches other than the Company's mooring launch, should not lie alongside the vessel.

7. *Tanker Safety.* Masters are at all times responsible for the application of all safety precautions as prescribed in the International Oil Tanker and Terminal Safety Guide.

8. *IOTTSG Safety Check List.* The Tanker Safety check list must be completed after inspection of each item prior to commencement of and during loading. The Mooring Master is authorised to stop all loading operations should he consider that the safety of lives and property is endangered by the infringement of safety rules.

9. *Action in case of Emergency.* In the event of a fire, oil spillage or other emergency on the vessel,

The Emergency Signal is:—

Three or more blasts of not less than ten seconds duration each on whistle or siren supplemented by a continuous ringing of the general alarm bells.

AGENT: Gulf Agency Co. (Lebanon) Ltd., Customs Street, Tripoli, Lebanon. Cables: "Gacship", Tripoli/Lebanon. Telephone: 625771 after hours 625930, 453957. Telex: 20906 Beirut or Athens 216344. Head Office: Beirut (which see).

NOTES

Please also advise Shipping Guides (Services) Ltd.

Leeward Islands

BASSETERRE, St. Kitts: 17.18 N. 62.43 W.

DOCUMENTS:
3 copies of Crew List.
3 copies of Passenger List.
1 copy High Duty Cargo List.
1 copy Crews' Personal Effects List.
1 copy Clearance from last port.
1 copy Ship's Stores List.
7 copies Manifest.
2 copies Bills of Lading.

PILOTAGE: No pilotage required.

ANCHORAGE: Harbour at Basseterre is an open roadstead and safe anchorage will be found at a distance of 0.25 to 0.5 mile from the shore opposite the piers in the centre of the town.

RESTRICTIONS: None.

MAX. SIZE: A vessel of any size may be admitted. Anchorage position will depend on the draught of the ship.

HEALTH: The Harbour Master boards all vessels on arrival at port and inspects the clearance from the last port. If there are no health problems the vessel is immediately granted pratique. If there is suspected disease or fever on board pre-notification is recommended. If this is done the Harbour Master will have a Medical Officer with him when he boards the ship on arrival.

RADIO: Contact is through Barbados Radio, call sign 8PO.

TUGS: Not needed.

BERTHING: Ships anchor off shore.

STEVEDORES: ETA should be advised 24 hours before arrival of vessel, also tonnage to be discharged and number of gangs required. Discharging rate: 15 tons per gang per hour on bags. 6 tons per gang per hour on general cargo.

MEDICAL: Advance notice if possible – hospital facilities available. Valid Vaccination Certificate for passengers disembarking but not for intransit or cruise ship passengers.

DENSITY: No tides. Density normal for a West Indian Island.

FRESH WATER: Not available.

FUEL: No bunkering facilities.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Done by stevedores.

CUSTOMS ALLOWANCES: Tobacco, 1 carton of cigarettes. Wine and/or Spirit, 1 bottle.

IDENTIFICATION CARDS: Not needed.

CONSULS: Netherlands, France, Dominican Republic.

REPAIRS: The sugar factory has a well-equipped shop for machine, welding and maintenance work. They can assist with most engine repairs.

DRY DOCKS: None.

REPATRIATION: Crew changes and repatriation can be arranged.

AIRPORT: 2 miles from town with regular daily connections to Antigua and Puerto Rico where onward passages to Canada, the U.S.A., Great Britain and Europe can be arranged.

TIME: GMT minus 4; no alteration.

HOLIDAYS: New Year's Day (January 1st); Statehood Day (February 27th); Good Friday; Easter Monday; Whit Monday; Queen's Birthday (date fixed by announcement annually); August Monday; Prince Charles' Birthday (November 14th); Christmas Day (December 25th); Boxing Day (December 26th).

POLICE/AMBULANCE/FIRE: Police 999; Fire 999; Ambulance (Hospital) 2551.

TELEPHONES: None available.

DEVELOPMENTS: A deep-water harbour and improved cargo handling facilities are being planned.

AUTHORITY: Comptroller of Customs.

AGENT: S. L. Horsford & Co. Ltd., PO Box 45, Basseterre, St. Kitts, BWI. Cable address: Horsford, St. Kitts. Tel. Shipping Manager, Office 2616, Home 2101; Secretary, Office 2617 Home 2122.

St. JOHN'S, Antigua: 17.7 N. 61.52 W.

DOCUMENTS:
4 Crew Lists.
6 Passenger Lists.
1 Customs Declaration.
1 Declaration of Health.
6 Copies of Manifest.
Port clearance from previous port.
3 Copies of B/L.
1 Copy Crew Personnel Curio List.
Fumigation and Deratisation Exemption Certificate.

PILOTAGE: Compulsory. Messages should be received by Agents 48 hours in advance. Pilot boat may be identified by pilot flag.

Pilot boards at entrance of channel if vessel is proceeding to Deep Water Harbour. If vessel proceeding to Oil Berth, Pilot boards 2 miles North of Sandy Island.

PORT LIMITS AND COMPULSORY PILOTAGE AREA: All the waters enclosed by an imaginary straight line running due West from Weatherills Point forming the Northern boundary, by an imaginary straight line running due North from Shipstern Point forming the Western boundary and by the coastline running from Weatherills Point to Shipstern Point forming an Eastern and Southern boundary.

ANCHORAGE: Open seas just outside inner harbour. Depths exceeding 50 ft.

RESTRICTIONS: No restrictions on entry, difference in tide is negligible. Channel is 8,000 ft. long and 300 ft. wide, dredged to 35 ft.

MAX. SIZE: At present vessels of any size can anchor in outer harbour. The New Deep Water pier is 1,200 ft. long and depth alongside is 35 ft., a turning basin of 1,200 ft. diameter is available. Oil carrier's berth at Oil Refinery Pier (Sea Island) is 34 ft. of water subject to sea conditions or at "Sea Berth" in calm water exceeding 45 ft. Tidal Range is negligible.

HEALTH: Pratique granted at berth. Suspected disease or fever should be notified by cable in advance.

RADIO: Cable and Wireless (W.I.) Ltd. Barbados Radio 8PO.

Tugs fitted with VHF equipment. Harbour Master's office equipped with VHF and HF equipment. West Indies Oil Company Marine Centre keeps constant watch on VHF Channel 16/6 and HF 2182.

TUGS: 2 tugs of 1,500 h.p. available.

BERTHING: No special requirements.

STEVEDORES: 48 hours notice required to arrange gangs.

MEDICAL: Required medical attention should be cabled in advance to Agents. Hospital facilities available, smallpox vaccination required.

TANKERS: At Oil Refinery Pier several product pipe-lines of 10, two 8, 6 and 4 in., one 16 in. crude line, one 3 in. fresh-water line. 36 ft. mean low water, acceptable draft 32 ft. (deeper draft subject marine terminal approval). At Seaboy one 10 in. Bunker C line, one 16 in. crude line; 5 mooring dolphins secure vessel in position. Acceptable draft 45 ft. No slop residue discharge facilities available.

DENSITY: 1025.

FRESH WATER: Available from Deep Water Pier and by barge in conjunction with bunker fuel deliveries.

FUEL: Normally all grades of marine fuel are available; ex wharf at Oil Refinery and by barge to vessels at St. John's Harbour and adjacent offshore bunkering area. Bunker nominations should be placed with West Indies Oil Company; Antigua. Cable "WIOC." Telex AK 112. Tel. 20141 or 21207. Oil Company will act as Agent for vessels calling solely for bunkers if requested.

FIRE PRECAUTIONS: No smoking or cooking at docks.

GANGWAY/DECK WATCHMEN: Not necessary. Available on request.

OPENING/CLOSING HATCHES: No set custom for opening/closing.

CERTIFICATES: All certificates should be on board but it is required to show Deratisation Exemption Certificate, L.S.A., Load Line.

CUSTOMS ALLOWANCES: 1 carton cigarettes. 1 bottle (26 oz.) spirits.

IDENTIFICATION CARDS: Not required.

CONSULS: Dutch, French, Danish and Swedish Consulates.

REPAIRS: Limited engine and hull repairs available.

DRY DOCKS: None. Slipway at English Harbour suitable for small yachts and small vessels of up to 120 ft. in length, 150 tons displacement, 21.6 ft. beam, draft 11 ft. Tel. 31056.

AIRPORT: Airport is 4 miles from docks in city and served by international airlines such as BA, BWIA, Air Canada, LIAT, Eastern, Prinair, Barbuda Wings, Seagreen Air Transport, Air B.V.I., Caribbean Air Services, Guyana Airways, Carib West.

TIME: Local time is GMT minus 4. No alterations made to clocks during the year.

HOLIDAYS: 1st January; Good Friday; Easter Monday; Labour Day (1st Monday in May and no work is possible); Whit Monday; August Monday; Carnival Holiday (Tuesday following August Monday); State Day (1st November); Christmas Day; Boxing Day; H.M. Queen's Official Birthday observed either first or second Saturday in June.

POLICE/AMBULANCE/FIRE: Police 20045, Ambulance 20251, Fire 999.

SHORE TELEPHONE CONNECTION: Available.

AGENT: Geo. W. Bennett, Bryson & Co. Ltd., PO Box 162, St. John's, Antigua. Telegraphic address "Bennett". Telex: 128 Brysons AK. Tel. 21200 or 20170, after hours 20246. Estate & Shipping Agents, Liner Agents, General Commission Merchants, Insurance Agents, Lloyd's Agents, Travel Agents, Stevedoring Contractors.

Liberia

COURTESY FLAG: Masters of vessels should check with the Pilot the correct times for raising and lowering the courtesy flag as heavy fines are imposed if raising and lowering is carried out at the wrong time. It is also advisable to carry a spare courtesy flag aboard the vessel.

BUCHANAN: 05.54 N. 10.04 W. (See Plan)

DOCUMENTS:

1 copy Clearance of last Port of Call.
1 copy Health Declaration.
6 copies Number of Passengers.
6 copies Cargo Manifest (even in ballast).
6 copies Crew List.
3 copies Store List (ship).
3 copies Personal Effects List.
1 copy Vaccination List.

PILOTAGE: The ship shall be considered to have arrived at Port of Buchanan when she cuts a circle with a 3 nautical miles radius from the beacon on the main breakwater head (Fl "G" 3-sec.). Lamco provides pilotage. Pilot boarding approximately 1.5 miles off the main breakwater, bearing 095°/110°. Pilot ladder on port side.

ANCHORAGE: If waiting Pilot, anchor 2 miles off main breakwater.

RESTRICTIONS: Harbour traffic hours – towage and pilotage (ore ships), 0000–2400 hrs. General cargo ships (tankers), 0700–2300 hrs.

MAX. SIZE: Ore carriers up to 42 ft. draft.

RADIO: Dakar Radio, and on ship's telephone working frequency if stated in sailing telegram from last port of call. Buchanan Harbour will call on 6520 kHz 4 days before ETA at 0830 hrs. GMT, or when within 200 miles call Buchanan Harbour on 2182 k/c at 0800 hrs. GMT. Communications with ore ships per HF, call 2182 k/c. Traffic, 2638 k/c, 2738 k/c. VHF, call Channel 16. Traffic, Channel 9, 11, 12 and 14.

HEALTH: Customs, health and passport inspection normally takes place at the berths. Quarantine signal must not be hauled down before "Free Pratique" is received. If diseases are suspected on board contact the Port Authorities or Agents by radio for instructions. After call at other Liberian ports where free pratique has been granted, Port Health will not board here.

TUGS: Lamco provides towage with two tugboats 1,640 h.p. and one tugboat 3,300 h.p. Tugs join vessel about 0.5 mile North of red buoy.

BERTHING: Number of berths for sea going vessels, 4. Length of quays, 2,800 ft. with 50-100 ton bollards and properly fendered. Depth conditions, 42 ft. at ore-loading quay (at MLWS), 33 ft. at commercial quay (at MLWS). Ore loading capacity, 6,000 t.p.h.

STEVEDORES: As early as possible advance notice of ETA required latest by 1500 hrs. on day preceding arrival if a weekday. Or Saturday before noon if arrival on Sunday. Shore working hours: Ore handling: Monday 0700 hrs. through Sunday 0700 hrs.: general cargo handling, 0700–1200 hrs., 1230–1500 hrs., overtime 1500–2300 hrs., and 2300–0700 hrs.

MEDICAL: Hospital and medical care is provided; advance notice should be given in serious cases. Smallpox, yellow fever and cholera vaccinations are compulsory to enter the Republic. Vaccination book is required.

TANKERS: One tanker berth for discharging only. Hose connections are: 6 in. and 10 in. Max. draft 30 ft.

DENSITY: Varying but around 1020/25.

FRESH WATER: Fresh water is available, ex-quay only, rate is 20 t.p.h. Subject to availability.

FUEL: No bunker facilities available.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Performed by stevedores.

REPAIRS: No commercial facilities available. In cases of emergency Lamco might assist with minor repairs.

CUSTOMS ALLOWANCES: Direct sales from ships are strictly forbidden.

IDENTIFICATION CARDS: Not required.

CONSULS: Swedish Vice-Consul only; however, most countries are represented either by Embassy or Consul at Monrovia.

REPATRIATION: Can be arranged.

AIRPORT: Roberts International Airport about 1 hour ride by car; several connections to the rest of the world.

TIME: GMT; no alterations during the year.

HOLIDAYS: January 1st; January 7th; February 11th; Second Wednesday in March; March 15th; Second Friday in April; May 14th; July 26th; August 24th; First Thursday in November; November 29th; December 1st; December 25th. Special holidays as proclaimed from time to time by the Liberian Government. No work will be performed on January 1st, July 26th and December 25th.

GENERAL: Two Customs officers stay on board the ship during ship's entire stay and they should be given meals in the Officers' Mess and if necessary night quarters.

POLICE/FIRE/AMBULANCE: No phone available; however the Lamco Plant Protection Force should be contacted; one officer is normally assigned to each quay/gate.

SHORE LEAVE: Apart from South African and Rhodesian citizens, who are not allowed ashore, no restrictions.

DELAYS: Generally, no major delays have occurred. For ore carriers and tankers the tide may occasionally involve 24/36 hours waiting time depending on the size of ships expected to load: general cargo ships; no delay.

AUTHORITY: Port Operators: Lamco J. V. Operating Company.

AGENTS: All ore carriers must employ LJVOC as their Agent.
Other vessels:
Scanship (Liberia) Inc., PO Box 19, Buchanan, Tel. 95.30/39. Telex via Monrovia.

MONROVIA: 06.20 N. 10.50 W.

DOCUMENTS:

6 Crew Lists.
5 Passenger Lists or 5 Statements "Nil" if none aboard.
5 Manifests for Customs. This should state. S.W. Ballast if no cargo aboard.
5 List of Ports of call from commencement of voyage with date of calls.
1 International Health Declaration.
1 List of Crew with dates of smallpox and yellow fever vaccination.
5 Store Lists.
2 Crew Custom Declarations.

Immigration now stamp all seamen's discharge books or passports.

PILOTAGE: Order Pilot through local Agents. Monrovia Freeport Pilot station equipped with R/T and VHF radio and on continuous listening watch from 0645 GMT to 2245 GMT. R/T 2182 kc/s, range 300–500 miles VHF Channel 16 range–30 miles.

Pilot comes out from inside breakwater by launch displaying H. flag. Vessels should approach to approx. 7 cables off entrance and should anchor clear of fairway channel as very large iron-ore carriers sail on deep draft.

ANCHORAGE: Good unlimited anchorage space available on roadstead S.W. of Leading Line, from 7 to 10 cables from Southern breakwater end, depth 7 to 10 fathoms. Anchorage safe but subject to moderate South-westerly swell during rainy season, April to October.

RESTRICTIONS: Pilot service given day and night. Loaded oil tankers berth in daylight hours only. Only deep-loaded vessels restricted to tide for berthing or sailing.

Channel outside breakwater being dredged to 49 ft. MLW. Channel to iron-ore piers dredged to 45 ft. MLW.

MAX. SIZE: Vessels up to 850 ft. length and 45 ft. draft can be accommodated at iron-ore piers. No restrictions on beam except that carriers with a beam in excess of 126 ft. may experience difficulty in loading with present loading gantries. Max. draft for berthing at Marginal General Cargo Wharf is 30 ft.

Tankers discharging at crude oil pier; max. length 700 ft., max. draft 40 ft. Max. draft for berthing at bunkering pier is 35 ft.

HEALTH: Vessels entering must fly International Code flag "Q". Port Health Officials board upon berthing. Pratique automatic for vessels having cleared at other Liberian ports, but vessel must still clear Customs.

RADIO: ETA cables should be routed to Agents through Government radio station ELC or via land cable (French Cables) through Dakar or Abidjan. Pilot R/T station will pass on messages to Agents free of charge.

TUGS: 3 tugs of 1700 h.p. available. Join vessels just inside breakwater entrance. For berthing, tug lines used; for sailing, ships lines used; no charges for tug lines.

BERTHING: Day and night, except loaded tankers not berthed during hours of darkness. Tankers arriving must enter breakwater by 1730 hours. Fishing boats are moved to or from fishing pier situated on North Breakwater during darkness.

STEVEDORES: Engaged by Agent. Several stevedoring companies. Port Management handles all cargo on shore and accepts cargo ex-ship's hook only.

MEDICAL: Whenever possible Masters should cable Agents if require medical attention especially when arriving week-ends or during night. Hospital facilities available. Port Health require smallpox and yellow fever vaccinations for crew members.

TANKERS: One bunkering and oil-loading pier, and one crude-oil discharge pier. At Crude Oil Pier discharge by means of floating 10 in. pipe-line.

DENSITY: Density varies with the tide. Also varies during rainy season as river flow increases. Varies from 1009 to 1024 oz. per cu. ft. with average of approx. 1019 oz. per cu. ft.

FRESH WATER: Available only on marginal wharf and three Iron-ore Piers by means of hoses from shore. Average rate of delivery approx. 20 t.p.h.

FUEL: Light diesel oil and heavy fuel oil available and these can be blended to specification by supplying oil company. Diesel only available on bunkering pier. Fuel oil available by barge and on bunkering pier.

GANGWAY/DECK WATCHMEN: Supplied by Agent, and recommended. Customs also place one gangway officer aboard and this officer should be supplied with food by ship.

OPENING/CLOSING HATCHES: Normally done by stevedores.

CUSTOMS ALLOWANCES: Tobacco, reasonable quantities for consumption while in port. Wine and/or Spirit, as tobacco.

IDENTIFICATION CARDS: Not required, but seamen's books are endorsed aboard by Immigration.

CONSULS: Majority of foreign countries have Consuls.

REPAIRS: Limited deck and engine repairs can be carried out by two private companies.

DRY DOCKS: One very small floating dock capable of lifting 300 tons with max. draft of 8 ft. This dock is used for small coastal craft and only accepts very limited outside work.

REPATRIATION: Repatriation of crews is possible.

AIRPORT: Roberts Field International Airport 45 miles distant. Served with daily international flights to Europe and America.
TIME: GMT.
HOLIDAYS: Many official holidays during year but cargo work carried out those days on overtime rates. Port closes three days per year: 26th July (Independence Day), Christmas Day and New Year's Day.
POLICE/AMBULANCE/FIRE: Port Management have own Security Force and Fire Service. Situated in port area.
TELEPHONES: There are no facilities for telephones on board.
GENERAL: Stevedores gangs have to be ordered the day before required, therefore essential for Agents to receive ETA messages in sufficient time.
SERVICES: Hull, deck and engine surveys can be obtained through Lloyd's, German Lloyds, B.V., Norske Veritas, America Bureau Agents.
SHORE LEAVE: No restriction on shore leave.
AUTHORITY: National Port Authority.

AGENT: Scanship (Liberia) Inc., PO Box 209. Tel. 22-832, 21-612. Telex 4281. Cables: "Scanship Monrovia".

SINOE: 04.59 N. 09.03 W.

DOCUMENTS:
1 copy Health Declaration
2 copies Store Lists
2 copies Vaccination Lists
2 copies Cargo Manifests
1 copy Clearance Last Port
2 copies Crew Declaration Forms
1 copy Stowaway List
5 copies Crew List
5 copies Kru Boy List — if any onboard
4 copies Ports of Call
4 copies Narcotics Lists
4 copies Passenger Lists
4 copies Animal Lists
4 copies Arms/Ammunition Lists
PILOTAGE: Not compulsory but recommended, and NPA Pilot available. No night pilotage. On approach Agent or Sinoe Pilot can be contacted by VHF Channel 16/2182 SSB Radio. Pilot boarding 1.5 miles off the harbour. No official Pilot Boat available but Pilot using small tug belonging to Scanship.
ANCHORAGE: Anchorage can be obtained in a depth of 7 fathoms about 8 cables West of Blubarra Point — bottom mud and sand.
MAX. SIZE: Max. length which can be accommodated alongside Pier, 400 ft. and Max. draft on departure from Pier 18 ft. 6 in. Max. length for a vessel moored across Basin, 500 ft. and max. draft on departure 23 ft.
HEALTH: Boarding party including Port Health Officials clear vessels while still in anchorage. Even when a vessel has called at another Liberian Port prior to Sinoe Port Health still boarding.
RADIO: Monrovia Radio.
VHF: See "Pilotage".
TIDES: Average 4 ft.
TUGS: 1 NPA tug 600 h.p. and 2 Scanship tugs 180 h.p. and 220 h.p. respectively.
BERTHING: Alongside Pier only 1 ship of max. length 400 ft. plus a small vessel of up to 175 ft. can be accommodated. Salt water only. Cargo handling to be carried out by vessel's own gear, however, NPA mobile crane available max. 10 tons capacity
BULK CARGO FACILITIES: Cargo handled-forestry products only i.e. logs, boules, sawn timber and plywood.
SPECIALISED CARGO HANDLING: Only equipment available for handling forestry products plus a very limited quantity of general cargo plus rubber.
STEVEDORES: Advisable to cable number of gangs workable, 24 hours prior of arrival. Vessels working full capacity gangwise are loading per 24 hours 500-1,000 cu.m. depending on type of forestry products and whether loading in basin or alongside.
MEDICAL: Medical facilities available to a very limited extent. All normal vaccinations possible. International vaccination card required.
TANKERS: Only facilities for small coastal tankers of max. LOA 180 ft. available moored alongside main pier.
DENSITY: Pure Salt.
FRESH WATER: Small quantities can be supplied by the NPA tugboat only.
FUEL: Small quantities of Diesel can be obtained but it is not advisable to rely on supply.
CONSULS: Nil.
REPAIRS: No facilities.
DRY DOCK: No docking facilities.
SURVEYOR: Nil, but surveyor can be called from Monrovia.
GANGWAY/DECK WATCHMEN: Not compulsory but recommended.
HATCHES: Opening/closing normally carried out by crew.
CUSTOMS ALLOWANCES: 200 cigarettes/1 bottle spirits per crew member, but depending on duration of stay.
CARGO GEAR: Always by ship's gear.
REPATRIATION: Possible through Monrovia Airport (Robertsfield). Small airstrip 5 miles from Sinoe Harbour with daily connections to Monrovia by small charter planes or small planes operated by Air Liberia.
TIME: GMT.
HOLIDAY: Only days where no work can be carried out are 24th August and 25th December.
POLICE/AMBULANCE/FIRE: NPA has ambulance and limited fire fighting equipments.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not required.
REGULATIONS: Vessels deemed unfit by NPA (derricks lifting capacity too low in the opinion of the authority, or in an apparent poor condition, etc.) might be refused to enter port. This especially applies when a congestion is faced at Sinoe, and it is feared by the authority that such a vessel is unable to handle an acceptable daily tonnage.

During 1976 several vessels have been rejected by NPA on the above grounds.
DELAYS: During the rainy season a heavy swell running into the harbour is frequently encountered, causing mooring lines to part, forcing vessel alongside to shift to the basin/roads awaiting more favourable conditions. Hurricane hawsers recommended.
DEVELOPMENT: An 80 m. extension to the Pier is planned and expected to be commenced during 1977.
GENERAL: Vessels should not expect to be able to purchase provisions at Sinoe apart from a limited variety of tinned foods.
AUTHORITY: National Port Authority.
AGENT: See 'Monrovia'.

NOTES

Please also advise Shipping Guides (Services) Ltd.

LIBYA

GENERAL: All ports:

CLEARANCE: ETA to be advised to Port Authority 24 hours before arrival, including the following information: Ship's Name, type, Nationality and port of Registry; Owner, Master and Agent names; Gross and Net tonnage; Ship's length and draft forward and aft; Expecting period for waiting in the port; Last port of call, tonnage, quantity and kind of cargo for discharging and loading; Full details of any dangerous liquids or cargo; Number of passengers and crew; Health situation.

Before arrival to the outer limits of the port, vessel requested to hoist the following signals: Flags of her call-sign; Flag of Quarantine; Flag of ship's Nationality; The Libyan Flag on the foremast; Red Flag during daylight and Red light during night-time, if carrying explosives or any inflammable cargo; Pilot Flag.

PILOTAGE: Pilotage is compulsory for all vessels. Pilot boat will meet ships outside the harbour. Ships should wait for Pilot at anchor outside the harbour if weather is good. In case of bad weather, after getting permission from Harbour Master ships may enter the harbour at their own risk and anchor inside.

TUGS: Tugs are available at all the Libyan Ports.

FREE PRATIQUE: The following documents to be provided for the doctor: A valid Fumigation Certificate; International Vaccination Certificate for every person on board; Health Certificate for any animal or bird on board. No automatic free pratique between the Libyan Ports.

CUSTOMS ALLOWANCES: 200 cigarettes for each crew member or passenger. All kinds of alcoholic drinks are forbidden, even wine and beer, and to be kept in the store under the customs seal. Also arms, perfume, saccharine and all kinds of anaesthetic. The sum of 10 Libyan dinars allowed for each crew member. All the Libyan and Foreign currency to be declared in the currency declaration. All personnel effects and electronics to be declared in the crew declaration.

BLACK LIST: Libyan law prohibits vessels from having on board any goods or containers of Israeli origin. Any vessel having such goods or containers on board on arrival in the harbour will be liable to heavy fine and confiscation of the goods or containers. The Libyan Authorities may, moreover, refuse to clear the vessel.

DOCUMENTS: *On arrival:* Last sailing permission; Full sets of cargo documents; Copies covering consignment; Certificate of origin; Bill of Ladings, etc. 8 copies of Crew List; 8 copies of Passenger List; 7 copies of Cargo Manifest; 3 copies of Cargo Plan; 1 copy of Crew Declaration; 1 copy of Currency Declaration; 1 copy of Store List.

During the first 24 hours of arrival: Valid certificates to comply with all the International conventions in force for the State whose flag the ship is flying. Certificate of Registry. For the National ships, moreover, the official log book, engine log book and ship's articles.

REGULATIONS: Foreign currency not to be taken ashore. Crew members visits between ships are not allowed without the prior permission of custom and immigrations. Ship's lifeboats are not to be used within harbours limits without the prior permission of the authorities. No engine repairs to be carried out in port whilst alongside or at anchor in the port without prior permission of authorities. Movements of ships in the port are not allowed without instructions. Using ships propellers whilst in port is not allowed without permission. Ships whistles not to be used without good reason. Cleaning funnels or making smoke whilst in port is strictly forbidden. Ship's gangway to be in position at all times whilst alongside. Rats guards to be fixed all times on every rope. Painting or scraping the outer hull of the ship not to be carried out without prior permission of authorities. Duty officer to be on board all the time accompanied by sufficient crew.

For tankers or vessels laden with dangerous cargo; moreover, the mentioned hereabove: Red flag to be hoisted in daylight and red light to be on in the night-time. No movements allowed between sunset and sunrise for such ships. Electricity to be off from ships holds whilst loading or discharging. Towing wires with suitable shackle to be ready fore and aft. Smoking and any kind of fire are strictly forbidden on deck. All steps for safety to be carried out.

POLLUTION: Pollution of any kind is strictly forbidden. Any ship causing any kind of pollution will be liable to heavy fine.

BERTHING PRIORITY: The berthing priority scheme, according to law, as follows: 1) Passenger ships. 2) Animal ships. 3) Liner and mail ships. 4) Cargo ships. 5) Tankers and dangerous cargo ships. Ships with cargo of less than 300 tons, may not have to comply with the scheme; subject to Harbour Master's decision.

OPENING/CLOSING HATCHES: To be done by crew.

IDENTIFICATION CARDS: Seaman's book or Discharge book, Passports, Identity Cards — all should be valid.

HOLIDAYS: Friday is the weekly day off. Revolution day (1st Sept. yearly); Evacuation days (28th March, 11th June, 7th October; yearly), Syrian Revolution day (8th March, yearly); Sudanese Revolution day (25th May, yearly); Egyptian Revolution day (23rd July, yearly); Hijra New Year (1st Moharam, Mohammadan year); Ashoura (half day, 10th Moharam, Mohammadan Year); Mohammadan birthday (12th Rabih Awel, Mohammadan Year); !sraa Wa Merag (half day, 26th, Rajeb, Mohammadan Year); Eid El-Fitr (1st, 2nd & 3rd Shawal, Mohammadan Year); Eid El-Adha (9th, 10th. 11th, & 12th Zi Al-Heja, Mohammadan Year).

TIME: Local time at all the seasons is GMT plus 2 hours.

SURVEYORS: The following addresses are Agents for the mentioned Classification Societies and may be conducted for the necessary surveys on request:—

Lloyd's Register of Shipping: Benghazi: Libyamar Ltd., 32 Gamal Abdel Nasser Street, P.O.B. 202, Telephone: 94490 and 92024, Telegraphic address: Libyamar Benghazi.
Tripoli: Libyamar Ltd., Sidi Issa Street, Bedri Building, P.O.B. 4452, Telephone: 30061, 30062, 30063 and 30067, Telegraphic Address: Libyamar Tripolilibia.

Bureau Veritas: Tripoli: Orfelli Agencies, 109 — 1st September Street, P.O.B. 2283, Telephone: 35338 and 37398, Telegraphic address: Shetaf Tripolilibia.

American Bureau of Shipping: Tripoli: Libyan Arab Shipping, Baghdad Street, Andalus Building, P.O.B. 882, Telephone: 41712 and 39358, Telegraphic Address: Arabship Tripolilibia, Telex 20033 Arabship.

Germanischer Lloyd: Tripoli: Johs Rieckermann, Baghdad Street, Andalus Building, P.O.B. 2121, Telephone: 37021 and 31069, Telegraphic address: Rieckermann Tripolilibia.

Registro Italiano Navale (RINA): Tripoli: Mr. Mahmoud Gamar, c/o Libyan Arab Shipping Co., Baghdad Street, Andalus Building, P.O.B. 2325, Telephone: 41712 and 39358, Telegraphic address: Gamarin Tripolilibia.

MINE FIELDS: The following areas are prohibited area and dangerous for navigation due to mines:

1)	32° 52.78′ North	& 13° 24.6′ East
	32° 57.67′ North	& 13° 24.46′ East
	32° 57.67′ North	& 13° 18.00′ East
	32° 53.82′ North	& 13° 22.30′ East
2)	32° 53.70′ North	& 13° 20.61′ East
	32° 55.93′ North	& 13° 18.00′ East
	32° 55.93′ North	& 13° 15.00′ East
	32° 54.45′ North	& 13° 15.00′ East
3)	32° 37.00′ North	& 23° 13.00′ East
	32° 14.50′ North	& 23° 31.00′ East
	32° 10.50′ North	& 23° 28.50′ East
	32° 37.50′ North	& 23° 7.50′ East

ATTENTION: It is imperative that vessels contact the wireless stations on the Libyan coast at a distance of 30 miles from the proceeding port, giving the ship's position. Ships winches and cargo gear should be in good order otherwise they will be liable to heavy fine if any delay occurs.

FLOATING DOCK: At Tripoli Port, available for ships up to 5,000 tons light displacement, max. length of ship 91.5 m., max. breadth 19 m., max. draft 6.10 m. Spare-parts to be supplied by ship's owner, paints also, 3 kinds of marine paint may be obtained from the dock in the near future.

AUTHORITY: General Ports and Lights Authorities, Tripoli

BENGHAZI: 32.06 N. 20.03 E.
Also see "General" before first Port.

PORT LIMITS: The water area existing within the actual breakwater and that which may fall within any new breakwater eventually constructed up to the bridge across the shallow water basin at the Eastern side.

b) The water area known as the navigational channel outside the harbour commencing as from the harbour entrance along the distinguishing marks of the channel for a distance of 2 km.

RESTRICTIONS: Vessels are not permitted to enter harbour between sunset and sunrise.

MAX. SIZE: All types of ships with 27 ft. draft and less in Wintertime and 28 ft. and less in Summertime are safe to enter the harbour.

RADIO: Benghazi Port Radio, from 0800 to 1800 hrs., call sign 5AV, R/T 2182 V.H.F. Channel 16.

BERTHING:

Quay No.	*Length ft.*	*Depth ft.*
1	1,050	28
3	550	28
Libya No. 2	420	16
Old F.T.St.S.	160	12
New F.T.St.S.	165	15
Oil Quay	170	24
2	920	28
Libya No. 1	150	16
Libya No. 3	450	16
Old F.J.Pt.S	160	14
New F.J.Pt.S	165	15

STEVEDORES: All stevedoring operations and formalities to be done by Agent

CRANES: Electric floating crane available up to 100 tons.

MEDICAL: All facilities available.

FRESH WATER: Available by barge and alongside. Should be obtained from Port Authority through ship's Agent.

FUEL: Available through Agents. A notice of 48 hours needed, advisable for Chief Engineer to check what grades are available.

REPATRIATION: Facilities exist without difficulty.

AIRPORT: Benina airport situated 29 km. away.

DEVELOPMENTS: Port extension project expected to start 1977.

WATCHMEN: Compulsory, provided by Port Authority.

CONSULS: France, Germany, Greece, Italy, Saudi Arabia, Tunisia, Egypt, Syria, U.K., U.S.A., U.S.S.R.

REPAIRS: Minor repairs are possible.

POLICE/AMBULANCE/FIRE: Police 99, Ambulance: 2131, 2132, 2281, Fire: 5555, 5599.
SHORE LEAVE: Allowed after free pratique, Custom and Immigration formalities completed.
PORT AUTHORITY: Port Manager and Harbour Master.

DERNA: 32.45 N. 22.40 E.

Also see "General" before first port.

PORT LIMITS: The water area existing within the actual breakwater and an imaginary line connecting the end of the breakwater and the damaged breakwater existing at the Southern side.

b) The water area known as the navigational channel outside the harbour commencing as from the harbour entrance for a distance of 1 km
RESTRICTIONS: Vessels are not permitted to enter harbour between 2100 and 0600 hrs.
MAX. SIZE: Max. draft, 11 ft., max. length, 370 ft.
RADIO: Recommended that radio messages for Agents be sent via Malta Radio or any other near coast station.
BERTHING: One quay of 415 ft. length and 11/12 ft. depth.
STEVEDORES: All stevedoring operations and formalities to be done by Agent.
TANKERS: Max. size 18,000 d.w.t. Max. draft 11.5 m. if weather conditions permit.
MEDICAL: Available.
FRESH WATER: Available alongside, to be supplied by Port Authority through ship's Agents.
FUEL: Available through Agents, a notice of 24 hours needed. Advisable for Chief Engineer to check what grades are available.
REPATRIATIONS: Available via Benghazi.
DEVELOPMENTS: Port extension project under construction.
WATCHMEN: Compulsory, provided by Port Authority.
CONSULS: Nearest consuls situated at Benghazi.
REPAIRS: Not available.
POLICE/AMBULANCE/FIRE: Call Port Manager, 2063 and 2074.
SHORE LEAVE: Allowed after free pratique, Custom & Immigration formalities completed.
AUTHORITY: Port Manager and Harbour Master.

ES SIDER: 30.38 N. 18.22 E. (See Plan)

(Also refer to "General – All ports").
DOCUMENTS: Oasis acts on behalf of tankers loading at Es Sider and shall prepare all crude oil loading documents. Arab Shipping Company is contracted by Oasis for all normal agency duties. This agency is currently the only agency used by the four Owner Companies.

After a tanker arrives at the anchorage or is moored in a berth, an agency representative will come aboard, accompanied by Libyan Customs Officials and Immigration Police. The agency representative will present certain clearance forms to the Master, which should be completed as soon as possible. After these forms have been signed by the Master, they shall be returned to the agency representative, who shall make the necessary distribution.

Crude oil loading documents shall be prepared by the Oasis documentation group prior to and during loading operations, to expedite their final completion. When the tanker has been loaded, the documents shall be completed and endorsed by the Customs Officer and by the representative of the Ministry of Petroleum Affairs. The documents shall then be distributed aboard the tanker and elsewhere, in accordance with previously arranged standard documentation schedules.

The tanker shall be considered clear to depart Es Sider when the crude oil loading documents have been delivered to the Master.

Libyan Customs Authorities:

(a) List of the crew with a declaration of their personal belongings (form supplied by the Customs Authorities).
(b) List of tanker's stores.
(c) List of passengers.
(d) Six copies of Cargo Manifest for cargo to be discharged at Es Sider.
(e) One copy of Cargo Manifest for cargo in transit.

Blank copies of "Certificate of Discharge" are placed on board every vessel at Es Sider. These certificates must be endorsed by the Customs, or other recognized authority, on completion of discharge. One completed certificate must then be forwarded to the Libyan Customs Authorities according to the instructions contained in the "Certificate of Discharge". At least one further copy should be retained on board, to be produced to the Customs on any subsequent voyage to a Libyan port. Failure to produce the certificate may result in delays to loading, or even rejection of the vessel by the Libyan authorities.
PILOTAGE: Vessels to be moored, anchored or manoeuvred will only be boarded within the recommended anchorage area. The Mooring Master will advise the Master on approaches to berths, mooring, unmooring, connecting and disconnecting the hoses and in all operations within the anchorage or berthing area. All manoeuvring of ships shall be done only in accordance with the advice of an Oasis Mooring Master, subject to the understanding that in all cases and circumstances the Master shall remain solely responsible for the safety and proper manoeuvring of the tanker.

Tankers not equipped with pilot hoists shall provide a pilot ladder, or ladders, constructed and placed in accordance with Chapter V 1960 Safety of Life at Sea Convention. Tankers having a large freeboard are requested to use a combination of pilot ladder and accommodation ladder, which is also in accordance with the above Convention.

The Mooring Master shall be in direct control of all tanker communications while in the Terminal area. Any unauthorized communications will result in the immediate cessation of all operations excepting clearing of the berth. Such tanker immediately nullifies its Notice of Readiness.
APPROACHES: Coastal landmarks in the area are as follows:

(a) The most prominent landmark is a water tower in the terminal area which is painted white and is 180 ft. above sea level. This water tower is located at 30° 38′ 00″ N. Lat. and 18° 21′ 01″ E. Long.
(b) A radio antenna tower which is 624 ft. above sea level is located at 30° 35′ 48″ N. Lat. and 18° 24′ 12″ E. Long. At night the tower is lighted with five red lights, vertically arranged. The top light and the fourth from the top flash simultaneously every second. Lights two, three and five are fixed.
(c) A radio antenna tower which is 395 ft. above sea level is located at 30° 36′ 56″ N. Lat. and 18° 16′ 55″ E. Long. At night this tower is lighted by an occulting red light, flash two seconds, eclipse one second, and there is a fixed red light halfway up the mast. It is flanked by two dish shaped aerials.
(d) There is a water tower at Ras Lanuf Terminal with a highest elevation of 179.5 ft. above sea level located at 30° 30′ 42″ N. Lat. and 18° 32′ 22″ E. Long. It is white in colour. A white light, characteristics:– flash two every 5 seconds, height above sea level 163 ft., is mounted on the seaward side. There is also a fixed red air warning light on the top of the structure.
(e) An omnidirectional aircraft radio beacon is situated at 30° 36′ N. Lat. and 18° 18′ E. Long. transmitting "OJ" 5 times every 60 seconds.

Range lights and mooring buoy marker lights will appear and disappear with unscheduled frequency. These lights are for the use of the Mooring Masters at the Terminal and should be disregarded by any tankers using the Terminal.
ANCHORAGE: Recommended anchorages at Es Sider within the seaward perimeter of a circle having a radius of 3,000 ft. centred at 30° 40′ 20″ N. Lat. and 18° 24′ 30″ E. Long. The anchorage area has a sandy bottom with a depth of approximately 100 ft.

Ships can make this anchorage with Radio Tower "B" bearing 183° in 16 fathoms. Great care should be taken approaching anchorage from the North or Northwest to give mono-moorings a wide berth.
MAX SIZE: The following are the approximate berth limitations:–

	Length	*Draft*
No. 1 Berth	920 ft.	51 ft.
No. 2 Berth	890 ft.	51 ft.
No. 3 Berth	950 ft.	51 ft.
No. 4 Mono Mooring	1150 ft.	62 ft. 6 in.

Max. beam 158 ft. Max. d.w.t. 250,000

Note: The max. length overall is 1150 ft. The max. draft to which vessel can load in good weather is 62 ft 6 ins., and when vessel lies within 30° of loading line. During adverse weather causing vessel to roll and pitch, draft may be restricted to 58 ft. The max. draft limitation in good weather is due to depth to top of loading line being 63 ft. at distance of 1900 ft. from buoy.

Length, beam and d.w.t. could all be extended provided draft does not exceed 62 ft 6 ins.

All the above limitations are based upon standard tankers in normal weather conditions.

Oasis reserve the right to vary the above limitations, depending on vessel's freeboard, (OBO's – ore/oil vessels, etc.) and also the prevailing weather conditions.
RADIO: Oasis maintains direct communication with Tripoli Radio, details of which are shown in publication 205 of the U.S. Hydrographic Office and are included in the Berne Lists. Oasis also maintains a VHF station at Es Sider Terminal.

Cables should be addressed to: Oasisoil Tripolilibya. Cables addressed in this manner will be received directly by the Oasis communications centre in Tripoli and relayed immediately by voice radio or teletypewriter to the terminal at Es Sider.

Within 6 hours of clearing its last port for its voyage to Es Sider, each tanker shall provide the Terminal with the following information by cable addressed to Oasisoil Tripolilibya:

(a) The name of the tanker.
(b) The name of the port from which the tanker last cleared.
(c) The date and hour of the ETA at Es Sider Terminal.

When the Master of the tanker en route to Es Sider is of the opinion that his tanker is within 72 hrs. of arrival at Es Sider, he shall notify the Terminal by cable addressed to Oasisoil Tripolilibya, providing the following information:

(a) The name of the tanker.
(b) ETA at Es Sider.

When the Master of the tanker en route to Es Sider is of the opinion that his tanker is within 24 hrs. of arrival at Es Sider, he shall notify the Terminal by cable addressed to Oasisoil Tripolilibya, providing the following information:

(a) The name of the tanker.
(b) ETA at Es Sider.

When the Master of the tanker en route to Es Sider is of the opinion that his tanker is within 12 hrs. of arrival at Es Sider, he shall notify the Terminal by cable addressed to Oasisoil Tripolilibya, providing the following information:

(a) The name of the tanker.
(b) ETA at Es Sider.

4 hrs. before the Master expects to arrive at Es Sider to receive a Mooring Master on board, he shall notify the Terminal by cable addressed to Oasisoil Tripolilibya, and also pass the same by VHF radio, providing the following information:

(a) The name of the tanker.

(b) Precise ETA at Es Sider.

If the tanker is equipped with a FM radio-telephone in the 156–162 mc/s band, communications may be established with the Es Sider Terminal dispatcher by calling on Channel 16, 156.8 mc/s. This frequency is monitored continuously. The range of the Terminal station is approximately 100 miles.

When the Master submits his first ETA to the Terminal he shall indicate the time he expects to need for discharge of ballast.

ARRIVAL PROCEDURE: Tenders to load crude oil cargo will normally be accepted and berths will be assigned to tankers in order of arrival, provided they have valid nominations for cargo and carry clean ballast, if any, and are in all respects equipped and ready to berth. In the event that berthing is delayed on account of weather, tankers will normally keep their position in line. Tankers required to leave Terminal area on account of weather (port closed) shall maintain contact with the Terminal via Tripoli Radio or VHF so they will be available when the weather moderates. Oasis reserves the right to load tankers out of turn following the return of good weather, to the extent that such loading "out of turn" does not materially delay the loading of other tankers in line. Further, Oasis reserves the right to decline to berth a specific tanker if its condition or facilities are unsafe for berthing or loading, even though the Terminal may be open to other tankers. Oasis Marine Superintendent's decision shall be final.

As soon as practical after arrival, all tanks will be inspected for evidence of oil in ballast. Similar inspections will continue during discharge of ballast. If evidence of oil appears at any time, the tanker shall be rejected forthwith and shall not again be accepted until it is shown the ballast can be properly discharged.

If during inspection or during progress of loading it is revealed that tanks are not tight or that oil is leaking from the tanker, it shall be rejected from further loading. Tanker shall not be later accepted for loading unless satisfactory evidence of repair is submitted, duly certified by Lloyds or ABS Surveyors, or other recognized surveyors.

Upon arrival at the Terminal of Es Sider, the Master shall give notice of readiness to load by wireless or VHF but not before one or other of the following events shall have transpired:

(a) The Master shall have received the Mooring Master on board; or

(b) The Master shall have dropped anchor in the anchorage.

However, the notice of readiness shall not be accepted unless the tanker is in every respect ready to load.

In reporting readiness to load, the Master of any vessel arriving at Es Sider for the first time shall state whether the flanges on the manifold of his vessel are such as to permit hose connections without modification.

A tanker shall have sufficient ballast for safe handling. Careful watch of the weather, frequent interchange of information between the tanker and the Terminal and the knowledge of the behaviour of his tanker may permit the Master to bring his tanker with minimum of ballast and thereby reduce the possibility of violating sea pollution requirements.

HEALTH: Tankers shall fly "Q" on arrival by day and display a red light over a white light at night to indicate quarantine conditions.

TUGS: Not required. Oasis maintains launches to assist in berthing tankers. These are under the direct supervision and control of the Mooring Master.

BERTHING: Three open roadstead submarine sea loading berths are available for loading crude oil at flow rates up to 40,000 barrels per hour. These berths are of the seven-buoy type. The berth headings are North. The fourth berth is a mono-mooring buoy with a flow rate of 30,000 b.p.h. In all four berths ships should pick up hoses on the port side.

The central spar buoy of the Easternmost loading berth at Es Sider is located at 30° 38′ 58″ N. Lat. and 18° 22′ 43″ E. Long. The middle of the three loading berths at Es Sider is located at 30° 39′ 06″ N. Lat. and 18° 22′ 06″ E. Long. The Westernmost loading berth at Es Sider is located at 30° 39′ 35″ N. Lat. and 18° 21′ 53″ E. Long. All conventional berths are approximately one mile from shore and in approximately 65 ft. of water. The mono-mooring is located at 30° 40′ 31.5″ N. Lat. and 18° 21′ 43.7″ E. Long. It is about two miles from the shore in approximately 80 ft. of water.

Tankers shall have at least eight good synthetic fibre lines of not less than 9 ins. circumference and at least 120 fathoms in length, with an eye spliced in each end. These lines shall be placed out free for running, three on the after end of the after well deck, and five on the poop deck. The three lines on the well deck shall be married together so that if the need arises the double length can be run on either side of the tanker.

After the tanker is securely berthed, the submarine hose shall be lifted amidships on the port side. The base lift may weigh up to five tons. Hoses shall be lifted and connected by the tanker crew. The Mooring Master shall advise the tanker's officer-in-charge concerning lifting techniques; however, the responsibility for all operations shall remain with the officer.

Mono-mooring: Vessels are normally moored by two bow lines only, these being provided by Oasis. A selection of wire strops and shackles will also be placed on board for mooring purposes. Mooring lines are hove in until the length of chafing chain is brought inboard. According to the mooring arrangements, the Mooring Master will advise on the method of securing the vessel. Ship's wires or ropes may be required to back up mooring equipment supplied by Oasis. Smits towing brackets will be utilized when fitted. Under no circumstances shall the weight of the ship be taken on lead-in ropes.

On advice from Oasis that a vessel is to load on the mono-mooring, she will have the following ready before the Mooring Master boards:

(a) Port side derrick to be rigged ready to lift various wire strops, shackles, and hose securing equipment. This equipment will be placed on board at the same time as the Mooring Master, or as soon as possible thereafter, who will advise on its disposition.

(b) Forward, the vessel should have ready two good synthetic fibre mooring lines, at least 9 ins. circumference, two good 4 in. circumference rope messengers at least 400 ft. long, or two 3 in. wire messengers of the same length, each fitted with a suitable screw shackle. Also a crowbar, spikes and hammers.

(c) No moorings will be required aft.

(d) The vessel shall make a lee on the port side.

It is essential on this berth that the hoses be picked up immediately mooring operations are complete. On advice from the Mooring Master, part of the ship's crew must be standing by at the port manifold for this operation.

Hose lifting and connecting operations are basically the same as in conventional berths, except that hose strings are floating.

Vessel's engines must be ready at all times, and under no circumstances is the propellor to be turned ahead without prior consent of the Mooring Master. Failure to comply with this may result in cessation of operations, and possible rejection as being unsuitable for a single point mooring.

In adverse weather, a continuous lookout may be required on the forecastle head, by a responsible person, to keep watch on the moorings.

In adverse weather the Mooring Master may require cargo to be loaded, in the initial stages, into the forward compartments and this should be complied with when requested.

Vessels are encouraged to load and deballast at the same time where this is possible. In the case of vessels with permanent ballast tanks, this ballast should not be started without first consulting the Mooring Master.

LOADING: Shore Stops: If it is requested by the Master of the tanker that the cargo flow should be stopped from the shore at a predetermined tonnage, it must be clearly understood that Oasis Oil Company of Libya, Inc. will not be held responsible for any error and that in the case of overloading, the excess cargo cannot be pumped back ashore.

Vessels are encouraged to load and deballast at the same time.

BALLAST: There is absolutely no provision at the Es Sider Terminal for dirty ballast. Tankers with dirty ballast shall be rejected and all costs accruing therefrom shall be for the tanker's account.

It is the Master's responsibility to see that no oil of any kind is pumped or spilled overboard from his tanker. This includes oily water from bilges, residuals from previous voyages or any other matter that may result in pollution of the sea. Owners and Masters are invited to examine all laws concerning pollution of the sea, especially in regard to the Mediterranean Sea area. Inspections may be made by the Libyan Ports & Lights Authorities, whose opinion of the cleanliness of the ballast shall be final.

The waters in and adjacent to the Terminal of Es Sider must not be polluted, and only clean oil-free ballast may be discharged anywhere inside of a line 100 miles to seaward and roughly parallel to the Libyan Coastline.

Prior to acceptance all tanks will be inspected for evidence of oil in the ballast and during discharging similar inspections will continue.

Masters are warned that when disposing of dirty ballast outside Libyan waters, all pipe-lines, sea-suctions, strainers and pumps that are later to be used to discharge clean ballast, must be flushed clean so that there will be no chance of even a small amount of pollution when the clean ballast is pumped out.

Any vessel required to return to a position at least 100 miles offshore, for the purpose of discharging dirty ballast, cleaning tanks or for any similar reason, automatically nullifies any Notice of Readiness already tendered and at the same time loses any priority held for loading. On return from sea, vessel will be entered for loading at the time of the second arrival, when a new Notice of Readiness will be tendered.

Master's attention is directed to Es Sider Notices concerning oil pollution and to the serious consequences of discharging dirty ballast, besides having his tanker rejected.

MEDICAL: Doctor will only attend vessel if patient unable to attend clinic ashore. Accommodation ladder required.

FRESH WATER: Not available.

FUEL: Not available.

REPATRIATION: No facilities exist for crew change or repatriation.

TIME: GMT plus 2 hrs.

REPAIRS: When a tanker is in or near the berth, its engines shall remain ready with full power for immediate use. Engine repairs shall not be performed near any berth.

WATCHMEN: Not less than one capable deck officer and three able seamen shall be available on the deck at all times. No person under the influence of alcohol shall be allowed on deck. The Mooring Master's opinion on the sobriety of an individual shall be final.

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, spirits, wines, beers, perfume, arms, ammunition, saccharine, and certain other items shall be placed under Libyan Customs seal from the time of arrival in port until such time as the tanker has left territorial waters. Each officer and crewman is allowed the following ration for each day the tanker is in port: *(a)* 25 cigarettes per day, or 25 grammes of tobacco or 25 grammes of cigars. *(b)* One litre of beer or 0.5 litre of wine. *(c)* Special provisions are sometimes made for the Master.

CONSULS: Consulates are located in Tripoli, which is approximately 650 km. by road from Es Sider. Some countries having Consulates are: Algeria, Argentina, Belgium, Brazil, Chad, Czechoslovakia, Denmark, Finland, France, Ghana, Greece, India, Italy, Japan, Jordan (represented by Indian Embassy), Kuwait, Lebanon, Morocco, Nigeria, Nationalist Republic of China, Pakistan, Saudi Arabia, Spain, Sudan, Syria, Sweden, Switzerland, Tunisia, Turkey, United Arab Republic, United Kingdom, United States of America, Union of Soviet Socialist Republics, Venezuela, West Germany and Yugoslavia.

GENERAL: When a Mooring Master and his assistants (launch crews and possibly apprentice Mooring Masters) are assigned to a tanker, the tanker shall supply them with meals at the same time and in the same manner as comparable personnel of the tanker. No special meals or special foods shall be required. The terminal will keep this item to a basic minimum. The intent is that the furnishing of meals to Oasis personnel be kept to the minimum.

No boats may be lowered into the water, except in an emergency.

Adequate deck lighting must be available for night mooring and loading. A good floodlight will be required to illuminate the area around the submarine and cargo hose connections during hosing and loading operations. During the discharge of ballast at night, the sea area around the vessel must be adequately lighted. If vessel is berthed on mono-mooring buoy, in addition to the foregoing, lights MUST be provided on forecastle head and over bow to facilitate supervision of moorings.

Stores of any sort shall not be handled while tanker is under "Notice of Readiness". No stores shall be handled while the tanker is in or near a berth.

Use of anchor marker buoys recommended.

Should any tanker or craft become an obstruction in any part of the Terminal or approaches thereto, or in any area of the submarine pipe-line. Oasis shall be empowered and shall have the right to take any steps it may deem necessary to remove the obstruction without notice to the owners. All expenses of such removal shall be borne by the tanker or craft or by those owning it at the time of the accident causing the obstruction, and Oasis shall be entitled to reimbursement by them for any such expenses incurred by it.

Power must be available at all times on all deck winches and on anchor windlass while the vessel is in the moorings.

If mooring wire winches are used, wires should be secured so as to enable them to be quickly let go from the vessel without damage.

Only in an emergency shall the tanker manifold valves be closed against crude flow, and then only with the Mooring Master's consent.

Should communications fail, the cessation of loading may be effected by a continuous sounding of the ship's whistle. This procedure will then stop the loading of all tankers in the area.

The bridge and/or control area shall not be locked nor otherwise arranged to prevent immediate entry at all times by the Mooring Master.

In adverse or marginal weather conditions Mooring Master may request that extra personnel be placed on duty on deck for tending moorings or hoses as required. Masters are advised to comply with this request.

The Mooring Master shall witness the plugging of all scuppers. Failure to plug scuppers shall result in the tanker's rejection.

The presence of unauthorized craft alongside a tanker will render it unacceptable. It shall be the duty of the tanker's personnel to clear all such craft away from the tanker.

When tankers are loading or discharging crude oil or ballast, and while tank tops are open or ullage plugs are open, boiler tubes shall not be blown. Every precaution shall be exercised to prevent sparks escaping through the funnel or stack or from the galley stack. The Mooring Master may demand all fires extinguished if he deems it necessary for safety.

Under the interpretation accorded to the Libyan "Boycott of Israel" Law, it is considered to be a violation thereof if a vessel calling at a Libyan terminal has on board any item of Israeli origin, irrespective of the nature thereof, including but not limited to manufactured products, fruit and vegetables, as well as empty crates, cartons, bottles and paper wrappings, regardless of the country where any of the foregoing was obtained. The law is strictly enforced, and the minimum penalty for violation thereof normally includes a fine and confiscation of all such items. Fines can exceed $1,000.

SHORE LEAVE: None of the officers and none of the crew of any tanker shall be permitted shore leave at Es Sider.

AUTHORITY: Operated by Oasis Oil Company of Libya, Inc. Owned by The National Oil Corporation of Libya, Amerada Petroleum Corporation of Libya, Continental Oil Company of Libya and Marathon Petroleum Libya Limited.

MARSA AL HARIGA: 32.04 N. 24.00 E. (See Plan)

(Also refer to "General–All ports").

LOCATIONS: Marsa al Hariga Oil Terminal is located on the South side of the harbour of Tobruk, approximately 1 mile Eastward of Marsa al Hariga.

OPERATORS: Arabian Gulf Exploration Company.

APPROACHES: Vessels bound for the terminal should approach the harbour of Tobruk from the North-East with the lighthouse on Tobruk Point bearing 238° (true). In daylight this lighthouse should be kept in line with the conspicuous German War Memorial on the South side of the harbour.

When about 4 miles from Tobruk Point, course should be altered to 224.5° (true) to bring the leading lights on Marsa Umm esc-Sciausc in line. This course should be maintained until the vessel is close to the outer buoy, where one of the company's Berthing Masters will board.

Deep-drafted vessels sailing from the terminal should avoid navigating North-Westward of the leading line from Marsa Umm esc-Sciausc, owing to the presence of shoal water off Tobruk Point.

DOCUMENTS:

A. Customs' Requirements. On the arrival of a vessel, the Tobruk Customs Authorities will require from the Master of the vessel:

4 copies of a Crew List.
2 copies of a List of Ship's Stores.
2 copies of a Declaration of the Crew's Personal Belongings, including currency, cigarettes, gifts, etc.
4 copies of a Passenger List.

B. Harbour Master's Requirements. On the arrival of a vessel, the Tobruk Harbour Master will require from the Master of the vessel:

1 copy of a Crew List.
1 copy of a Passenger List.
1 copy of the Ship's Manifest.
1 copy of a Port Declaration (form will be made available to each vessel on arrival).

PILOTAGE: Vessels coming to and departing from the Terminal will be berthed and unberthed by Berthing Masters provided by the company, subject to the understanding that in all circumstances the Master shall remain solely responsible on behalf of his Owners for the safety and proper navigation of his vessel.

Berthing Masters will board at the Outer Buoy.

ANCHORAGES: If a berth is not immediately available on a vessel's arrival off the harbour of Tobruk, the vessel will be advised by the company where she is to anchor.

Anchorage position for tankers waiting to be berthed is 1.5 miles N.E. of the Outer Buoy.

MAX. SIZE: Two berths are located at the end of a T-head jetty which extends some 700 ft. from the shore. There is a min. depth alongside of 60 ft. and approach to and departure from the berth can be made in not less than this depth of water. Max. draft 52 ft. freeboard at any time whilst deballasting must not exceed 40 ft.

A buoy berth is situated some 1,200 ft. from the shore approximately 1,800 ft. West of the Jetty Berth No. 2. There is a min. depth in the buoy berth and its approaches of 49 ft.

PRATIQUE: The Libyan Authorities will grant clearance by radio of a vessel coming to the terminal. Radio messages requesting clearance should be sent not earlier than 48 hours prior to vessel's arrival off the harbour of Tobruk and should give the details required in the Maritime Declaration of Health which must also be completed.

COURTESY FLAG: On entering the territorial waters of the Libyan Arab Republic which commence six miles off the coast of Libya, vessels should if possible, hoist the Libyan flag, and in any event the Libyan Flag must be hoisted before entering the harbour of Tobruk. Should a vessel arrive without a Libyan Flag on board, one may be obtained from the Company's Berthing Master when he boards at the Outer Bay.

ARRIVAL MESSAGES: In addition to their arrival messages to Agent, vessels must pass an arrival message to the terminal via the company's radio station giving at least 72 hours notice of ETA and advising their estimates of:

(a) The quantity of cargo (in long tons) to be loaded at the terminal.
(b) The cargo loading rate (in long tons) per hour.
(c) The quantity of ballast (in long tons) to be discharged ashore at the terminal.
(d) The ballast discharge rate (in long tons).

If, subsequent to advice of their ETA there is any material change, a further ETA message must be passed via the company's radio station.

RADIO: Tobruk Radio 5 A1 (MF & HF). Position: 32° 02′ N. 24° 00′ E. Frequency: 420, 500 A1, A2, 0–5 kW. 4241 kHz at 2130 GMT, 8480 kHz at 1730 GMT, 16963 kHz at 0930 and 1330 GMT. All using A1 0–5 kW.

Note: Station owned by Arabian Gulf Exploration Company. Company telegraphic address: "Injaz Tobruk". All times given are GMT. Station keeps watch on 500 kc/s. during 24 hours.

TUGS: For berthing and unberthing at the terminal, vessels will be required to use the two diesel tugs which are available at the terminal. Each of these diesel tugs has a bollard pull of approximately 25 tons.

BERTHING: *Jetty:* Vessels will berth on the jetty starboard side alongside, depending on the prevailing weather conditions, though starboard side alongside is preferred. Each berthing head is "T" shaped and is protected by four breasting dolphins.

All moorings, except the backsprings to the outer breasting dolphins at Jetty Berth No. 1, attached to quick release hooks.

Buoy Berthing: Berthing/unberthing in daylight only.

Vessels will berth heading East or West depending on the prevailing weather conditions, though head East is preferred. The moorings consist of four buoys, one buoy being on each bow and one buoy on each quarter.

In addition to the vessel's mooring of two ropes to each buoy, the mooring wires provided by the company to each buoy must be utilised and vessels moored to the satisfaction of the company.

The company's Berthing Master will remain on board the vessel whilst the vessel is in the buoy, to supervise and co-ordinate the ballast discharging and loading operations.

HOSES: *Jetty:* Ship-shore connections, four flow booms with suspended rubber hoses, diameter of hoses 12 in. Flange size and rating 12 in. ASA 150. Full range of standard adapters available.

Buoy Berth: Ship-shore connections, three flexible hoses, two crude oil loading, one ballast discharging, diameter of hoses 12 in. Max. lift from ship's equipment 5 tons. Flange size and rating 12 in. ASA 150.

PNEUMATIC OIL BARRIER: Although it is emphasised that all precautions must be taken by vessels to avoid any leakage or spillage of oil into the harbour the berths are each protected by a pneumatic oil barrier to contain any oil which may, due to unavoidable circumstances, get into the harbour waters.

A pneumatic oil barrier consists of a pipe-line which is laid on the harbour bed around the berth. Through this pipe-line is pumped compressed air which escapes from the pipe-line via small holes in it. As a result of this escape, the surface of the water above the pipe-line is forced upward to form a "mound" of water which encloses the berth and prevents any spillage from spreading.

While vessels are berthing and unberthing the barrier will be kept in operation and the disturbance on the surface of the water will indicate the position of the pipe-line. To avoid damage to the pipe-line, it is essential that vessels do not drop their anchors in this vicinity.

BALLAST: Vessels should make every effort to arrive at the terminal with clean ballast and with the minimum quantity for safe handling under prevailing weather conditions.

All ballast must be discharged into shore tanks provided by the company, unless it is clean ballast, carried in tanks which are completely isolated from the vessel's cargo system. However, the discharge of such ballast into harbour waters must not be commenced until the ballast has been inspected by a company official, and he has certified that it is in order to commence discharge.

Ballast can be accepted into the company's store tanks at rates up to 6,000 t.p.h. from the jetty berths and 1,500 t.p.h. from the buoy berth. Ballast is discharged ashore over the jetty by way of a loading boom. Ballast is discharged ashore from the buoy berth through a separate 24-in. ballast discharge line connected to a 12-in. flexible hose. Max. quantity 35,000 tons.

LOADING: Cargo loading at each jetty berth is by means of four 16-in. flow booms to which 12-in. flexible hoses are attached. Cargo loading at the buoy berth is by means of a 34-in. submarine line to which two 12-in. flexible hoses are attached.

This system permits a max. loading rate of approximately 8,000 t.p.h. over each jetty berth, and 4,000 t.p.h. through the buoy berth. The actual loading rate for a particular vessel will be determined prior to the commencement of loading by agreement between the Master and the Company.

The following signals will be exhibited by a vessel whilst in the buoy berth to indicate the nature of the operation taking place, and to provide a second channel of communication should VHF contact be broken between ship and shore.

	Day	*Night*
Deballasting	Code Flag N	1 green light
Slow loading	1 red flag	1 red light
Full loading	2 red flags	2 red lights
Stop	flags lowered	lights out
Require launch	Code Flag L	signal lamp
Fire emergency	Continuous sounding of short blasts on whistle or siren	

These signals will also be repeated ashore from a mast situated on top of the main administration office building, which is situated opposite the buoy berth.

Jetty: Method: gravity loading, max. head 360 ft. rate regulated to requirements. Loading rates: two lines each 4,000 t.p.h. Two 8,000 t.p.h. max.

Buoy Berth: Method: gravity loading, max. head 350 ft. rate regulated to requirements. Loading rate 4,000 t.p.h.

SAFETY: A copy of the Regulations will be given to Master when Company's Berthing Master boards at outer buoy. Masters should make themselves thoroughly acquainted with these Regulations, strict observance of which is required by the Company.

In the event of any infringement of the Regulations, operations may be stopped and, if so, will not be recommenced until the Company is satisfied that appropriate action has been taken by the Master to comply with all the Regulations. The Company also reserves the right to unberth a vessel in the event of a continued or blatant disregard of any of the Regulations. Any loss or expense to the Company resulting from an infringement of the Regulations and, in particular, in the event of an infringement leading to an interruption of operations and/or unberthing of a vessel, will be for the account of the Owners.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: No shore facilities for carrying out repairs to vessels either at the terminal or at Tobruk.

CONSULS: No Consulates at Tobruk and the nearest locations of Consular officials are as follows:

Benghazi – 445 kms. from Tobruk: France, Germany, Greece, Italy, Saudi Arabia, Tunisia, United Arab Republic, United Kingdom of Great Britain and Northern Ireland, United States of America, U.S.S.R.

Derna – 175 kms. from Tobruk: Turkey.

El Berda (Beida) – 260 kms. from Tobruk: Belgium, United States of America.

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wines, beer, perfume, arms, ammunition and saccharine have to be locked up under Customs' seal from time of vessel's arrival in harbour of Tobruk until time of departure.

Whilst in harbour, each member of crew allowed following: 200 cigarettes (the Master will be allowed 400); half bottle spirits (the Master will be allowed 1 bottle); 4 bottles of beer or wine per man per day.

No fixed allowances for cigars and tobacco.

Libyan law prohibits vessels from having on board any goods or containers of Israeli origin. Any vessel having such goods or containers on board on arrival in the harbour of Tobruk will be liable to a heavy fine and confiscation of the goods or containers. The Libyan Authorities may, moreover, refuse to clear the vessel.

REGULATIONS:

1. *Ship's Garbage.* Whilst within limits of harbour of Tobruk the throwing overside of ships' garbage is prohibited.

2. *Ships' Radio.* Once vessel berthed at Terminal the use of her radio will not be permitted.

3. *Ships' Boats.* Use of ships' boats not permitted within limits of harbour of Tobruk.

MARSA EL BREGA: 30.25 N. 19.34 E.

Also refer to "General – All Ports".

FLAG: All ships should fly the Libyan flag when inside teritiorial limits. They should make sure that they have a Libyan flag on board before leaving the last port of call. Failure to fly the Libyan flag may result in a heavy fine.

Libyan Law does not permit ships using Libyan waters to retain Israeli flags, stores or literature pertaining to Israel on board, even though these may be normally part of the vessel's navigation equipment.

DOCUMENTS: Customs and Immigration officials will board the vessel, except in adverse weather. All relevant documents are supplied by the Mooring Master and on completion of mooring the Master will fill in, sign and stamp the papers. These will then be handed over to the authorities before clearance for loading is granted.

Letters on ships' business should be addressed to Esso Standard Libya Inc., P.O. Box 385, Essofield, Marine, Tripoli, Libya, and should be marked "Marine Documentation Section".

Vessels calling at Marsa el Brega should have the following documents in addition to the ship's register.

Customs and Ports and Lights Authorities Forms:

A. Port Declaration – Form P.L. 7 (1 copy)
B. (Title in Arabic) Inward Report – Form C.L. 128 (3 copies)
C. Cargo Manifest Inward – Form C.L. 1 (3 copies)
D. Report Outwards – Form C.L. 4 (3 copies)
E. Crew Manifest Inwards – Form C.L. 31 (2 copies)
F. Export Manifest Form C.L. 155 (6 copies)
G. Certificate of Discharge for last cargo of Libyan crude. If vessel has not called at a Libyan port since October 18, 1973, then a letter is required from the Master, addressed to the Ministry of Petroleum, stating that he undertakes to mail the Certificate of Discharge, for the present cargo, from the Port of discharge.

Required when ships clear inwards, lists each member of the crew and all goods held (e.g. liquor, cigarettes, cameras, money, etc.) with crew member's signature opposite name or rank. This form is ordinarily supplied in advance so that it may be completed prior to arrival at Brega. Ships making their first call at Brega must necessarily complete after arrival, but will then receive advance forms for future calls.

Cargo ships also require ship's cargo manifest form (3) with same information as C. above.

Ship's Forms required by Customs:

A. Crew List – ship's form (3 copies)

Submitted for inward clearance and containing the following information:

List of crew members, type of vessel, nationality, date of arrival, place from which arrived, destination, and estimated date of departure. Sign and stamp with ship's stamp.

B. Stores List – Ships form (2 copies)

A list of ship's stores required when ship clears inward. Sign and stamp with ship's stamp.

C. Clearance from Last Port – Port's form (1 copy)

Required for inward clearance to load at Brega. Must be properly signed and stamped by officials of port of previous call. There are exceptions on requirement for this clearance dependent on ship, nationality and last port of call.

Other Forms: (Not required of cargo ships)

A. Report of Cargo and Ship's Ullages (original)
B. Tanker Time and Loading Report (original)

(A mimeograph original to be signed by the Master and returned to ship's Agent).

C. Certificate of Cargo Discharge (4 copies)

Master signs and stamps 1 copy at bottom of form, and returns it ashore.

Additional 3 copies are completed by Master at port of discharge and stamped and signed by Customs authorities. 1 copy should then be air-mailed to Ministry of Petroleum, Tripoli. The second copy air-mailed to Marine Superintendent, c/o Essofield. Marine Division, P.O. Box 385, Tripoli, and the third copy retained on board for presentation when the vessel next calls at Brega.

Notes on Ship's Documentation:

Agencies: E.S.L.I. no longer supply an agency service. Vessels should nominate an Agent by cable prior to arrival as most agencies have no accommodation locally and travel from Benghazi.

Should the vessels' Agent not be available on the vessel's arrival E.S.L.I. are prepared to negotiate with an agency, present in Brega at that time, to act on the vessel's behalf, providing that a letter is received, from the Master, nominating such Agent as E.S.L.I. may name as being present.

This will give the previously nominated Agent time to show during the vessel's manoeuvre to berth after which the Master's letter will come into effect. Should the Master decline from the above, the vessel will then remain at anchor until such time as the representative of the nominated agency presents himself. This is necessary as it is the Agent who obtains from the Local Authorities permission to load the vessel.

Information required by Esso Standard Libya Inc. prior arrival
The Owner, Charterer or Agent should airmail or cable following to Esso Standard Libya Inc., PO Box 385, Esso Field, Marine, Tripoli, cable address Essoship Tripoli:

(1) Name and flag of vessel.
(2) Dimensional characteristics, e.g. overall length, beam and max. draft.
(3) Total tonnage, number and type of products or cargo on board.
(4) Number and size cargo hose connections on either side and distance in feet of each from the bow.
(5) Safe working load of derricks in vicinity those connections.
(6) Number of shackles of chain (90 ft. shots) on each anchor.
(7) Whether or not VHF fitted.

Information concerning dimensional characteristics need not be included in letter or cable after first call.

LOCATION: Marsa el Brega is located in the South-Eastern part of the Gulf of Sirte in Lat. 30° 25′ 0″ N., Long. 19° 34′ 3″ E. It is an open bay contained between Ras Magdar and an unnamed headland some 3 miles to the West.

The Brega sea buoy is located in Lat. 30° 27.55′ N., and Long 19° 35.1′ E. A bow mooring oil loading fixed structure is located in Lat. 30° 26.0′ N., and Long. 19° 33.9′ E., with a fixed red light exhibited at a height 93 ft. above mean sea level. In addition, the structure is lighted by floodlights. Brega is radar controlled with the shore installation scanner in position 30° 25′ 02.5″ N., and 19° 34′ 55.6″ E. The height of the scanner tower is 112.2 ft. The Radio Beacon is located in Lat. 30° 25′ 00″ N., and Long. 19° 34′ 14″ E. The call sign is "M.B." and it operates continuously on a frequency of 403 kc/s.

A single point mooring is located in position Lat. 30° 26′ 45.26″ N., and Long. 19° 34′ 01.40″ E. A single flare is located in position 30° 24′ 31.9″ N., and 19° 35′ 49.7″ E. Three other flares are located approximately 700 ft. to the West and South-west. The flares when burning can be seen at extreme distances. Numerous lighted and unlighted navigational and mooring buoys are located within the restricted area shown on BA Chart 3350.

PILOTAGE: The services of a Pilot/Mooring Master are provided without charge. He will normally board the vessel in the vicinity of the Brega buoy and will advise the Master on approaches to the berths, mooring and unmooring, connecting and disconnecting cargo hoses, and all other operations within the berthing area. Vessels are cautioned not to enter the restricted area mentioned above without the services of a Brega Pilot/Mooring Master. Pilot ladder must conform to international safety standards.

PRATIQUE: Quarantine signals must be displayed upon entering Brega port limits in accordance with international practice and shall be continuously displayed until pratique is granted.

ANCHORAGE: Anchorages located 0.5 mile N.E. to East of Brega buoy in 12 to 18 fathoms. *Vessels should not remain at anchor in bad weather.* Vessels not permitted to anchor within 0.5 mile of the channels into the bay and inner harbour.

RADIO: Vessels bound Marsa el Brega not required call Tripoli for inward or outward clearance. Radio messages should be sent through Tripoli (via Malta if beyond communication range of Tripoli) and ETAs should be sent at least 48 hours but preferably 72 hours in advance. Master should state whether ETA in GMT or local time.

Unless 24 hours notice of ETA is received by "Essoship, Tripoli", Notice of Readiness will not be accepted.

As cable office closed between midnight and 0800 hrs., allowance for delays in receipt of radio messages due to this and other causes should be made when sending ETAs and other urgent traffic.

Esso Standard Libya Marine Terminal equipped with short-range Radio/VHF Telephone Port Control System. The following procedure should be adhered to: Vessels approaching Brega and equipped with VHF should call Brega Port Control on Channel 16. Channel 16 is reserved for "Calling", "Safety", "Emergency". When contact made, vessel will be allocated one of the four working channels: Channel 13, Channel 12, Channel 9, Channel 6. Esso Libya's Pilot launch is equipped to operate on these channels. Portable radio sets available for vessels not fitted with VHF.

TUGS: Esso Standard Libya Inc. maintains tugs and mooring launches to assist vessels to moor and unmoor.

BERTHING: Tankers: *Connecting of Cargo Hoses:* All cargo hoses used in the sea berth and at the bow mooring have 12 in. American Standard flanges. The hose used on No. 5 berth SPM has 16 in. American Standard flanges. Raising, connecting, disconnecting, and lowering of the hoses used in all berths will be performed by the ship's crew as advised by the Pilot/Mooring Master who will remain on board while the ship is in the mooring. Vessels should arrive with port derrick topped and ready for use.

Ballast: Esso Standard Libya Inc. has no facilities for the discharge of dirty ballast in Brega. Accordingly, all ships must arrive with clean ballast. International oil pollution regulations must be strictly observed by all ships while in Libyan waters.

Vessels should have sufficient ballast aboard for safe manoeuvring, but should not arrive excessively ballasted. The propellor should be submerged and the vessel trimmed not more than 8 ft. by the stern.

Vessels not properly ballasted will not be berthed in order of arrival and will not have their Notice of Readiness accepted.

Loading and Deballasting Simultaneously: Vessels properly equipped will be encouraged to discharge clean ballast and load oil simultaneously subject to the loading rate being reasonable, and that this procedure does not unduly delay the discharge of clean ballast.

Mooring Ropes: Tankers calling at Brega to load at the crude/naphtha sea berth should be equipped with a minimum of eight 10 in. circ. fibre or synthetic mooring ropes in good condition, not less than 120 fathoms in length. Mooring wires of equivalent strength are acceptable. A fibre or synthetic mooring rope in good condition must be available for towing vessels into berths by tug. It is recommended that 3 ropes be ready for use on the main deck. One on each side and one amidships joined to the others.

Crude Tanker Sealine Berths Nos. 1 and 4:
Berths 1 and 4 are now out of service. Ground chains and clamps for the mooring buoys, and the loading lines are still in position.

Crude Tanker Sealine Berth No. 2:
The least depth of water in this berth is 44 ft. The 30 in. crude line is approx. 8,000 ft. long with two hose strings. Crude oil is loaded by gravity or pumps and rates up to 39,000 b.p.h. can be obtained. When berthed the tanker is heading 330° true with both anchors out forward, and 6–700 ft. of chain on each anchor. The stern is secured to 5 mooring buoys fitted with quick-release hooks. The submarine hoses are picked up amidships on the port side of the tanker and the vessel's derricks should have a safe working load of 5 tons.

A naphtha line with a single 12 in. connection is laid in this berth, the shore line being 24 in. In the event that a vessel loads naphtha, then both crude hoses will be taken on board first before connecting the naphtha hose. In good weather, Berth No. 2 can safely accommodate a 65,000 d.w.t. tanker with the following principal dimensions: 65,000 d.w.t.; length, 800 ft.; beam unrestricted, up to 42 ft. draft in good weather. Gravity of sea water about 1030.

Crude Tanker Sealine Berth No. 3 – bow mooring:
The bow mooring is located in approximately 95 ft. of water, and consists of a fixed pylon surmounted by a revolving boom from which hangs a submerged oil-loading pipe arm. The main structure has a diameter of 130 ft. and is 97 ft. above mean sea level at its highest point. The pylon is surrounded by a fender ring which is mounted on vertical steel piles. The revolving boom is 76 ft. in length from the centre of the pylon to the end. The loading arm hangs from a ball joint at the end of the boom and is approximately 560 ft. in length, terminating in a hose handling platform on the outer end. The hose platform is kept at the level of the ship's deck by means of a compressed air ballasting and deballasting system. Four 12 in. hoses hang from the platform. Vessels are normally berthed port side to the platform. Derricks should have a safe working load of 5 tons. A maximum loading rate of 65,000 b.p.h. may be realised with the loading pump in operation.

Vessels are moored in position using 2 head ropes to the bollards on the boom and with two 6 in. nylon back spring mooring lines to the hose-handling platform. In addition, a 6 in. nylon snubber line is used to keep the platform alongside the ship. In bad weather conditions two additional headlines consisting of 12 in. "Samson" nylon are available. Vessels with the following principal dimensions can be accepted: 100,000 d.w.t., overall 1,000 ft., beam unrestricted, draft 48–49 ft., bow to manifold not to exceed 434 ft. Larger vessels may be accepted with prior approval.

Crude Tanker Sealine Berth No. 5 – Single Point Mooring:
No. 5 SPM is located in approx. 140 ft. of water and is in position 30° 26′ 47″ N., 19° 34′ 01.4″ E. The mooring consists of a monobuoy to which are attached 2×15 in. synthetic lines. These are shackled to a single 3 in. chain partly around which is a flotation cover. On the end of the chain is a 9 in. polypropylene line.

Mooring is effected by heaving the polypropylene through the bow as near the centre lead as possible until the chain is on board, and then shackling two 12 in. perlon strops to open links in the chain. The strops and shackles will be placed on board with the Pilot and vessels are advised to have the port derrick ready to hoist the gear on board at that time. The vessel is also required to have a good 3.5 in. to 4 in. messenger line of at least 75 fathoms in length, ready for use on the fo'c'sle head.

The 48 in. pipe-line is approx. 11,850 ft. long, terminating at the underbuoy structure on the seabed. Crude is loaded through one string of self-floating 24 in. hose with one 16 in. over-the-rail hose to the ship's manifold. Vessel's derricks should have SWL of 10 tons and if necessary be double rigged. The weight of a normal lift for connection to the ship's manifold amounts to less than 5 tons. This is for a hose free of oil, which is usually the case. Vessels with the following principal dimensions can be accepted in this berth: 300,000 d.w.t. Length beam and draft unrestricted. Flow rate 48,000 b.p.h.

Berths Nos. 3 and 5:
Vessels entering the restricted area on the approach to, mooring and leaving, these two berths must at all times have their anchors firmly secured. No anchor work may be carried out at any time whilst a vessel is in this area.

Product and Asphalt Tanker Berth:
Tankers loading refined petroleum products to Marsa el Brega will be berthed at the product dock. Products will be loaded through a number of small pipe-lines approximately 2,000 ft. long. 3 in. or 6 in. hoses are provided according to the grades of oil being loaded. Vessels assigned to load at this berth must be suitably equipped with mooring ropes and have derricks capable of lifting 2 tons.

Vessels cannot be berthed or remain alongside the breakwater except in fine weather. The breakwater is equipped with resilient fendering and ample mooring points. Tankers will be berthed by an Esso Standard Libya Pilot/Mooring Master. Two tugs are available, and a launch will run the mooring lines. In good weather vessel with the following principal dimensions can be accepted: Overall length 500 ft., beam unrestricted, draft 26 ft. max.

Gas Docks: Three types of processed gas are loaded in Marsa el Brega: liquefied natural gas (LNG); pressurized liquefied petroleum gas (Press. LPG) and refrigerated LPG.

These are loaded on 2 piled berths situated on the Southeastern part of the harbour.

There are dolphins to head, stern and breast lines.

The springs are secured to the central pier and in addition springs from the pier are also made fast. Vessels alongside the gas jetties must be ready to leave at short notice.

On the North or "A" jetty the following products are loaded: Press. LPG and LNG. On "B" jetty: Press. LPG, Refrig. LPG and LNG. There is also a caustic facility on "B" jetty. Minimum depth alongside the gas jetties is 37 ft.

Acid Dock:
There is a small berth to deal with sulphuric acid.

Dry Cargo Dock:
To nominate vessels, carrying cargo for Esso Standard Libya, for direct call at Marsa el Brega, prior approval must be obtained from Esso Europe Inc., Traffic Coordination, 50 Stratton Street, London, W.1., England. Telex No: EURESSPUR, 21221/5. The approval of the Operations General Manager, Brega, is required for any other vessel.

Notice of ETA Port Brega must be given 72, 48 and 24 hours prior to the vessel's arrival. Master of vessel should also advise number of stevedore gangs required.

Vessels assigned to discharge dry cargo at Marsa el Brega will be berthed alongside the dry cargo dock by an Esso Standard Libya Pilot/Mooring Master. The min. depth alongside and in the approach is 30 ft. Two tugs are available. A mooring launch will be available to run mooring lines. The dry cargo dock is fitted with resilient fendering and ample mooring points. During Winter it may be necessary to leave the berth during bad weather, and the Master is responsible for any damage sustained by the jetty and/or his vessel. A Pilot/Mooring Master will be standing by at all times.

All mooring ropes should be in good condition and none should have more than one short splice in the useable length. Crew shall keep the moorings tendered and properly lighted day and night. Shore ropes are also available when necessary.

Ships shall provide their own gangways and the crew shall keep them lighted and tendered, day and night. Ships must be equipped with adequate unloading gear. All cargo will be off-loaded with the use of ship's gear. When weather permits, derricks should be topped at sea prior to arrival. Due to the increase in cargo vessels calling at Brega, considerable delay may be experienced. Vessels carrying Esso cargoes have priority over all other vessels.

The length of the dry cargo dock is 650 ft. The max. size ship which can be accommodated is 500 ft. overall, beam unrestricted, *max. draft 26 ft.*

MEDICAL: There are limited medical and no dental facilities at Marsa el Brega. Personnel requiring urgent medical treatment may obtain it, but this will only be undertaken in serious cases. Masters of vessels arriving at Marsa el Brega who require medical treatment should give advance notice of their requirements by radio whenever possible.

FRESH WATER: No fresh water is available.

FUEL: No bunkers are available.

REPAIRS: No repairs are allowed to ship's engines while vessels are moored in the berths. Ship's engines should be ready for use on short notice in case the vessel has to vacate the berth suddenly because of bad weather. There are no repair facilities for ships available at Brega.

REPATRIATION: Crew members cannot pay off or leave the vessel at Marsa el Brega except in cases of emergency. Even in an emergency, it should be noted that seamen's Books are not valid under the Libyan law. A valid passport is required, and with adequate notice by radio it is possible to obtain an exit visa for a crew member leaving in an emergency.

SHORE LEAVE: Passengers and crew members are not permitted to land for reasons other than emergencies.

PORT REGULATIONS:
Cargo vessels:
The following restrictions, conditions, rules and priorities shall be observed by Masters, Consignees and Agents of Non-Esso cargo vessels calling at Marsa el Brega.

1. The permission of the Operations General Manager must be obtained before a non-Esso cargo vessel can discharge. The Operations General Manager also designates certain priorities which may change from time to time. Agents of cargo ships must keep in touch with Marine Superintendent who will advise them of the priority assigned to their vessel.
2. Maximum vessel draft 26 ft.
3. Maximum length overall 500 ft.
4. No repairs may be carried out to the propulsion machinery during the unloading operation and the ship must remain mobile and be ready to manoeuvre at all times.
5. Vessels must be equipped with their own unloading Gear.
6. Unloading must be from ship to truck and no marshalling arrangements can be made available inside the reserved area. The unloading operations must be completed rapidly.
7. Unloading operations may not be performed except during daylight hours as determined by the Marine Superintendent.
8. Loading trucks will be required to adhere strictly to Esso's safety rules, particularly while operating within the limits of the Industrial area.
9. Arrangements for the entrance and movement of the stevedoring personnel must be coordinated with Esso's Industrial Security Division. No housing or victualling will be provided for stevedoring personnel. All expenses, costs, remunerations and compensations associated with this activity will be borne directly by the company concerned.
10. The stevedores will be held responsible for cleaning up after completion of unloading.
11. No victual, water supply or bunkering service is available for vessels calling at Brega.
12. Advance notification must be given to Esso's Marine Division at least 10 days prior to arrival of vessel at Marsa el Brega. ETA of vessel to be notified 72 hours prior to arrival and confirmation and reconfirmation 48 hours and 24 hours respectively prior to arrival.
13. All vessels carrying or receiving Esso cargoes will be given priority over other vessels even if this requires interruption of the unloading operations of other cargo vessels.
14. Weather and sea conditions, particularly during the period December to April of each year, impose severe restrictions on the cargo pier usage. Among these restrictions are the discontinuation of unloading and the unberthing of the ships as a safeguard against ship and berth damage.

    One hour's notice will be given to Masters should it be deemed necessary to vacate the berth due to bad weather.
15. Esso shall not be held reponsible for any waiting period or delay (demurrage) related to the entry of cargo ships, nor be liable for any costs or compensation in that connection, regardless of the circumstances.
16. Esso shall not be held liable for any loss, damage or injury that may occur to any property or persons whatever the cause therof as long as they are related to or resulting from the use of the port. Such loss, damage or injury shall be the liability of the Master, Consignee or Agent irrespective of whether they are real or alleged. The above named shall also undertake to indemnify Esso for any such losses and damages and to hold Esso harmless from any liability that may arise as a result thereof.
17. All vessel movements will be subject to the control and direction of Esso's Marine Division Superintendent.

GENERAL: *Provisions:* There are no fresh or dry provisions available at Marsa el Brega, and Esso Standard Libya cannot undertake to obtain supplies from Benghazi.

Mail: The Ship's Agency will handle all official and crew ship's mail which should be passed to the Mooring Master before the vessel sails.

Harbour Work: Dredging is in continual progress in the vicinity of the inner harbour. Vessels are cautioned not to enter the restricted area (B.A. Chart 3350) without the services of a Brega Pilot/Mooring Master.

Master of cargo/product vessels calling at Marsa el Brega are cautioned that seaweed in suspension is present in the inner harbour area, and all precautions should be taken to avoid blockage of main engine room intakes.

Work on a new breakwater and harbour complex for the National Oil Company is in progress and is due for completion in 1977.

Communications: Communications between ship and shore will be by portable VHF radios. In the event of a breakdown in communications, the following visual signals should be used.

	By Day (in a vertical line) *Ship and Shore*	*By Night* (Lights) *Ship and Shore*	
Radio contact has failed. Send a boat.	Z Flag	3 White	3 Green
Ship has completed ballast. Is ready to load. Open shore valve	A Flag	2 White	2 Green
Ship is loading crude. Everything is in order.	B Flag	1 Red	1 Red
Ship will complete loading in 30 minutes, and will haul down signal at moment of completion to shut shore valve.	B over B Flag	2 Red	2 Red
Power failure – 30 minutes required to shut shore valves.	Answering	1 Green	1 Green
Ship is disconnecting and unmooring immediately. Shut shore valve	B over B flags Over answering Pennant	3 Red	3 Red

Ship will draw attention to each signal with a series of blasts on whistle or siren. Shore will acknowledge signals by repeating them or acknowledging them on the Aldis Lamp.

AUTHORITY: Esso Standard Libya Inc.

MISURATA (Kasr Ahmed): 32.22 N. 15.13 E.

Construction of this port commenced in 1973 — still under construction.

RAS LANUF: 30.31 N. 18.35 E.

(Also refer to "General All Ports").

Sirtica Terminal

DOCUMENTS: Customs will require:

4 Crew Lists.
1 Crew Declaration of personal belongings (including cigarettes etc.)
2 Stores Lists.
1 Passenger List.

Crew Lists and Crew Declaration of personal belongings must be on the approved Libyan Government Documents. Vessels are advised on their initial visit to the port to obtain sufficient forms for future visits. Also required are:

6 Copies of Cargo Manifest for Ras Lanuf Discharge.
1 Copy of Cargo Manifest for transit cargo with a summary.
1 Copy of Passenger Manifest.

Clearance from the last port of call will be required by the Government authorities. The police will require 4 copies of a Crew List and a Passenger Manifest if any passengers on board.

PILOTAGE: It is most important that ships establish communications with the terminal not less than 72 hours prior to arrival, giving estimated time of arrival. Further ETA signals should be sent when the vessel is 24 hours, 12 hours and 4 hours distant or any time a change of 1 hour in original ETA occurs. These messages should state specifically whether ETA is given in GMT or local time. The 72-hour signal should include the following: ETA, last port of call, if any sickness on board and if vessel has clean bill of health. Cargo quantity and grades expected to be lifted in net long tons at 60°F. The 12-hour signal should include definite indication as to whether the vessel is ready to load or not and should also include information on the time she will require to discharge ballast after arrival. Precise time of arrival should be given when the ship is 4 hours distant from the terminal.

Vessels to be moored at Ras Lanuf will be boarded by Mooring Master in the close vicinity of the suggested anchorage area mentioned below. The Mooring Master will advise the Ship's Master on approaches to berths, mooring, unmooring, connecting and disconnecting the hoses and in all operations within the mooring area.

Terminal sea buoy, colour red with radar reflector and bell is located in approximately Lat. 30° 32′ 40″ N. Long. 18° 34′ 38″ E. Vessels in the vicinity of the port should not navigate or anchor inside of a bearing 120°-300° running through this buoy position.

ANCHORAGE: Suggested anchorage area is within a 3,000 ft. radius of position Lat. 30° 33′ 00″ N., Long. 18° 35′ 40″ E. in approximately 90 ft. of water.

MAX. SIZE: Conventional berths: up to 60 ft. draft; up to 130,000 d.w.t.

Single Point Mooring: up to 75 ft. draft, up to 265,000 d.w.t.

HEALTH: By day – fly flag "Q" and by night display red light over white light for Quarantine Service.

Libyan Customs, Federal Police and Immigration Officials will board the vessel as soon as possible after arrival to give inward clearance and "pratique" services. Libyan Government Regulations are strictly enforced. The vessel should have a clean Bill of Health or equivalent document from the last port of call. The vessel's Master and all members of the crew shall possess International Certificates of Health showing valid smallpox Vaccination Certificates.

RADIO: Direct communication by radio between ship and shore is by VHF International Maritime Mobile Radio-telephone Service to Ras Lanuf Oil Movements Control Centre. All communication between ship and terminal should be by way of this station. ETA messages to Mobilpro, Tripoli, Libya, via Tripoli Radio (call sign 5AT). Ras Lanuf Oil Movements Control Centre keeps continuous watch on VHF Radio-telephone Channel 16 (156.80 mc/s), Channel 14 (156.70 mc/s) and Channel 11 (156.55 mc/s). Vessels approaching the port should make contact on Channel 16 when shore will request her to switch to Channel 14. This channel will also be used by terminal Marine Section for internal use and tanker mooring control. Channel 11 is reserved for communications between ships in mooring and Terminal Oil Movements Control Centre and should only be used for general purposes after obtaining clearance from Oil Movements Control on Channel 16. This is a safety measure since oil flow to ships is controlled through Channel 11 and therefore it must be clear at all times in case of need to stop oil flow for any cause. Channel 16 is for calling and safety use only.

TUGS: Not required. The company maintain launches to assist in mooring and unmooring vessels. These are under the direct supervision and control of the Mooring Master.

BERTHING: There are 4 submarine loading pipe-lines which terminate in the following approximate positions which are each marked by an unlit white spar buoy.

Berth No. 1: Lat. 30° 31′ 35″ N., Long. 18° 34′ 37″ E., from which a submarine pipe-line runs to shore on a bearing of approximately 224°. Depth of water at spar buoy 70 ft.

Berth No. 2: Lat. 30° 31′ 55″ N., Long. 18° 33′ 58″ E., from which a submarine pipe-line runs to shore on a bearing approximately 197°. Depth of water at spar buoy 70 ft.

Berth No. 3: Lat. 30° 32′ 18″ N., Long. 18° 33′ 19″ E., from which a submarine pipe-line runs to shore on a bearing of approximately 198°. Depth of water at spar buoy 73 ft.

Berth No. 4: Lat. 30° 31′ 35″ N., Long. 18° 33′ 00″ E. – a Single Point Mooring buoy in 95 ft. of water.

Raising, lowering, connecting and disconnecting of submarine hoses, as well as all other labours and duties on shipboard, will be performed by the ship's crew under direction of the Mooring Master.

LIFTING HOSES: After the vessel is securely moored the submarine hose will be hoisted on the port side. Berths No. 1 and 2 are each equipped with 2×12 in. loading hoses, the weight of each hose lift being approximately 5 long tons. Berth No. 3 is equipped with 2×12 in. loading hoses the weight of each hose lift being approximately 5.75 long tons. Therefore, all lifting equipment and tackle should have a safe working load of at least 6 long tons. Hoses are lifted by ship's gear and crew, and all connecting of hoses will be done by them. The lifting derrick, equipment, tackle, etc., should be topped off and ready on arrival.

The SPM is equipped with two 16-in. loading hoses, ending in 12-in reducers.

MEDICAL: No medical services (except in case of emergency and subject to a doctor being available) or other services are to be expected at Ras Lanuf.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: When a ship is in the moorings or vicinity, its engines must remain on standby with full power for immediate use. Deck machinery shall be kept in instant readiness. *Positively no repairs of any sort will be permitted in the moorings.*

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wines, beers, perfume, arms, ammunition, saccharine and possibly other items have to be locked up under Customs seal from time of arrival of ship in port until time of leaving territorial waters. Each person is allowed 25 cigarettes per day of stay or 25 grams of tobacco or cigars in lieu. Each man allowed 1 litre of beer or half litre of wine per day. Special allowances are made for Master under special circumstances.

CONSULS: The only consulates are located in Tripoli which is 670 km. by road from Ras Lanuf. These consist of U.S.A., British, Danish, Dutch, United Arab Republic, French, German, Greek, Indian, Italian, Norwegian, Spanish, Russian (U.S.S.R.), Turkish, Yugoslavian.

REPATRIATION: Crew members cannot pay off or leave the vessel at Ras Lanuf except in cases of extreme emergency. Even in an emergency it should be noted that Seamen's Books are not valid under the Libyan law. A valid passport is required.

BALLAST: Positively no provision is made for dirty ballast. Any ship arriving with dirty ballast will be rejected and all costs accruing therefrom will be to the ship's account. Notice of readiness shall not be accepted until vessel returns with clean ballast and tanks fit to receive cargo. She will on second arrival tender a new notice of readiness to load.

TIME: Libyan local time is GMT plus 2 hours.

GENERAL: No stores, foodstuffs or goods whatsoever of Israeli origin may be on board any ship calling at Ras Lanuf.

Penalties: Fine, confiscation of goods and possibly more. The Libyan Government strictly enforces this law.

Whilst arriving fly the Libyan Ensign (red side up).

Due to the existence in these waters of the fish commonly called "Weaver" fish, ship's crew are urged to exercise extreme caution in fishing whilst lying off the port area. There have been several cases of poisoning by these fish, all of which were distressingly painful, caused by contact with the fins.

SHORE LEAVE: Not allowed.

AUTHORITY: Mobil Oil Libya Limited, Tripoli.

TOBRUK: 32.04 N. 24.00 E.

(Also refer to General all ports)

PORT LIMITS: The complete water area existing within Tobruk Bay or that water area existing to the West of an imaginary line commencing as from Tobruk Peninsula up to the coast to the South.

It is formed of 3 areas inside the Bay, namely Marsa Tobruk, the proposed naval base and Marsa Al-Hariga Oil Terminal.

BERTHING: Berths in Torbruk Harbour:

Quay No. 3: Length 82 ft. draft 11 ft.
Quay No. 4: Berth 1: length 560 ft. draft 20 ft.
Berth 2: Length 395 ft. draft 28 ft.
Berth 3: Length 410 ft. draft 30 ft.

TANKERS: Refer to "Marsa Al Hariga".

MAX. SIZE: Max. draft: 29 ft., max. length: 400 ft.

RADIO: Tobruk Radio (Station operated by Arab Gulf Oil, Timing 0900/0930, 1300/1330, 1700/1730, 2100/2130 hrs.) 5AL: 420, 425 and 500, VHF (24 hours) Channels 12, 16 and 19.

STEVEDORES: All stevedoring operations and formalities to be done by Agents.

MEDICAL: Available.

FRESH WATER: Not Available.

FUEL: Not available.

REPATRIATION: Available via Benghazi.

DEVELOPMENTS: Port extension project under study.

TRIPOLI: 32.54 N. 13.13 E.

Also see "General" before first port.

PORT LIMITS: (a) The water area existing inside the actual breakwater and that which may fall within any new breakwaters eventually constructed in accordance with the Port Developments Project.

(b) The outer water area known as the navigational channel commencing as from the harbour entrance along the distinguishing marks of the channel for a distance of 2 km.

RESTRICTIONS: Any containers arrived on ro/ro ships should be on trailers.

MAX. SIZE: All types of ships with 27 ft. draft and less are safe in harbour.

RADIO: Tripoli Radio (coast station — 24 hours), 5AT, 476 and 500 kc/s, R/T 2182 and 2197, VHF Channels 16 and 6.

Tripoli Port Radio (24 hours), 5AI, 500 kc/s, R/T 2182, VHF Channels 10, 12 and 16.

BERTHING:

	Quay No.	*Length ft.*	*Depth ft.*
Main Port:	5.5	200	11
	6 East	200	13
	8	400	22
	10	450	22/25
	Victory	550	22
	F.J. PT.S.	200	9
	6 West	220	13
	7	400	18
	9	400	23
	11, 12 & 13	930	22
	F.J. STB.S.	200	10
	Japanese	4,823.4	19.7
Karamanly:	1 & 2 (oil)	450	27
	3	400	22
	4	400	18
	5	300	15
	F.J. STB.S.	250	14
	F.J. PT.S.	250	16.5

STEVEDORES: All stevedoring operations to be done by Port Authority except formalities to be done by ship's Agent.

CRANES: Electric floating crane available up to 100 tons.

MEDICAL: All facilities available.

FRESH WATER: Available by barge and alongside, should be obtained from Port Authority through ship's Agent.

FUEL: Available through Agent. A notice of 24 hours needed, advisable for Chief Engineer to check what grades are available.

REPATRIATION: Crew changes are possible.

AIRPORT: A number of major air lines operate to and from Tripoli airport which is about 27 km. from the city.

DEVELOPMENTS: Port extension project under construction.

WATCHMEN: Available.

CONSULS: Algeria, 34631; Belgium, 37797; Bulgaria, 35733; China, 32300; Denmark, 39413; Egypt, 33833 & 33822; France, 33526 & 33527; Germany, 33827 & 30554; Pakistan, 40072; Poland, 31768; Saudi Arabia, 30486; Spain, 35463 and 33275: Sudan, 39181 and 39182; Sweden, 32343; Switzerland, 32416; Greece, 36978 and 36689; India, 41835; Iraq, 34235; Italy, 34131; Jordan, 32707; Kuwait, 40282 and 40281; Lebanon, 33733 and 32289; Malta, 38081 and 38082; Morocco, 34239 and 40188; Netherlands, 41549 and 41550; Syria, 31783; Tunisia, 31051/2; Turkey, 37728; U.S.S.R., 3054; U.K., 31191/5; U.S.A, 34020 to 34030; Venezuela, 36838; Yugoslavia, 34114 & 33392.

POLICE/AMBULANCE/FIRE: Main port call; 39111, 35010, 31518. Karamanli wharf call: 30378, 35010, 31518.

SHORE LEAVE: Allowed after free pratique, custom and immigration formalities completed.

REPAIRS: See floating dock in "All Ports General".

AUTHORITY: Port Manager and Harbour Master.

ZAWIA TERMINAL: 32.48 N. 12.42 E.

Also refers to General All Ports.

LOCATION: Situated about 50 km. west of Tripoli. Two conventional buoy mooring systems have been installed off Azzawiya Refinery, in place of the single point moorings previously sighted.

PILOTAGE/APPROACHES: No lights have been installed as yet to mark the berths. Vessels are advised to anchor in a position 1.5 miles N.W.of C.B.M. No. 1 to await Pilot and Libyan Authorities. Vessels must keep clear of an area deemed to be the pilotage area. They should not approach the mooring closer than 1 mile without receiving local advice.

Admiralty charts indicate an Anchorage symbol in position 30° 49′ 00″ N, 12° 41′ 00″ E and Flare symbol in position 32° 47′ 25″ N, 12° 42′ 00″ E. Zawia Oil Terminal is adjacent to the flare.

BERTHING: *C.B.M. No. 1:* In position 32° 52′ 16″ N, 12° 41′ 45″ E consists of 6 Lamgar buoys. Vessels lie on a heading of 310°(T) using 2 anchors each with about 8 shackles in water. Depth of water 27 m. Size of vessel 20,000 – 50,000 d.w.t.

C.B.M. No. 2: Consists of 3 Lamgar buoys. Vessels lie on a heading of 310°(T) using 2 anchors each with about 7 shackles in water. Depth of water 27 m. Size of vessel 5,000 – 20,000 d.w.t.

ZUARA: 32. 55 N. 12.07 E.

Also see "General" before first port.

PORT LIMITS: a) The water area existing between the actual breakwater and that which may fall within any new breakwater eventually constructed.

b) The water area known as the navigational channel existing outside the harbour entrance for a distance of 1 km.

RESTRICTIONS: The port for ships laden with cargo of direct delivery only.

MAX. SIZE: Ships up to 13 ft. draft and 65 m. length are safe in the harbour.

RADIO: VHF channel 16. Use Tripoli Radio and Tripoli Port Radio.

BERTHING:

Quay No.	*Length*	*Depth*
Shore quay	2 ships	13 ft.
F.J. Stb.S.	165 ft	13 ft.
F.J. Pt.S.	165 ft	13 ft.

STEVEDORES: All stevedoring operations and formalities to be done by Agents.

MEDICAL: Available.

FRESH WATER: Available alongside.

FUEL: Not available.

REPATRIATION: Possible

AIRPORT: Tripoli Airport situated about 127 km. from Zuara.

DEVELOPMENTS: Port extension project under study.

CONSULS: Nearest consuls are at Tripoli.

REPAIRS: Not available.

POLICE/AMBULANCE/FIRE: Call Port Manager, Tel: 025305.

SHORE LEAVE: Allowed after free pratique, custom and immigration formalities completed.

AUTHORITY: Port Manager and Harbour Master.

ZUEITINA: 30.51 N. 20.00 E. (See Plan)

(Also refer to "General – All Ports")

LOCATION: The Terminal Light float, moored in position 30° 56′ 00″ N. 20° 00′ 00″ E., has a red hull with a black and white vertically striped tower; it shows at night a white light flashing every ten seconds. A prominent landmark is the radio mast (height 451.5 ft. above sea level) in position 30° 49′ 57.6″ N. 20° 03′ 05.5″ E.; it displays at night three red lights in a vertical line – the top light flashing, the two lower fixed. The top light is on top of the mast (which is 400 ft. above the base), the middle light is 226 ft. above the base, and the lowest light is 133 ft. above the base. At night flares at the Liquid Petroleum Gas Plant, in position 30° 54.2′ N. 20° 05.4′ E., can be seen from a considerable distance; by day a column of smoke emanating from this position is also conspicuous. Fourteen large oil tanks, painted white, near the foot of the Radio mast, are prominent landmarks.

Positions of Moorings:

"Alpha" berth	30° 53′ 30″ North,	20° 01′ 05″ East
"Bravo" berth	30° 52′ 18″ North,	20° 01′ 24″ East
"Charlie" berth	30° 52′ 08″ North,	20° 00′ 11″ East
"Delta" berth	30° 50′ 56″ North,	20° 00′ 26″ East
"Echo" berth	30° 50′ 16.4″North,	19° 59′ 16.1″East

DOCUMENTS: Soon after vessel's arrival, a Custom's official will board, accompanied by a Company employee, who will act on behalf of the ship and its Agent, as well as on behalf of the Company, in the execution of essential ship's business. The following documents, signed by the Master and stamped with the ship's official stamp, are required by the Customs official for the Customs and Immigration Departments and for the Port and Lights Authority:

2 Entering and Leaving Territorial Waters Certificates.
2 Report Inwards Certificates.
2 Crew Declarations of Dutiable Goods.
2 Report Outwards.
3 Boycott Certificates.
2 Stores Lists.
5 Crew Lists.
1 Clearance from Last Port of Call.
2 Tanker Characteristics Certificates.

Certificate of Discharge, from the Discharge Port Authorities, of the last cargo loaded in Zueitina.

With the exception of the Crew Lists and the Stores Lists and the clearance from the Last Port, the above forms will be provided by the Company's representative.

It is very important that the Master should be able to produce a properly authenticated certificate of discharge covering the last cargo loaded into the ship in Zueitina. If for some reason he is not in possession of such a certificate, he must write a letter of explanation which includes the pertinent extracts from the ship's logbook, append his own signature to it and stamp it with the ship's official seal, and address it to the Ministry of Petroleum, Es Zueitina. If the explanation for failure to produce the certificate is considered satisfactory the ship may be permitted to load. If there appears to be any suspicion that the last port was not as stated, the ship will be turned away.

If the vessel has not previously loaded in Zueitina, the Master is required to confirm this fact in an official letter, stating also the ship's last port of discharge and giving an undertaking that the cargo about to be loaded will not be discharged in any of the countries to which the Arab embargo extends.

On completion of loading, the Company's clerk will again board the ship and assist the Master with the completion of the various documents. He will require to take ashore the following:—

Port Log	1 copy
Ports & Lights Certificate	3 copies
M. of P. Cargo Loaded Form	3 copies
Ullage Report	15 copies
Mail Form	3 copies

all of which forms are provided by the Company or by the Agency. He will also take ashore any letters to be posted. On occasions, a customs official will visit the ship with the documentation clerk prior to sailing to ensure that the seals which were put on the bonded stores lockers have not been tampered with before the ship has left Libyan waters.

The documentation formalities prior to departure, are usually completed whilst the ship is unmooring from the berth, or just after it has left the berth, hove to with the Mooring Master still aboard. Sometimes, however, (and particularly after the loading of "Agip" cargo), the processing of the papers ashore may take longer than usual, and the ship may have to anchor to await the clerk's arrival, in which case the Mooring Master will direct it to a safe anchorage before disembarking. Zueitina Marine will then inform the Master when the launch bearing the clerk is about to leave the Small Craft Harbour, in order that the anchor may be weighed, and a lee side presented to the launch.

For information relative to ships' movements at Zueitina Terminal, such as arrival times, delays in berthing, quantities of cargo loaded in their vessels, tanker owners and agents, should contact "Occidental International Oil, Inc." 16 Palace Street, London SW1. Telephone 01-828 5600.

ACCEPTANCE PROCEDURE: *Notice of Readiness, Laytime etc:*

Vessels Loading Crude Oils: A vessel for which a berth is available on arrival will be boarded by the Mooring Master at the Terminal Light float and, providing that the vessel is in all respects ready to commence loading (except for the necessary de-ballasting time), the Notice of Readiness will be accepted at the time of the Mooring Master boarding, subject to the provisos – a, b, c and d, below.

If the vessel is not in all respects ready to proceed to the berth, with main engine and auxiliaries fully manoeuvrable, mooring ropes on deck, anchors, windlasses, winches, etc., in good working order and readiness, it will not be accepted until the Mooring Master is satisfied that all these conditions are met.

A vessel which has been instructed by Zueitina Marine to anchor in the roadstead on arrival should, after doing so, inform Zueitina Marine of the precise anchorage time, which time will, for the purposes of berthing order and the Port Log, be considered as the vessel's arrival time. According to the practice of the port, acceptance of the Notice of Readiness will coincide with this arrival time, providing:–

(a) that it is within the hours of daylight – deemed to be from 06.00 hrs. l.t. to 18.00 hrs. l.t.,
(b) that it is not a Public Holiday, or a Friday (the Libyan Sabbath), unless the vessel is actually handled on that day,
(c) that the port is open, and
(d) that the vessel has been nominated to load.

An exception to clause (a) above, is when conditions allow of night berthing, in which case the vessel will be accepted when the Mooring Master boards, or, should the vessel have been at anchor, when the anchor is aweigh, providing that the Mooring Master is then on board.

In the case of a vessel arriving without nomination, the Notice of Readiness will be accepted when notification of her nomination has been received at the Terminal, subject to provisos (a), (b) and (c) above, and instructions from the Company's Operations Department. On occasions when the Company deems it advisable to berth a vessel prior to the date of the nominations, acceptance of the Notice of Readiness will be at the time the Mooring Master boards, providing that the anchor is then aweigh.

In addition to clauses (a), (b) and (c) and (d), above, vessels will not necessarily be accepted when arriving at an unreasonable time ahead of, or behind, their last signalled Estimated Time of Arrival.

Vessels Loading Liquid Petroleum Gas: A Liquid Petroleum Gas Tanker's Notice of Readiness will be accepted on arrival, provided that:

(a) the port is open, ("port" meaning, in this case, the LPG berth,)
(b) that it is not a Friday (the Moslem Sabbath) or an official holiday, unless the ship is actually handled on that day,
(c) that it is not during the night hours – deemed to be, at the LPG berth, between 18.00 hours and 06.00 hours (local time) – unless the ship is actually handled during that period,
(d) that the ship does not arrive on the same day, or clash with the loading of, another LPG tanker chartered under a LINOC contract,
(e) that the ship's tanks are in such a state of readiness, i.e., requiring no cooling, no purging, that loading can be commenced *at full rate* immediately the hoses are connected,
(f) that the arrival time does not differ appreciably, either before or after, from the last signalled ETA sent by the ship and received at the Terminal, and
(g) that the vessel has been nominated to load.

When a Liquid Petroleum Gas tanker does arrive whilst the port is closed, the Notice of Readiness will be accepted at the time of the opening of the port, subject to provisos (b), (c), (d), (e), (f), and (g).

The N.O.R. of an LPG loader arriving on a Friday or on an official holiday, or during the aforesaid night hours, will be accepted at 06.00 hours (local time) on the first subsequent working day, subject to provisos (a), (d), (e), (f) and (g).

An LPG tanker arriving on the same day as an LPG tanker scheduled to load under a LINOC contract, or whose loading would clash with an LPG tanker scheduled to load under a LINOC contract, will have its N.O.R. accepted on the completion of hose connection, subject to provisos (e) and (f).

PILOTAGE: Es Zueitina Terminal is situated on the Libyan coast, in the Gulf of Sirte, 72 miles distant from Benghazi. The terminal sea buoy, painted black and white vertical stripes and at night showing one flash (white) every 10 seconds, is located in position Lat. 30° 55′ 39″ N. Long 19° 58′ 00″ E. A radio tower, in position Lat. 30° 49′ 57.6″ N. Long. 20° 03′ 05.6″ E., the height of which is 451.5 ft. above sea level, is a prominent landmark. It displays at night three red lights in a vertical line, the top light flashing, the lower two fixed.

A Mooring Master will board the vessel in the close vicinity of terminal Light float and advise Master on all manoeuvres relative to berthing, connecting and disconnecting the hoses.

Vessels of 40,000 d.w.t. and upwards which are not fitted with a mechanical pilot hoist should have a pilot ladder long enough to reach the Mooring Master's launch rigged alongside the accommodation ladder, in such a manner that the Mooring Master can transfer to the accommodation ladder when about 10 ft. from sea level. Ladders must be strong, clean, and in good state of repair and well secured. A good lee should be made, to allow the launch to come alongside the Mooring Master to board safely. (Note: Ships which have been instructed to berth at the S.P.M's, and need to take aboard the Company's gear, should have the ladder(s) rigged on the port side, and give a lee on that side, in order that they may take it aboard from the Mooring Master's launch with the working derrick as soon as the Mooring Master has boarded.)

ANCHORAGE: Vessels awaiting the Mooring Master should heave to in the close vicinity of the Terminal Light float. If they are obliged, or instructed to anchor, they should do so in the recommended anchorage, which is within the radius of a circle centred in position Lat. 30° 55′ N., Long. 20° 01′ E. Under no circumstances should they anchor South of the 30° 54′ 00″ parallel. Whilst at anchor, they should exercise the utmost vigilance, and should keep in VHF radio-telephone with the Terminal at all times. If heavy weather necessitates them heaving up anchor and proceeding to sea, Zueitina Marine must be informed accordingly.

RADIO: Cable Address: OXYPORT OXYLIBYA TRIPOLILIBYA (via Tripoli Radio) OXYOIL LONDON (via Portishead Radio). 72 hours prior to arrival at Zueitina, Masters should advise the Company of their vessels' ETA, by cables sent both via Tripoli and via Portishead Radio to the addresses given above. They should subsequently confirm or amend them when they are 48 hours and again when they are 24 hours distant from the Port.

(Cables to Agents advising of ETAs should be sent in addition to, and *not* in place of, those sent to OXYPORT, TRIPOLI and OXYOIL, LONDON.)

Note: Where a ship fails to comply with the requirements detailed in the above, "Occidental of Libya, Inc." will not accept responsibility for any delays which may occur in consequence of such failure.

Cables should include the quantity and grade of cargo to be loaded, the last port of call and destination, Bill of Health status and details of any sickness on board. Estimated times of arrival should be given in GMT. (Libyan Standard Time is GMT plus 2 hours.).

Masters of vessels equipped with VHF radio-telephones should contact Zueitina Marine on Channel 13 or Channel 16 when within range, and give a firm calculated time of arrival at the Zueitina Light float. They should also again inform Zueitina Marine duty officer of the quantity and grade of cargo required, the last port and the destination. They should confirm that they have in their possession a certificate of discharge for the last cargo loaded into their ships in Zueitina or, in cases of ships arriving in Zueitina for the first time, that they have ready for the Ministry of Petroleum a letter which certifies that the cargo which they are about to load will not be discharged in any country against which the Arab Oil Embargo extends. In vessels paying their first visit to the Terminal, Masters should also inform the duty officer of the size and type of the manifold connections (i.e. 12″ A.S.A., or 10″ European, etc), and whether or not they have on board heavy wires and shackles for mooring at the mono-buoys.

(N.B. It is important that all ships arriving at Zueitina are fitted with VHF radio-telephones, capable of operating on the main working channels. Without VHF communications, Zueitina Marine cannot always know with accuracy a vessel's arrival time, for instance, and as a result that vessel might well lose its loading turn and be subjected to an appreciable – and, with VHF, avoidable – delay in consequence.)

HEALTH: Pratique will be granted by the Custom's official. He will examine the ship's logbook, and will inspect and seal the bonded storerooms.

TUGS: No tugs available to assist berthing.

BERTHING: The sea terminal consists of five berths, two of which – "Bravo" and "Delta" – are conventional buoy moorings, and the others – "Alpha" "Charlie" and "Echo" – are "single-point moorings", or "mono-buoys". Conventional buoy moorings "Bravo" and "Delta" are approximately 2.5 miles off shore, with an average depth of 70 and 80 ft. respectively. 42 in. (ID) submarine lines connect the berths to the shore installations. Two 12 in. hoses connect the header at the end of the submarine line to the ship's manifold. They are invariably taken up on the port side. The weight to be lifted on each string is approximately 7 tons.

Single-point Moorings "Alpha", "Charlie" and "Echo" are all approximately 3 miles offshore, in an average depth of 100 ft. of water. As in the conventional buoy berths, the hoses are always taken up on the port side, and the connection to the ship's manifold is by a 12 in. ASA flange. The weight of each string to be lifted is approximately 7 tons.

Single-point Moorings. The "Mono-buoy" is a large cylindrical buoy (weight 106 tons), divided by steel bulkheads into four watertight compartments, through the centre of which emerges the loading hose. The perimeter of the buoy, to which the buoy-to-ship moorings are attached, is a turntable which revolves on bogies round the centre – hose-supporting – section, in such a manner that the vessel berthed on the buoy will always lie head to wind. The minimum depth of water within the swinging radius of the largest ship envisaged at the buoy is approximately 95 ft.

To the mono-buoy are attached two 150-feet long, 14-inches circumference, braided nylon ropes, each with a minimum breaking strain of 263 tons; they are wound round each other and the eyes at each end are shackled together so that they form a composite mooring of immense strength. To the seaward end of this composite line is attached a 15-feet length of 2.375-inch section chain cable, buoyed, to prevent it sinking with the ropes. The other end of the chain cable is made fast to the "approach rope", a (300-feet length of 10-inch circumference plaited polypropylene, which, when not in use is allowed to float out from the buoy.

The ship approaches the buoy from downwind, taking care to keep the wind right ahead. (Adequate ballast should be retained aboard to provide manoeuvrability.) When sufficiently close, the crew will lower to the waiting mooring launch the end of a good mooring rope, to the eye of which has been attached a stout nylon lashing. This mooring rope should be passed out through a central panama lead, if a suitable one exists, or over a fairlead on the port bow. Meanwhile, two heavy 5.5-inch circumference flexible steel slip wires have been made fast in readiness – one on each bow, if the line is being hove through a central panama lead, both on the port side (and preferably on different sets of bitts) if the port fairlead is being used – in such a manner that there is an adequate number of turns around the bitts and that the end of the eye reaches to approximately ten feet from the lead. When the chain comes aboard, it is quickly secured to the wires by two 150 tons B.S. shackles, which are bolted through the open links in the chain. The strain on the approach rope (which had followed the ship's rope round the drum-end of the windlass) is now released, and the weight allowed to come on to the wires, shackles chain, and buoy composite: the approach rope is then "turned-up" as an additional mooring and the ship is now all fast in the berth. Ship's tension wires, or other mooring lines, should also be shackled or lashed to the chain, for added security.

It is the intention of the Terminal authorities to ultimately replace the composite mooring rope with a 150-feet length of chain cable, supported in polyurethane buoyancy collars. Such form of mooring has been installed in "Echo" berth. The method of berthing at "Echo", however, is no different to that described above.

When leaving the berth, the ship's additional moorings are first detached from the chain, any slack which is in the approach rope is taken in and that rope made fast very securely. The slip wires are then paid out slowly and carefully until the strain comes on to the approach rope. (When strong winds have tightened the mooring, it will probably be necessary to put the engine slow ahead before attempting to do this). The shackles can then be taken adrift, freeing the wires, and the approach rope slacked off until the chain reaches the water – care being taken to ensure that it is not allowed to fall across the hoses. The engine is then put astern, and the rope allowed to pay out easily (with half a turn around the bitts to stretch it clear) as the ship leaves the buoy.

Loading. Rate of loading is between 32,000 and 50,000 b.p.h.

Conventional Buoy Moorings. In berths "Bravo" and "Delta" the ship is berthed with two anchors ahead and seven mooring lines to buoys round the stern and quarters. In addition, to all buoys except No. 4 (right astern) there are attached 5.5" circumference steel wires, laid on the sea bed, buoyed, when not in use — in all but the most settled weather these are brought into the ship by the mooring launch, hove up and made fast on board. Vessels should have ready a good 3.5" rope messenger to take up these wires, and strong chain stoppers, or "carpenter's stoppers", for use when securing them.

Three good mooring lines should be ready on the after end of the main deck, two of which have been securely married in readiness to be sent away first, to warp the ship round. At least seven good ropes should be ready for running out from the poop, with lashings ready in case one rope has to be married to another. Plaited polypropylene ropes, at least 120 fathoms long and of a diameter and strength appropriate to the size of the vessel, are recommended: large manilla ropes, slow and cumbersome to handle, are definitely unsuitable for berthing under these conditions.

Synthetic ropes on automatic winches are favoured in this port, but it is recommended that they be at least 150, and preferably 200, fathoms long. These winches must be capable of being firmly locked when in the moorings — any tension feature is not permissible.

When it has been necessary to slip moorings in order to leave the berth quickly and without the assistance of the mooring launches, the Company will make every effort to recover them and to return them to the vessel as soon as possible. Normally the Company makes no charge for recovering anchors and moorings, but it reserves the right to do so under exceptional circumstances.

In the conventional buoy moorings, in order that ships may be securely moored against beam winds and the chain sufficient leading ahead to ride out heavy swells, we recommend that they be equipped with ample chain on both bower anchors. Experience gained in sea berths suggests that the chain required should be more than the length of the ship. In vessels of 100,000 d.w.t., for which the berths were designed, we recommend that there should be 14 shackles (1,260 ft.) of chain on each anchor. A minimum acceptable amount of chain is 150 fathoms (10 shackles) for the safety of the ship and the company's installations. Anchor marker buoys should be used.

HOSES: The lifting, lowering, connecting and disconnecting of the cargo hoses will be done by the tanker's personnel in accordance with the advice and directions of the Mooring Master. Ship's derricks and deck winches should be capable of operating with a safe working load of 7.5 tons and preferably 10 tons. Vessels with inadequate hose-lifting equipment will be rejected. All derricks should be fitted with "preventer-guys" in addition to normal guy tackles. The port derrick must be rigged and ready for use on arrival. In addition ships leaving SPM should have the starboard derrick ready, too, in order to facilitate the discharge of the mooring gear on the lee side.

LOADING: *Occidental crude oils and debutanized condensate:* The principal cargo loaded at Es Zueitina Terminal is Occidental Field Blended Crude Oil, pumped in from the Company's wells, two hundred and twelve kilometres inland, but in addition certain other grades of Crude Oil are loaded, namely, Occidental Medium Crude, Occidental Premium Crude, and Occidental Debutanized (Stabilized) Condensate. Also loaded are Liquid Petroleum Gas products, Butane and Propane (LPG), and "Agip" Buattifel Crude Oil, from the wells of Agnezia Generale Italiana Petroli, in concession 100.

The following pertinent data will, we believe, be of interest to tanker owners and operators, Masters and Mates, and to refinery operatives in the discharging ports:-

Occidental Field Blend
Average A.P.I. 39.5
Average Specific Gravity 0.8275
Pourpoint +35
Reid Water Vapour Pressure +5.2 p.s.i. at 100° Fah.
H_2S less than 5 p p m.
Flash Point below 60° Fah.
Average loading temperature on board 108° Fah.
Barrels per long ton at 60° Fah. 7.741

Occidental Medium Blend
Average A.P.I. 36
Average Specific Gravity 0.8448
Pourpoint +85
Reid Water Vapour Pressure +5.0 p.s.i. at 100° Fah.
H_2S less than 5 p p m
Flash Point below 60° Fah.
Average loading temperature on board 98° Fah.
Barrels per long ton at 60° Fah. 7.582

Occidental Premium Crude
Average A.P.I. 43.5
Average Specific Gravity 0.8086
Pourpoint +30
Reid Water Vapour Pressure +5.6 p.s.i. at 100° Fah.
H_2S less than 5 p p m
Flash Point less than 60° Fah.
Average loading temperature on board 108° Fah.
Barrels per long ton at 60° Fah. 7.922

Occidental Debutanized (stabilized) Condensate and Debutanized Condensate:
Average A.P.I. 79.5
Average Specific Gravity 0.6706
Pourpoint −60° Fah.
Reid Water Vapour Pressure 11.0 p.s.i. at 100° Fah.
H_2S less than 1 p p m
Flash Point less than 0° Fah.
Average loading temperature on board 75° Fah.
Barrels per long ton at 60° Fah. 9.555

The grades of cargoes to be loaded will affect the berthing schedule, irrespective of the chronological sequence of vessels' arrival times.

It is recommended that vessels take the maximum flow with due regard to safety, in order to both expedite the turn-round time and to obtain a ballast to counteract the possible effect of local winds which frequently spring up with little warning.

Care must be taken not to overload, as there is no provision whatsoever for cargo once loaded to be pumped back ashore.

Warning is given of the danger of closing hoses against an incoming oil flow. Such a procedure may create excessive pressures which result in damage to loading hoses, sea lines, and other Terminal equipment. Vessels which ignore this warning and do in consequence cause such damage will be held responsible for all costs incurred for the renewal or restoration of the damaged equipment.

The attention of Masters is drawn to Safety Precautions, wherein they are reminded of their responsibilities for ensuring that all persons aboard their ships are cognizant with the hazards involved in the loading operations, and with the need for strict observance at all times of the Fire and Safety Rules. Debutanized Condensate, in particular, is a highly volatile fluid which must be treated with the utmost prudence.

(N.B. particulars of cargoes included in the foregoing are for information only and do not constitute a guarantee of quality.).

Loading – A.G.I.P "Buattifel" Crude: Because of its high wax content – 37% – A.G.I.P. "Buattifel" Crude Oil, (hereafter referred to as "Agip") has to be maintained at a very high temperature throughout its entire transit from the wells to the Terminal system, and thence via the sea lines to the berth and the loading vessel: it will arrive on board at approximately 140° Fah., and the heating coils in the cargo compartments must be motivated in readiness and be capable of keeping the oil at above this temperature.

Two berths "Bravo" and "Charlie", have been modified for the loading of Agip cargoes – ships may be moored in either of these berths but because of the considerable heating problem involved only one of the berths at a time can be used for loading Agip cargo. Through the submarine lines to "Bravo" and "Charlie" central "gut" lines have been inserted – at "Charlie" berth where the sea line is 48 inches diameter, the gut line is of 18 inches diameter, and at "Bravo" – sea line 42 inches diameter – the diameter of the gut line is 16 inches. These two gut lines (which are, of course, tied in ashore with the Terminal tank and metering and pumping complex) terminate twenty feet from the headers at the seaward ends of the sea lines. The area between the outside of the gut line and the interior wall of the sea line is called the "annulus". To the headers (from which emanate the strings of flexible hoses which are ultimately bolted to the ship's manifold connections) are fitted remote control hydraulic valves, operative from the loading station within the Terminal.

Immediately prior to the berthing of the prospective Agip loading ship, hot Occidental crude oil is circulated from its storage tank, through the gut line, and back through the annulus, heating the entire system. Once the ship is securely moored, preparations are made to replace the hot "Oxy" oil with hot Agip oil. (60,000 barrels is the full line content at "Charlie", 33,600 barrels at "Bravo"). This process will take about four hours, and ship and shore must work in conjunction to ensure that the deballasting and the recirculation of the line with hot Agip oil are completed at about the same time. This is of vital importance, for once the line system is filled with hot Agip cargo it cannot remain in circulation for more than one hour. If the ship is not then ready to receive it, the Agip oil must be replaced by Oxy oil, and only after this has been circulated round the line can the line be again replenished with another circulation of Agip oil. This entire process may take about twelve hours – a wastage of time which neither the Terminal nor the ship operators can afford to contemplate with unconcern.

When ship and shore are ready to begin loading, the remote control valves are opened and, at a very slow rate, the cold Oxy oil which has been in the flexible hoses is loaded – 1,500 barrels at "Charlie", 300 barrels at "Bravo".

At this point, the loading officer in the ship will transfer the cargo to other tanks to avoid intermingling of the two types of crude, for now hot Agip is entering the ship's system, from the gut line. Loading continues at a slow rate until the contents of the gut line – 6,000 barrels at "Charlie", 3,600 at "Bravo" – have been pumped into the ship, after which the loading of the Agip, at normal rate, is through the annulus only. (The gut line is, at this point, filled with Oxy oil, which will remain static throughout the loading of the Agip cargo).

With about 2,000 barrels of Agip cargo to go to completion, loading is stopped in order that the ship's loading officer may check his ullages and calculations. When, in "Bravo" there are 300 barrels to go, in "Charlie" 1,500 barrels, loading is again stopped briefly: this marks the completion ashore of Agip cargo being pumped into the circuit. Now the Oxy oil in the gut line is pumped into the flexible hose strings, so that when the required quantity of Agip oil has been loaded into the vessels, the hose strings – from the headers to the terminal flanges, disconnected from the manifold – are filled with Occidental crude oil, which will not solidify whilst the hoses lie dormant under the sea. Similarly, the Agip crude oil in the annulus of the sea line is pumped back into the tank ashore and replaced throughout the system by Occidental crude.

The foregoing explanation pertains to vessels loading Agip cargo only, taking the minimum essential Occidental oil solely as a line flush. If, however, a ship requires a part cargo of Occidental crude, it will load that after completing the Agip cargo, except for that small quantity used as the line flush at the commencement.

A.G.I.P. "Buattifel" Crude, particulars:-
Average A.P.I. 41.0 at 60° Fah.
Average Specific Gravity 0.806
Wax Content 37%
Pourpoint +95
H_2S 0
Flash Point 68° Fah. (ABEL)
Average Loading Temperature on board 140° Fah. to 150° Fah.
Barrels per Long Ton 7.9 (approximate)

(N.B. The above data is for information only and does not constitute a guarantee of quality).

LPG LOADING BERTH: *Berth, location and nature:* The LPG loading berth is S.S.W. of the Small Craft Harbour, inside Tre Scogli reef. It is designed for vessels of approximately 600 feet in length, with a cargo capacity of 25,000 cubic metres. The maximum loaded draft permissible is 28 feet. Because of the location of the dolphins, the minimum length of ship which can be accepted is 290 feet with a minimum distance from manifold connection to extremity of stern of 155 feet. The channel through the reef is indicated by a P.E.L. leading light, clearly visible both by day and by night.

The berth comprises a loading platform and control tower, with a breasting dolphin 125 feet on each side of the loading point. There are four mooring buoys, one on each bow and one on each quarter: the length between them is 1,090 feet, and the thwartship distance is 315 feet. In addition, there are two mooring dolphins, 190 feet each side of the loading point and 135 feet from the centre line of the berth. Ships approaching the berth swing round on the port anchor and about six shackles of chain – when moored alongside the anchor chain is hove tight, and a swamp mooring taken up on the port quarter. The berth heading is 285 (T).

The loading platform is of structural steel, supported on concrete piles. From the control tower, two Continental Emsco Cema Type 11 loading arms are operated – one for liquid petroleum gas and one for vapour return. The flanges for connection to the ship's manifolds are 12" A.S.A.

Such is the location of the berth – fully exposed to winds from most directions but sometimes protected partially by the reef from the worst effects of the swell – that on occasions LPG tankers can be berthed when conditions do not permit mooring operations at the crude oil berths. And vice versa. Consequently, with regard to Port Closure Time, the LPG berth is regarded as a separate entity from the main harbour.

Arrival: On first contacting Zueitina Marine by VHF (Ch. 13 or 16) the Master of an LPG tanker should, in addition to giving his ETA at the Terminal Light float, inform Zueitina Marine of his last port, the intended port of discharge after leaving Zueitina, the quantity and grade of cargo required, the temperature at which he wishes the cargo to be loaded, the size of the ship's manifold connections, and whether or not he requires a return vapour line to be connected.

Loading: For a ship which needs tank purging and cooling prior to loading, the minimum rate will be approximately 100 barrels per hour. Inert gas is not provided at Zueitina Terminal – the vessel must provide inert gas for purging after previous cargoes other than butane or propane. The ship will not be loaded until the air has been purged to a maximum oxygen content of 5%. When loading has commenced, the minimum rate permitted by the Libyan Ministry of Petroleum is 1,500 barrels per hour. The maximum rate available is between 6,000 and 7,000 barrels per hour. For "topping off", the rate can, within these limits, be adjusted to the requirements of the loading officer. Arrangements can be made in advance for the LPG plant to stop loading when the desired quantity has been metered into the ship, or alternatively, the ship's loading officer can instruct the Terminal to stop loading when he sees that the correct amount has been received aboard.

Loading operations on board are the responsibility of the ship's personnel. The Master's attention is particularly drawn to the Terms of Acceptance as detailed in the "Tanker Loading Advice" letter which he has signed, and to the "Zueitina Marine Terminal, Fire and Safety Rules".

The loading platform – abreast of the ship's manifold and within easy hailing distance – is manned at all times during loading operations, and the ship *must* maintain a continuous verbal contact with the loading operative. In addition, VHF contact between ship and loading installations must be maintained on Channel 12. In the event of any emergency – fire, leakage, parting of moorings, etcetera – the operative on the platform can stop the loading by remote control.

Unberthing in bad weather: Should deteriorating weather conditions necessitate the vessel leaving the berth quickly, a Mooring Master will be speedily available at all hours.

Cargo Particulars: The following data will, we believe, be of interest to Masters and Mates and operators of vessels loading LPG products:-

Propane
Average A.P.I. 146
Average Specific Gravity 0.510
Reid Vapour Pressure 175 p.s.i.g.
Free Water nil
Copper Strip Corrosion 1a
Flash Point less than 0° Fah.
Average Loading Temperature −43° Fah. (−42° Cent.)
Barrels per Metric Ton at 60° Fah. 12.3 (approx).

Butane
Average A.P.I. 114.2
Average Specific Gravity 0.576
Reid Vapour Pressure 48 p.s.i.g
Free Water Nil
Copper Strip Corrosion 1a
Flash Point less than 0° Fah.
Loading Temperature At Ship's Request, within Ranges +15° Fah. (−10° Cent.) to +45° Fah. (+7° Cent.)
Barrels per Metric ton at 60° Fah. 10.8 (approx.)

(N.B. The foregoing data is intended for information only, and does not constitute a guarantee of quality.)

Departure: Immediately after completion of loading, the manifold connections are unbolted and the loading arms retracted. Shortly afterwards the Mooring Master will board and, with the assistance of adequate mooring boats, unberth the ship and pilot it through the reef to a safe anchorage in the outer harbour before disembarking.

When the documents pertaining to the ship's loading have been completed ashore, a clerk will take them out to the ship. (On occasions he will be accompanied by a customs official, boarding the ship to ensure that the seals which were put on bonded storerooms on arrival have not been tampered with before the ship has left Libyan territorial water.) It is customary for Zueitina Marine to inform the ship's Master when the documents clerk leaves the Small Craft Harbour, so that the anchor may be hove up and a lee side presented to the launch.

After the documentation formalities have been completed on board, the Master is required to pass by VHF to Zueitina Marine the official sailing time of his ship.

MEDICAL: Medical facilities are restricted to treatment of emergency cases only.

FRESH WATER: No fresh water available.

FUEL: No bunkers available.

REPAIRS: There are no engineering repair shops.

REPATRIATION: Only in an emergency can any crew member be paid off. Seamen's discharge books are not recognised in Libya. Crew members are advised to have a valid passport in their possession in case of emergency.

CUSTOMS ALLOWANCES: Each member of the crew is allowed 25 cigarettes, or 25 grammes of tobacco, one litre of beer, or half a litre of wine, for every day of the ship's stay in port. Other tobacco and cigarettes, wines, beers and spirits, as well as matches, arms and ammunition, and saccharine, must be locked under seal from the time of arrival until the time of departure from territorial waters.

CONSULS: There are consulates in Benghazi for most of the maritime nations. Those nations not represented in Benghazi are represented in Tripoli.

BALLAST: Because of the exposed position of our sea berths, it is essential that vessels arrive with sufficient ballast for safe handling, having due regard to existing weather and sea conditions. Experience has shown that a fair estimate of the amount required is one third of the summer deadweight. A tanker found by the Mooring Master to be insufficiently ballasted will be rejected. However, it is imperative for the safety of the ship and of the installation that deballasting should be as speedy as possible, to reduce the period wherein the ship is most vulnerable to any sudden deterioration in the weather. It is, indeed, to the advantage of everyone concerned if the ship is able to commence loading as soon as the hoses are connected, deballasting simultaneous with the loading of the cargo. In cases when it is essential to complete the deballasting before loading can start, and deballasting time in excess of six hours will be deducted from the lay time.

As there are at Zueitina no facilities for discharging it ashore, vessels must arrive at the Terminal with clean ballast: all lines, pumps, and strainers must have been flushed out prior to arrival within one hundred miles of the Libyan coastline.

The Mooring Master will inspect ship's ballast on boarding, and he has the power to reject any vessel that he deems would cause pollution in the Terminal waters. A vessel so rejected must proceed to a position over one hundred miles from the coast, re-ballast, and return only when the ballast is completely clean. A new notice of readiness must then be tended, and the loading turn will be counted as from this second arrival.

The sea area round the ship shall be adequately lighted, as frequent inspection by the Mooring Master will be made during ballast discharge. Any pollution whatever, including bilge discharge, will be cause for rejection. Similarly, any hull leaks causing pollution during loading will be cause for rejection – a vessel rejected on these grounds will not be re-accepted until satisfactory evidence of repairs has been certified by a qualified surveyor.

On completion of deballasting, all unused cargo connections must be blanked off, sea valves closed and lashed, deck scuppers securely plugged, and drip pans placed below the cargo hose connections. All the requirements listed on the Company's Safety and Fire Precautions Check Form must be seen to be complied with before loading is commenced.

In the event that the Company has to settle any third party claims as a result of damage to property caused by pollution attributable in any way to a vessel, the Company will have the right to reimbursement by those responsible for the vessel for all expenses incurred.

WEATHER: Weather conditions in Zueitina are generally clement. The temperature during the Winter seldom falls below 10° C. (50° Fah.), and in the Summer, even at midday, is rarely in excess of 35° C. (95° Fah.). The prevailing winds are North-Westerly. During the mid-Summer months, the land-and sea-breezes phenomenon is very apparent: a North-Westerly wind springs up at about 1100 hrs. sometimes to reach near-gale force by late afternoon, then gradually dying away during the evening. At about 2300 hrs. the wind begins to blow off the land – again sometimes to a fresh breeze or near-gale – before falling away completely around dawn.

During the Spring and Autumn, and in the early Winter months, there are frequent prolonged periods of calm, tranquil weather. However, in Spring especially, and again in the Autumn, such periods may be interrupted by the onset of the "gibli", an off-shore wind which, like the "khamsin" wind in Egypt, springs up with little warning to reach gale intensity, laden with sand and dust to such an extent that visibility is reduced to a few yards.

In the Winter months, prolonged periods of strong North-Westerly gales, with very heavy seas and high swells, accompanied by frequent rain squalls, are experienced. Even after the strong winds have subsided, long, high swells may continue for several hours to prevent mooring operations. Such North-Westerly gales are usually accompanied by a sharply rising barometer, and follow the passing of a cold front, with winds from the West.

Rainfall is confined to the Winter months only. Fog is rare, though it does occasionally occur in the Spring and Summer around dawn, generally dissipating after two or three hours.

GENERAL: Vessels are advised not to have on board any articles whatsoever of Israeli origin. All ships must fly the Libyan flag when inside Libyan territorial waters. Being an open roadstead, vessels must keep engines on stand-by during their stay in the moorings. No repairs to main engine may be undertaken in berth. Steam must be kept on deck in case adjustments to anchor cables or mooring lines are found necessary. Ship's boats must not be lowered into the sea and detached from the falls. Swimming is prohibited. The Mooring Master will remain onboard during vessels stay in port and should be provided with suitable accommodation and adequate meals.

SHORE LEAVE: No shore leave is permitted.

AUTHORITY: Occidental of Libya Inc.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Madeira

FUNCHAL: 32.38 N. 16.55 W. (See Plan)

DOCUMENTS:

Maritime Declaration of Health Form.
5 Crew Lists.
12 Lists of Passengers finally landing.
5 Lists of Passengers in transit.
1 List of Stores and Provisions, including Deck and Engine Stores.
1 List of Contents of shops on board.
6 Copies of Manifest of Cargo for discharge.
2 Copies of each B/Lading of Cargo for discharge.
1 Copy of Manifest of Cargo in Transit.
1 List of Passengers finally landing, visaed by Portuguese Consul at original port.

All other entry and clearance documents are arranged by the Agents.

PILOTAGE: Vessels should radio their ETA to Agents who order Pilot. 24 hours notice requested. Pilot launch flies "H" flag during day. Exhibits bright white light over red at night. To request Pilot on approach by day fly international "G" flag, or give 2 long and 1 short blast on whistle. At night flash 2 long 1 short. For vessels berthing alongside Pilot boards in bay; for vessels anchoring Pilot does not board but pilot launch indicates where vessel should anchor. Pilot boat equipped with radio telephone on 2182 and 2341 kHz.

Also VHF, Channel 16 (calling) and Channel 6 (working).

ANCHORAGE: Permitted anchorage within 800/900 m. East from end of breakwater or 300/500 m. South of breakwater within a limit of 400 m. from shore.

RESTRICTIONS: None.

SIZE OF VESSEL: No limit to size of vessels which can anchor, but all anchorage positions should be indicated by pilot launch. For vessels berthing alongside quay max. permissible length 990 ft. max. draft 36 ft. Oil carriers discharge at buoys at Praia Formosa 3 miles to West of Funchal. Max. length of oil tankers than can berth at oil discharge buoys 665 ft. max. draft 36 ft.

HEALTH: Free Pratique may be arranged by Master sending wireless message addressed "Port Doctor Funchal" – "Request free pratique arriving . . . from . . . sailing to . . . number passengers . . . landing . . . number passengers in transit . . . number of crew . . . all well. Master."

In event suspected disease or fever on board Master should wireless either Port Doctor direct or to ship's Agents, who will inform Port Doctor. The Master will then be instructed what further action he is to take.

When vessel other than of national flag arrives after calling at another port in same country usual procedure applies, i.e. Masters' radio for free pratique or pratique granted by Doctor visiting in bay.

RADIO: Maderia Radio Station call sign CUB 500 k/cs. Same station normally used by Agent when communicating with vessel.

TUGS: Two tugs each of 1,000 /1,100 h.p. – bollard pull 18 tons – are available.

N.B. Vessels up to 2,000 gross tons are not obliged to use tugs.

Vessels of between 2,000 and 15,000 gross tons are obliged to use one tug.

Vessels over 15,000 gross tons are obliged to use two tugs.

BERTHING:

Quay No. 1 Length 139 m., depth 6 m.
Length 41 m., depth 7 m.
Length 19 m., depth 8.5 m.
Quay No. 2 Length 425 m., depth 11 m.
Quay No. 3 Length 347 m., depth 11 m.

STEVEDORES: When ships require labour, Agents must be notified before 1600 hrs. on working days and on Sundays and holidays before 1100 hrs., after these hours labour not available for last minute engagement. On Christmas Eve work stops at noon even if ships loading or discharging. No labour available Christmas Day, New Year's Day or Easter Sunday.

Grain cargoes can only be worked from 0800 hrs. to 2000 hrs. daily including Sundays, and a maximum of 4 gangs only can be worked simultaneously.

Bulk cargoes such as potash and fertilizers need to be bagged on board. Receivers supplying the bags – and this generally applies to grain. Bulk cement, clinker and granulated plaster is discharged by grabs.

MEDICAL: Advance notice is required by Agents for any medical attention required. Hospital facilities available. No inoculations required.

TANKERS: Diameter of connection of discharge lines 8 in. into pipe-lines of 12 in. diameter for black fuel and 10 in. diameter for white fuel. 1 anchorage buoy berth with max. draft of 36 ft.

DENSITY: Salt water.

FRESH WATER: Available at anchorage and ex quay.

Three barges available, with total capacity of 450 tons. Delivery hoses ex barge or ex quay are of 2.5 in. diameter, and there are nozzles of various sizes. Rate of delivery ex barge – 50 t.p.h. per barge. Delivery ex quay, said to be about 60 tons per lead per hour, but this can be slow, according to the number of ships being supplied, and the amount of water in the city storage tanks and may require to be supplemented ex barge in case of big quantities or supplies required within limited time.

FUEL: Fuel oil available from 3,500 seconds Redwood 1 to 200 seconds Redwood 1. Also marine diesel and gas oil. 12 hours (min. notice) required.

FIRE PRECAUTIONS: At discharging buoys usual non-smoking precautions.

GANGWAY/DECK WATCHMEN: Gangway watchmen recommended.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCES: Tobacco, Wine and Spirits: Moderate supplies allowed for personal use during ship's stay.

CARGO GEAR: No specific local safety regulations. Vessels discharging must provide strops, slings and nets. Lifts over five tons must be effected by ships gear.

8 mobile cranes are available.
1 crane – 6 tons at 12 m., 3 tons at 24 m.
3 cranes – 5 tons at 20 m.
3 cranes – 3 tons at 12 m.
1 crane – 15 tons at 13 m.

A floating crane is available which can lift up to 27 tons from the water line up to 8 m. This same crane can lift up to 20 tons from the water line to 12 m.

IDENTIFICATION CARDS: Required.

CONSULS:

Austria	21057	W. Germany	20338	Peru	21375
Belgium	20255	Greece	20824	Spain	20535
Brazil	20355	Guatemala	20824	Sweden	20121
Costa Rica	24888	Holland	20317	Switzerland	22101
Denmark	22031	Italy	23890	United Kingdom	21221
Dominica	21057	Monaco	20041	United States	23309
Finland	20596	Norway	20541	Uruguay	20535
France	21445	Panama	20091	Venezuela	24050

REPAIRS: Repair yard available which can carry out most engine repairs on board except removing or replacing main engines. Hull work limited to removing riveting or replacing hull plates above water line, electric and oxy-acetylene welding. Most electrical work can be effected but notice required in regard to materials necessary. Foundry where castings can be made up to one ton weight.

DRY DOCKS: None.

REPATRIATION: Limited facilities for crew changes. Necessary repatriations can be made.

AIRPORT: At Santa Cruz, 20 km. East of Funchal. Service between Funchal and Lisbon operated by national airline TAP, 19 flights weekly Funchal/Lisbon/Funchal.

TIME: GMT maintained throughout year.

HOLIDAYS: New Year's Day (totally unworkable); Easter Sunday (totally unworkable); Municipal Holiday (local) (workable, 50% overtime); Camoes Day (workable, 50% overtime); Corpus Christi (workable, 50% overtime); The Assumption (workable, 50% overtime); Proclamation of the Republic (workable, 50% overtime); All Saints (workable, 50% overtime); Independence of Portugal (workable, 50% overtime); The Immaculate Conception (workable, 50% overtime); Christmas (totally unworkable).

Workers' Day, Portugal Day and Good Friday are also totally unworkable.

Saturday is an ordinary working day. December 24 (workable up to 1500 hrs. only).

POLICE/AMBULANCE/FIRE: Police 22022; Ambulance 22122; Fire 21163.

SHORE LEAVE: All crew visiting shore must be in possession of special Landing Card, plus Identity Cards, Discharge Books or Passports, which must be shown to Immigration Officer at gangway. Crew Landing Cards must be stamped by Immigration Officer before crew can proceed ashore.

DEVELOPMENTS: The Port Authority expect to start construction of new jetties in 1976 with completion of the first phase in September 1978.

Phase 1: Construction of 290 m. of berthing space, depth 6–8 m.
Phase 2: Two roll-on/roll-off berths, length 270 m. and 170 m.
Phase 3: Construction of a Marina.

AUTHORITY: Capitania do Porto.

Malagasy Republic

DIEGO SUAREZ: 12.12 S. 49.19 E.

Shipmaster's Report (Survey vessel): July, 1975.

DOCUMENTS:

Documentation on Arrival:

Malagasy Customs require:
- 2 Crew Lists.
- 1 Copy Personnel Manifest (any form will do).
- 1 Nil Cargo Return.
- 1 Bonded Stores List.

Immigration/Police:
- 2 Crew Lists.
- Inspect all Discharge Books and Passports.
- An undertaking that all men will carry their Identification when ashore.

Port Health:
- 2 Crew Lists.
- 3 Vaccination and Inoculation lists very carefully inspected.
- 2 Copies of their own Maritime Health Declaration Form, copy of which becomes Inward Clearance, after stamping ashore.

Agents:
- 2 Crew Lists.
- Ship's register to lodge ashore.

Documentation on Departure:

A gentleman from the Port Junta visits in plain clothes with the Agent and will wish to see:
- Cargo Ship Safety Construction Certificate.
- Safety Equipment Certificate.
- Safety Equipment Record of Inspection Certificate.
- Safety Radio Certificate.
- Load Line Certificate.
- Ships Register (held by the Agent).

After checking all these an Outward Clearance Certificate will be presented. One is then free to leave the Port, the Agent having given an undertaking that all Port dues have been paid.

APPROACHES/PILOTAGE: Tides run fast in the Orangea Pass, but seem to follow the pattern as per the Admiralty Pilot. Until experience is gained it should only be taken in the hours of daylight. There are numerous natural-transit marks available to the navigator, all very clearly described in the 'Pilot'. For this reason it would be essential to take this in fine visibility. Pilots can be taken at Cape Mine but this can be difficult and dangerous in the S.E. Trade season and ships are advised that they can proceed on into the Bay right up to Port Antsirana Point.

ANCHORAGE: There are many splendid anchorages available in this vast Bay. Vessel anchored 2 cables off the N.W. corner of the wharf at Antsirana, to conduct formalities for Customs, etc.

RADIO: Tananarive Radio handles HF traffic and Diego Suarez can handle MF and VHF. English is not understood. Port Antsirana Pilots are available spasmodically on Channel 16.

BERTHING: Good modern berthing, plenty of tugs. 1 pier only about 1,500 ft. long operated by SCOM. Not actually used by vessel which went straight into the Dry Dock.

FRESH WATER: Good quality water available at the Pier and at the Dry Dock. No water barge.

FUEL: It appears that they like to have at least a week's notice. Gas oil is available through the Agent or through Shell. There is a bunker barge but this can be unreliable unless several week's warning is given. Bunker available by bowser and pipe-line at the main wharf.

We were unable to find any lubricating oil at all. Several weeks warning is necessary. All fuels and oils should be ordered through London.

MEDICAL: Great attention was paid by the Port Health Authorities and services asked for were promptly dealt with especially out of date inoculations. There is a hospital with Doctors and the necessary surgeries.

DRYDOCK:

Length overall	199.05 m.	653.00 ft.
Subdivided into sections	128.96 m. 70.09 m.	424.00 ft. 229.00 ft.
Breadth at Bottom	28.40 m.	93.00 ft.
Breadth at Coping	36.60 m.	120.00 ft.
Depth at sill and blocks at MHWS	10.42 m.	34.40 ft.

Yard Services: Nothing was too much trouble for any of their staff attending this ship. Power was a bit of a problem but they did everything to help. Fire mains, fresh water, cranes were all good. Toilets and shower-rooms were more than adequate especially after we were given our keys and had them cleaned.

Workshops: A modern well equipped yard with every conceivable service from an iron foundry to upholstery shops. A clean, well kept set of shops including the building of small craft. The Engineers of this ship were very favourably impressed with the shops and technical services.

SURVEYORS: We were informed that there is no Lloyd's Surveyor in the country but often when required Lloyd's Representative flies up from Durban. Sometimes it is agreed that the resident Bureau Veritas Surveyor will substitute. M. Cavanas lives in Tananarive.

AIRPORT: Air services are available each day to connect with the international Air France flights to Orly from the local airfield about 8 miles from the town.

GENERAL:

Launches: Numerous launches are abounding throughout the harbour. Owned by the Dock Company, the Port Junta and one by the Agent, who charges FMg 2,500 for a round trip out to the anchorage (c £5.00).

Laundry: A laundry man did call but we were unable to offer him any business. He said he would need at least two and a half days to complete a complete ship's wash.

Shore Amenities: Generally a very popular Port for Officers, Scientists and Crew. The absence of large hotels would be felt if the whole ship's company had to be present for a long period.

Hotel de la Poste and the Hotel Nouvelle have each about 15 bedrooms air conditioned, and ordinary. Bed and Continental Breakfast with air conditioning FMg 1,500.00 – FMg 2,500.00 – not more than £5.30 per night. They have excellent dining rooms and good French cooking.

Bathing facilities by taxi at beaches and clubs some 7 or 8 miles from town.

AGENTS: S.C.A.C. Box Poste 384, Malagasy Republic, Diego Suarez, Madagascar. Telephones: Diego Suarez 213-27 & 213-47.

FORT DAUPHIN: 25.02 S. 47.02 E.

DOCUMENTS:
- Manifest of Cargo for discharge.
- Manifest of Cargo in transit.
- Ship's Stores List.
- List of Passengers Landing.
- Crew List.
- Franchise Certificate (for mail-carrying vessels).

PILOTAGE: The port is an open roadstead and pilotage not required.

ANCHORAGE: In depths of 8 m. Vessels anchoring are charged with port dues.

RESTRICTIONS: Port is normally used by coastal trading vessels. In case of liners handling cargo exceeding 150 tons, special permission required which is obtained by Agent.

HEALTH: Pratique should be requested from the Health Department, tel. 36.

RADIO: Fort Dauphin Radio, call sign 5RD, between 0400 and 1630 hrs. GMT on following frequencies: 458, 500, 2182 and 2712 kHz.

TUGS: None available.

BERTHING: There are no berths alongside. Vessels work cargo at anchorage.

STEVEDORES: Arranged by the Fort Dauphin Lighterage Company. Advance notice of ETA required to arrange gangs. Average loading/discharging rate is 10 tons per hold per hour.

MEDICAL: 2 hospitals available in the town.

TANKERS: 1 buoy berth for tankers.

FRESH WATER: No water barge. Only small quantities can be supplied in emergency.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Opening and closing hatches carried out by stevedores.

CUSTOMS ALLOWANCES: 1 carton of cigarettes per man. No alcohol.

CONSULS: No local representatives.

REPAIRS: Only facilities available for repairing lighters.

REPATRIATION: No facilities for effecting crew changes.

AIRPORT: Situated 5 kms. from the port, 4 regular flights per week.

TIME: GMT plus 3 hours all year round.

HOLIDAYS: Days on which work is normally carried out with overtime payment: Easter; Ascension Day; Whitsun; Assumption; Christmas.

Official holidays on which work can be arranged by special permission: 1st January; 1st May; 26th June (Independence Day); 14th October; Festival of the Republic.

FIRE/POLICE/AMBULANCE: Police Tel. 49; Fire 19; Ambulance 36.

SHORE LEAVE: Not permitted.

AUTHORITY: Service des Ports' Phares et Balises, Tananarive.

AGENT: SCAC Madascar BP 425, Tananarive. Tel. 228–64. Cables: "Freight Tananarive". Telex 22214.

MAJUNGA: 15.44 S. 46.20 E.

DOCUMENTS:
- List of Crew Members.
- List of Passengers.
- Customs Documents.
- Health Documents.
- Manifests.
- Bills of Lading.
- Ship's papers.

PILOTAGE: Vessels requiring Pilot must apply by cable to Majunga Harbour Master's office at least 24 hours before arrival. Pilot embarks at Narcissus buoy.

ANCHORAGES: Indicated to ship's captain by cable from Majunga Harbour Master's office.

RESTRICTIONS: Ship's can enter day and night. Max. draft allowed 10 m.

MAX. SIZE: No restriction except for max. 10 m. draft.

HEALTH: Pratique automatic when vessel comes from a Madagascar port. Pilot is health agent.

RADIO: Radio Majunga.

STEVEDORES: Vessel informs Agent by telegraph 24 hours in advance of number of gangs needed.
MEDICAL: Hospital available.
TANKERS: One berth, max. draft 10 m.
FRESH WATER: Unlimited drinking water.
CERTIFICATES: See "Tamatave".
CUSTOMS ALLOWANCES: See "Tamatave".
CONSULS: French and Greek consulates.
REPAIRS: Minor repairs only.
REPATRIATION: All facilities available.
AIRPORT: Served by regular airlines; 7 km. from town.
TIME: GMT plus 3 hours.
HOLIDAYS: Catholic and official holidays. Commercial transactions possible on public holidays.
POLICE/FIRE/AMBULANCE: Police 24–85; Fireman 13; Hospital 29–15.
AUTHORITY: Harbour Master.
AGENT: See "Tamatave".

TAMATAVE: 18.08 S. 49.22 E. (See Plan)

DOCUMENTS:

Health
International Maritime Certificate of Health.
List of Passengers disembarking.
Crew List.

Police
List of Passengers disembarking.
Crew List.

Customs
Ship's Register.
3 sets Cargo Manifests.
Crew List.
2 Stores Lists.
2 Lists of Crew disembarking.
2 Lists of Crew transitting.
2 Lists of Passengers disembarking.

Port
2 sets Cargo Manifests.

Agents
1 set Cargo Manifests.
List of Passengers disembarking.
Crew List.

PILOTAGE: Compulsory. No telegraphic address. Ships advise Agents hour of ETA. Pilots informed by Agents. Due to the breakwater being extended the South Pass is temporarily closed to all traffic. When completed, the extension will render the Pass so narrow that only small coastal vessels can use it.

The East Pass is now permanently in use for large vessels. The pilot boat waits on the East Pass range approximately 3.3 miles S.S.E. of Prunes Island Lighthouse. The pilot boat is fitted with a small, portable VHF set (Channels 16 and 27) but its effective range is only about 5 miles.

ANCHORAGES: No special anchorage. If no berth available on ship's arrival, Pilots put ships at best anchorage, according to draft and length of ship, between Reef and shore.

RESTRICTIONS: No restrictions. Ships enter and sail day and night any time. Max. tide only 3 ft.

MAX. SIZE: For roads, max. length about 200 m. (concerns only passenger ships). For cargo vessels max. length 180 m.; max. draft 31 ft. 2 in. (9.5 m.).

For tankers, max. LOA 230 m., max. beam 31 m., max. draft 12.20 m. in salt water. Distance from stern to manifold 110 m.

HEALTH: Quarantine message sent to Agents who inform Health Service. "Q" flag must be hoisted if health satisfactory. Captain presents maritime declaration of health. Health Officer and Immigration board at Quarantine anchorage.

RADIO: Tamatave Radio, call sign 5RS. VHF frequency (16) 156.80 – (26) 161.90 – 168.95.

TUGS: 1 tug of 1,750 h.p. and 2 tugs of 250 h.p. available to assist berthing.

BERTHING: 3 berths for deep-sea ships and 2 berths for coastal ships. Ships moored at berth in order of arrival and according length and draft. Mooring has to be very strong, due to swell that may sometimes enter harbour when S.E. trade winds are strong, or if cyclone in vicinity. Mooring by 2 chains and special nylon lines furnished by harbour. Swell is so dangerous that ships have to go to anchorage or put to sea until weather improves.

CRANES: 3 ton and 6 ton cranes available for hire. Floating crane 80 ton capacity also available.

STEVEDORES: ETA to Agents must give hatches, tonnages, and all information about cargo.

Working hours: 1st shift 0700 – 1400 hrs., 2nd shift 1400 – 2100 hrs. On Sundays there is one shift 0700 – 1400 hrs. at overtime rates.

MEDICAL: Preferable to inform Agents in advance. All hospital facilities available – smallpox vaccinations.

TANKERS: 1 refinery imports crude oil and exports fuel and refined oils. Tankers moored using anchors forward, and moorings aft.

Diameter of lines 12 inches. No slop discharge facilities. If tanks are to be washed, slops must be discharged outside harbour.

Shipmaster's Report: A brief description of the berthing manoeuvre is as follows:

About 350 m. from the berth, let go starboard anchor and swing around to starboard with the assistance of a tug, slacking the cable all the time. As vessel completes swing, let go Port anchor, then slack down both anchors. Vessel usually finishes up with about 9 shackles on each anchor. Aft, vessel secures with 4 lines from the starboard quarter to the buoy and 4 lines from the port quarter to the quay. The mooring operation takes about 2.5 hours and unmooring about 1.5 hour.

Facilities:

1. One 12 in. rubber hose, connected always from the starboard side. You can expect 4-5 hours for connecting up the hose and about 2-3 hours for disconnecting.
2. The shore tanks are situated about 5 km. from the vessel, and have a total storage capacity of about 100,000 cu.m. The tanks are located about 4 m. above sea level, the heights of the tanks being approximately 13 m.
3. The main pipe-line is 20 in. diameter by 5 km. long.
4. Maximum back pressure permitted is 6-7 kg. However in view of the length and size of the line it is very difficult to obtain such a pressure, even with all 3 pumps going all out. Understand from the refinery Superintendent that maximum back pressure so far attained was 4 kg. The back pressures are monitered by gauges fixed on the manifold and on the quay.
5. The maximum draft permitted at the Tanker mooring is 40 ft. Fully laden tankers arriving can berth only in daylight hours. However 24 hour sailing is possible.
6. The cargo discharging operations are as follows: The main pipe-line is kept constantly filled with bunker fuel and has a capacity of approximately 1,000 cu.m. After connecting up vessels commence discharge of their crude. The bunker fuel in the line is thus pushed back and stored in a separate tank ashore. The vessel then continues to discharge her full cargo. After completing discharge, all tanks are inspected and a dry certificate obtained. The refinery then pushes back the pipe-line crude (1,000 cu.m.) and about 1,200 cu.m. of bunker fuel, which must be stored on the ship in separate tanks. Thereafter, the vessel must discharge all crude, and finally the bunker fuel. Thus the pipe-line is constantly kept filled with bunker fuel. The drawbacks to the vessel are obvious. 3 individual stripping operations are involved viz. stripping the crude during completion of discharge, stripping of pipe-line crude stored in the ship and stripping of the bunker fuel.
   Note: Capacity of shore pumps (when transferring oil back to ship) is 800 t.p.h.
7. Communications: A telephone is installed aboard for communication between ship and shore. This however never seems to be at its best when you need it most. Other difficulties are the language barrier (French being spoken). Notwithstanding, the slow rate of discharge obtainable, helps to offset in part the lack of communications.
8. Out-turn quantities: It is understood that these are checked by sounding shore tanks.
9. Bunkers are available on 24 hours notice. Range Redwood 1,000–1,500 seconds.
10. Diesel oil is available, however as the supply barge has been out of commission for sometime now, supply cannot be depended upon.
11. Fresh Water available.
12. Connection and disconnection of the cargo pipe-line is undertaken by the refinery personnel.

DENSITY: 1023.5.

FRESH WATER: Delivered by water-boats at rate of about 100 t.p.h.

FUEL: Available alongside. Gas oil and diesel oil at 70 t.p.h. Fuel oil at 110 t.p.h.

Vessels at anchorage may be serviced by fuel barge of 250 tons.

FIRE PRECAUTIONS: 1 fire-boat stationed near tankers.

GANGWAY/DECK WATCHMEN: Recommended. Very low cost.

OPENING/CLOSING HATCHES: Booms always operated by crew. If hatches are Macgregor type, by crew; otherwise by stevedores.

CERTIFICATES: Safety certificates (3), Derating or Exemption Certificate, Register, Load Line Certificate.

CUSTOMS ALLOWANCES: 200 cigarettes. Wine/Spirits. 1 opened bottle.

IDENTIFICATION CARDS: Only seaman's papers required.

CONSULS:

France	2721	Dutch	2632
Great Britain	2680	Swedish	2136
Norway	2549	Danish	2615

REPAIRS: Only small repairs possible.

REPATRIATION: Possible, arranged by Agents.

AIRPORT: Served by regular airlines. 1 flight a day by Air Madagascar to Tananarive and 4 to 6 flights a week from Tananarive to Africa and Europe.

TIME: Local time GMT plus 3 hours.

HOLIDAYS: 13 holidays per year. Cargo work cannot be arranged on holidays but can be on about every second Sunday.

TELEPHONES: 2 connections at 2 berths used for passenger ships, but may be requested by other ships.

GENERAL: 14 cranes of 3 tons each. 1 floating crane for max. 120 tons weight. Small tugs and lighters for ships operating on roads. 1 port launch and some private launches for crews of ships at anchor.

SHORE LEAVE: Permitted.

DELAYS: Not fixed. When all berths occupied, ships wait at anchorage.

AUTHORITY: Port Autonome de Tamatave.

AGENT: SCAC Madagascar, Rue du Capitaine-Shoel, BP 411, Telex: 55610. Tel. 320–48; 320–49; 326–80; 326–81. Cables: "Freight Tamatave".

Malaysia

DUNGUN, Malaya: 04.47.30 N. 103.27 E.

DOCUMENTS:

Register.
Last Port Clearance.
10 copies Crew List.
6 copies Passenger List (if any).
6 copies Stowaway List (if any).
2 copies Stores List (including Firearms and ammunition).
2 copies Dutiable Liquor and Tobacco List.
2 copies Crew Declaration List (cameras, radios, etc.).
2 copies Cargo Manifests.

PILOTAGE: Extra charge for pilotage outside normal office hours and holidays. Ocean vessels should anchor about 0.8 miles S.E. of Tg. Dungun Lighthouse.

ANCHORAGE: On arrival vessels required anchor about one mile outside berthed ships to obtain pratique. Accommodation ladder must be rigged on lee side to allow Port Authorities to board.

CUSTOMS: Customs Office hours 0830 to 1630 hrs. (Thursday afternoons, Fridays and holidays excepted).

IDENTIFICATION CARDS: Every member of crew must produce Identity Document or Shore Leave Pass at Customs House when landing and again when returning to vessel.

SHORE LEAVE: No seaman may proceed more than 3 miles from Dungun Customs House. The Officer in Charge Customs, as acting Immigration Officer, has authority to limit or prohibit Shore Leave in all cases.

KOTA KINABALU (Jesselton), Sabah: 06.00 N. 116.05 E. (See Plan)

DOCUMENTS:

Documents to be produced on arrival:
Port Clearance from Last port.
6 copies Inward Cargo Manifests.
2 copies Hatch List, *or*
1 copy Stowage Plan.
9 copies Crew Lists.
9 copies Passenger Lists.
2 copies Bonded Store Lists (incl. Arms and Ammo Lists).

In addition, the Master has to complete a Shipping Arrival Report Form and a Maritime Declaration of Health Form.

Notes: (a) = If vessel arrives from any port outside those declared infected.

(b) = These 2 copies (Inward Cargo Manifests) must be certified by the Master as follows: "I hereby certify that to the best of my knowledge and belief this manifest is complete and correct. . . . .Master".

To be Supplied to Ship before Departure:
1 set Agents Outward Manifests.
2 copies Passenger Lists for Immigration.*
1 copy Passenger Lists for Customs.*
1 set Manifests for Customs.*
*To be supplied by Agent.

If vessel departs to a port outside Sabah, 2 copies outward crew list are also required for Immigration.

PILOTAGE: Pilot normally available between 0600 and 1800 hrs. only. Written application must be submitted 12 hours in advance.

ANCHORAGES (also see "Health"):

Special Anchorages and Prohibited Areas

(1) *Prohibited anchorage:* No vessels shall anchor as to swing within 3,000 ft. of the F.R.G. light on the N.N.E. end of the Authority wharf in approx. position Lat. 05° 59′ 51″ N. Long. 116° 04′ 30″ E. Vessels under 150 ft. in length may anchor within this area, East of a line joining the F.R.G. light and Gueritz shoal light beacon.

(2) *Prohibited Area:* Except with the previous permission in writing of the Authority, no logs or timber shall be allowed to lie afloat within the area – Eastward of a line drawn in a 172° direction from Grieve Reef Beacon.

(3) *Explosives and Dangerous Goods Anchorage:* Vessels having explosives and Dangerous Goods on board shall anchor within a line drawn from a position in Lat. 06° 01′ 21″ N. Long. 116° 05′ 45″ E. thence in a 360° direction for 6.5 cables thence in a 270° direction for 10 cables thence in a 180° direction for 6.5 cables thence in a 090° direction for 10 cables to the starting point.

(4) *Dangerous Petroleum anchorage:* A vessel having dangerous petroleum on board shall anchor within a line drawn from a position in Lat. 06° 00′ 42″ N., Long. 116° 05′ 45″ E. thence in a 270° direction for 10 cables thence in a 360° direction for 6.5 cables thence in a 090° direction for 10 cables thence in a 180° direction for 6.5 cables to the starting point.

(5) *Quarantine Anchorage:* A vessel which is required to proceed to a quarantine anchorage shall anchor within an area bounded by a radius of 3 cables from a position in Lat. 06° 01′ 34″ N. Long. 116° 03′ 46″ E.

RESTRICTIONS:

1. Entering. Vessels with dangerous cargo such as benzene are not allowed to stay alongside wharf or to berth after 1800 hrs. Vessels arriving from any port within hours of day-light not allowed to berth until they see the signals at the Customs House directing them. This applies equally to vessels arriving on schedule as well as unscheduled vessels and any infringement of these regulations can have very serious consequences.

Master of ship not sailing within 48 hours after port clearance to report to Harbour Master reason for not sailing, and, if so required obtain a fresh port clearance.

2. Shifting. The Authorities must be informed prior to shifting.

3. Immigration. No person may leave ship before clearance has been given by Customs/Immigration officers.

4. Currency. There is no restriction on amount of currency which can be brought into this State but max. amount allowed to be taken out is Mal $100. Foreign exchange must be conducted through recognised banks.

HEALTH: (Also see "Regulations"). *(a)* Sabah Government are signatories to WHO convention on Quarantine regulations. Port Health Doctor will not board unless vessel comes from infected port. Instead, Maritime Declaration of Health to be filled-out and handed to Boarding Officer of Health Department who will require 1 copy of crew list and 1 copy of passenger list. Vessels should cable Agent prior arrival advising last port of call and whether vessel is healthy. Pratique normally cabled to ship but if unreceived, vessel need not proceed to Quarantine anchorage unless coming from infected port.

(b) Vessels arriving from ports outside the State will anchor until boarded by Authorities unless previously instructed by telegram to come alongside.

RADIO: (Also see "Health"). Information required before ship's arrival: Manifest, stowage plan, number of gangs required, amount of water required, Pilot requirements. Local radio call sign "Control K.K.".

TUGS: Tug 280 h.p. available to assist vessels berthing and unberthing without a Pilot at inner berth. Ship's lines used.

BERTHING: Wharf T-shaped; outer berth 647 ft. long with min. depth of 25 ft. Inner berth 475 ft. long with min. depth of 21 ft.; 2 godowns 28,000 and 30,000 sq. ft. floor area respectively. Sabah Ports Authority operates one 10-ton crane, 22 towing tractors, 43 6,000-lb. forklifts, one 7-ton forklift, 76 trailers of capacity ranging from 3 to 6 tons. Heavy Lifts up to 6 tons received into Sabah Ports Authority trailers, up to 17 tons could be received into railway wagons, beyond 17 tons overside discharge into landing craft. Sabah Ports Authority landing ramp capable of accepting loads of up to 30 tons. Bulk handling limited to petroleum and bitumen into private installation by pipe-line.

New Wharf: Rectangular island wharf 700 ft.×400 ft.

The particulars of the berths are as follows:

Berth No.	*Length (ft.)*	*Depth (ft.)*
1	700	30
2	400	24
3	360	24
4	260	24

Covered storage: one transit shed 72,000 sq.ft.

STEVEDORES: Stevedores provided SPA; labour supplied for working in ships' holds and on ships' winches (if required). For cargo delivered direct ex-wharf consignee provides wharf labour; cargo for Sabah Ports Authority godown labour provided by Sabah Ports Authority.

Working hours/days: Ships can be worked on all days except for 11 state and national holidays when port closed completely. Working hours 0730 to 1130 hrs.; 1300 to 1700 hrs.; 1800 to 2200 hrs. Work beyond these hours possible by application. Additional charges payable.

Deliveries 0730 to 1630 hrs. except Sunday.

Loading/discharging rate: General cargo excluding vehicles and liquid cargo 17.60 B/L tons per gang hour. Palletised (unit-load) cargo 27.4 B/L tons per gang hour.

CARGO: (Also see "Berthing").

1. Tally: The Agent can provide tally clerks at ship's expense.

2. Inward cargo: Ship's responsibility ceases as soon as consignees take delivery ex-sling.

3. Transhipment cargo: Transhipment cargo handles via Port Authority Godown.

4. Outward cargo: All cargo is brought to the ship alongside wharf either by tractors and trailers.

5. Special cargo regulations:

(a) Dangerous cargo. Vessels carrying explosives as cargo: All vessels arriving at, or remaining within the limits of, any port with explosives on board shall fly the gunpowder flag at the foremast.

No vessel having explosives on board shall, without the permission in writing of the Harbour Master, come or remain within 500 yards of the shore or any other vessel:

Provided that such a vessel may, with the written permission of the Harbour Master, come and remain within such limit where:

(i) such explosives are wholly and exclusively of Class V (Fulminate) or Class VI (Ammunition) or both such classes in the second schedule; and

(ii) the total quantity of such explosives does not exceed two thousand pounds; and

(iii) such explosives are carried in a properly constructed magazine duly certified as such by a British Board of Trade Surveyor or by an officer fulfilling similar functions appointed by a Government of any British possession or the vessel has a certificate from one of Her Majesty's Inspectors of Explosives or from an Officer fulfilling similar functions appointed by the Governments of Singapore, the Federation of Malaysia or Hong Kong and approved by the Governor that all the explosives on board such vessel have been properly stored and the Master of such vessel further certifies in writing that no other dangerous cargo is carried by the vessel; or where:

(iv) such explosives are wholly and exclusively explosives of one or any of Class III (Nitro-compound), Class IV (Chlorate mixture) or Class VII (Firework); and

(v) The total quantity of such explosives does not exceed three thousand pounds.

No such explosive shall be landed, shipped or transhipped between sunset and sunrise without the previous permission in writing of the Harbour Master. Any Master of a vessel offending against the provisions of this section shall be liable to a fine of one thousand dollars.

(b) Livestock. Pigs or cattle may not be loaded or discharged on any wharf without permission of the S.P.A.

MEDICAL: Medical Officer of Health: Medical Services Department, tel. 54303. Vaccination and inoculation (incl. Yellow Fever) can be arranged via Agent at any time during working days. In case of death on board, Agent and Harbour master as well as the Police to be informed.

FRESH WATER: Can be supplied from wharf. Supply rate is 25 tons per hose per hour.

FUEL: Not available.

CONSULS: British Council Tel. 54056; Indonesian Council Tel. 54100; Japanese Council Tel. 54698.

HOLIDAYS: Working on Sundays/holidays is possible against overtime payment. No work will be done on Chinese New Year's Day, Hari Raya Puasa and Christmas Day.

POLICE/AMBULANCE/FIRE: Police 999, Ambulance 54911.

GENERAL: Ship Chandlers: All kinds of stores and provisions available.

Recreation Facilities. Two cinemas in town which show English films frequently. Three tennis courts available and football matches may be arranged. Sports Club is next to town Padang, about half a mile from wharf and golf and yacht clubs situated on beach at Tanjong Aru, 4 miles from town.

Surveyor: Harrisons & Crosfield (S) Ltd. are Lloyd's Sub-Agents and can arrange a surveyor provided prior warning is given.

Fumigation: No facilities.

SHORE LEAVE: Crew members allowed ashore after inspection by Immigration Officer.

REGULATIONS: *(a)* Arrival and Departure. 1. The owner or Agent of every vessel other than a small ship intending to call at a port shall, as soon as possible, and in any case not later than 36 hours prior to the estimated time of arrival of the vessel, give notice in writing to the Authority of such arrival and, if so desired, the requirement for a berth at a wharf.

2. The notice under this regulation shall be in a form prescribed by the Authority and shall contain full particulars regarding the cargo to be discharged and loaded, the embarkation and disembarkation of passengers, heavy lifts, special or perishable cargo, hazardous and dangerous goods (whether to be discharged at the port or not), and any other matters of importance relating to the working or safety of the vessel in the port.

3. The Master of every vessel entering or leaving a port between sunrise and sunset shall cause to be hoisted the national colours and the signal letters, if any, of the vessel. The national colours shall be exhibited from 0800 hrs. to sunset whilst the vessel remains in port.

4. The Master of every vessel arriving from outside the State of Sabah shall exhibit the Immigration and Quarantine signals contained in the First Schedule and shall also at the request of a Customs officer hoist the Customs signals. Such signals shall remain exhibited until the appropriate officer has given permission for them to be lowered.

5. No vessel shall approach within 600 ft. of any other vessel exhibiting the Immigration, Health or Customs signals.

6. No person other than a Pilot may board or disembark from any vessel until the vessel is cleared inwards and the Immigration, Quarantine and Customs signals have been lowered.

7. Every vessel entering a port shall be anchored or efficiently secured to a wharf or buoy before commencing the loading or discharging of cargo and/or the embarkation or disembarkation of passengers.

8. No vessel shall leave any port unless in possession of a valid Port Clearance issued by or on behalf of the Director of Marine.

(b) Special signals.

Significance	*By Day*	*By Night*
Immigration (for ships not carrying passengers)	International Code Signal "2 5"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Immigration (for ships carrying passengers)	International Code Signal "3 4"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Quarantine (vessel is Healthy request pratique)	International Code Signal "Q"	Nil
Quarantine (vessel is suspect)	International Code Signal "Q Q"	A red light over a white light and a separate hoist of red light over a green light and hoisted vertically 6 ft. apart where best seen.
Quarantine (vessel is infected)	International Code Signal "Q L"	
Quarantine (not received pratique)	Nil	A red light over a white light 6 ft. apart hoisted vertically where best seen.
Request Police Assistance	International Code Signal "S T"	A green over a white light, 6 ft. apart hoisted vertically where best seen.
Request Medical Assistance	International Code Signal "W"	A red light over a green light, 6 ft. apart, hoisted vertically where best seen.

(c) Priority. First come first served.

AUTHORITY: Sabah Ports Authority.

AGENT: Harrisons & Crosfield (Sabah), Limited. Telegraphic address "Crosfield". Tel. Shipping Department 52458; Vessels at wharf 52300–54400.

KUCHING, Sarawak: 01.34 N. 110.21 E.

DOCUMENTS:

- Port Clearance to be surrendered to Customs when boarding.
- Crew Lists and Passenger Lists, 2 copies for Immigration Department, 2 copies for Kuching Port Authority, 2 copies for Customs, 1 copy for Port Health Officer.
- List of Ship's Stores (2 copies for Customs).
- List of Ammunition (3 copies for Customs).
- Health Documents (Vaccination Certificates and Cholera Inoculation Certificates to be examined by Health Inspector).
- Manifests (3 sets for Customs, 5 sets for Kuching Port Authority, 1 set for Health Inspector).

PILOTAGE: Pilot can be applied for through Agents or by direct cable Marine Dept. giving at least 24 hours notice of ship's arrival time at Tanjong Po. Telegraphic address, Shipping, Kuching. Pilots are embarked either at the position, marked on B.A. Chart 1822, off Tg. Po or at Sejingkat by vessels proceeding further up river to the wharves operated by Kuching Port Authority. Pilot boat "Alor" equipped with VHF.

In rough weather it may be necessary for a ship to follow or meet the pilot launch at the junction of Embang and Senari leads. Pilots for the Batang Lupar, Triso or Lingga Anchorages are also normally embarked off Tanjong Po by arrangement.

APPROACHES: The seaward approach to Kuching port is restricted by the presence of two bars; Outer Bar at a depth of 16 ft. below datum, and the Inner Bar at 15 ft. below datum. The max. depth of high water over the Bar, which occurs at springs is about 31 ft., whilst at neap high waters this decreases to approximately 28 ft. The tidal range is 5 to 17 ft. There are also numerous rocks and shoals in the river.

ANCHORAGES: *(a)* Tanjong Po Anchorage: 045° one mile from Tanjong Po line. Area of safe anchorage is 0.25 mile radius. Depth 6 fathoms. *(b)* Sejingkat Anchorage: For vessel up to 550 ft. long with max. draft 25 ft.

Examination Anchorage: The examination anchorage is re-established off Sejingkat in an area bounded by:—

(a) A line, marking the outer limit, drawn 345° from the Channel Beacon in position Lat 01° 34′ 51″ N., Long. 110° 26′ 41″ E.

(b) A line, marking the inner limit, drawn 343° 30′ from the Inner Measured Mile Beacon in position Lat. 01° 34′ 50″ N., Long. 110° 26′ 13″ E.

Vessels are recommended to anchor in the Northern half of the area and shallow draft vessels should berth as close to the Northern bank of the river as is practicable.

Vessels should advise the Marine Signal Station of their arrival using VHF Channel 20. Movement of vessels up river will be controlled from the Marine Signal Station or Marine Office. In order to receive information, vessels should keep watch on VHF Channel 20.

Vessels carrying dangerous cargo will be examined in the existing explosives anchorage.

RESTRICTIONS: Tide restriction and max. draft 17 ft. at high tide. Not advisable to enter port at Tanah Puteh at night.

MAX. SIZE: Max. permissible length overall for vessel entering port at Tanah Puteh is 435 ft. and max. draft 17 ft. Max. overall length for oil carriers proceeding to oil installation at Baiwak Wharf, Pending Point is 400 ft., and max. draft 22 ft. At Pelabuhan Datuk Sim Kheng Hong, the LOA of ship permissible is 550 ft. with a max. draft of 25 ft.

RADIO: ETA cable to ship's Agent can be sent to Department of Communications, Kuching. Code words, Kuching Radio.

VHF direct communication with Port Authority, Channel 16, calling and safety, Channel 20 port operations. Channel 26 public correspondence. Pilot boat and Marine Department also equipped with VHF. Range 25 to 30 miles from Kuching port.

TUGS: 3 tugs, 2 of 1,000 h.p. and 1 of 164 h.p.

BERTHING: Application for berth must be made by Agents at least 24 hours before berthing. Facilities: at *Tanah Puteh* 800 ft. wharf of the deck on piles with shore-bridge type with 103,000 sq. ft. of Covered Storage Space and 195,000 sq. ft. of Open Storage Space; at *Pelabuhan Datuk Sim Kheng Hong* 860 ft. marginal wharves with 80,000 sq.ft. Covered Storage Space and 100,000 sq. ft. of Open Storage. Feeder Container Services are available but ship must provide lift on/lift off gear for ship/shore and vice versa operations. Max. shore facilities – 14 tons gross per container.

STEVEDORES: Gangs required for working vessel for weekdays must be ordered by Agents before 1530 hrs. prior to ship's working the following day. Gangs required for working vessel on Sundays or public holidays must be ordered before 1000 hrs. prior to ship's working on Sundays and public holidays.

MEDICAL: Necessary for Agents to receive advance notice of required medical attention at least 24 hours before arrival. Hospital facilities available. Crew should possess Cholera inoculation and Vaccination Certificates.

TANKERS: Tankers berth at Biawak Wharf, Pending Points, for discharge of their oil. Diameter of pipe line 6 in. Only one tanker can berth at a time and max. draft is 25 ft.

DENSITY: 1008 oz. per cubic ft.

FRESH WATER: Available and can be supplied to vessel alongside Authority's Wharf by hose about 25 tons per hour.

FUEL: High-speed diesel fuel oil can be supplied to vessel by making arrangement with either Shell or Esso Oil installation at Biawak.

GANGWAY/DECK WATCHMEN: Not usually available. Ship should provide own watchmen.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Ship's should possess all relevant certificates on board in case required for reference.

CUSTOMS ALLOWANCE: Tobacco: 1 oz. tobacco or 25 cigarettes or 8 cigars permitted for each crew member daily. Up to three days ration in port. Wines and/or Spirits, eighth qt. bottle of spirits or 0.25 qt. of beer or 1 qt. of wines is permitted for each crew member daily. Up to 3 days' ration in port.

CARGO GEAR: Ship provides own gear especially for handling heavy lifts, vehicles, etc. Rope slings, pallets and safety nets, etc., will be provided by the Authority.

IDENTIFICATION CARDS: Required.

CONSULS: Indonesian.

REPAIRS: Minor repairs to vessels only.

DRY DOCKS: Not suitable for sea-going vessels. Coastal vessels up to 220 ft. long.

REPATRIATION: Facilities available.

AIRPORT: Airport about 6.5 miles from port at Tanah Puteh. It is served by regular airlines which operate two flights daily except on Tuesday, Thursday and Friday when one flight only.

TIME: Local time eight hours ahead of GMT.

HOLIDAYS: Port work can be arranged on all official holidays on overtime rates except Chinese New Year Day, Hari Raya Puasa Day, International Labour Day, (1st May), Dayak Festival Day (1st June), and Christmas Day, during which the port at Tanah Puteh will be closed.

POLICE/AMBULANCE/FIRE: For emergency call, tel. 999 is applicable to all these three services. Individual call: Central Police Station, 2222; General Hospital, 23151; Fire Station, 21033.

TELEPHONES: Telephones can be provided free of charge on board vessel occupying Authority's berths at Tanah Puteh Wharf.

SHORE LEAVE: Crew members are allowed ashore provided permission is granted by Immigration Department.

REGULATIONS: Refer to Sarawak Merchant Shipping Ordinance and Kuching Port Authority's Ordinance and Bye-laws.

DELAYS: At present ships can normally secure a berth within 24 hours of arrival if tide is right.

AUTHORITY: Kuching Port Authority.

KUNAK, Sabah: 04.41 N. 118.15 E. (See Plan)

Sabah Government Requirements

(a) Customs will treat port as sufferance wharf as defined in Section 2 of Customs Ordinance (Cap. 33), with control from Lahad Datu. Agent will be required to make application to Customs for sufferance facilities in respect of each vessel, on appropriate form. Officer-in-Charge of Customs, Lahad Datu will arrange to send a supervising officer with ship; this officer will attend vessel's inward and outward Customs clearance. Transport, food and shelter of Customs Officer are for vessel's account, though it is envisaged that his transport can be concurrent with boarding and departure of the Pilot, i.e. per Marine Department launch.

(b) Immigration requires that vessel shall be cleared inwards and outwards in Lahad Datu. As Marine Department launch will be required to run mooring lines at Kunak, it will not be available to transport Immigration Officer who will *not* accompany vessel. His transport will therefore be a matter for Agent to arrange.

(c) Medical will grant pratique by radio by Medical Officer, Lahad Datu: whose right to carry out full inspection is not affected thereby. This will only be exercised, it is anticipated, when vessel has called at an infected port within prescribed period. Radio messages should therefore give this information, e.g. "Malay Maru Hongkong Twentieth Tokyo Thirtieth Manila Second All Well Request Pratique Master".

(d) Marine Dept. in the case of a vessel arriving from foreign ports will ultimately place a Pilot on board in Lahad Datu, if requested.

(i) Pilot will receive vessel's arrival report and sight her last port clearance. Pilotage will commence at any such point on route as Master may request, at rates laid down in the Merchant Shipping (Fees) Regulations, 1961. The Pilot launch carrying berthing crew will arrive in advance of vessel at Kunak and assist in making fast.

(ii) As there is no accommodation available at Kunak, the Pilot it is hoped, can be accommodated on board ship during her stay.

(iii) Return to Lahad Datu will follow as in sub-para (i) with the Pilot issuing Port Clearance on completion of Immigration formalities.

(iv) Requests for Pilot should be made *at least* 24 hours in advance to Marine Sandakan via Sandakan Radio, 9WHZ1. Initially this service will be offered from Sandakan, and ships proceeding Kunak from there will retain the Pilot on board. Ships from foreign ports will be served by air; charges to their account. There is now a Pilot based at Tawau, who will berth vessels at Kunak.

For information the port limits of Lahad Datu are "a line drawn from Tanjong Melandong on the South-west point of Darvel Peninsula to the most Westerly point of Sakar Island and thence to the mainland, etc." From this it can be seen that large vessels need not enter the narrow waters of the inner bay.

BERTHING: 1. Wharf consists of,

(a) A raised cement platform 30 ft. × 30 ft. on wooden piling.

(b) Three lazy piles with rubber fendering situated 20 ft. from the front edge of the platform and 125 ft. in each direction from the centre of the platform.

(c) Two cement mooring dolphins 20 ft. × 20 ft. situated 350 ft. each side of the platform and 50 ft. from the rear edge of the platform.

(d) A metal jetty approach 10 ft. wide × 350 ft. long.

(e) A coral bund 24 ft. wide at the base and approximately 16 ft. wide at the top.

(f) Mooring Buoy placed 600 ft. off head of jetty.

2. Depth of water alongside: Minimum depth of water outside the lazy piles is in excess of 35 ft. datum.

3. Bulk oil will be pumped from installation along a metal pipe via coral bund and metal jetty. At a point approximately 15 ft. before cement platform the pipe bifurcates and the two terminals are situated two-thirds the way along each side of platform. To these terminals will be attached a flexible steel hose for connection with ships. Hose will be provided by shippers, and is 400 ft. long if required.

4. Pumping capacity. Maximum overall rate of pumping palm oil will be 100 t.p.h. Palm oil pipe is of 6 in. diameter.

AUTHORITY: Port Manager, Tawau.

AGENT: Harrisons & Crosfield (Sabah) Ltd., PO Box 131, Sandakan, Sabah, Malaysia. Telegraphic address "Crosfield Sandakan". Tel. 2141. Code-Bentley's Second Phrase.

LABUAN, Sabah: 05.17 N. 115.15 E.

Island of Labuan is 12 miles long and 7 miles wide lying off Northwest coast of Borneo at entrance at Brunei Bay. It is part of State of Sabah and is only 4.5 miles from mainland and some 77 miles from the State Capital of Kota Kinabalu.

DOCUMENTS:

(a) On arrival, when vessel has arrived from ports outside Sabah, Health Officer, Boarding Officer, Customs and Immigration or their representatives will board vessel. Agent cannot board until ship has been cleared.

(b) Health Officer will require Maritime Declaration of Health duly completed together with one copy of passenger list and one copy of crew list whenever vessel's last port of call has been outside State of Sabah.

(c) Boarding Officer will require one copy of Shipping Arrival Report, one copy of passenger list and one copy of crew list. He will also inspect various Certificates such as Load Line, Life Saving Equipment etc.

(d) Following is summary of documents required:

	Customs	*Immigration*	*Boarding Officer*	*Agent*	*M.O.*
Passenger List	2	2	1	1	1
Crew List	2	2	1	1	1
Store List	2	—	—	1	—
Maritime Declaration of Health	2	—	—	—	1

(e) To be supplied before Departure:

Manifests as necessary.

Captain's copies of Bills of Lading.

Port Clearance.

Customs Clearance.

Certificate of *(a)* Buoys and Lights Dues and *(b)* Port and Harbour Dues.

PILOTAGE: Pilot available if adequate notice given but pilotage not compulsory. Vessels normally berth between 0600 and 1800 hrs., unberthing at any hour, day or night, provided that notice of such movements received between 0800 and 1600 hrs.

ANCHORAGES: Good anchorage for large vessels in a least depth of five and three-quarters fathoms South and S.E. of No. 6 Beacon.

Quarantine. Vessels arriving from an unhealthy port should proceed to quarantine anchorage for pratique. This anchorage is bounded on North by a line drawn 090° from Harbour Shoal Beacon to Eastern Harbour Limit; South by a line drawn between S.W. point of Papan Island and Enoe Beacon; on West by Eastern Boundary Limit of Explosives Anchorage (as under). If vessels arriving from healthy port and healthy themselves, they need not proceed to Quarantine Anchorage.

Explosives. No vessels having explosives on board may come or remain within 500 yards of shore or of any other vessel; such vessels shall fly Gunpowder Flag at foremast, and should anchor in Explosives Anchorage which is within a line drawn from Enoe Beacon to Harbour Shoal Beacon thence in 090° for 6 cables thence in 180° direction until it joins line between S.W. point of Papan Island and Enoe Beacon.

Dangerous Petroleum. A vessel having dangerous petroleum on board shall anchor within a line drawn from Harbour Shoal Light beacon in a 360° direction for 2,500 ft., thence in a 090° direction for 3,600 ft., thence in a 180° direction to join Northern boundary limit of Explosives Anchorage.

Prohibited Anchorage. No vessel shall anchor within 2,000 ft. from the light of Southernmost dolphin of Liberty Pier.

RESTRICTIONS: Tides. Subject to diurnal inequalities but usually one high water and one low water a day. Average high water is 6.5 ft. and low water 3 ft. above datum of soundings.

Clearance. Port is open from 0600 to 1800 hrs. although vessels can be cleared later than 1800 hrs. on application provided they are sighted from Papan Lighthouse at 1800 hrs.

HEALTH: See "Regulations" and "Anchorages".

RADIO: Information required before ship's arrival. ETA Labuan, with as much prior notice as possible. Number of gangs required Quantity of fresh water required. Whether Pilot required for berthing.

Labuan has no radio facilities and messages are received via Kota Kinabulu, Miri, Singapore, etc.

Port VHF Service operates on Channels 16 and 12, between 0530 and 2400 hrs.

TUGS: No tugs available.

BERTHING: 1. Wharves.

(a) Liberty Wharf – A permanent concrete wharf, measuring 800 ft. with dolphins 100 ft. off each end – least depth of water is 28.5 ft.

(b) Victoria or Small Ships' Wharf (marked on Chart as H. & C.'s Wharf). A wooden structure – length 270 ft. with min. depth of 12 ft. No longer useable except by kumpits. No vehicles allowed on wharf.

(c) New Shell Installation Wharf. Concrete jetty 170 ft. long with two dolphins at each end with a total length between of 700 ft., least depth of water 31 ft.

(d) Brown & Root Jetty – A timber decked jetty with following dimension:
Length of main jetty – 160 ft., width 40 ft.
Length of causeway – 476 ft., width 22 ft.
Least depth alongside approximate 28 ft.
Max. load (proven) – 800 lb./sq.ft.
Max. single approximate 100 short tons.

2. Buoys: No mooring buoys in Labuan.

3. Monsoons. N.E. monsoon prevails from December to April and S.W. monsoon from middle of May to middle of October. Harbour is well sheltered from both monsoons.

4. Flags and Berthing Signals:

(a) When entering port vessel should fly Signal Letters, Mail Flag if applicable, and "G" flag if requiring Pilot, and also Quarantine Flag.

(b) Berthing Signals. Following berthing signals will be used at Labuan and will be displayed from Flagstaff in Harbour Office in vicinity of Liberty Wharf, Victoria Harbour. A red and white chequered flag and International Code numbered pendant will indicate berth number allocated. Berth numbers have been allocated as follows:

(c) Berth and Pendant No.

1. Esso Wharf.
2. LCT. Landing Ramp.
3. Victoria Wharf (small ships) S.E. Section.
4. Old Liberty Wharf (inner section).
5. Old Liberty Wharf (outer section).
6. New Liberty Wharf (inner section).
7. New Liberty Wharf (outer section).
8. Brown & Root Jetty.
9. Shell Installation Jetty.
10. Anchor.

On receipt of berthing signal, vessel should acknowledge in the usual manner with the answering pendant and proceed to berth.

(d) Tidal Signal. A tidal signal consisting of a cone and ball is hoisted in conjunction with berthing signal showing state of tide at berth indicated. A cone point down signifies flood tide (West-going), a cone point up ebb tide (East-going), a ball slack water.

(e) Facilities. Max. single load without special precautions on Old Liberty Wharf is 25 tons and New Liberty Wharf is 650 lbs/sq. ft. i.e. 180 tons four axle vehicles. Any load over this figure will require to be distributed over two or more panels of 10 ft. by 10 ft. each according to weight. However, special arrangements must be made prior to discharge, and Agent should be consulted in advance.

STEVEDORES: Supplied by contractors as arranged by Agent. Working hours 0800–1200 hrs., 1300–1700 hrs. Working outside these hours on Sundays and Public holidays is overtime.

CARGO: 1. Inward. Inward cargo is tallied out of ship on to wharf or into lighter. Damaged cargo is surveyed on the spot, otherwise no liability of the vessel is acknowledged. Discharge is carried out after permission has been obtained from Customs after manifest of inward cargo has been deposited. Cargo is delivered to consignees against production of relative Bill of Lading. Ship's responsibility to consignees ceases at ship's side but, in the case of shortlanded cargo, reasonable proof must be given to Customs that the cargo has not been landed. A shortlanded Memo certified by the Chief Officer is usually accepted as proof.

2. Transhipment. After discharge of cargo from the 1st carrier, transhipment cargo is placed under supervision of Customs, unless it is possible to arrange direct transhipment into small coastal vessel. Customs do not accept responsibility for cargo in Customs Bond.

3. Refrigerated. Only small quantities of refrigerator cargo loaded or discharged.

4. Explosives. Explosives must be discharged into lighters under police escort and transported to an approved police store. A licence for their importation must be obtained from the police prior to arrival of cargo, and harbour and police authorities must be informed of arrival of explosives in port either for discharge or as through cargo.

MEDICAL: Hospitals. Not possible for Government Medical Officer to visit ships but patients can be sent to Cottage Hospital. Four 1st class beds, 10 2nd class beds, 46 3rd class beds.

Dentist. A Government Dental Clinic, located in Cottage Hospital area. In addition, a Chinese dentist is available in town.

TANKERS: See "Berthing".

FRESH WATER: Only available in small quantities (usually 30 tons maximum) and at restricted hours.

FUEL: Bulk furnace oil and high speed diesel usually available but 48 hours notice of requirements must be given.

FIRE PRECAUTIONS: In case of fire, the Harbour Master, OCPD, and Agent should be telephoned immediately. A mobile gas turbine fire pump is available.

CONSULS: None.

REPAIRS: Slipways of up to 500 tons displacement, and Marine Department can undertake minor repairs.

POLICE/AMBULANCE/FIRE: Medical Officer 224; Asst. Commissioner of Customs 201; OCPD 400; Police Station 297; Hospital 222.

GENERAL: *Surveyors.* Harrisons & Crosfield are Lloyd's Sub-Agents in Labuan and may appoint a surveyor as necessary.

Ship Chandlers. Fresh fruits, vegetables and fish available and price list can be obtained from ship chandler through Agent. Cold storage with limited supplies.

Recreation Facilities. If owners pay a monthly subscription to the Labuan Recreation Club, ship's crew are automatically members. Football and cricket, etc., can usually be arranged on application to Agent. Two cinemas in town which show American, English, Chinese, Malayan and Indian films.

Good beaches all round island, however, it is strongly recommended that bathers should remain in shallow water. It is not considered safe to bathe from the ship.

Victoria Hotel situated in town. All rooms air-conditioned and have private bathrooms or showers attached. Lodging house accommodation available in town for Chinese Crew members.

REGULATIONS: *(a)* Arrival and departure. 1. The Owner or Agent of every vessel other than a small ship intending to call at a port shall, as soon as possible, and in any case not later than 36 hours prior to the estimated time of arrival of the vessel, give notice in writing to the Authority of such arrival and, if so desired, the requirement for a berth at a wharf.

2. The notice under this regulation shall be in a form prescribed by the Authority and shall contain full particulars regarding the cargo to be discharged and loaded, the embarkation and disembarkation of passengers, heavy lifts, special or perishable cargo, hazardous and dangerous goods (whether to be discharged at the port or not), and any other matters of importance relating to the working or safety of the vessel in the port.

3. The Master of every vessel entering or leaving a port between sunrise and sunset shall cause to be hoisted the national colours and the signal letters, if any, of the vessel. The national colours shall be exhibited from 0800 hrs. to sunset whilst the vessel remains in port.

4. The Master of every vessel arriving from outside the State of Sabah shall exhibit the Immigration and Quarantine signals contained in the First Schedule and shall also at the request of a customs officer hoist the Customs signals. Such signals shall remain exhibited until the appropriate officer has given permission for them to be lowered.

5. No vessel shall approach within 600 ft. of any other vessel exhibiting the Immigration, Health or Customs signals.

6. No person other than a Pilot may board or disembark from any vessel until the vessel is cleared inwards and the Immigration, Quarantine and Customs signals have been lowered.

7. Every vessel entering a port shall be anchored or efficiently secured to a wharf or buoy before commencing the loading or discharging of cargo and/or the embarkation or disembarkation of passengers.

8. No vessels shall leave any port unless in possession of a valid Port Clearance issued by or on behalf of the Director of Marine.

(b) Special signals.

Significance	*By Day*	*By Night*
Immigration (for ships not carrying passengers)	International Code Signal "2 5"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Immigration (for ships carrying passengers)	International Code Signal "3 4"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Quarantine (vessel is Healthy request pratique)	International Code Signal "Q"	Nil
Quarantine (vessel is suspect)	International Code Signal "Q Q"	A red light over a white light and a separate hoist of red light over a green light and hoisted vertically 6 ft. apart where best seen.
Quarantine (vessel is infected)	International code Signal "Q L"	
Quarantine (not received pratique)	Nil	A red light over a white light 6 ft. apart hoisted vertically where best seen.
Request Police Assistance	International Code Signal "S T"	A green over a white light, 6 ft. apart hoisted vertically where best seen.
Request Medical Assistance	International Code Signal "W"	A red light over a green light, 6 ft. apart, hoisted vertically where best seen.

AUTHORITY: Harbour Master.

AGENT: Harrisons & Crosfield (Sabah) Limited, PO Box No. 7, Labuan, Sabah, Malaysia. Telegraphic Address "Crosfield". Tel. 218, 219.

LIMBANG, Sarawak: 04.48 N. 115.05 E.

Limbang is the principal town of the Fifth Division and is situated 8 miles above the entrance of the Limbang River. There is an anchorage for ocean-going steamers 5 miles below the Limbang bar buoy with a least depth of 26 ft.

Depth on Bar. The least depth reported on the bar is about 2 ft. with a highest rise of 12 ft. The channel is marked by stakes with red/white and black/white topmarkers and a flashing light buoy Fl.1 sec. at the entrance.

Every vessel arriving in quarantine shall fly or show the appropriate International Quarantine signal; and no person other than a Pilot, Port Officer, Port Health Officer, Immigration Officer or Officer of Customs shall board the vessel; and no person shall disembark therefrom until the vessel has been cleared by the Port Health Officer.

The Master of every vessel of over 15 tons about to depart from a port for any place outside Sarawak shall cause the "Blue Peter" (International Code Flag "P") to be hoisted, during daylight hours, for at least twelve hours before the vessel is due to sail, or if the vessel is in port for less than 12 hours, for the period of her stay in the port.

(1) The Master or the Agent of every vessel about to depart from a port shall, on demand by the Port Officer, produce for inspection the Port Clearance.

(2) The Port Clearance shall be in the form of an endorsement on the form of clearance prescribed under the Customs Ordinance or in such other form as may be approved by the Director.

A vessel arriving in, leaving from or shifting berth within a port shall hoist her signal letters, if any, whilst under way.

MALACCA, Malaya: 02.15 N. 102.15 E.

DOCUMENTS:

1. *Harbour Master's Office or Marine Department*

(a) "Report of Arrival of Vessel" on prescribed Form (Marine 28) obtainable from Harbour Master's Office on arrival.

(b) One copy Passenger List, specifying names and nationalities and required to report any casualties, accidents, births or deaths that have occurred during the voyage to the passengers, crew, ship or cargo.

(c) Port Clearance from last port and copy of Manifest of Cargo to be discharged.

(d) List of all arms and explosives on board.

(e) In the case of a British or Malaysian vessel and vessels belonging to a nation not having a Consular Officer at the port produce to Port Officer the Certificate of Registry and ship's Articles.

(f) All ship's certificates such as Safety Equipment Certificate, Radio Certificate, Load Line Certificate, Safety Construction Certificate, Ship's Registry, Passengers' Certificate, Derating Certificate and all Certificates of Competency of all Officers on board.

(g) Crew List.

2. *Immigration Authorities*

(a) Crew List (3 copies).

(b) Passenger List (3 copies).

(c) Produce all passengers passports/visas.

(d) Produce all seamen's cards.

(e) Forms A and B – "Immigrant and Emigrant" obtainable from Immigration Department on arrival.

3. *Port Health*

(a) Crew List showing last date of vaccination.

(b) Passenger List, showing the last date of vaccination.

(c) Produce all seamen's and passengers' vaccination cards.

4. *Customs Department*

(a) Crew List (2 copies).

(b) Passenger List (2 copies).

(c) Personnel Effects List (2 copies).

(d) Cargo Manifests (2 copies).

(e) Last Port Clearance.

(f) Bonded Stores List (2 copies).

(g) Full and correct statement of dutiable goods carried as ship's stores (2 copies).

(h) Customs Form CD 15 obtainable from Customs Department on arrival.

APPROACHES: No difficulty from North or South. No sand bar at river mouth. Harbour open all year round.

PILOTAGE: None.

ANCHORAGES: For ocean-going and coastal vessels anchorage between 1—1.5 miles off Malacca harbour. Between 3–6 fathoms depth. No specific prohibited anchorage.

TUGS: None.

BERTHING: None. Discharging into lighters at anchorage.

STEVEDORES: Discharging cargo capacity per day – 1,000 tons.

MEDICAL: Modern Government hospital. All surgical and medical facilities available.

FRESH WATER: None.

FUEL: None.

DEVELOPMENTS: Proposed provision of deepwater berths.

CUSTOMS ALLOWANCE: Tobacco, cigarettes 25 in number per man per day, or cigars, 8 in number per man per day, or Tobacco, 1 oz. per man per day, or snuff, 1 oz. per man per day.

Wine and/or Spirit: Spirit, eighth of a quart per man per day, or wines, 1 quart per man per day, or beer or stout, 1 quart per man per day.

REPAIRS/DRY DOCKS: None.

HOLIDAYS: Official holidays in the state as follows: New Year's Day, 1 day; Chinese New Year's Day, 2 days; Muslim New Year's Day, 2 days; Wesak's Day, 1 day; His Majesty's Birthday, 1 day; Prophet Mohammad's Birthday, 1 day; His Excellency Governor's Birthday, 1 day; Malaysia Day, 1 day; Deepavali, 1 day; Hari Raya Huji, 2 days; Christmas Day, 1 day. No cargo is worked on any of the above gazetted public holidays – port closed.

AIRPORT: Batu Berendam, 6 miles from port – commercial airlines daily.

AUTHORITY: Marine Department, Malacca and Port Dickson.

MIRI, Sarawak (incl. Lutong): 04.26.30 N. 113.55.30 E.

Miri Roads is an open roadstead in a shallow bay, bounded at North by Tanjong Baram and at South by Tanjong Lobang.

PORT LIMITS: Outer: within an area to Northward of Lat. 04° 22′ N., Eastward of Long. 113° 55′ 30″ E. and Southward of Lat. 04° 31′ N.

DOCUMENTS: *(a) Health.* Vessels exempted from inspection (see "Health") should deliver to Berthing Master on arrival, a Declaration of Health, Last Port Clearance and 2 Crew and Passenger Lists.

(b) Inward Clearance (also see "Anchorage"). All vessels calling Miri Roads for passengers or cargo must be cleared by Immigration and Customs and, if necessary, by Port Health.

Inward clearance effected only between 0600 and 1800 hrs. and following signals must be shown: if passengers carried, flags "3" and "4"; if no passengers carried, flags "2" and "5"; if free pratique requested, flag "Q".

Following papers will be required on arrival for inward clearance:

Port Health:

Declaration of Health.
1 Crew List.
1 Passenger List, inward and through.

Customs Boarding Officer:

As above, if not boarded by Health Officer, and 2 Inward Cargo Manifests.

(c) Outward Clearance. For vessels that have called to lift bunkers only at Lutong Moorings, clearance will be issued by Berthing Master.

Other vessels will be issued a Port Clearance by Customs Officer on board who will require: 1 Outward Manifest and, if any embarked, 1 Outward passenger list.

APPROACHES: The loom of gas flares on Seria Oilfields 30 miles N.E. of Miri are a general guide at night but should not be used as a bearing because flares movable within area of oilfield and liable to be extinguished at any time. Following bearings exist. By night, three lighthouses:

(a) *Tanjong Baram* 04° 35′ 47″ N. 113° 58′ 25″ E. white single light 680,000 candle power, visibility 17 miles, elevation 120 ft. in grey steel lattice tower, group flash three every twenty seconds.

(b) *Lutong* 04° 28′ 30″ N. 113° 59′ 46″ E., white single light, 13,500 candle power, visibility 10 miles, elevation 80 ft. in grey steel lattice tower, group flash two every ten seconds.

(c) *Tanjong Lobang* 04° 21′ 48″ N. 113° 57′ 36″ E., white single light 20,150 candle power, visibility 18 miles, elevation 155 ft. in grey steel lattice tower, 60 ft., flash one every ten seconds.

By day, above lighthouses difficult to distinguish and following may be used for day-time bearings:

(a) Lutong radio mast FR 210 ft., position 04° 26′ 25″ N. 113° 59′ 54″ E.

(b) Tanjong Lobang radio masts as marked on chart.

PILOTAGE: No official Pilot stationed at Miri but Shell Company provide Berthing Masters to moor vessels at their Lutong Moorings (see "Tankers").

ANCHORAGE: for cargo, passengers or clearance. It is recommended that vessels anchor close inshore directly opposite Miri River Mouth, but caution must be exercised as sudden squalls and swell up to 4 ft. can occur, for which allowance should be made.

Cargo usually worked into or from wooden lighters of 30 to 35 tons capacity. Swell often restricts work to landward side only and swell or wind often make it difficult to work Hatch No. 1 in some vessels. Accommodation ladder should be lowered on landward side to enable shore personnel to board.

Prohibited Anchorage and Berthing Area. From *(a)* 4° 30′ 54″ N.; 113° 56′ 19″ E. in a 090° direction to the shore; and from *(a)* to *(b)* in 4° 27′ 30″ N.; 113° 47′ 01″ E., thence in a 090° direction to the shore.

HEALTH: Every vessel arriving in quarantine shall fly or show the appropriate International Quarantine signal; and no person other than a Pilot, Port Officer, Port Health Officer, Immigration Officer or Officer of Customs shall board the vessel; and no person shall disembark therefrom until the vessel has been cleared by the Port Health Officer.

Free pratique granted without health inspection to vessels calling to lift bunkers only at Lutong Moorings, provided ship healthy. Vessels with unclean bill of health or vessels which have not declared themselves healthy in their arrival notice telegram are subject to normal Port Health inspection procedure. Therefore of utmost importance that arrival notice is sent not less than 24 hours before arrival and contains all information requested (see "Radio") in order to prevent unnecessary delay.

RADIO: Miri Radio call sign 9 WW21, frequency 500 kc/s., operates at following hours local time: 0900–0930, 1300–1330, 1700–1730, 2100–2130. Present station has a limited range and if difficulty is experienced making contact, vessels should pass messages through other stations, such as Singapore radio, or through other ships in close vicinity of Miri.

Arrival notice must be telegraphed at least 24 hours before arrival and should contain following information:

All vessels

(a) expected time of arrival (local time GMT plus 8 hours);

(b) name of last port of call and next port of call, if not previously advised;
(c) whether or not ship is healthy.
For bunkers
(d) quantity of bunkers required, in long tons at least 48 hours notice is required;
(e) provisions or medical attention required, if any.
For cargo
(f) tonnage to discharge, if any;
(g) number of gangs required to load;
(h) number of winchmen required to load.
Passengers
(i) number of passengers to disembark.

BERTHING: Cargo vessels – see "Anchorage", oil carriers – see "Tankers".

MEDICAL: Treatment of urgent cases available on shore subject weather conditions. Early notice should be telegraphed of medical requirements.

TANKERS: Lutong Terminal position 04° 30′ North 113° 57′ East (approx.). Open sea berths lying about 3 miles offshore just Northward of Lutong River mouth. Berthing any hour day or night. Await Berthing Master in area bounded by lines joining following positions: 04° 25′ N. 113° 56.25′ East; 04° 25′ North. 113° 55′ East; 04° 26.25′ North. 113° 55′ East; 04° 26.25′ North. 113° 56.25′ East.

Pilot ladder should be rigged for Berthing Master, and starboard derrick near fuelling connection should be topped-up and rigged to lift heavy equipment required for mooring and connecting pipelines and which has to be taken on board before proceeding to mooring berth.

Moorings are in a prohibited area which must not be entered without a Berthing Master of Sarawak Shell Oilfields Limited on board.

Berth	*Max. length*	*Max. draft*
SBM 1	600 ft.	40 ft.
SBM 2	750 ft.	40 ft.
SBM 4	820 ft.	44 ft.

No slop discharge facilities.

FRESH WATER: No fresh or boiler water available.

FUEL: No ex-barge facilities but bunkers obtained from Lutong Terminal.

Nos. 2 and 4 Sealines. Available for bunkering dry-cargo vessels. Ship's spring wire will be used to haul ends of mooring wires on board and mooring winches should be double gear and in all respects ready for use. All other gear for mooring and connecting pipes is brought on board with Berthing Master at Pilot Station. Bunkers will be supplied through 8-in. flexible hose brought up on starboard side amidships and appropriate flange on ship's connection should be removed in advance. Berthing Master will remain on board throughout bunkering operation and will leave after vessel has unberthed. Mooring and unmooring operations each require about 1.5 hours and bunkering rate usually 45–75 t.p.h.

CUSTOMS ALLOWANCES: Bonded Store on vessels other than those berthing at Lutong Moorings for bunkers only and exempted from formal clearance, sealed by Customs after allowing a daily ration for duration of stay in port.

1 Customs Officer will remain on board all vessels anchored in Miri Roads and accommodation, if necessary, should be arranged for them. The Agents' staff will remain on board throughout all cargo operations and it would be highly appreciated if meals could be supplied to them and to the Customs Officer in view of the long time occupied travelling by launch between ship and shore.

AIRPORT: Distant 10 miles. Daily flights.

TIME: GMT plus 8 hours. Permanent.

SHORE LEAVE: It is regretted that both passengers and crew must be dissuaded from coming ashore other than for medical attention, owing to weather and tidal restrictions.

REPAIRS: No facilities for repairs.

LUBRIÇANTS: Generally, lubricants not available but in emergency certain grades sometimes obtainable in very limited quantities.

PROVISIONS: Limited fresh provisions and ex-bond stores available for which vessels should give 72 hours notice of requirements so that arrangements can be made to secure the required supplies.

REGULATIONS: The Master of every vessel of over 15 tons about to depart from a port for any place outside Sarawak shall cause the "Blue Peter" (International Code Flag "P") to be hoisted, during daylight hours, for at least 12 hours before the vessel is due to sail, or if the vessel is in port for less than 12 hours, for the period of her stay in the port.

(1) The Master or the Agent of every vessel about to depart from a port shall, on demand by the Port Officer, produce for inspection the port clearance.

(2) The Port Clearance shall be in the form of an endorsement on the form of clearance prescribed under the Customs Ordinance or in such other form as may be approved by the Director.

A vessel arriving in, leaving from or shifting berth within a port shall hoist her signal letters, if any, whilst under way.

POLICE/AMBULANCE/FIRE: Tel. 999.

AUTHORITY: Marine Officer, Marine Dept., Miri.

AGENT: Lloyd's sub-agents in Miri. The Borneo Company (M) Sdn. Bhd. Postal address PO Box No. 60, Miri, Sarawak. Tel. office: 3365, 3366, 3367; out of office hours: 3261, 3344. Telegraphic address "Borneo Miri".

The Borneo Co. (M) Sdn. Bhd. operate their own launches and a representative will board vessels as soon as possible after arrival.

PENANG, Malaya: 05.25 N. 100.21 E. (See Plan)

DOCUMENTS:

The report of arrival (provided in Marine Shipping Ordinance, 1952).
A copy of Passenger Statistics on prescribed forms.
A List of Crew Members.
A List of Passengers.
Evidence of last port clearance.
All Ship's Documents (safety equipment, deratisation, radio, load line and register).
Maritime Declaration of Health.
International Health Certificate for passengers and crew.
Vaccination List, for Smallpox and Cholera, for passengers and crew.
Departures: Port Clearance Certificate signed by the Port Health Officer, to be shown to the Port Officer issuing clearance.

For oil tankers, a copy of Ship's Manifest to be submitted. Ship carrying explosives, Captain required to fill prescribed form "D" stating quantity of explosive cargo ship is carrying together with copy of Ship's Manifest.

PILOTAGE: Vessel approaching port has to send telegram to Pilot Office direct (cable address "Pilots Penang") or to ship's Agent stating "ETA North Channel Light Float" or in case of South Channel "ETA Pulau Rimau". Draft of vessel to be given. Pilot Office may be contacted through Penang Telephone Exchange on VHF Channel 16 to local telephone No. 63313. At least 6 hours advance notice should be given before arrival at Pilot point.

Pilot boats have a blue hull, varnished upperworks with "Pilot" written in bold letters on both sides of boat.

Pilot is usually taken on board, for North Channel, in vicinity of North Channel Light Float and for South Channel, in vicinity of Rimau Wreck Buoy 1 mile South of Pulau Rimau Lighthouse.

Vessels awaiting tide can anchor, in case of North Channel, in area shown by pecked lines marked anchorage area in Chart No. 1366. For South Channel ship can anchor in vicinity of Rimau Wreck Buoy. During bad weather, provided draft suitable, vessels sometimes requested enter and take on Pilot at Erskine Buoy.

Pilotage is compulsory for all vessels navigating in pilot district of Penang with the exception of fishing vessels and vessels of below 600 g.r.t.

Shipmaster's Report: The KRA lightvessel, on the Outer Kra Bank to the South of the South Channel, is non-existent.

The Pilot station is now equipped with VHF but operates on Channel 12 only. The Pilot Launch is also equipped likewise, as is a car that transports the Pilots from their homes to Batu Maung Point where they board the launch. It takes them exactly 1 hour from their homes until they are aboard a vessel at Rimau Buoy, therefore a minimum 2 hour notice is adequate.

One Pilot advised me not to approach the South Channel at any time if the vessel's draft is over 24 ft. He stated that the bar to the S.W. of Rimau Buoy has not been surveyed for many years and that possible silting may leave it on a lesser depth than the chart suggests. The approach to the North Channel is safe.

ANCHORAGES: The anchorage for foreign going steamers (other than those carrying dangerous cargo or quarantine ships) is Southward of the S.W. corner of the Man of War Anchorage (shown on Admiralty chart by pecked lines) and Eastward of a line drawn from this point to the Northern white mark buoy and thence 180°. Vessels must moor so as to swing clear of these lines at all states of tide.

The anchorage for coasting power vessels is Southward of a line drawn 270° from the Northern white mark buoy and Westward of a line drawn 180° from this buoy. Vessels must swing clear of these lines at all states of the tide.

RESTRICTIONS: No entry restrictions imposed other than those dictated by state of tide and draft of vessel.

MAX. SIZE: No limitations of size of vessel except for draft. North Channel chart datum 26 ft. South Channel chart datum 22 ft. Vessels of up to 32 ft. can use port but must wait for high water.

RADIO: Penang Radio, call sign 9–MG.

VHF: Vessels can communicate direct to Pilot Office via VHF operated on Channel 12 VHF within a range of 15 miles. A separate VHF network links the tugs, launches and the Commission's personnel working on board vessels in the roads.

TUGS: May be required to berth vessel at Butterworth Wharves in Port Penang. Tug joins vessel when at close proximity to wharves. Usual for tug's lines to be used.

2 tugs available, 1,320 b.h.p. and 1,200 b.h.p. Also 1 small tug of 440 b.h.p. and 1 tow-boat of 174 b.h.p. available to tow lighters to and from vessels.

BERTHING: There are 2 wharves, viz. Swettenham Pier on the island of Penang and Butterworth Wharves on the Mainland.

Swettenham Pier: 2 ocean berths of 1,200 ft. length with 32 ft. of water alongside. There is 168 sq. ft. of covered storage accommodation.

Butterworth Wharves; 5 ocean berths of 2,928 ft. length with 32 ft. of water alongside. There are 5 transit sheds of 148,000 sq. ft., 7 storage godowns of 261,000 sq. ft. an open sided timber shed of 90,000 sq. ft. and 140,000 sq. ft. of open storage area. 9 godowns of 384,000 sq. ft. near the port area are leased to private companies.

SPECIALISED CARGO-HANDLING FACILITIES: No special berths for handling bulk cargo. 2 of the berths at Butterworth Wharves are designed to handle containerised cargo when such facilities are required. At Swettenham Pier and Butterworth Wharves there are vegetable oil bulking installations. Pipe-lines are connected from the installations to the wharves.

CONTAINER HANDLING FACILITIES: Available at Butterworth wharves to service feeder container vessels and conventional vessels transporting containers includes:—

(a) A marshalling yard of 16.5 acres with storage space for 2,400 containers.
(b) A container freight station of 42,000 sq. ft. and a back-up godown of 51,000 sq. ft. to accommodate any overflow of cargo from the container freight station.
(c) 20 power points for refrigerated containers.
(d) 2 units straddle carriers.
(e) Prime movers with 20 ft. and 40 ft. trailers and other mechanical equipment for the container freight station.

A heavy lift crane with the capacity to lift 20 ft. containers at 80 ft. radius and capable of plumbing the hatch of vessels berthed alongside the wharves will be available by September 1976.

CARGO HANDLING EQUIPMENT: At Butterworth Wharves one mobile crane of 30 tons capacity, 14 mobile cranes of 2-to 3-ton capacity, 62 fork-lift trucks of 6,000 lb. capacity, 3 fork-lift trucks of 13,000 lb. capacity and 28 LPG fork-lift trucks for hatch work. At Swettenham Pier 1 mobile crane of 10-ton capacity, 2 electric cranes of 3-ton capacity, 8 fixed and mobile cranes and 25 fork-lift trucks. Scores of tractors and trailers make up the rest of the mechanised cargo-handling equipment of the Commission.

LIGHTERAGE: In the event of a vessel working in the Roads, lighterage is available for the transport of goods to and from the vessel. There are about 229 lighters operated by private companies and twenty 150-ton lighters by the Commission for lightering of cargo in the Port. In the case of the Commission's lighters, lighterage is only undertaken for import cargo.

STEVEDORES: Stevedores can only be provided by stevedore contractors at short notices but normally a min. of 12 hours will be required. Shipping Agents normally make these arrangements with stevedoring contractors.

MEDICAL: Advance notice is necessary if medical attention is required so that arrangements can be made with Medical Department by Agents.

TANKERS: 2 tanker berths. Esso Wharf, 27 ft. at low water. Caltex Wharf, 35 ft. at low water. Mud bar approach to Caltex Wharf is 29 ft. at low water. Tankers also occasionally call at Swettenham Pier to deliver oil to City Council Power Station.

FRESH WATER: Available at all times. Delivery can be by means of hydrants at berths or by water-boats to vessels anchored in Roads. Rate of delivery is approximately 40 t.p.h.

FUEL: Fuel available from private oil companies at 24 hours notice. Limited quantities of fuel can be supplied by barges to vessels in the Roads.

GANGWAY/DECK WATCHMEN: Services of a watchman recommended.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

IDENTIFICATION CARDS: Needed only when a crew member is discharged after hospitalisation or when he is repatriated.

REPAIRS: Minor repairs can be undertaken.

DRY DOCKS: Dry docks not available for ocean carriers. Slipways available for vessels of 700 nrt with dimensions of 190 ft. × 40 ft.

REPATRIATION: Facilities exist for effecting crew changes and arranging necessary repatriation.

AIRPORT: Distance from port to airport approximately 11 miles. Served by both international and local airlines.

TIME: 7.5 hrs. ahead of GMT. No alteration to clocks during year.

HOLIDAYS: 3 port holidays a year: Hari Raya Puasa, Hari Raya Haji and National Day.

POLICE/AMBULANCE/FIRE: Dial 999.

TELEPHONES: A telephone is placed on every ship that berths alongside. This is one of services provided under a common charge known as the wharf service charge.

SERVICES: All types of minor marine servicing is available. Provided by private firms. Some of the services are draft survey, general conditioning of ship, valuation of ship, accident survey, inspection of refrigeration, radar adjusting service, compass adjusting and tank-cleaning facilities.

SHORE LEAVE: Allowed.

REGULATIONS: Free port, and as such, when a vessel calls at port, Customs search party may go on board vessel to search for contraband goods.

DEVELOPMENTS: The Commission is constructing at Butterworth Wharves a Sixth Berth which will be a container berth with berthing facility for roll-on/roll-off vessels and provision for a gantry crane. Work has already commenced and the project is expected to be completed in late 1977.

The Penang Port Commission is also constructing a Bulk Cargo Terminal at Prai with the view to provide an efficient and modern dry and wet cargo bulk cargo handling facility at the Port of Penang.

It includes the provision of shore facilities for storage of both wet and dry bulk cargo together with deep water wharf for ships to directly discharge and load cargo. The wharf frontage will have a draft of 32 ft. and will be connected to the shore facilities by belt conveyors, pipes and a 4,000 ft. long jetty. The terminal is designed to handle 1.8 million tons of bulk cargo per year. Work has already started and is expected to be completed by mid 1979.

The Commission's other proposed development projects for the Third Malaysia Plan period 1976-1980 includes:—

(a) Construction of a Vegetable Oil Tanker Pier at Butterworth.
(b) Feasibility study into the deepening of the North channel.
(c) Modernisation of Bagan Dalam Dockyard.

The Commission has appointed a consulting firm to undertake an engineering feasibility study into the construction of a Vegetable Oil Tanker Pier of open dolphin supported structure extending Southwards from Berth No. 1 Butterworth wharves into the Prai estuary. The proposed construction of the Vegetable Oil Tanker Pier is in response to the increasing need for specialised facilities for the palm oil and coconut oil trade which has grown substantially over the last few years.

The main shipping entrance to Penang Harbour from the Straits of Malacca is via the North channel around the Northern and North Eastern shores of Penang Island. However, the channel crosses a wide flat bar with a least depth in the Fairway of about 26 ft. chart datum preventing the entry of vessels over 32 ft. draft into the harbour.

In view of this draft restriction, the Port of Penang is not able to service cellular container ships, deep draft bulk carriers for wet and dry bulk commodities such as petroleum, vegetable oils, ores, etc. The Commission proposes to carry out a feasibility study with a view to deepen the North channel in order that the port may be able to service these types of large vessels.

The Commission has a dockyard at Bagan Dalam where dry docking, repair and overhauling of its floating craft are undertaken. it is proposed to expand and modernise the dockyard to service the Commission's expanded fleet of ferry vessels, provide adequate facilities for future increases in the number of floating craft as well as having sufficient spare capacity to service government and commercial vessels up to 700 tons displacement.

DELAYS: Rain is only factor that may delay a ship's discharging or loading operations.

AUTHORITY: The Penang Port Commission.

PORT DICKSON, Malaya: 02.31 N. 101.47 E.

DOCUMENTS:

1. *Harbour Master's Office or Marine Department*
   (a) "Report of Arrival of Vessel" on prescribed Form (Marine 28) obtainable from Harbour Master's Office on arrival.
   (b) One copy, Passenger List, specifying names and nationalities and required to report any casualties, accidents, births or deaths that have occurred during the voyage to the passengers, crew, ship or cargo.
   (c) Port Clearance from last port and copy of Manifest of Cargo to be discharged.
   (d) List of all arms and explosives on board.
   (e) In the case of a British or Malaysian vessel and vessels belonging to a nation not having a Consular Officer at the port, produce to Port Officer the Certificate of Registry and ship's Articles.
   (f) All ship's certificates such as Safety Equipment Certificate, Radio Certificate, Load-line Certificate, Safety Construction Certificate, Ship's Registry, Passengers' Certificate, Derating Certificate and all Certificates of Competency of all Officers on board.
   (g) Crew List.
2. *Immigration Authorities*
   (a) Crew List (3 copies).
   (b) Passenger List (3 copies).
   (c) Produce all passengers passports/visas.
   (d) Produce all seamen's cards.
   (e) Forms A and B – "Immigrant and Emigrant" obtainable from Immigration Department on arrival.
3. *Port Health*
   (a) Crew List showing last date of vaccination.
   (b) Passenger List showing the last date of vaccination.
   (c) Produce all seamen and passengers' vaccination cards.
4. *Customs Department*
   (a) Crew List (2 copies).
   (b) Passenger List (2 copies).
   (c) Personnel Effects List (2 copies).
   (d) Cargo Manifests (2 copies).
   (e) Last Port Clearance.
   (f) Bonded Stores List (2 copies).
   (g) Full and correct statement of dutiable goods carried as ship's stores (2 copies).
   (h) Customs Form C.D.15 obtainable from Customs Department on arrival.

APPROACHES: Deep water approach channel from N.W., marked by four light buoys, presents no difficulties and is clear.

Leading lights also exhibited which when in line bearing 070°, lead up to harbour over a sand ridge in depths of about 3.5 fathoms.

PILOTAGE: The Port Dickson area does not constitute a Compulsory Pilotage District under provisions of Merchant Shipping Ordinance, 1952. Private pilotage services are, however, operated by Shell and Esso for vessels making use of their respective marine installations. Mooring Master boards tankers at Banbeck Shoal Buoy.

Ship's Officer's Report: Pilot boards one mile off Fairway Buoy. However, vessels of less than 30,000 d.w.t. holding Admiralty Chart No. 1140 may be requested to proceed inwards, Pilot boarding at No. 1 Buoy. Coasters proceeding to Headlands Jetties may be required to do own pilotage.

ANCHORAGES: *(a)* Good anchorage may be obtained in depths from 15 to 20 fathoms, Westward and South-Westward of Tanjong Kamunin. Small vessels may obtain anchorage in depths from 4 to 5 fathoms North-Eastward of Pulau Arang Arang, but holding ground is poor.

(b) Quarantine Anchorage is Westward of 10 fathoms line with leading light beacons of Port Dickson in line, bearing 070°, and

within 15 cables of front leading light beacon situated on Railway Jetty.

(c) Prohibited Anchorage Area indicated by pecked lines on chart and described under Port (Negeri Sembilan) (Amendment) Rules, 1963. This area contains a tanker mooring buoy, with extensive ground tackle and floating hose attachments, which is connected to the shore by a submarine pipe-line. Passage between the buoy and the shore is also prohibited.

RADIO: *Ship's Officer's Report:* Send ETA 96 hours and 24 hours in advance. Two hours before arrival keep listening watch on Channel 16. Shell Oil Terminal on VHF Channel 16 and 9. Cargo operations are carried out on Channel 9.

TUGS: No tug-boats available.

MAX. SIZE: Up to 47 ft. draft at S.B.M. terminal.

BERTHING: Port installations at Port Dickson comprise the following:

A small boat harbour contained in the curve of the stone approach to the Railway Jetty which affords little shelter against Southerly winds dries out at low water.

The Shell Jetty – property of the Shell Refining Co. (Malaysia) Ltd. (Private). Reinforced concrete jetty 700 ft. with "T" head 170 ft.×36 ft.

The Esso Jetty – property of the Esso Standard Malaya Ltd. (Private). Reinforced concrete island jetty 200 ft.×24 ft.

The Railway Jetty – property of the Malayan Railway Administration. Stone pier 600 ft. length terminating in a crosshead 150 ft. long with steel piling and wooden deck.

The Joint Shell/Esso single-buoy Tanker Mooring and Crude Oil Discharging Terminal.

Stone ramp on foreshore usable by lighters at high water.

MEDICAL: District hospital with 150 beds.

TANKERS: Shell/Esso Single Buoy Mooring for crude discharge into submarine pipe-line. Refineries produce petroleum products for export. Deballasting facilities up to 35,000 barrels capacity.

Esso Product Jetty: Berth is constructed of reinforced concrete. The island jetty is 200 ft.×24 ft. with 4 off-lying mooring buoys inshore for mooring purposes. Accommodation for one vessel on outer face only.

Max. LOA 575 ft.; max. draft 34 ft.; max. size 19,500 d.w.t.

Shore connections:

1×20 in. black oil/ballasting
1×16 in. white oil line
1×10 in. LPG line
1× 4 in. inert gas line
1 crane to handle hose

FRESH WATER: Available at Shell and Railway jetties.

FUEL: Bunker fuel-oil available. No diesel.

DEVELOPMENTS: Proposal to enlarge facilities and to provide deep-water berths.

CUSTOMS ALLOWANCES: Tobacco, cigarettes 25 in number per man per day, or cigars 8 in number per man per day, or tobacco 1 oz. per man per day, or snuff 1 oz. per man per day. Wine and/or spirits, spirit .175 qt. per man per day, or wines 1 qt. per man per day, or beer or stout 1 qt. per man per day.

REPAIRS/DRY DOCKS: None.

HOLIDAYS: Official holidays in the state as follows: New Year's Day, 1 day; Chinese New Year's Day, 2 days; Muslim New Year's Day, 2 days; Wesak's Day, 1 day; His Majesty's Birthday, 1 day; Prophet Mohammad's Birthday, 1 day; His Excellency Governor's Birthday, 1 day; Malaysia Day, 1 day; Deepavali,1 day; Hari Raya Huji, 2 days; Christmas Day, 1 day. No cargo is worked on any of the above gazetted public holidays – port closed.

AIRPORT: None.

AUTHORITY: See "Malacca".

PORT KELANG, Malaya: 03.00 N. 101.24 E.

(See Plan)

PORT LIMITS: All the waters in the Klang Straits, Klang River, Sungei Aur, Selat Lumut, Sungei Langat and other waterways contained within the parallels 2° 58′ N. and 3° 05′ N. and the meridians 101° 20′ E. and that passing through Connaught Bridge i.e. 101° 28′ 30″ E. approximately including all piers, jetties, landing places, wharves, quays, docks and other similar works whether within or without the line of high water mark, any position on the shore or bank within 50 yards of high water mark subject to any rights of private property therein.

APPROACHES: Ships from and to Penang enter and leave the port by the North Klang Straits, and ships from and to Singapore enter and leave by the South Klang Straits. The entrance channel at the North Klang Straits is dredged to 36 ft. below datum. A very large deep water anchorage for ships is available at the North Klang Straits. For ships entering the Old Port, the permissible draft is 28 ft. and 22 ft. plus the height of tide through the North Klang Straits and South Klang Straits respectively.

DOCUMENTS: *(a) For Agent.* Vessels required to fill in arrival report which may be obtained from Agent at Singapore or Penang or Boarding Agent on arrival. This should be completed and handed to Boarding Agent together with last Port Clearance and one copy each of Crew List and Passenger Lists for submission to Marine Department.

Vessels should have ready and hand to Boarding Agent on arrival the following:

Arrival Report.
Last Port Clearance.
Two copies of Crew List.
Two copies each of Disembarking and Transit Passenger Lists (if any).
List of Explosives, dangerous cargo on board.

Following documents should also be handed to Boarding Agent on arrival and will be returned to vessel after perusal by Marine Department:

Malaysian Light Dues Receipt (if any).
Ship's Register.
Radio Safety Certificate.
Safety Equipment Certificate.
Load Line Certificate.
Deratisation Certificate.

Port Health Officer now requires all vessels arriving from foreign ports to submit an "Entry Declaration" on form Health 43, on the International "Maritime Declaration of Health" form or on a similar copy, and this should be handed to Boarding Agent, together with copy of crew list, in cases where vessels are not in Quarantine, in which case doctor does not attend on board.

Note: Endorsement of Port Clearance must be obtained from Port Office at Marine Office before a fresh Port Clearance can be issued by local Customs Authorities and handed to vessel before sailing.

(b) Immigration

2 copies Crew List.
2 copies Passenger List (Disembarking and Transit).

(c) Customs

2 copies Customs List (CD.15).
1 Crew List.
1 Passenger List.

FLAGS: The Malaysian Flag. Flag "Q" meaning Health Clearance required. *Flag 2/5 meaning No passengers on board, or *Flag 3/4 meaning Passengers on board. Pennant Zero is not required since Boarding Officers do not board the ship on arrival. Flag H meaning Pilot on board. (*Applies only to vessels arriving from foreign ports, which now includes Singapore.)

Note: Except for vessels under way, no vessel in port may use its siren except in case of an emergency when no other means of communication is available. The Authorities strictly enforce this rule and vessels infringing it become liable to heavy fine.

PILOTAGE: Available 24 hours a day. Pilotage compulsory.

(a) Application. Piloting carried out by Kelang Port Authority. Masters to cable "Pilots Port Kelang" giving ETA and point of arrival, i.e. Pintu Gedong or Pulau Angsa and draft at least 4 hours before arrival, as Pilots will not leave shore until confirmation received from vessel. Both North and South Channels are well marked and Pilots consider it quite safe to arrive and depart at any hour.

Vessels approaching this port normally apply through Agent, giving ETA Pintu Gedong, Pulau Angsa or Deep Water Point, together with draft and port of departure.

(b) VHF. If vessels wish to communicate direct all pilot boats are fitted with VHF for use between pilot office, pilot boats, pilot boat to pilot boat and where necessary to vessels arriving at this port. Operated on Channel 12 of International Maritime VHF radio telephone bands, and of a range of 20–25 miles.

(c) Recognition. Pilot boats painted orange and have white superstructure.

(d) Boarding. Unless advised otherwise Pilots will be ordered to board vessels at Pulau Angsa (North Channel), or Pintu Gedong South of the Seaward Bar Buoy.

Pilot ladders should be of approved Standard pattern internationally used.

(e) Waiting for Pilot. Location for a vessel awaiting Pilot is at Pintu Gedong 5 cables South of Seaward Bar Buoy, at Pulau Angsa 1 mile East of Pulau Angsa Island, and at Deep Water Point where anchorage is available according to number of vessels already anchored.

ANCHORAGES: Per latest Admiralty charts. Vessels may load timber and ore from privately owned junks at Deep Water Point Anchorage. In exceptional cases and with permission of Port Authority it is also possible to work with Authority Lighters at Deep Water Point.

RESTRICTIONS: (See "Max. Size"). Pintu Gedong, the Southern Channel Pilot Station, there is a restriction, of which vessels will be advised when giving their ETA.

MAX. SIZE: Max. length of vessels using South Port (old port) is: dry cargo vessels, 565 ft. LOA with draft of 32 ft., tankers, up to 560 ft. LOA and draft 32 ft. Tidal conditions govern movements of all vessels over 500 ft. LOA in the South Port but not at the North Port (new port). Vessels of up to 621 ft. can be berthed under any conditions at the North Port but only under special tidal conditions at the South Port.

At the North Extension Wharves, container ships of 950 ft. can be berthed.

HEALTH: Port Health Officer will board vessels arriving from infected ports, or carrying deck passengers at Deep Water Point between 0700 and 1800 hrs. All ships arriving from foreign ports should ensure that all on board hold valid smallpox vaccination documents.

All vessels should include in arrival cables confirmation that all well on board and also that all health papers in order. It should be understood that the health papers referred to include deratisation, or deratisation exemption Certificate.

RADIO: ETA cables normally routed via Singapore or Penang as no radio station in Port Kelang. Such messages when received are transmitted by telephone to Agents/and or Pilots at Port Kelang.

VHF: (See "Pilotage"). Ship to shore telephones available at all berths at North Klang Straits, and VHF sets available for ships in moorings. Klang Exchange keeps a 24-hour watch on Channel 16 and will connect the vessel to any telephone receiver ashore. For local calls the cost is $1.92 for three minutes (approx.).

TUGS: Supplied by Port Authority and normally "stand by" vessels berthing at wharves as and when required. Tugs towing use ship's lines, tugs pushing use their own lines. 5 tugs available to assist in berthing and unberthing and are equipped with fire-fighting appliances and radio communications system. When vessels berth or unberth at wharf tugs ordered by Agent in consultation with Pilots and once in attendance are charged for whether used or not. Tugs also used to swing vessels in stream which are stemming ebb tide on departure. In addition 3 smaller tugs used to tow lighters to and from vessels.

BERTHING: There are 2 ports viz: the South Port or Old Port and the North Port. Vessels berthing in the South Port (Old Port) are governed by tidal conditions which vary considerably. Vessels over 525 ft. LOA are usually berthed port side to on the ebb and then only when tides are favourable. There is usually no objection to vessels unberthing from the wharf at night although generally speaking vessels will not be berthed at night. As a general rule discharging vessels will berth at North Port (North Klang Straits) and loading vessels in the stream in the South Port (Old Port).

(a) South Port. 3 ocean wharves of 2,190 ft. length with 30 ft. of water alongside, 2 coastal shipping wharves of 650 ft. with 20 ft. of water alongside, 5 swinging buoys, and 2 anchorages. 3 to 4 vessels of not more than 250 ft. in length and with drafts of up to 18 ft. can be accommodated at North Shore anchorage.

(b) North Port (North Klang Straits) Wharves. 4 ocean wharves with total length 2,490 ft. Each berth 580 ft. long, with 202 ft. Concrete wharves with a safe working load of 4 cwt. per square foot and a maximum point load of 10 tons. Draft alongside all 4 wharves 30 ft. Rail track on wharf apron. In addition 2 container wharves, each 1,050 ft. long and 1 conventional cargo wharf 700 ft. long have been built and are now in operation. The wharf aprons are 260 ft. wide. Depth of water alongside is 45 ft. There are 2 container cranes on the container wharves. If there are no container ships in port, these wharves will be used by conventional vessels.

Depth of water alongside is 45 ft. Container stacking yard is 28 acres. Freight station measures 600 ft.×120 ft.

Container Handling Equipment: 2 container cranes of 35 tons capacity each (which can handle 800 containers a day).

16 straddle carriers of 30 tons capacity each.
20 prime movers.
12 × 20 ft. and 10 × 40 ft trailers.
53 forklifts.
2 tugs of 2,700 h.p. each.

(c) General.

Facility		*Depth Below New A.D.C.* (ft.)
North Klang Straits Approach		36
Pintu Gedong Bar		22
Labohan Garap Bar		25
No. 1 Wharf	400 ft. length	20
No. 2 Wharf	350 ft. length	20
No. 3 Wharf	480 ft. length	20
No. 3A Wharf	550 ft. length	30
No. 4 Wharf	580 ft. length	35
No. 5 Wharf	580 ft. length	35
No. 6 Wharf	580 ft. length	30
No. 7 Wharf	580 ft. length	30
No. 8 Wharf	580 ft. length	30
No. 9 Wharf	580 ft. length	30
No. 10 & 11 Wharf	1,050 ft. length	45
No. 12 & 13 Wharf	1,050 ft. length	45
No. 14 Wharf	700 ft. length	
No. 1 Buoy on 600 ft. swing		23
on 500 ft. swing		30
No. 2 Buoy on 600 ft. swing		23
on 500 ft. swing		29
No. 3 Buoy on 600 ft. swing		17
on 500 ft. swing		26
No. 4 Buoy on 600 ft. swing		20
on 500 ft. swing		25
No. 5 Buoy on 600 ft. swing		24
on 500 ft. swing		24
No. 6 Mark on 600 ft. swing		30
on 500 ft. swing		30
No. 7 Mark on 600 ft. swing		30
on 500 ft. swing		40

Distance between buoys is as follows:

Distance between No. 1 buoy and No. 2 buoy	1,200 ft.
Distance between No. 2 buoy and No. 3 buoy	1,200 ft.
Distance between No. 3 buoy and No. 4 buoy	1,200 ft.
Distance between No. 4 buoy and No. 5 buoy	1,300 ft.

The above distances allow for slackness in pendants at low water. The depths listed combined with tidal predictions for current year give actual depth of water.

STEVEDORES: Almost all timber loaded from private junks for which no lighter gangs needed. Average working rate, subject to stow, for timber in loose pieces is 4–6 t.p.h., and in bundles 6–8 t.p.h. Not more than 2 lighters or "tongkangs" may lie alongside any vessel abreast of each other and not more than 2 lighters shall be moored astern of a vessel.

Rubber, latex in drums, etc., loaded by Port Authority and lighter/wharf gangs are required. Average working rate for these commodities is 14 t.p.h.

The average rate of discharge at North Port (North Klang Straits) wharves is 14–16 t.p.h.

On-board stevedores provided by the Port Authority. Requirements for the 1st shift should be made known by 1300 hrs. the previous day and for 2nd shift by 1000 hrs. same day and the 3rd shift not later than 1130 hrs. the same day.

Working hours throughout the port: 1st shift 0700 to 1500 hrs. (meal break 1100–1200 hrs.). 2nd shift 1500 to 2300 hrs. (meal break 1900–2000 hrs.). 3rd shift 2300 to 0700 hrs. (meal break 0300–0440 hrs.).

MEDICAL: A number of private doctors in Port Kelang and it is often not necessary to give any advance notice of medical attention being required. In event of vessel requiring urgent medical attention on arrival, advisable for Master to cable Agent in advance. At present 2nd class medical facilities available in Kelang and 1st class facilities only available in Kuala Lumpur. As vessels arriving at Port Kelang normally do so after calling at Penang or Singapore no inoculation, vaccination or fever certificates are required unless either Singapore or Penang is declared an infected port.

TANKERS: Tankers always berth port side to on ebb and near slack water. Vessels with bulk liquid cargoes to load or discharge will berth at wharves 3, 4, or 5. When a number of pumping vessels in port, vessels will usually occupy these wharves only for the time it takes to complete pumping and may then have to shift to stream or another wharf. Three of the ocean wharves are provided with facilities for handling liquid cargo. Liquid cargoes now being handled are: latex, palm, coconut oil, petroleum products, alkane, tallow and fuel oil.

Shell Company has a private jetty on which vessels up to 320 ft. in length with drafts not exceeding 20 ft. can be berthed.

DENSITY: Varies considerably with state of tide and heavy monsoon rains.

FRESH WATER: Waterboat, capacity 200 tons, available to supply vessels in South Port (Old Port) and at Deep Water Point with fresh water. As much notice as possible should be given if waterboat required. At North Port (North Klang Straits) water available from wharf. Pumping rate about 20–25 t.p.h.

FUEL: Bunkers are available.

FIRE PRECAUTIONS: In respect of tankers loading or discharging inflammable cargo, necessary to have wharf cordoned off and "No Smoking" signs exhibited prominently. Port Fire Brigade required to be on stand-by at wharf whilst operation in progress. Vessel may not disable engines whilst alongside wharf and shall have axes ready in event has to leave wharf urgently and necessary to cut ship's lines. Port Fire Service on duty 24 hours a day throughout year. Service is capable of fighting all types of fire whether on land or on sea. Fire service has following equipment: 3 fire engines, 1 Land Rover fire engine, 2 trailer pumps, 3 fire fighting tugs.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS/IMMIGRATION: Customs Officer will board vessel soon after arrival to seal the "Bonded stores". For vessels staying in port some time it is usual to issue three days supply – a further issue may be made on request after three days.

Immigration Officer will clear vessels arriving from foreign ports on all days between 0700 and 2100 hours. No one may board or leave or approach within one cable length of such vessel without special permission until vessel has been cleared by Immigration Officer and Immigration Signal is hauled down. No Immigration formalities required for vessels arriving from or leaving for other West Malaysian ports (Malacca and Penang).

IDENTIFICATION CARDS: Advisable that members of crew carry identification cards when leaving ship.

CONSULS: Consulates/Embassies/High Commissions in Kuala Lumpur (28 miles from Port Kelang).

Embassy of the United States of America.
Australian High Commissioner's Office.
Belgian Embassy
Consulate of Brazil
British High Commission
Burmese Embassy
Canadian High Commission
Consulate of the Republic of China
Royal Danish Embassy
Consulate of Finland
Embassy of France
West German Embassy
Indian High Commission
Embassy of the Republic of Italy
Embassy of Japan
Embassy of the Republic of Korea
Royal Embassy of Netherlands
New Zealand High Commission
Consulate of Norway (at Penang only)
Consulate of Panama (at Penang only)
Pakistan High Commission
Embassy of Philippines
Singapore High Commission
Royal Swedish Embassy

REPAIRS: Slipping facilities for repair of lighters and smaller tugs available. No facilities for major repairs to ships.

DRY DOCKS: None.

REPATRIATION: Crew changes and repatriation must be arranged by Agent. Harbour Master attends signing-on and signing-off of the crews on ship's articles.

AIRPORT: Subang International Airport approximately 20 miles from port on main trunk route to Malaysian capital of Kuala Lumpur and served by regular domestic flights and international flights.

HOLIDAYS: Port Closing Days. *Hari Raya Puasa; *Chinese New Year; Malaysia Day (31st August); *Deepavali; Christmas Day (25th

December). *Dates subject to changes as festivals coincide with Mohammedan, Chinese and Hindu calendars.

TELEPHONES: At North Port (North Klang Straits) Wharves telephones installed on board if required. At wharves in South Port (Old Port) there is always a telephone within easy reach at Wharf Office.

GENERAL: *(a)* Ship-Shore Communication. When vessels are berthed in stream or at Deep Water Point a 24 hour launch service can be supplied. Arranged by Agent in consultation with Master to suit requirements of ship.

Vessels permitted use own boats with proper navigation lights at night.

(b) Seamen's Club. "Mariner's Club" for officers and seamen outside No. 3 Gate of South Port. Club has swimming pool and bar.

(c) Diving. Diving services available for salvaging lost cargoes, examining underside of ships, etc. Divers capable of deep-sea diving down to 120 ft.

DEVELOPMENTS: The North Port is being extended Northwards. Phase 1 of the project consists of the construction of two bulk liquid wharves totalling 1,400 ft. and 2 container wharves totalling 2,100 ft. Completion of liquid wharves and one container wharf by late 1976 whilst the other container wharf to be completed by 1977. Phase 2 consists of the construction of another 3,500 ft. of wharves expected to be ready by 1980.

AUTHORITY: Lembaga Pelabohan Kelang.

ROMPIN (Kuala Rompin): inc. Pahang, Malaya: 02.43 N. 102.30 E.

DOCUMENTS:

Register.
Last Port Clearance.
7 copies Crew List and 4 for Agent.
5 copies Passenger List (if any).
5 copies Stowaway List (if any).
2 copies Stores List (including firearms and ammunition).
2 copies Dutiable Liquor and Tobacco List.
2 copies Crews Declaration List (cameras, radios, etc.).
1 copy Vaccination List.

Masters of vessels to fly the necessary following flags on arrival as required under Section 448 of the Merchant Shipping Ordinance and Sub-Section (9) of the Federation Port Rules, 1953.

(1) The Federation of Malaysia Flag.
(2) The Pennant "O" Flag. (Request Port Officer).
(3) The "Q" Flag (request Port Health Officer).
(4) The Pennant "2"; "5" Flags if no passengers and "3"; "4" Flags if there are passengers on board (Immigration).

PILOTAGE: Compulsory to the loading berths. Extra charge for pilotage outside normal office hours and holidays.

ANCHORAGE: On arrival, vessels required to anchor about 1 mile outside berthed ships to obtain pratique. An accommodation ladder must be rigged on lee side to allow Port Authorities to board.

READINESS: Notice of readiness cannot be accepted until vessel is in free pratique, Customs Inward Examination completed, and in all respects ready to load.

LOADING. *(a)* Ladders. Masters particularly advised to see that a sound and adequate ladder provided at each lighter to allow labourers engaged in loading to pass to and from ship with no undue risk. Regulations are provided in the Merchant Shipping Ordinance, Section 445, Sub-Section (O) which takes care of this requirement and failure to take adequate precaution in seeing regulation is observed may result in serious consequence to those responsible.

Masters requested to ensure that in addition to ladders for labourers, an extra ladder, preferably a clean pilot ladder, be made available at all times for the Agent for boarding. This ladder should be made fast on lee side, just forward of any scuppers in vicinity, and a heaving line from ship's rail made fast to bottom rung. When ladder not in use, bottom of ladder can be pulled up a few feet with heaving line to prevent labourers from using it or damage from lighters.

(b) Winches. All winches must be in single gear at all times.

(c) Derricks. Practice to work 2 sets of derricks to 1 lighter where practicable.

(d) Trimming. No manual trimming undertaken.

(e) Damages. In the event of your vessel sustaining damage by stevedores during loading, you are requested to inform the clerk and foreman on board immediately and as soon as practicable confirm same in writing to the Eastern Stevedoring Co. Ltd., Kuala Rompin, with copies to Hong Kong & Eastern Shipping Co. Ltd., Hong Kong, and Malay States Shipping Ltd., Kuala Rompin. It is important that full details of damage are given, together with measurements whenever possible.

Minor damage has occurred on vessels due to hatch beams not being bolted or lashed. Masters therefore requested ensure all beams adjoining working parts of hatches either bolted or lashed, otherwise stevedores will repudiate liability for any damage incurred.

OPENING/CLOSING HATCHES: Removal and replacement of hatch beams and covers must be done by ship's crew. Ship's Officers should see that any tween-deck beam removed is replaced before ore reaches that height.

CUSTOMS: Customs office hours 0830 to 1630 Monday to Friday, 0830 to 1300 hrs. Saturday.

IDENTIFICATION CARDS: Every member of crew must produce Identity Document or Shore Leave Pass at Customs House when landing and again when returning to vessel.

HOLIDAYS: New Year's Day; Hari Raya Puasa, 2nd day; Chinese New Year, 2nd day; Hari Raya Haji, 2nd day; First Day of Muharram; Vesak Day; Birthday of Sultan of Pahang; Birthday of H.M. The Yang Di-Pertuan Agong; Birthday of Prophet Muhammad; Malaysia Day; Deepavali; Christmas Day.

Note: Where a holiday falls on a Sunday, the following day will be observed as a holiday, and if such latter day is already a holiday, then the day following shall be a public holiday.

GENERAL: *(a) Scrap Iron.* Steel mills in Japan complain from time to time of finding pieces of scrap iron in the iron ore cargoes. If this scrap is not found it will cause serious damage to the plant and occasion considerable delay to production: furthermore, should scrap iron enter the machinery there is always the possibility of it endangering life, and several fatal accidents have been attributed to this cause.

The assistance of officers and crew is requested in reporting any scrap iron they see being loaded, advising shippers into which hold it went and number of the lighter it came from to enable us to take appropriate action.

(b) Whistle, Radio. Wireless Transmitters, Whistles and Sirens etc., must not be used by vessels at anchor off Kuala Rompin.

(c) Stores. Bonded stores can be obtained from Kuala Lumpur and Kuantan at prices roughly same as Singapore. Essential, view Customs formalities, that Masters give Malay States Shipping Ltd., Kuala Rompin 6 days prior notice of requirements.

SHORE LEAVE: No seaman may proceed more than 3 miles from Kuala Rompin Customs House. The Officer in Charge Customs, as acting Immigration Officer, has authority to limit or prohibit shore leave in all cases.

AGENT: Malay States Shipping Sdn. Berhad, PO Box 2, Kuala Rompin, Pahang.

SABAH, including Kudat, Lahad Datu and Semporna: (See Plan)

DOCUMENTS: 8 copies all usual documents.

PILOTAGE: Applications normally made by Shipping Agents with advance notice of 24 hours prior to actual time that Pilot services required. Pilot boats between 30-40 ft. length and equipped with VHF/AM Sets – 80.4 Mc/s. frequency. Pilot station at Port Office and location for vessel awaiting Pilot is within port limit.

ANCHORAGE: All ports within bays, therefore provide safe anchorages.

RESTRICTIONS: No restrictions for vessels entering port at night.

MAX. SIZE: All ports unlimited, cargo worked at anchor.

HEALTH: To obtain pratique, arrange with Shipping Agent. Pratique for vessel entering, after calling at another port in same state, is not required. Anchor in quarantine anchorage if vessel is suspect and display following signals: *By Day:* International Code Signal "QQ". *By Night:* A Red light over a White light and a separate hoist of Red light over a Green light. Hoisted vertically 6 ft. apart where best seen.

RADIO: Singapore Radio recommended.

BERTHING: Application for berthing has to be made within 24 hours prior to actual time that berthing is required. *Details and Requirements:* Name of vessel, gross and net tonnage, length overall, draft (fore and aft), ETA at berth, ETD from berth, nature and tonnage of cargo to be discharged/loaded. No priority for berthing ships and the turn is, first come first served.

Kudat: L-shaped wharf with 2 berths. Western berth – length 370 ft. min. depth 21 ft. Eastern berth – length 300 ft, min. depth 21 ft.

Lahad Datu: L-shaped wharf with 2 berths. Outer berth, length 200 ft. min. depth 32 ft. Inner berth, length 130 ft. min. depth 30 ft.

Semporna: T-shaped wooden wharf with 2 berths. Outer berth, length 150 ft. min. depth 26 ft. Inner berth, length 127 ft. min. depth 20 ft.

STEVEDORES: Arrangement of stevedores should be made with 48 hours notice to Shipping Agent. Average load/discharge rate: General cargo, 15–20 tons per hatch per hour; cement 20-30 tons per hatch per hour.

MEDICAL: Arranged on arrival by Shipping Agent.

DENSITY: Average density in the ports 1020.

FRESH WATER: Available at Government General Cargo Wharves at a rate of 20 t.p.h.

DEVELOPMENTS: Lahad Datu, having new port installation and wharves facilities.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally by stevedores.

CERTIFICATES: Registry, Load Line, Radio, Safety Equipment and Derating Exemption.

CUSTOMS ALLOWANCE: Tobacco, Wine and/or Spirits: no control and up to discretion of Officers of Customs and Excise.

CARGO GEAR: Ships gear used.

IDENTIFICATION CARDS: Not needed.

CONSULS: At Kota Kinabalu.

REPAIRS: Marine Department operates engineering workshops at Labuan and Sandakan. Some private firms also undertake small engine and deck repairs.

DRY DOCKS: No dry docks available in the State. Marine Department has 3 slipways in Labuan which are capable of shipping vessels of 60 tons, 200 tons and 500 tons displacements. 1 in Sandakan for vessel up to 120 tons.

REPATRIATION: Normally arranged by Agents.
AIRPORT: Most airports in State between 2–5 miles from the town.
TIME: Local time is 8 hours ahead of GMT. No alteration to clocks.
HOLIDAYS: Cargo work can be arranged if necessary during official holidays, but not for Hari Raya Puasa, Chinese New Year and Christmas Day.
POLICE/AMBULANCE/FIRE:

	Fire/Police	*Hospital*
Kudat	333	335
Lahad Datu	81999	81522
Semporna	599	

SERVICES: No services available for cleaning tanks, but compass adjusting can be arranged with officers of Marine Department, Labaun.
SHORE LEAVE: Allowed.
DELAYS: Due to weather conditions only.
AUTHORITY: Sabah Ports Authority.

SANDAKAN, Sabah: 05.50 N. 118.07 E. (See Plan)

FLAGS: Signal letters, Mail flag (if any mail on board for discharge); "Q" flag is essential if Sandakan is the first Sabah port at which a vessel calls. If ship carrying passengers it should fly immigration signals Nos. 3 and 4; if no passengers Nos. 2 and 5.
DOCUMENTS: 5 sets of Inward Manifest in the prescribed form to be airmailed to Agent to arrive at least 48 hours before the vessel.
(a) To be Produced on Arrival:
1 Sabah Lights and Harbour Dues form
2 Manifest in the prescribed form
3 Crew List
1 Last Port Clearance
3 Stores List
3 Passenger List
2 Arms List
3 Narcotics List
2 Parcels List
(b) Required by Agent:
2 sets of Inward Manifests for all inward cargo
5 sets of Transhipment Manifests for all cargo to be transhipped at Sandakan.
2 copies of Hatch List.
1 copy of Passenger List.
1 copy of Crew List.
1 copy of List of Arms and Ammunition.
1 copy Narcotics List.
1 copy Stores List.
(c) To be Supplied to Ship before Departure:
Manifests, as required by vessels.
Captain's copy of B's/Lading.
Port Clearance and Customs Clearance.
Sabah Lights and Harbour Dues form.
(d) Immigration: Immigration Officer will board vessel on arrival and clear her inwards. No restrictions on crew and/or passengers going ashore. Immigration require 2 copies of crew list and 2 copies of passenger list. Vessels cleared inward until 1800 hrs. only. If there are special circumstances arrangements can be made to clear vessels inward after this time.
(e) Marine Department: Shipping Arrival Report to be signed by Master of Vessel.
PILOTAGE: Pilotage not compulsory but if required the Harbour Master acts as Pilot. At least 24 hrs. notice should be given and position where Pilot is required to embark (i.e. the bar buoy or within harbour limits) should be included in the message. Pilot station tel. 3128.
ANCHORAGES: For loading timber: A black and white conical buoy situated 1.2 miles S.W. from Government Wharf indicates the anchorage. It is important that vessels should anchor as close to this buoy as possible, when anchored further from shore it may take up to an hour longer for launches towing rafts of timber to reach ship and in addition there is less shelter from wind and weather and consequently raftsmen have to cease work earlier.

For discharging: Unless it is intended to come alongside the wharf, vessels discharging should anchor 4 cables due South of wharf. Wharf is 750 ft. long with dolphins placed 100 ft. from each end giving a total length of 950 ft. If discharging into lighters and loading log timber simultaneously vessels should proceed to Timber Anchorage.
RESTRICTIONS: *(a)* Shifting: Vessels may not berth alongside after dark without special permission but they may leave the wharf, having given prior notice.

(b) Special Cargo Regulations: No vessel with dangerous cargo may be alongside after sunset, except at discretion of Harbour Master. No dangerous cargo may be discharged simultaneously with general cargo except with permission of Harbour Master. Livestock: subject to approval of Veterinary Authority. Certain animals, including cattle, are prohibited imports and exports except under licence.
MAX. SIZE: Draft restriction is 25 ft. on the Bar plus the height of tide, mean high water being about 6 ft.
HEALTH: (Also see "Radio" and "Regulations"). If Sandakan is first port of entry into Sabah a vessel must proceed to quarantine anchorage until cleared by Health and Immigration Officials.

The Sabah Government are signatories to the WHO convention on quarantine regulations. If vessel comes from outside State of Sabah then Port Health Authority will require to board in quarantine anchorage before vessel can proceed to wharf or timber anchorage. If, however, vessel is not coming from an infected port pratique may be granted providing vessel cables Agent prior arrival advising last port of call and whether vessel healthy. Pratique normally cabled to ship but if unreceived, vessel must proceed to quarantine anchorage.

Port Health Authority require completed copy of Maritime Declaration of Health, and copies of Crew, Passenger and Narcotics Lists.
RADIO: (Information required before ship's arrival). ETA; number of passengers, health situation. Manifest. Amount of water required. Vessels not allowed to use their radio in port.

Marine signal station keeps watch on VHF Channel 16, from 0530 to 2000 hrs.
TUGS: A tug of 337 b.h.p. stationed at Sandakan.
BERTHING: (Also see "Anchorages").

(a) Mooring: The numbers of a vessel which is berthing alongside will be shown from signal station on Eastern end of Customs House. In addition, a cone indicating tidal stream will be hoisted pointed end of cone down indicates flood tide and pointed end up indicates ebb tide. Linesmen are on hand to receive a vessel's lines, a mooring boat will be provided by Marine Department if it is necessary to send lines to dolphins. Government Wharf, least depth 21 ft.

(b) Buoys: No mooring buoys.

(c) Lighters: No lighter fleet. The timber companies have their own lighters and scows which can sometimes be hired if not being used by these companies.

Rectangular Island Wharf: The particulars of the berths are as follows:

Berth No.	*Length (ft.)*	*Depth (ft.)*
1	*700*	*30*
2	*540*	*24*
3	*400*	*24*
4	*250*	*18*

Covered Storage:
(a) One transit shed 90,000 sq.ft. at new port site.
(b) One 8,100 sq.ft. and two 20,000 sq.ft. godowns at the old port site in town.
Equipment: New equipment only listed below:
(a) 10 towing tractors.
(b) 17 6,000 lb. forklifts.
(c) 26 5-ton trailers.
STEVEDORES: Stevedoring in hands of Port Authority who supply gangs as required.

(a) Working hours, 0730–1130 also 1130–1300 (overtime), 1300–1700 also 1700–2200 (overtime). Gangs ordered at least 12 hours before a vessel arrives.

(b) Overtime. When working in stream, overtime usually from 1100 to 1200 and 1800 to 2200 hrs. Application for permission to work overtime must be made to Customs not later than 1500 hrs. on the afternoon that overtime is to be worked or 1100 hrs. on Saturday for weekend overtime.

(c) Working Sundays and holidays. Work is normally carried out Sundays and it is sometimes possible to arrange for work on some public holidays, principal exception being Chinese New Year. Application must be made to Customs for permission to work Saturday afternoons, Sundays and public holidays.

(d) Rate. Log loading is good, comparing more than favourably with other Borneo ports. Rate of loading about 800 cu. ft. hoppus (20 B/L tons) per gang hour for logs, and 6 B/L tons per gang hour for sawn timber. Discharging general cargo about 10 tons per gang hour.
CARGO: (a) Tally: Tally clerks supplied by Agent if required. Sawn timber tallied on to scows by timber companies' clerks and tallied into ship by ship's tally clerks. Ship responsible for total number of pieces of timber shown on Mate's receipts. Letters of Credit do not allow the clause: "A quantity said to be" to be inserted on the B/Lading. Log timber tallied into ship by checking against specifications supplied by timber companies.

(b) Inward Cargo: Is tallied out of ship on to wharf or into lighter. Local watchmen can be supplied by Agent if necesary but it is generally found to be more satisfactory if these duties are carried out by crew. Damaged cargo is surveyed on the spot, otherwise no liability of vessel is acknowledged. Discharge carried out after permission has been obtained from Customs after manifest of inward cargo has been deposited. Cargo is delivered to consignees against production of relative Bill of Lading. Ship's responsibility to consignees ceases at ship's side but, in the case of short-landed cargo, reasonable proof must be given to Customs that cargo has not been landed. A short-handed Memo certified by Chief Officer is usually accepted as proof.

(c) Heavy Lifts: Usually landed overside on flat-top scows for delivery to private jetties, where they are man-handled to required site. Occasionally consignees provide low-loaders.

(d) Transhipment Cargo: After discharge of cargo from first carrier, transhipment cargo placed under supervision to Ports Authority, unless it is possible to arrange direct transhipment into small coastal vesels.

(e) Outward Cargo: Main export is log timber and is towed out to loading vessels in rafts, each one accompanied by 2 raftsmen. Loading is on a single swinging derrick with gun tackle; the other derrick being used for pulling the logs into position in the holds. Vessels should have, if possible, 2 snatch blocks available at each hatch where log timber is being loaded. Sawn timber loaded in normal manner from scows and lighters. Documents required are shipping order issued by Agent and list of specifications supplied by timber companies. Other exports are rubber, copra, coconuts, palm oil, jungle and sea produce.

(f) Refrigerator cargo: Only small quantities of refrigerator cargo loaded or discharged. No formalities or certificates being required other than compliance with normal Customs regulations. Inward fridge cargo is confined to foodstuffs, meat, etc., and outward to frozen prawns.

(g) Explosives: Explosives must be discharged into lighters under police escort and transported to an approved police store. A licence for their importation must be obtained from police prior to arrival of cargo, and Harbour and Police authorities must be informed of arrival of explosives in port either for discharge or as through cargo.

(h) Damaged Cargo: Ship's survey should be carried out at ship's side on all cargo discharged in a damaged condition and Chief Officer should note extent of damage, and sign certifying same. Cargo coming alongside in a damaged condition should be noted and M/R claused accordingly. Chief Officers are reminded that it is most unwise to load any copra which is rain or salt water damaged.

MEDICAL: *(a)* Hospitals: Duchess of Kent Hospital will receive sick seamen or officers. Three classes of wards, also isolation wing. Hospital equipped to carry out normal surgery.

(b) Inoculation: PHO will vaccinate or inoculate crew members at Duchess of Kent Hospital.

(c) Death on Board: PHO and police to be informed immediately. They will then make an investigation into cause of death. If satisfied that death was due to natural causes, a certificate will be issued, and arrangements may then be made for interning the body. Harbour Master must also be informed in the case of seamen.

TANKERS: Two bulk oil installations at Karimunting (Pavitt Point). Esso, with storage capacity of 2,080 tons and Shell, with storage capacity 15,730 tons.

Jetty extends 550 ft. from shore, is 128 ft. long with mooring dolphins 125 ft. from each end. Min. depth alongside 24 ft.

New oil berth, 1,000 ft. length between dolphins, with central discharging pier. Least depth alongside 30 ft. This berth also used for loading palm oil in bulk.

FRESH WATER: Can normally be supplied from wharf at rate of 20 t.p.h. No water boat. Occasionally water is not available and, at such times, Agent warns Principals in advance.

FUEL: No facilities for supply of fuel oil bunkers. Limited quantities of lubricants can be obtained in drums and bulk diesoline available at Shell jetty.

FIRE PRECAUTIONS: No fire-floats and in case of a vessel alongside, fire brigade should be summoned by dialling 999. The OCPD should be informed also.

WATCHMEN: No regulations regarding use of watchmen, who, however, can be supplied if required. There have been only very isolated reports of pilferage in Sandakan.

CONSULS: At Kota Kinabalu. Contact using Kota Kinabalu numbers.

DRY DOCKS/REPAIRS: No dry docks and very limited repair facilities. Marine Department slipway on Berhala Island is capable of taking ships up to 300 tons. Castings, forgings, welding, etc., can be done at this slipway. Permission to repair main engine of a vessel alongside the wharf should be obtained from the Port Manager, Sabah Ports Authority.

POLICE/AMBULANCE/FIRE: Ambulance: Duchess of Kent Hospital, tel. 2111; Police/Fire: Police Station Emergency, tel. 999.

GENERAL: *(a) Surveyors:* Harrisons & Crosfield (Sabah), Sdn. Bhd. are Lloyd's Agents, neither Bureau Veritas nor the American Bureau of Shipping are represented.

(b) Fumigation: No facilities.

(c) Ship Chandlers: All kinds of stores and provisions can be supplied at reasonable prices.

(d) Call Signals and Call Flags: (i) Continuous watch kept by signal station during day-light hours. In emergency such as serious injury or fire a ship should hoist appropriate International Code signal and blow whistle or siren to attract attention. Apart from these circumstances and for purposes of navigation vessels are prohibited from using sound signals for any other reason.

(ii) Signals for attracting Public Service Launch: By day: International Code Pendant No. 8. By night: three red lights vertical. Owing distance of anchorage from jetty these signals often indistinguishable by hire launches unless they are cruising in the harbour. Regular launch services can be arranged if required by Master. No restrictions against a vessel using its own launch or motor lifeboat but it must not land anywhere other than at Customs wharf.

(e) Recreation Facilities: Three cinemas in town which show English-language films. Cricket, football, and hockey matches can be arranged with local teams and several tennis courts available. Only suitable swimming beaches at Berhala Island at mouth of harbour. Yacht Club and Golf Club for members only, but several Shipping Companies pay Corporate Membership fee which enables all officers and first-class passengers to use club. Recreation Club offers facilities for large variety of sports and entertainment; visitors must be accompanied by a member. Churches in town for Anglican, Catholic and Lutheran worship.

REGULATIONS: 1. Arrival and Departure. The Owner or Agent of every vessel other than a small ship intending to call at a port shall, as soon as possible, and in any case not later than thirty-six hours prior to the estimated time of arrival of the vessel, give notice in writing to the Authority of such arrival and, if so desired, the requirement for a berth at a wharf.

2. The notice under this regulation shall be in a form prescribed by the Authority and shall contain full particulars regarding the cargo to be discharged and loaded, the embarkation and disembarkation of passengers, heavy lifts, special or perishable cargo, hazardous and dangerous goods (whether to be discharged at the port or not), and any other matters of importance relating to the working or safety of the vessel in the port.

3. The Master of every vessel entering or leaving a port between sunrise and sunset shall cause to be hoisted the national colours and the signal letters, if any, of the vessel. The national colours shall be exhibited from 0800 to sunset whilst the vessel remains in port.

4. The Master of every vessel arriving from outside the State of Sabah shall exhibit the Immigration and Quarantine signals contained in the First Schedule and shall also at the request of a customs officer hoist the Customs signals. Such signals shall remain exhibited until the appropriate officer has given permission for them to be lowered.

5. No vessel shall approach within 600 ft. of any other vessel exhibiting the Immigration, Health or Customs signals.

6. No person other than a Pilot may board or disembark from any vessel until the vessel is cleared inwards and the Immigration, Quarantine and Customs signals have been lowered.

7. Every vessel entering a port shall be anchored or efficiently secured to a wharf or buoy before commencing the loading or discharging of cargo and/or the embarkation or disembarkation of passengers.

8. No vessel shall leave any port unless in possession of a valid Port Clearance issued by or on behalf of the Director of Marine.

9. Special signals.

Significance	*By Day*	*By Night*
Immigration (for ships not carrying passengers)	International Code Signal "2 5"	Two green lights, six ft. apart, hoisted vertically where best seen.
Immigration (for ships carrying passengers)	International Code Signal "3 4"	Two green lights, six ft. apart, hoisted vertically where best seen.
Quarantine (vessel is Healthy request pratique)	International Code Signal "Q"	Nil
Quarantine (vessel is suspect)	International Code Signal "Q Q"	A red light over a white light and a separate hoist of red light over a green light and hoisted vertically six ft. apart where best seen.
Quarantine (vessel is infected)	International Code Signal "Q L"	
Quarantine (not received pratique)	Nil	A red light over a white light six ft. apart hoisted vertically where best seen.
Request Police Assistance	International Code Signal "S T"	A green over a white light, six ft. apart hoisted vertically where best seen.
Request Medical Assistance	International Code Signal "W"	A red light over a green light, six ft. apart, hoisted vertically where best seen.

AUTHORITY: Sabah Ports Authority.

AGENT: Harrisons & Crosfield (Sabah), Sdn. Bhd. Telegraphic address "Crosfield". Tel. 2141 ext. 51–54 (Shipping Department). Code – Bentley's Second Phrase.

SARAWAK COASTAL PORTS

Coastal anchorages at Sibuti, Niah and Suai, 28, 30 and 47 miles S.W. of Miri respectively are being used increasingly for the export of round logs, good holding ground is to be found approximately 3.5 miles offshore in 30 ft. of water. Caution should be observed in the event of sudden wind squalls from the West.

Vessels destined for coastal ports should report to Miri for Customs and Immigration Clearance.

Every vessel arriving in quarantine shall fly or show the appropriate International Quarantine signal; and no person other than a Pilot, Port Officer, Port Health Officer, Immigration Officer or Officer of Customs shall board the vessel; and no person shall disembark therefrom until the vessel has been cleared by the Port Health Officer.

The Master of every vessel of over 15 tons about to depart from a port for any place outside Sarawak shall cause the "Blue Peter" (International code Flag "P") to be hoisted, during day-light hours, for at least 12 hours before the vessel is due to sail, or if the vessel is in port for less than 12 hours, for the period of her stay in the port.

(1) The Master or the Agent of every vessel about to depart from a port shall, on demand by the Port Officer, produce for inspection the port clearance.

(2) The Port Clearance shall be in the form of an endorsement on the form of clearance prescribed under the Customs Ordinance or in such other form as may be approved by the Director.

A vessel arriving in, leaving from or shifting berth within a port shall hoist her signal letters, if any, whilst under way.

SEJINGKAT (Sungei Sarawak), Sarawak:
01.35 N. 110.26 E.

Anchorage off Kampong Sejingkat approximately 10 miles from mouth of river and 3 miles below Pending Point. (See "Kuching".)

Main timber loading point for the First Division of Sarawak. Loading used to be seasonal due to log rafts having to be towed from felling areas along coast. Since this is not possible during North-east monsoon season shippers now stockpile during favourable weather and loading continues throughout monsoon period.

Vessels up to 500 ft. length and 25 ft. draft regularly use anchorage. No facilities for obtaining fuel or fresh water.

Pilots may be picked up off Tanjong Po in the area marked "Pilots" on Admiralty Chart 1822 or at Pending. In rough weather it may be necessary for a ship to follow or meet the pilot launch at the junction of Embang and Senari leads. Pilots for the Batang Lupar, Triso or Lingga Anchorages are also normally embarked off

Tanjong Po by arrangement. The Kuching pilot launch "Alor" is fitted with "Hague Plan" VHF radio for ship to Pilot communication.

Every vessel arriving in quarantine shall fly or show the appropriate International Quarantine signal; and no person other than a Pilot, Port Officer, Port Health Officer, Immigration Officer or Officer of Customs shall board the vessel; and no person shall disembark therefrom until the vessel has been cleared by the Port Health Officer.

The Master of every vessel of over 15 tons about to depart from a port for any place outside Sarawak shall cause the "Blue Peter" (International Code Flag "P") to be hoisted, during daylight hours, for at least 12 hours before the vessel is due to sail, or if the vessel is in port for less than 12 hours, for the period of her stay in the port.

(1) The Master or the Agent of every vessel about to depart from a port shall, on demand by the Port Officer, produce for inspection the port clearance.

(2) The port clearance shall be in the form of an endorsement on the form of clearance prescribed under the Customs Ordinance or in such other form as may be approved by the Director.

A vessel arriving in, leaving from or shifting berth within a port shall hoist her signal letters, if any, whilst under way.

SIBU, Sarawak (incl. Binatang and Sarikei): 02.24 N. 111.56 E.

Sibu is the major town in the Third Division of Sarawak. There are 2 inward routes *(a)* via Paloh River and *(b)* via Rajang River. Sibu is 51 miles from the sea via Paloh, and 70 miles via Rajang.

(a) Paloh Entrance: This route to Sibu is almost exclusively used by overseas vessels and the use of a Pilot is recommended, they having knowledge of other ship movements in the river (see "Pilotage").

The Outer Bar limits the draft to 17 ft. during the Landas (N.E. monsoon) or to 20 ft. during the summer months. The depth on the axis of the channel is now 11.5 ft. chart datum. The 2 buoys are fitted with radar reflectors and the Fairway Buoy is visible for a distance of 10 miles. Care should be taken transitting the channel against being set to the Northward by the ebb tide as there is a 7 ft. patch in position 2° 29.2′ N. 111° 10.5′ E. The entrance to the Kuala is marked by a light beacon at Tanjong Sedi on the North bank of the river.

Strong cross currents and swell especially during the N.E. monsoon period (November to March) necessitate caution when entering.

An inner bar with a least depth of 12 ft. exists where the Paloh joins the Seredeng at Tanjong Gelang. This crossing is marked by unlit transits and being sheltered no allowance is necessary for swell.

Vessels can cross the Outer Bar at night then anchor off Tanjong Sedi to await daylight.

(b) Rajang Entrance: Draft for crossing Outer Bar is governed by state of tide with an allowance for swell together with depth of 19 ft. below ACD. Vessels drawing 29.5 ft. have successfully crossed this Bar. However, this draft will only give access to the Deep Water Anchorage at Tanjong Mani and vessels proceeding further up river are restricted as follows:

(i) Deep water anchorage in Rajang River situated at Tanjong Mani. Has a capacity for about 6 large ships (500 ft.) and 4 small ships (300 ft.), it is normally used for loading logs. (See separate information for "Tanjong Mani".)

(ii) From Tanjong Mani inwards there is a Bar situated about 3 miles below Sarikei with a least depth of 13 ft. below ACD thus limiting drafts to 23 ft.

(iii) From Sarikei to Binatang, the next port, the river is winding with some shallow patches with depths of 15 to 18 ft. below ACD.

(iv) Proceeding from Binatang towards Tanjong Pendam and thence to Sibu vessels are limited to 13 ft. draft and 200 ft. length.

(v) Leba'an corner, 15 miles below Sibu is the junction of the 2 routes used by sea-going vessels bound for Sibu. A certain amount of shoaling has taken place here at the approach from the Rajang channel and it has been found necessary to restrict the length of vessels using this route (Rajang) to 200 ft. with a draft of 13 ft. This route is generally used by the smaller overseas vessels trading from Singapore, etc. There is an obstruction off Tanjong Ensurai approximately 6.25 miles up river from Leba'an bend which has a least depth over it of 15 ft. Caution should also be exercised when rounding Tanjong Bindje due to 3 shoals across the river, 1 of which has a least depth over it of 11 ft.

Note: River Igan and Sungei Kut. The River Igan affords access to Sibu from the North. It is approximately 60 miles long and depth over the bar is 4 ft. with an average rise of 5 ft. Ocean-going oil tankers of up to 2,000 tons displacement entering the river from the Sibu end discharge at Sungei Meral Oil Wharf about 3 miles from Sibu.

The largest vessel to use this wharf was the Japanese vessel Nisso Maru of 1,566 gross tonnage, 264 ft. overall length with a draft of 16 ft. Larger vessels using this wharf are not envisaged due to the wharf position and structure.

DOCUMENTS: Port Clearance to be surrendered to Customs when boarding.

Crew lists and passenger lists, 2 copies for Immigration Department, 2 copies for Rejang Port Authority, 2 copies for Customs, 1 copy for Port Health Officer.

List of ship's stores (2 copies for customs).

List of ammunition (2 copies for customs).

Health Documents (Vaccination certificates and Cholera Inoculation Certificates to be examined by Health Inspector).

PILOTAGE: *(a)* Kuala Paloh. Pilots usually embarked off Tanjong Sedi, however, if master requires a Pilot to board at Fairway Buoy he should indicate this in his ETA telegram.

Ship Masters wishing to use Paloh channel should state this clearly in their ETA messages.

(b) Rajang River (Tanjong Mani, Sarikei, Binatang and Sibu). Pilots normally embarked, weather permitting in buoyed channel West of Jerijeh lighthouse but it may be necessary for a ship to follow the pilot launch to sheltered water inside turning buoy. This applies mainly to larger ocean ships calling at Tanjong Mani and smaller vessels on a first visit, but a Pilot may be picked up anywhere to suit provided clear and precise information is given in the arrival telegram. A few of the more frequently requested points are off South Jerijeh Beacon, Rajang Village and for upriver berths, Tanjong Mani itself, or even as far up as Tanjong Delima. The Rajang Pilot launch "Raya" is fitted with "Hague Plan" VHF radio for ship to Pilot communication.

Application for Pilots should be made giving 24 hours' notice of arrival to "Shipping", Sibu or to "Shipping", Sarikei, for Sibu and Tanjong Mani ports respectively. Ships proceeding to Sibu and requiring a Pilot should indicate positively in their arrival telegram which channel they wish to use by adding "Paloh" or "Rajang" in the text, bearing in mind the max. length via Rajang is 200 ft.

ANCHORAGES: *(a)* See "Tanjong Mani".

(b) Sibu Anchorage. Some foreign-going vessels load, with Customs permission, at the mid-stream anchorage when Customs wharf is congested.

(c) Restricted Anchorages.

(i) Abeam of Loba Selemit on the true right bank of the Rajang River in position 02° 08′ 22″ N. 111° 16′ 35″ E. for loading and discharging dangerous goods.

(ii) The Anchorage defined by a line running 045° 2.6 cables from position 02° 16.89′ N. 111° 49.28′ E. on Pulo Kerto, thence 135° 8 cables to position 02° 16.5′ N. 111° 50.4′ E. thence 225° 1.9 cables to shore on Pulo Kerto. For loading and discharging dangerous goods other than petroleum.

(iii) The berth alongside the Sungai Merah Wharf in position approximately 2 miles downstream from the junction of the Rajang/Igan River on the true right bank. For loading and discharging petroleum.

MAX. SIZE: Largest vessel to berth Sibu was 7,372 gross tons and overall length 450 ft.

Deepest drafted vessel to berth Sibu was 22 ft. 6 in.

HEALTH: Every vessel arriving in quarantine shall fly or show the appropriate International Quarantine signal; and no person other than a Pilot, Port Officer, Port Health Officer, Immigration Officer or Officer of Customs shall board the vessel; and no person shall disembark therefrom until the vessel has been cleared by the Port Health Officer.

BERTHING: *(a)* Principal wharves at Sibu.

1. Main wharf 1,500 ft. long (incorporating the former Lighterage Wharf) with min. depth alongside 20 ft.
2. Burong Apu wharf 250 ft. long with a least depth of 17 ft. Used for larger coastal craft.
3. Floating landing stages 576 ft. long with least depth of 4 ft. Used for smaller coastal and river craft.
4. Upstream of the public wharves several private wharves are used for timber and general cargo.
5. Sibu-Sungei Merah oil wharf is "T"-shaped with a berthing face of 64 ft. and a least depth alongside of 15 ft. This is a "common user" wharf at present used by the Shell and Esso Oil Companies. It can accommodate vessels up to 245 ft. long and 15 ft. draft.

(b) Sarikei. Wharf 198 ft.×30 ft. long floating pontoons, can accommodate vessels up to 2,000 d.w.t. up to 23 ft. draft. There is a Customs Godown on shore.

(c) Binatang. Customs Wharf 179 ft. long by 20 ft. wide with a least depth alongside of 15 ft.

STEVEDORES: The Rajang Port Authority provide all labour necessary for loading and discharging.

REPAIRS: 5 shipbuilding (up to 100 gross tons in size) and repairing yards near Sibu. These deal mainly with repairs to wooden or steel coastal and river craft. 1 yard has a slipway capable of taking vessels up to 500 gross tons.

DEVELOPMENT: Construction of further 1,000 ft. of concrete wharf at a Westerly direction, following the river bank from the existing jetty. 2 godowns and other buildings and ancillary services are nearing completion.

GENERAL: Small quantities of diesel oil bunkers available, also provisions and fresh water. Principal exports rubber, pepper, timber and sago. Average delay time per ship varies from 10 to 25 hours.

REGULATIONS: The Master of every vessel of over 15 tons about to depart from a port for any place outside Sarawak shall cause the "Blue Peter" (International Code Flag "P") to be hoisted, during day-light hours, for at least 12 hours before the vessel is due to sail, or if the vessel is in port for less than 12 hours, for the period of her stay in the port.

(1) The Master or the Agent of every vessel about to depart from a port shall, on demand by the Port Officer, produce for inspection the Port Clearance.

(2) The Port Clearance shall be in the form of an endorsement on the form of clearance prescribed under the Customs Ordinance or in such other form as may be approved by the Director.

A vessel arriving in, leaving from or shifting berth within a port shall hoist her signal letters, if any, whilst under way.

AUTHORITY: Rajang Port Authority.

TANJONG MANI, Sarawak: 02.09 N. 111.21 E.

Rejang River entrance. The least depth on the bar remains at 19 ft. The entrance is well lit by two lighthouses and one light beacon and the bar is marked by two light buoys.

Tanjong Mani. This is a deep water anchorage 16 miles from the river entrance, mainly used by vessels loading timber.

Size of vessels using Tanjong Mani limited only by depth on bar. Ten ships can be safely accommodated at anchorage at any time, roughly six large (500 ft. length) and four small (300-400 ft.). So far no ship has been delayed awaiting a berth though eight or nine ships anchored there at the same time is now a regular feature. Vessels up to 29 ft. 6 ins. draft have crossed the bar.

Pilots are normally embarked, weather permitting, in the buoyed channel West of Jerijeh lighthouse but it may be necessary for a ship to follow the pilot launch to sheltered water inside the turning buoy. This applies mainly to the larger ocean ships calling at Tanjong Mani and smaller vessels on a first visit but a Pilot may be picked up anywhere to suit provided clear and precise information is given in the arrival telegram. A few of the more frequently requested points are off South Jerijeh Beacon, Rejang Village and for upriver berths, Tanjong Mani itself, or even as far up as Tanjong Delima. The Rejang pilot launch Layang Laut, is fitted with "Hague Plan" VHF radio for ship to Pilot communication.

Application for Pilots should be made giving 24 hours' notice of arrival to "Shipping", Sarikei.

Anchorage. Abeam of Loba Selemit on the true right bank of the Rejang River in position 2° 08′ 22″ N. 111° 16′ 35″ E. is restricted to loading and discharging any dangerous goods.

TAWAU, Sabah: 04.15 N. 117.53 E. (See Plan)

PORT LIMITS: A line drawn from Batu Tinagat on the Mainland to the boundary mark on Sebatik Island between Indonesian Borneo and Sabah (Malaysia) and thence through the island to Burs Point on the Mainland, and thence intersecting all waterways to the West of Burs Point, entering the Serudong River.

DOCUMENTS:

(a) To be Produced on Arrival:

Customs

2 Manifests in prescribed form.
2 Crew Lists.
1 Last Customs Clearance.
2 Stores Lists.
2 Passenger Lists.
2 Arms Lists.

Marine

1 Marine Dept. Boarding Report, required to be completed.
1 Last Port Clearance.
1 Crew List.
1 Passenger List.

Agent

4 (2 for SPA) Manifests in the prescribed form
1 Crew List.
1 Passenger List.

Immigration

2 Crew Lists.
2 Passenger Lists.

Travel Control Office

2 each. Crew Lists and Passenger Lists.

(b) To be Supplied to Ship before Departure:

Manifests, as required by vessel.
1 Port Clearance and 1 Customs Clearance.
3 copies of Passenger List.

PILOTAGE: A Pilot is available from 0600 to 1800 hrs. for berthing vessels given reasonable notice (48 hours). Not compulsory.

ANCHORAGES: Good anchorage in 8 fathoms 1,000 yd. to 1,300 yd. W.N.W. of wharf; and 350 yd. South there is an anchorage in 8.5 fathoms.

Petroleum Anchorage. An area bounded by parallels of 04° 15′ N. and 04° 16′ N. and meridians of 117° 51′ E. and 117° 52′ E. This area is to be marked "Petroleum Anchorage".

Explosives Anchorage. An area bounded by parallels of 04° 12′ N. and 04° 13′ N. and meridians of 117° 52′ E. and 117° 53′ E. This area is to be marked "Explosives Anchorage".

Quarantine Anchorage. An area bounded by parallels of 04° 12.5′ N. and 04° 13.5′ N. and meridians of 117° 54′ E. and 117° 55′ E. This area is to be marked "Quarantine Anchorage".

RESTRICTIONS: *(a)* Communication ship/shore when lying on roads: Regular launch services difficult to arrange if required by Master. No recognised signals for summoning a launch, as distance between small boat jetty and anchorage is too great for flag signals to be recognised. No restrictions against a vessel using its own launch or motor life-boat apart from fact that it must not land anywhere other than at Ports Authority Wharf.

(b) Explosives: No vessel carrying explosives shall come within 500 yards of shore or any other vessel except with written permission of Port Manager which will be given provided that:

(i) quantity does not exceed 2,000 lb. of explosives of Class V and VI and are carried in a certified magazine, and there is no other dangerous cargo on board as certified in writing by the Master.

(ii) quantity does not exceed 3,000 lb. and are exclusively of one of the following classes III, IV or VII.

Danger flag must be flown by day and a red light by night.

HEALTH: *(a)* Quarantine. The Sabah Government are signatories to WHO convention on Quarantine regulations. Port Health Doctor will not board, unless vessel comes from an infected port. Instead Maritime Declaration of Health is to be filled out and handed to Boarding Officer of Marine Department, who will require one copy of crew list and one copy of passenger list. Vessels should cable Agent prior arrival advising last port of call and whether vessel healthy.

(b) Immigration. Immigration officer will board vessel on arrival and clear her inwards. No restrictions on crew and/or passengers going ashore. Immigration will require 2 copies of crew list and 2 copies of passenger list. Vessels are cleared inward until 1800 hours only. If there are special circumstances arrangements can be made to clear vessels inward after this time.

RADIO: Information required prior arrival, ETA Tawau with as much prior notice as possible. Number of gangs required. Quantity of fresh water required.

VHF: A Maritime VHF radio telephone service now operates in the Port of Tawau on Hague Plan Channels 16 and 12.

Continuous listening watch is kept on Channel 16 and the station is operative between the hours of 0600 and 2000 daily. Vessels are requested to make use of the above facility for notifying ETA, pilotage requirements etc. Berth availability will be notified on vessel's call.

TUGS: No tugs available.

BERTHING: *(a)* Wharf Light at Tawau in position on North-west end of wharf, 04° 14′ 32″ N. 117° 52′ 56″ E.

(b) Tides/Linesmen. The numbers of a vessel which is berthing alongside will be flown from signal station. In addition a cone, indicating tidal stream will be hoisted, pointed end of cone down indicates flood tide and pointed end up indicates ebb tide. Linesmen are on hand to receive a vessel's lines; a motor boat can be hired to assist in berthing if prior advice is given.

(c) New Wharf. Consists of a 300 ft. long approach causeway extending from a reclamation area and a 550 ft. long wharf, 50 ft. wide with a dolphin in line ±100 ft. off each end. Least depth 20 ft.

(d) Monsoon. During strong wind from S.E. and S.W. ships are liable to range alongside wharf, and during S.W. monsoon sea breeze may make it difficult for ships to leave wharf in the afternoon.

(e) Buoys: No mooring buoys in Tawau.

(f) Lighters: No lighters available except a few wooden and steel lighters owned by Bombay Burmah Trading Corpn. Ltd. and Borneo Abaca Limited. Hire of these lighters can be arranged when they are not being used by owners, which is seldom.

SPECIALISED CARGO-HANDLING FACILITIES: None. Can handle palletised cargo only.

STEVEDORES: *(a)* No stevedoring company in Tawau. Work is undertaken by stevedoring contractors. Stevedores in sufficient numbers usually available.

(b) Working hours 0730–1130 hours, 1300–1700 hours, 1800–2200 hours.

(c) Overtime: Overtime working hours are from 1800 to 2200 hours. Application must be made to Customs one day in advance; double rate charged.

(d) Sundays and holidays: Work normally carried out on Sundays and holidays, the only exception being Chinese New Year. Application must be made to Customs for permission to work Saturday afternoons, Sundays and public holidays.

(e) Rates: General cargo about 8 tons per gang/hour (loading/discharging).

CARGO: *(a)* Special Cargo Regulations: No vessel with dangerous cargo may be alongside after sunset except at discretion of Port Manager. No dangerous cargo may be discharged simultaneously with general cargo except with permission of Port Manager.

Heavy lifts usually landed overside on to flat-top scows. Customs bonded store is available with about 4,000 sq. ft. of space including Customs Liquor and tobacco store. There are no private bonded warehouses to date. There are no facilities for handling or storing bulk cargoes in any quantity.

Livestock: Subject to approval of Veterinary Authority, certain animals including cattle are prohibited imports and exports except under licence.

(b) Damage. Ship's survey should be carried out on all cargo discharged in a damaged condition and Chief Officer should note extent of damage, and sign, certifying same. Cargo coming alongside in a damaged condition should be noted and M/R claused accordingly. Chief Officers are reminded that it is most unwise to load any copra which is rain or salt water damaged.

(c) Tally: Tally clerks can be supplied by Agent if required, on receiving advance notice.

(d) Inward. Inward cargo is tallied out of ship onto wharf or into lighter. Damaged cargo surveyed on the spot, otherwise no liability of the vessel is acknowledged. Discharge carried out after permission has been obtained from Customs after manifest of inward cargo has been deposited. Cargo delivered to consignees against production of relative Bill of Lading. Ship's responsibility to consignees ceases at ship's side, but, in the case of short-landed cargo, reasonable proof must be given to Customs that cargo has not been landed. A short-landed Memo certified by Chief Officer is usually accepted as proof.

(e) Transhipment. After discharge of cargo from first carrier, transhipment cargo is placed under the supervision of the Customs, unless it is possible to arrange direct transhipment into small coastal vessel.

(f) Outward. When vessels berth alongside, packages are brought by motor transport and lighters; when in roads, by lighters.

(g) Refrigerator. Only small quantities of refrigerator cargo

loaded or discharged. No formalities or certificates being required other than compliance with normal Customs regulations. Inward refrigerator cargo is confined to foodstuffs, meat, etc., and outward to frozen fish.

(h) Explosives. Explosives must be discharged into lighters or immediately on arrival onto wharf under police escort and transported to an approved police store. A licence for their importation must be obtained from police prior arrival of cargo, and Harbour and Police authorities must be informed of arrival of explosives in port either for discharge, or as through cargo.

TANKERS: Shell jetty, least depth 14 ft.
Also see "Shipmaster's Report".

MEDICAL: *(a)* Hospitals. Government General Hospital is only hospital in town, and will receive any sick seamen or officers. 3 classes of wards, but first class ward can only accommodate 2 persons. Hospital is equipped to carry out normal surgery.

(b) Inoculation. Port Health Officer will vaccinate or inoculate Crew members at General hospital.

(c) Port Health Officer. General Hospital, General Office 73533, 72191. Medical Officer-in-Charge 71206. M.O.'s Residence 72239.

FRESH WATER: Can only be supplied at wharf. 24 hours notice should be given of a vessel's water requirements. Usual rate of supply is about 15 t.p.h. A water barge is available but no guarantee of availability.

FUEL: Not available except diesoline in drums.

FIRE PRECAUTIONS: No fire floats and in the case of a vessel alongside catching fire, the fire brigade should be summoned by dialling 2999. The OCPD should also be informed.

CONSULS: At Kota Kinabalu.

REPAIRS: No facilities.

POLICE/AMBULANCE/FIRE: *(a)* Police/Fire, Tel. 999; Ambulance/Hospital 73533.

(b) Accidents: Hoist a two-flag signal and give a blast of the whistle to call attention of signal station. Police and the hospital should be informed immediately of any untoward incident.

GENERAL: *(a) Surveyors:* Harrisons & Crosfield (S) Ltd., as Lloyd's sub-Agents, may appoint a Surveyor if a survey is requested.

(b) Fumigation: No facilities.

(c) Ship Chandlers: Fresh vegetables obtainable in limited quantities early every morning from vegetable market.

(d) Priority: Vessels are berthed on a "First come first served" basis. Vessels with palletised cargo get priority.

(e) Watchmen: These can be supplied if required.

REGULATIONS: *(a)* Arrival and Departure. The Owner or Agent of every vessel other than a small ship intending to call at a port shall, as soon as possible, and in any case not later than 36 hours prior to the estimated time of arrival of the vessel, give notice in writing to the Authority of such arrival and, if so desired, the requirement for a berth at a wharf.

2. The notice under this regulation shall be in a form prescribed by the Authority and shall contain full particulars regarding the cargo to be discharged and loaded, the embarkation and disembarkation of passengers, heavy lifts, special or perishable cargo, hazardous and dangerous goods (whether to be discharged at the port or not), and any other matters of importance relating to the working or safety of the vessel in the port.

3. The Master of every vessel entering or leaving a port between sunrise and sunset shall cause to be hoisted the national colours and the signal letters, if any, of the vessel. The national colours shall be exhibited from 0800 hrs. to sunset whilst the vessel remains in port.

4. The Master of every vessel arriving from outside the State of Sabah shall exhibit the Immigration and Quarantine signals contained in the First Schedule and shall also at the request of a Customs Officer hoist the Customs signals. Such signals shall remain exhibited until the appropriate officer has given permission for them to be lowered.

5. No vessel shall approach within 600 ft. of any other vessel exhibiting the Immigration, Health or Customs signals.

6. No person other than a Pilot may board or disembark from any vessel until the vessel is cleared inwards and the Immigration, Quarantine and Customs signals have been lowered.

7. Every vessel entering a port shall be anchored or efficiently secured to a wharf or buoy before commencing the loading or discharging of cargo and/or the embarkation or disembarkation of passengers.

8. No vessel shall leave any port unless in possession of a valid Port Clearance issued by or on behalf of the Director of Marine.

(b) Special signals

Significance	*By Day*	*By Night*
Immigration (for ships not carrying passengers)	International code Signal "2 5"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Immigration (for ships carrying passengers)	International Code Signal "3 4"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Quarantine (vessel is Healthy request pratique)	International Code Signal "Q"	Nil
Quarantine (vessel is suspect)	International Code Signal "Q Q"	A red light over a white light and a separate hoist of red light over a green light and hoisted vertically 6 ft. apart where best seen.
Quarantine (vessel is infected)	International Code Signal "Q L"	
Quarantine (not received pratique)	Nil	A red light over a white light 6 ft. apart hoisted vertically where best seen.
Request Police Assistance	International Code Signal "S T"	A green light over a white light, 6 ft. apart hoisted vertically where best seen.
Request Medical Assistance	International Code Signal "W"	~~A~~ red light over a green light, 6 ft. apart, hoisted vertically where best seen.

SHIPMASTER'S REPORT: October 1976
Government Oil Wharf:
Position: 04°15.5′ N. 117° 50′ E. 2 miles N.W. of Main Cargo Pier. Least depth in channel from sea to berth — 30 ft. Vessels to be ballasted to 1/3rd deadweight. Density, 1025. Vessel docks daylight only, undocks anytime at any stage of tide. Anchorage 0.5 mile S.W. of jetty. 5 lengths of ship's hose required. Manifold, 10 in. Length of shoreline 3,000 ft. All products handled. Shore booster pump cannot be used. No steam.

Pilot boards at Quarantine Anchorage. 48 hours notice required. No tugs available. Accommodation ladder required for Quarantine but not at berth.

Fresh water available ex-barge. Other services available. Fresh provisions, repairs, Machine Shop, Airport, Lloyd's Surveyor, Telex, Doctor, Hospital, Laundry, Groceries and Meats. No slop tanks.

AUTHORITY: Port Manager, Sabah Ports Authority.

AGENT: Harrisons & Crosfield (Sabah) Ltd., Dunlop Street. Telegraphic address: "Crosfield". Tel. Manager 72624.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Malta

VALLETTA: 35.54 N. 14.31 E.

DOCUMENTS: Pratique deposition to be filled by Master on arrival, form supplied by the boarding Customs Officer. 3 Crew Lists. 2 Bonded Store Lists and 1 list of dutiable items belonging to crew on arrival. 3 Passenger Lists.

PILOTAGE: Compulsory. Pilot boards at Fairway Buoy weather permitting. Pilot available at all hours for small ships, daylight hours for large vessels. Sea Pilot berths vessel for civil berths, Malta Dry Docks or Buoy Berths. In bad weather Pilot boards inside entrance. Vessel's ETA should be given to Agent at least 12 hours' prior arrival to order Pilot. Pilot boat located near Customs House. Pilot boat not equipped with VHF.

ANCHORAGES: Sea anchorage off Grand Harbour. To East of line, Fairway Buoy to entrance, medium to poor holding ground. To West of line, holding ground excellent.

RESTRICTIONS: Min. depth entrance channel (over wreck) 52 ft. Harbour channels – Bighi Bay 58 ft., French Creek 43 ft., Marsa 32 ft. Nature of bottom entrance channel rock and mud. Harbour channels mud. Harbour entrance and approaches affected by current – in N.W. winds there is a set of up to 0.5 knot from N.W. to N.E. Port is subject to closure in gregale (N.E. gale) conditions – Winter months occasionally, not more than 4 times a year.

MAX. SIZE: Discharging Berths – New Quay.

Berths 1, 2, 3. Min. water depth alongside berth 30 ft. Max. length acceptable 350/400 ft. Max. draft acceptable 30 ft.

Berth 4. Min. water depth alongside berth 32 ft. Max. length acceptable 550 ft. Max. draft readily acceptable 30 ft.

HEALTH: Port Medical Officer grants pratique when boarding on arrival. Accelerated pratique can be granted through Pilot provided crew all in good health and ship has not called any infected port during last 15 days, and is coming from a European port.

RADIO: Radio call sign 9HD. Radio telephony working frequency 2625 kHz. Listening watch 2182 kHz.

RADAR/VHF: No radar service available. VHF available by Malta Dry Docks. Frequency 156.8/156.55/157.9 Mc/s. Call sign Malta Dry Docks. Range 10 miles. Master can call signal station on VHF Channels 16 or 12.

TUGS: Join vessel just inside harbour entrance. Lines at discretion of ship's Master.

BERTHING: No specific requirements necessary. Can berth at any time but subject size of vessel and weather conditions. Ro/Ro and container facilities available.

CRANES: 1×60 ton floating crane, 1×60 ton mobile crane, 1×20 ton mobile crane. Additional mobile cranes with capacity up to 15 tons.

STEVEDORES: Ordered by Agents. At least 24 hours notice required.

MEDICAL: Notice must be given to Agent soon as possible to make necessary arrangements. Hospital facilities available. Crew must be in possession of inoculation/vaccination certificates, etc.

TANKERS: Vessels must be gas-free except at tank-cleaning berth, where ships with not more than 2 tanks gas free are allowed. Slop (residue) discharging facilities available. No. of tanker berths: Parlatorio Wharf (Navy) Max. draft 35 ft.; max. length 650 ft. Marsaxlokk – has Saptan Dolphin (Navy) max. draft 34 ft.; max. length 650 ft.

FRESH WATER: Unlimited amount ex barge between 20 to 80 t.p.h.

FUEL: Bunker Berth – Sea Malta Co. Ltd. at new quay. Grades handled include MFO. MDO. TFO. GO. Max. draft 30 ft. 48 hours notice required. Bunkering berth also used for discharging cargo and available when not occupied by discharging vessel.

FIRE PRECAUTIONS: Precautions according to Petroleum Ships Regulations. Civil tugs partly equipped with fire fighting equipment but not well trained.

GANGWAY/DECK WATCHMEN: Not compulsory but recommended.

OPENING/CLOSING HATCHES: Opening by stevedores. Closing of hatches by crew. Stevedores can close hatches at extra cost.

CERTIFICATES: Ship's Register; Load Line Certificate; Derat Certificate.

CUSTOMS ALLOWANCES: 200 cigarettes allowed for each crew member. Wine and/or Spirit, None to crew except Captain, at Customs' discretion.

CARGO GEAR: Factory Act Book for Cargo Gear. Cargo work cannot commence unless certificates valid.

IDENTIFICATION CARDS: Not needed.

CONSULS:

	Tel.
American	623653 620424 623216
Austrian	29182 627356
Belgium	625071 28180
Danish	624858
Finnish	621788
French	31107 35856
German	33415
Greek	625192
Haiti	624713
Ethiopian	624713
Korea	22372 22780

	Tel.
Italian	621985 621986 621988
Israel	33094
Netherlands	624858
Norwegian	625488
Oman	40404
Peruvian	624687
Polish	24306
Portugal	624400
Monaco	625488
Spain	625071 28180
Swedish	624858
Switzerland	27750
Turkish	626589
Liberian	620431
Japanese	620434

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: Malta Dry Docks Corp. operates 5 dry docks up to 861 ft. length, 130 ft. 6 in. wide.

SERVICES: Tank cleaning and underwater hull cleaning undertaken by Malta Dry Docks Corp.

REPATRIATION: Facilities exist for crew changes and repatriation by air.

AIRPORT: 4 miles from port. Served by BA/Alitalia and Air Malta daily to London and Rome.

TIME: GMT plus 1.

HOLIDAYS: New Year (1st January); St. Paul's Shipwreck (10th February); St. Joseph's Day (19th March); Good Friday (no work performed at all on this holiday and in the afternoon of Tuesday Carnival); St. Joseph the Worker (1st May); Ascension Day (date changes); St. Peter and St. Paul (29th June); Assumption of B.V. Mary (15th August); National Day (8th September); All Saints Day (1st November); Immaculate Conception (8th December); 13th December (Republic Day); Christmas Day (25th December) (no work performed at all).

POLICE/AMBULANCE/FIRE: Police 26934; Ambulance 21251; Shore Fire Brigade 24001.

TELEPHONES: Can be arranged in Dry Docks berth, and on buoys.

GENERAL: Important that tankers are gas-free before entering, and that cargo vessels do not carry explosives.

AUTHORITY: Superintendent of Ports, Valletta.

AGENT: Kirton & Co. Ltd., 38 Lascaris Wharf, Valletta, Malta. Telegraphic address: "Kirton", Valletta, Malta. Tel. 624360. After hours 20599 or 26388. Telex MW 241. Sole and exclusive Agents for Lambert Brothers Ship Agencies Ltd.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Marianas Islands

GUAM, (Apra Harbour): 13.26 N. 144.39 E.

DOCUMENTS: Guam is part of the American Trust Territories in the Western Pacific and official documentation is as for mainland U.S. ports, including visaed crewlist completed at port of departure prior to Guam. Vessels should have a stock of American Crew Lists Form 1-148 and Form 1-95A. The American Alien Crewman Landing permit is acceptable and preferred. This is the plastic identification card previously issued on the U.S. coast.

Required on arrival:

- Vaccination Cards.
- Visaed Immigration Crew List.
- 4 Crew Lists.
- 4 Passenger Lists.
- 1 Store List.
- Clearance from last port.
- Cargo papers.

Have ready Immigration Form 1-94 for each passenger and Form 1-95A for each alien unless they have 1-184 plastic Identification Card. Shore Passes not required. Crew Customs Declaration not required.

RESTRICTIONS: The Harbour Master of the Port Authority of Guam, is in complete control of the approaches to Guam and it is essential to obtain clearance and permission to enter Guam from "Harbour Master" Port Authority, call sign KUF-810 at least 24 hours prior to arrival. Permission is readily granted with the condition to request permission again two hours prior to arrival at Guam. This time from Guam controls, call sign KUF-810 and NRV (USCG).

PILOTAGE: It is advisable to have on board U.S. charts for Guam: C & GS 4197 Apra Harbour. 4198 Guam Approaches.

Pilot usually boards at Quarantine Anchorage, or just inside breakwater. When requested will board outside, weather permitting. Pilot mandatory in Inner Harbour. Pilot available at all times.

ANCHORAGE: Harbour -range 084° True, 2 green lights. Strong set across harbour entrance, Navy recommends 10 knots entering. Quarantine Anchorage at Middle ground, Outer Harbour, depth 45 ft.

RADIO: Harbour Master Radio Station, call sign KUF–810 ship/shore watching 24 hours. Use of USCG Station "NRV" for best service if unable to reach KUF–810 due to limitation of range. Prior to arrival call Channel 16 upon approaching Alpha Hotel (VHF) for further instruction giving ETA (account harbour traffic).

VHF: Masters of vessels approaching should keep watch on Channels 16 and 13.

HEALTH: If from suspect port, Inspector boards at anchorage or at pier for thorough check. Grants Pratique.

BERTHING: Vessels may berth Port or Starboardside upon request of the Master or Agent at F–3, 4, 5 except F–6 Portside to 1 large tug and 1 small tug normally used. Ship's gangway is required. Local information from Pilots states that after completion of this oil berth, a submerged wreck was discovered, said to be a 500 ft. long cargo vessel, and lies across and below the vessel in this berth, on the Eastern side of the jetty. It is advisable not to drop anchors -should they have to be used – until vessel has passed over the wreck. There have been instances of forward springs or breastlines becoming fouled in this wreck during operations.

HOSES: 4×10 in. flexible hoses connected by ship's crew. 2×20 in. lines.

IMMIGRATION: 1. Prior to Departure for Guam:

A. Visaed Crew List: Prepare 1 Crew List on U.S. Form 1-418 and have it visaed by a U.S. Consulate at a port prior to Guam. Without this, crew shore leave may be denied.

B. Passengers must have a valid passport and also must have an appropriate U.S. Visa whether landing or not on Guam.

C. Intransit passengers do not need U.S. visa if the Owners of the vessel have signed a contract called "Immediate and Continuous Transit Agreement" with the Commissioner of Immigration at Washington, D.C.

D. Obtain a supply of U.S. Form 1-84 for passengers and U.S. Form 1-95 for Crew.

2. Prior to Arrival at Guam:

A. Passenger List, Form 1-418 prepare 3 copies of Passenger List on U.S. Form 1-418 for Immigration, Customs and Agent.

B. Passenger Landing Card Form 1-94 these to be presented by passenger with passport.

C. Crewmen's Landing Permit Form 1-95A prepare or have on hand 1 U.S. Form 1-95A for each alien crew member. Not required if crew member is a permanent resident with U.S. I-184 laminated "*Crewmen's Landing Card*", not required of U.S.A. Citizens. Please present Form I-95A in appropriate Seaman's passport or identification book. Form I-95A can be used repeatedly for future arrivals of same crewman on same ship.

3. Upon Arrival at Guam:

A. U.S. Federal Immigration Inspector boards upon arrival at pier, must see all passengers with their passport and Form I-94 and all crew members with their passport or identification books and Form I-94A or Form I-184.

B. Passengers and crew are required to be ready for inspection immediately upon docking at Guam.

C. No shore leave and no mail distributing and no visitors or stevedores may board until this Immigration inspection is complete. The Inspector will advise Master when he has completed his inspection of passengers and of crew.

4. Prior to Departure from Guam:

A. *Intransit Passengers:* pick up from intransit passengers the Form I-94 and hand to Agent before departing from Guam. These must be returned by Agent to U.S. Immigration as passenger departure records.

B. Alien crew member joining at Guam pick up from them the Form I-94 which they used to enter the U.S.A. These must be returned to U.S. Immigration by Agent as permanent records.

SECURITY: Guam Government Official usually boards at pier, examines vaccination cards (smallpox vaccination required) and inspects Steward's stores and slop chest. Also represents U.S. Customs. Requires 1 Crew List, 1 Passenger List, 1 Store List, Clearance from last port, later issues new clearance from Guam which Agents bring to ship. Normally does not seal stores or slop chest.

MARINE GUARD: Required when docked at Ammo pier, requires 1 Crew List.

U.S. COAST GUARD: Marine Inspection and Shipping Commissioner Services. Requires 1 Crew List. Checks official log book and arrival draft.

FUEL: Mobil Petroleum can supply black oil or truck diesel, but no marine diesel. Requires ship move to their pier, no commercial fuel barge. Unable supply fuel while Ammo vessel or Bulk Cement vessel working. Possible to supply by truck/trailer to other piers. Navy special (Black Oil) and marine diesel available from Navy on emergency basis only, sufficient to reach next bunkering port. Cash payment required in advance of delivery. Will not normally supply commercial vessels. Navy barge available.

FRESH WATER: Very good, available any quantity, meter service. No water barge.

STORES: No ship chandler, order through Agent. Available but considered expensive. Produce from U.S.A., Milk is recombined in quart cartons, White, Chocolate or Buttermilk. Order milk day prior to delivery. Tropical fruits seldom available. Ice in blocks or cubes. Prices wholesale, except under 1 case lots when at retail. Delivered to ship's gangway or hook.

LAUNDRY: Also dry-cleaning available, U.S.A. prices. 1-day service extra. Delivered to ship's gangway or hook.

MEDICAL: Foreign ships use Guam Memorial Hospital or Catholic Medical Centre or other clinics in town. American ships use U.S. Naval Dispensary in Harbour area, or in emergency U.S. Naval Hospital near Agana, 10 miles distant. Certificates required signed by Master. Patient returns to vessel by taxi at vessel's expense. Dispensary Hours for merchant seamen Monday to Friday 0800-1500 hrs. At other times, if emergency, use the U.S. Navy Hospital. Doctors will not normally visit ships.

Dentists: Private dentists only. Usual hours 0900-1700, Saturday to 1200 hrs.

REPAIRS: Commercial Yard, Dillingham Maritime Services Yard available. Navy Yard, repairs by U.S. Naval Ship Repair Facility (SRF), subject to prior Navy commitments, and requires cash deposit in advance. Payment to be made for work done successfully or not. "No Cure No Pay" does not apply.

TIME: G.M.T. plus 10 hours. When on Daylight Saving Time, G.M.T. plus 11 hours.

POLICE/FIRE/AMBULANCE: Ambulance U.S. Naval Dispensary, Harbour Area, 339-4224/4227; Fire, 22222; Police – Naval Station Security, Harbour Area, 333-2968; Police – Guam Civilian Police, Agana 777-9611

AUTHORITY: Harbour Master, Port Authority of Guam.

Martinique

FORT DE FRANCE: 14.36 N. 61.04 W. (See Plan)

PORT LIMITS: The straight lines joining Pointe des Negres, the South extremity of Fort St. Louis and Pointe d'Alet.

DOCUMENTS:

Maritime Declaration of Health.
4 Crew Lists.
2 Provisions Lists.
2 Lists of Passengers in Transit.
5 Lists of Passengers Disembarking.
2 Lists of Crew Personal Effects.
2 Vessel's Particulars Declarations.
2 Cargo Manifests.

PILOTAGE: Call Pilot by International Code flag "G" or by sounding "G" on whistle. Pilot launches are painted black. The Pilot joins vessel on arrival at Pointe des Negres. If Pilot not available, vessel must anchor in the Baie des Flamands East of Point des Negres to await Pilot.

ANCHORAGE: In Baie des Flamands in front of the town. Depths of 10—14 m.

MAX. SIZE: Length 190 m. Draft 10 m. See also "Tankers".

Quay	*Max. Draft*
Quai Quest	7.50 m.
Quai Ouest Tableau	6.00 m.
Quai des grands cargos	7.50 m.
Darse	7.00 m.
Annexes	8.00 m. Aft. 6.60 m. Forward
Tableau Tourelles	8.00 m.
Tourelles	9.15 m.
Hydrobase	9.15 m.
Batellerie	4.80 m.
Appontement des Carrieres	15.00 m.

HEALTH: Request free pratique by radio or can be obtained on arrival when Master completes Health Declaration and presents Health Certificates.

RADIO: Fort de France Radio, call sign FFP. ETA message to Agent required 24 hours before arrival on working days or 48 hours on holidays. Message to include number of crew on board.

TUGS: None available.

BERTHING: Alongside quay. Max. depth 10 m. Roll-on/roll-off berth operational.

MEDICAL: Doctor and hospital facilities available.

TANKERS: *Petrol Pier:* depth alongside 17 m., can accommodate tankers up to 65,000 dwt. Crude discharge through 2×12-in. Chiksan Arms, capacity 4,500 t.p.h.

Vessel's displacement is limited by strength of the dolphins.

Refinery Berth: depth alongside 7.50 m. for loading products, fuel, gas oil, kerosine at a rate of 150 t.p.h.

DENSITY: About 1028.

FRESH WATER: Available from quay in unlimited quantity. Rate 50-80 t.p.h.

FUEL: All grades available subject to 12 hours advance notice.

GANGWAY/DECK WATCHMEN: Recommended. Performed by crew members.

OPENING/CLOSING HATCHES: Can be performed by crew.

CUSTOMS ALLOWANCES: 200 cigarettes per man. All alcohol to be declared.

IDENTIFICATION CARDS: Not necessary.

CONSULS:

Belgium
Colombia
Cuba
Denmark
Germany
Haiti
Italy
Netherlands
Norway
Panama
Portugal
Spain
Sweden
U.S.A.
Venezuela

REPAIRS: Minor repairs possible.

DRY DOCK: 1×200 m. length, 21 m. wide. Equipment restricted.

REPATRIATION: Facilities for crew change and repatriation.

AIRPORT: 7 miles from the port, served by regular airlines.

HOLIDAYS: 1st January, Shrove Tuesday, Ash Wednesday, Easter Monday, 1st May, Ascension Day, Whit Monday, 14th July, 15th August, 1st November, 25th December.

POLICE/FIRE/AMBULANCE: Police, tel.: 17 and 43-06; Fire/Ambulance, tel. 18 and 22-64.

AUTHORITY: Capitainerie du Port.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Mauritania

NOUADHIBOU: (Port Etienne):
POINT CENTRAL: 20.49 N. 17.03 W.

PILOTAGE: Compulsory for vessels calling at Point Central.

An outer pilot station is situated in the vicinity of No. 2 Buoy, bearing 037° distance 4.4′ from Fairway Buoy No. 0 (position LAT= 20° 40′ N., Long. 17° 04′ 30″ W.).

The inner pilot station is about 2 miles from the mineral wharf bearing N.N.E.

ANCHORAGE: Ships waiting can anchor N.E. of No. 2 Buoy, distance 2 miles in 20 m. of water, good holding ground. Another anchorage on the roadstead, the wharf bearing N.W./N.N.W. distance from 1 mile to 2 miles can be used by ships prior to berthing.

RESTRICTIONS: Minimum depth of water below chart datum is 17 m. in the buoyed channels and swinging area. Outer channel width is 400 m. but it varies from 250 to 400 m. for the inner channel; the radius of the swinging circle being 500 m.

MAX. SIZE: Not to exceed 310 m. in length and 45 m. in breadth, the extreme reach of the shiploader arm being 28.5 m. from ship's side. At the limit an extreme breadth of 48 m. could be accepted after advice from the DCFP. If possible drawing should be sent prior to acceptance.

The recommended draft for large vessels in ballast, or partially loaded is 12 m. on arrival. Smaller ships should have on board a quantity of ballast equal to half their cargo capacity.

Maximum freeboard under ship loader arm is 14 m. With hatch covers opening crosswise (abreast) the maximum freeboard must be understood as the height from sea level to the upper part of hatch covers.

On departure a draft of 15.85 m. is usually admitted but 16.15 m. is accepted according to the stage and range of the tide at the time of sailing.

Essential: All vessels greater than 100,000 d.w.t., which have never visited the port before must have prior approval of the DCFP.

HEALTH: Free pratique is usually given after vessel has berthed. Smallpox and yellow fever vaccination certificates required.

TUGS: None available.

BERTHING:

Mineral Wharf: The ore loading terminal of "Societe Nationale Industrielle & Miniere" de Mauritanie (SNIM) is located at mid distance between the Cap Blanc and Nouadhibou, geographical position: Lat 20° 49′ N., Long. 17° 02′ W. It consists of a platform, 12 m. wide oriented North and South, resting on 8 big dolphins, 9 m. in diameter each and 32 m. distant one from the other. The platform supports a conveyor belt and one single shiploader. The maximum travel of the shiploader from one end of the rails (railway) to the other is 165 m.; the virtual loading capacity would be 5,000 t.p.h. while the actual output varies from 2,000 to 3,000 t.p.h. according to ship's size and on condition there is only one quality and grade of ore to load.

To maintain a depth below LLWT (lowest low water astronomical tides) of 16 m. at the berth, ships are laid against 2 big outrigger pontoons leaning on the dolphins and protected on the ships side by heavy but efficient rubber rollers acting as shock-absorbers.

Ships are generally made fast port side to the quay, coming alongside with the help of the anchors which should be kept at the ready.

TANKERS: *Oil Wharf:* It consists of a light platform placed on top of 3 dolphins of the same diameter as above but 64 m. apart, adjoining the mineral wharf to the Southward. A wooden decking supports the oil pipes which are connected abreast of dolphin No. 10 to the tanker lying portside to the quay, the stern is made fast to a mooring buoy.

DENSITY: 1025 at Point Central.

FRESH WATER: Not available.

FUEL: Not available at the moment. An oil refinery is being built and production should start in 1977.

MEDICAL: There are hospital and medical facilities at the port.

CUSTOMS: Regulations are very strict, and a careful declaration of all bonded stores must be made before berthing. Ships have been fined for quantities in excess or missing even when small.

GENERAL: (a) Radiotelegrams stating the date and ETA at pilot station and addressed to Snim-Cominor Nouadhibou should be transmitted 72 and 24 hours beforehand via Nouadhibou coast radio station (5 TA) working hours 0800 – 1800 or Dakar (6 VA) hours: continuous.

(b) It is of interest to pilots when coming on board, to know whether the ship is powered by a steam-turbine or diesel engine whether the propeller is left or righthand and if it is a variable pitch propeller, how she behaves when the engine is running astern.

SHIPMASTER'S REPORT: (May 1975), Vessel 169,000 d.w.t.

Iron Ore Marine Loading Terminal:—

Approach to Cap Blanc and Baie du Levrier: Approach was from the Southward. From Dakar the course was laid to cross the 100 fathom line at 20° 04′ N. 17° 41′ W., this being a precipitous shelf, when crossed with D.F. bearings from the Radio Beacon at Port Etienne gave a reasonable fix. Vessel than steamed across the main flow of North/South traffic at quite a broad angle heading for the landfall buoy 6 miles West by South of Cap Blanc. A dense concentration of fishing vessels extending Westwards from Banc Vilmorin offered little hindrance to our landfall. the light of Cap Blanc lighthouse was visually observed in the pre-dawn darkness at 26 miles and radar contact of Cap Blanc was established at 23 miles. The landfall buoy fitted with a radar reflector, gave radar contact at 15 miles.

Pilotage: A Pilot boards in the vicinity of No. 2 Fairway Buoy from a black-hulled, white superstructure, 40 ft. high-speed motor launch with "PILOTE" written on the side. VHF contact is made on Channel 16, working frequency Channel 14. Call "Nouadhibou Pilot". The Pilot, a Frenchman, had a good understanding of English and proved to be very competent. The transit inwards and through the Passe du Levrier was at half speed but the last mile towards the berth only an occasional Dead Slow ahead movement was made to maintain steerage way.

Tide/Currents: Berthing for large vessels is on the ebb tide with a Southerly set of about 1 knot. South of the headland the set is to the Eastwards again about 1 knot i.e. directly across the channel. Unberthing is made on the flood tide setting Northerly along the jetty again about 1 knot. Rise and fall is in the region of 1.6 m.

Wind: Ranges from North by West to North by East (May). During darkness it abated to about Force 3 but from early morning through to sunset gusted up to Force 6 causing a short steep sea to run. The Pilot stated that in August and September Easterly winds often occurred hence the placing of 2 mooring buoys about 1 cable off the berth to assist vessels warping clear when leaving.

Tugs: None available.

Quay: Stout cylindrical rubber fenders are chained to the sides of 2 floating pontoons laying to the quay face. An adequate number of bollards are placed along the length of the quay. 3 dolphins, connected by a catwalk, extend the Southern length of the quayside for ship mooring purposes.

Moorings: When approaching and lying off the jetty 2 motorized mooring boats will run ashore 1 synthetic fibre rope (no wire ropes at this stage) from forward and 1 similar rope from the Poop. Vessel is then to warp alongside with these 2 lines aided by helm and small engine movements. Once alongside a spring from the after extremity of the Poop is to be sent away and a forward spring. Vessel secured to the berth with 1 headline to a mooring buoy North of the jetty, 3 forward breast lines, 1 forward spring, 2 stern lines, 2 after breast lines 1 spring from the Poop, and 1 spring from the normal position on the after deck.

Gangway: The accommodation ladder could not be used because of the space between the pontoons lying between ship's side and the quay. A pilot ladder was the means of access to the after pontoon from which access could be obtained to the quay.

Depths alongside: At the first low water soundings were taken around the ship and when reduced to chart datum — obtained from a monthly tide table loaned by the Pilot – a least depth of 15.6 m. was sounded 45 m. East of the quay about 100 m. South of the quays Northern end. A least depth of 16.2 m. was found on the inboard side with depths generally about 18/19 m. elsewhere.

Draft: Maximum permitted for berthing 12 m. Maximum permitted draft for sailing is 16.16 m. (53 ft.) on high water or 52 ft. at any state of the tide.

Airdraft: Maximum 14.5 m. In our case several thousand tonnes of hold ballast had to be taken once secure alongside, this delayed loading for 5 hours.

Shiploader: This is a single conveyor belt fed gantry having a range of travel of 165 m. along the quay but the loading arm has no facility to slew horizontally. It can only be luffed in the vertical plane. The maximum outreach was stated to be 23 m. which combined with the airdraft limitation of 14.5 m. made it extremely difficult to plumb the centre of the holds. For the majority of our loading period the ship had a port list (this was exaggerated by the free surface effect of the 4 ballasted holds). To keep the loading arm from fouling the ship's structure and assisting the arm to plumb centre all the port side side-rolling hatch lids were only partially opened.

Shifting: This had to be done on 2 occasions but was successfully achieved by hauling on the 2 spring wires aft and 1 headline to warp a distance of 6 m. forward and heaving on the forward spring and stern lines to warp 26 m. aft. The shifting was necessitated by the fact that the distance centre to centre of our extreme loading hatches was 191 m.

Agency: This was conducted by SNIM, Societe Nationale Industrielle & Miniers, their telegraphic address Snimport – Nouadhibou.

Documents: Required are:

4 Crew Lists.
2 Store Lists.
2 Crew Declaration Manifests.
2 Vaccination Lists.
3 Passenger Lists.
3 Ports of Call of the Last Month Lists.
2 Ballast Manifests.

The latter 3 lists can be made on 1 sheet of paper (in triplicate). No Maritime Health Declaration was asked for. All these documents were passed to the Agent, no Customs, Port Health, Immigration or Police visited the ship. Although some crew members were without Yellow Fever vaccination certificates this posed no problem, with the Agent, he declared no vaccinations can be done here. Nor can the De-rat Exemption Certificate be renewed.

Port Restrictions: The Agent warned that crew members could not use pounds sterling, U.S. dollars, Dutch guilders or other foreign currency ashore for fear of confiscation by the "authorities". The local currency is the Ouguiya, 100 of which are on par with £1 (approx.).

Port Capacity: The pilot stated previous largest ships had been:
(i) *"Atland"* Obo Swedish 84,229 g.r.t.
(ii) *"Thor"* Bulk German 79,270 g.r.t.
(iii) *"Lilyprima"* Obo Italian 72,68 g.r.t.

However, our claim to be the largest vessel to call being 169,080 d.w.t. is unsubstantiated. The Agent claims a shipment of 139,000 metric tonnes is the largest cargo exported from the port.

Loading Rate: The installation foreman claimed a rate of 4,000 t.p.h. Our rate, allowing for the frequent short stoppages, was 2,813 t.p.h.
Ore: The grade "Siliceous Iron Ore Fines XBF" was extremely dusty. About 10 grades of ore are available from 3 different mines.
Water Density: From our observations at low water 1024 ozs. cu. ft. and at high water 1025 ozs. cu. ft.
Cargo Figures: All tonnages quoted this port are metric tonnes. Ship's figure was about 1,300 tonnes less than the shore quantity, however, the ship's figure was accepted and the foreman stated the shore installations were usually 1% high of the ship figure. Ship was loaded to the maximum draft of 53 ft. but a great deal of difficulty was experienced reading the draft due to the seaway.
Unberthing: This was carried out on the flood tide and only during daylight. Single up to the 2 spring wires aft, using small astern movements and helm movements which aided by the anchor will cant the head from the quay. When the anchor is aweigh, slip the springs and steam ahead of the jetty then using full ahead power and starboard rudder followed by full astern power the vessel is swung well within the turning area to head seawards.
Depths in Channel: Except for the area of the channel abreast Cap Blanc lighthouse where less than 1 m. beneath the keel the remaining parts of the channel showed 3-4 m. underkeel clearance.
Conclusion: It would appear impractical to enter ships of a larger physical size than ourselves at this port because of airdraft/outreach limitations, draft restriction and manoeuvrability problems. Although we were fortunate in having a trouble-free berthing and unberthing procedure serious problems could be foreseen if a vessel had a main engine failure or a sudden deterioration of the weather occurred during these manoeuvres.

Copy of notice received from SNIM Agents Nouadhibou:
To avoid any problem with the Authorities, kindly note the following instructions:
Documents required on arrival:
4 Crew Lists
2 Store Lists
2 Crew Declaration Lists
3 Passengers Lists (even "Nil")
3 Ports of Call Lists of the Last Month
2 Manifests "In Ballast"
1 Health Declaration
2 Vaccination Lists
Customs: The Mauretanian Customs Officers check very closely the provisions on board. Any difference (more or less) may lead to a fine including the confiscation of the excedent goods. Then please give on arrival to your Agent lists of provisions strictly exact.
Maritime Gendarmie: Officers of the Maritime Gendarmerie of Nouadhibou may come on board. They mainly control if the Mauretanian flag is up and check very closely the concordance between the Ship's Articles, the Seamens' Books and the Crew List. If any difference is found between these 3 documents a fine may be given to the ship.
Immigration/Police: The crew members are not allowed to go ashore without a safe conduct given by the police. The list of the men asking to go ashore has to be given to your Agent on arrival.
Money: On principle, foreign money is not allowed in Mauretania, but your Agent may change your money into local currency. Non-Mauretanian money (Ouguiya) may be kept on board and if crew has not spent the total of their local money they have to give it back to the Agency (100 Ouguiya = £1) (10 Ouguiya = 1 Fc.)
AUTHORITY: Societe Nationale Industrielle et Miniere (SNIM).

NOUADHIBOU HARBOUR: 20.54 N. 17.03 W.

LOCATION: Position of Trading Port 20° 53′ 48″ N., 17° 03′ 10″ W.
PILOTAGE: Not compulsory, effected by SNIM/Cominor. Pilotage not available at night.
RESTRICTIONS: Depth of buoyed Channel 24 ft. Anchorage strictly prohibited in the Channel.
TUGS: One tug, 150 h.p.
BERTHING: Pier of 75 m. length connected to shore by a 150 m. long bridge.

Outside general berth for ships with a 24 ft. draft and a 160 m. max. length. According to certain vessel's accommodations, the extreme hatches cannot be discharged through quayside.

Inside berth for ships with a 15 ft. max. draft and a 80 m. max. length.

The maximum payload authorized on the bridge connnecting the pier to the warehouses and the storage areas being limited to 10 tons, all heavy lifts over 10 tons are to be compulsorily discharged on lighters.
Lighterage Piers: Southern quay = length 80 m; depth 10 ft.
Western quay = 150 m; depth 10 ft.

The Southern quay is connected to SNIM/Cominor railroad network, allowing the loading of heavy lifts on railcars.

2 covered sheds: totally 3,500 sq.m.

1 area with macadamized roads offering 30,000 sq.m. of storage connected to SNIM/Cominor railroad system.
Lighterage: Compulsory for any ship whose characteristics do not allow a safe berth.

Compulsory for any loading or unloading of heavy lift over 10 tons

Not compulsory in case berths are occupied and if manpower and equipment are still available.
STEVEDORES:
Working Hours. Normal hours: from 0800 hrs. to 1200 and 1400 to 1800 on Monday to Friday.
From 0800 to 1200 on Saturday
Overtime: from 0700 to 0800 hrs., 1200 to 1400 hrs. and 1800 to 2000 hrs. on Monday to Friday.
From 1200 to 2000 hrs. on Saturday
From 0800 to 2000 hrs. on Sunday and holidays.
Night work after 2000 hrs. is not normally foreseen during Ramadan period, during this period, the work stops at 1800 hrs.
There is no work on the following holidays: New Year's Day (Jan. 1); Tabaski (El Aid) (variable date); El Mouloud (variable date); Labour Day (May 1); Africa Liberation Day (May 25); Korite (El Fatar) (variable date); Independence Day (Nov. 28); Christmas (Dec. 25); 1st Moharam (variable date).

The holidays corresponding to the Islamic holidays are calculated from Arabic calendar.
FRESH WATER: Only available for small vessels.
FUEL: Only available for small vessels.
GENERAL: *Winds* mainly N./N.E. in the morning N./N.W. in the evening. Wind force: variable from August to January rather strong from February to July. Tidal current running North during Flood, and South during Ebb (1.5 to 2.5 knots).
Swell 0.80 m. max. Strong surge alongside all berths.
Rise and Fall High water 2.35 m. Low water 0.35 m. difference = 2 m.

NOUAKCHOTT: 18.02 N. 16.02 W.

LOCATION: Nouakchott Wharf is situated in position 18° 02′ 08″ N., 16° 01′ 43″ W., being about 7 km. S.S.W. of Nouakchott.

All vessels anchor off the port and movement of cargo is undertaken by barges and lighters.
WIND: The direction of the wind varies from N.N.W. -N.E. The predominant winds affecting navigation are from the N.N.W.

The rapid onset of bad weather should be noted. When conditions are bad vessels should weigh anchor and proceed seaward as the coast offers no natural shelter.
CURRENTS: There is an almost permanent N.-S. current running at about 0.5 knot; it reverses S.-N. on a few days during the year.
SWELL: 2 kinds of swell have been observed: Local swell due to the coastal winds, varying from N. to N.W. in dry weather, and turning between N.W. and S.W. during the wet season.
ANCHORING ROADS CONDITIONS: The periods during which climatic conditions are liable to upset work are as follows: Strong swell, January/March; rain, July/August/September.

This virtually allows the port to be used during 200 days in the year.
WORKING CONDITIONS: Vessels must locate themselves as closely as possible, where they can anchor without risk, to the wharf, within the limits of their drafts (generally between 0.5 and a 0.25 miles), in line. At the lighterage quay there is a depth of water of 7 m.-8.5 m. It is preferable for a ring of lines to be placed in advance around the sides of the vessel to which barges may tie up.

Experience shows that the tonnage unloaded currently by the wharf is 400 to 500 t.p.d. where goods in sacks are concerned. It is possible to work 2 vessels at once, but each 4 will only work half of this tonnage.

Work is currently carried out on board by private companies, and on land, in the launches and lighters by the Wharf Organisation personnel.

As far as wharf personnel are concerned, during working days, the normal working hours are from 0800 to 1600 hrs.

Overtime day hours are from 1600 to 1900 hrs.

Night time working is considered to apply between the hours of 1900 and 0600 hrs. (currently impossible).

It should be noted that there is an overtime hour at the beginning and end of work, which is the time required to launch or bring barges on to the landing-stage.
RECOMMENDATIONS TO CAPTAINS OF VESSELS: Vessels must be at all times capable of gaining the open sea rapidly, since bad weather comes up very quickly, and the coast affords no natural protection.
WHARF: The working platform is 86 m.×21 m. and lies in a N.W.-S.E. direction; it is connected to the shore by a gangway 246.5 m. length and 7 m. wide.

The wharf is designed to take a load of 2 lorries of 25 tons (2 axles of 10 tons and 1 axle of 5 tons) or an overload of 1 ton/sq. m.

The wharf manager's office together with Police, Customs and radio office are located on the shore.
WHARF EQUIPMENT: 3 cranes with capacities of 20, 8 and 5 tons respectively.
FLOATING EQUIPMENT: 1 launch of 50 hp, 2 launches of 100 h.p. 10 steel barges, internal dimensions 10 m. × 3 m. × 1.25 m. with capacity for 20 tons cargo. 1 steel barge, internal dimensions 13 m. × 4 m. × 1.35 m. with capacity for 30 tons cargo.
LAND EQUIPMENT: Goods are transported from the wharf to the storage area by 18 trailers each with a capacity of 8 tons. The port is also equipped with 2 tractors of 80 h.p. and 5 fork-lift trucks with capacity of 3.5 tons.
TANKERS: Dakar oil companies are presently building a hydrocarbon oil depot about 400 m. North of the wharf.

The depot will be fed from tankers by means of 2 sea-lines of 900 m. length.

Mauritius

PORT LOUIS: 20.09 S. 57.30 E. (See Plan)

PORT LIMITS: The commercial area of the port is the area inside the port bounded by the entrance buoys and the shore line of the inner harbour. Vessels at the outside anchorage lie within the limits of the port defined by an imaginary line joining Pointe Aux Sables and Pointe aux Pimentes. In this area commercial activities are restricted to bunkering, ship repair and the landing of passengers or personnel.

PILOTAGE: Compulsory for vessels over 100 tons register. Vessels are piloted inwards and outwards at any time of the day or night if circumstances permit. Inward bound vessels are met about a mile seaward of the Entrance buoys though they may, in some circumstances have to be boarded at a greater distance offshore.

ANCHORAGE: Open roadstead with anchorages for vessels of any draft. Admiralty Chart No. 713 refers.

MAX. SIZE: Harbour entrance depths from 42 ft. to 119 ft. Channel – dredged to 40 ft.

RADIO: The Director of Marine requires to be notified of the date of the vessel's arrival, the length and draft and purpose of call, by radio as soon as it is possible for Master to communicate with Harbour either:

1. By CW transmission through the Government Radio Station (3 BA) at Vacoas on 500 kc/s.
2. By R/T transmission through Port Louis Harbour Radio Station (3 BB 3) on 2182 kc/s.

VHF: Port Louis Harbour Radio Station is equipped with VHF and maintains 24-hour watch on Channel 16.

TUGS: 2×720 h.p. diesel-engine tugs, *Betty* and *Winnie*. These tugs are available for deep-sea towage and salvage and are fitted with fire-fighting equipment, R/T and VHF. 3 smaller tugs of 320 h.p. are also available for harbour work and fitted with VHF.

BERTHING:

Quay D, length 485 ft., depth alongside 31 ft. 06 in. Can take 1 vessel up to 600 ft. overall, draft 30 ft. 06 in.

West Quay, length 400 ft., depth alongside 38 ft., designed for white oil and fertiliser discharge.

Quay C, length 396 ft., depth 18 ft. alongside for a length of 310 ft. Can take 1 vessel up to 300 ft. length, and 17 ft. draft.

Buoys: 5 berths capable of taking ships up to 37 ft. 06 in. max draft; 4 berths capable of taking ships up to 30 ft. 06 in. max. draft; 1 berth capable of taking ships up to 25 ft. max. draft; 3 berths capable of taking ships up to 20 ft. max. draft, max. length 350 ft.; 2 berths capable of taking ships up to 16 ft. max. draft; max. length 225 ft. Vessels of 37 ft. are berthed in Quarantine Berth in No. 4E, No. 2E, No. 2W, and No. 5W. Distance between buoys at entrance 1.5 cables.

SPECIALISED CARGO-HANDLING FACILITIES: LPG carriers berth at Quay D; there are no full containerisation facilities. Containers are handled by ships gear at West Quay, where Roll-on/Roll-off vessels are also handled.

Bulk Cargo: Cement Discharging facilities. Rate of discharge 500 t.p.h. Max. draft 22 ft., max. length 350 ft.; capacity of Silo; 7,400 tons.

STEVEDORING: Undertaken by private contractors. Approximate rate of loading per day of 8 hours: Sugar in bags, 200–250 tons per gang per day; sugar in bulk, 200–250 tons per gang per day; general cargo, 60 tons per gang per day; rum in drums, 100 tons per gang per day; bales hemp, 100 tons per gang per day.

Working hours: Monday to Fridays from 0700 to 1600 hrs., Saturdays from 0700 to 1300 hrs. Overtime can be carried out on weekdays up to midnight and up to 1600 hrs. on Sundays and public holidays.

MEDICAL: Arrangements for medical attendance should be made through ship's Agent. Private clinics available.

FRESH WATER: Fresh water supplied by barges at any berth between 0700 and 1600 hrs. Arrangements can be made for supply before 0700 and after 1600 hrs. on payment of overtime. The rate is about 25–30 t.ph. 4 barges of 50, 75, 85 and 110 tons respectively are available.

FUEL: Gas oil, marine diesel and furnace oil obtainable. (Arrangements must be made in advance between Owners and the Shell Co., BP, or the Anglo-Iranian Oil Co.) The pumping capacity of the installations at Port Louis for furnace oil is between 150 and 200 t.p.h., and for marine diesel oil and gas oil 50 t.p.h. Marine diesel oil and furnace oil (35 secs. to 1,000 secs.) is supplied at Quay "D". Furnace oil 1,000 seconds only is supplied on No. 5 West berth.

A 400-ton bunkering barge available to supply vessels in harbour and outside anchorage.

DEVELOPMENTS: The development project involves the construction of 3 deep water quays, a small jetty, mooring dolphins, sheds and administrative and workshop buildings.

REPAIRS: Almost any type of repair can be undertaken in Port Louis.

DRY DOCK: Stevenson dry dock. Largest vessel that can be docked: 326 ft.×48 ft., with a max. draft of 16 ft.; vessels of up to 358.5 ft.×50 ft. can also be docked, but at least 15 days notice should be given.

CONSULS: *Consulates:* Belgian, Danish, Dutch, Finnish, German (Federal Republic), Norwegian, Portuguese, Spanish and Swedish. *Embassies:* French, Malagasy, American, Russian and Pakistan. *High Commission:* British and Indian.

HOLIDAYS: 1st January (New Year's Day), 22nd January (Cavadee); 6th February (Chinese Spring Festival); 18th February (Id-El-Adha); 6th March (Maha Shivaratree); 12th March (Independence Day); 1st May (Labour Day); 29th October (Divali); 1st November (All Saints' Day); 1st December (Id-El-Fitr); 25th December (Christmas Day).

POLICE/FIRE: Police, tel. 999; Fire, tel. 999.

TIME: Local time GMT plus 4 hrs.

AUTHORITY: Mauritius Marine Services Dept.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Mexico

ACAPULCO: 16.50 N. 100.00 W.

DOCUMENTS:

Health Clearance from previous port.
Health Pratique.
4 Stores Lists.
4 Lists of Crew's Personal Effects.
12 Crew Lists.*
2 Passenger Lists.*
12 Manifests of cargo for the port.*

*One copy to be visaed by Mexican consul.

PILOTAGE: Pilot is ordered by Agent on the basis of Master's ETA, which should be given accurately at least 24 hrs. before arrival. Pilot boards at the port limits, approx. 1 mile from the entrance.

ANCHORAGE: Vessels may anchor in the middle of the bay as indicated by the Pilot. Depths up to 150 ft.

RESTRICTIONS: The Bay of Acapulco is a natural harbour surrounded by mountains, approx. 4 miles across at its widest part and 2.5 miles across at its narrowest. There are 2 entrances, 1 called Boca Grande and the other called Boca Chica.

Boca Grande is between Punta Siclata on Isla de la Roqueta and Punta Bruja. The channel is 3,000 m. wide with a depth of 31 fathoms in mid-channel.

Boca Chica Channel, between Isla de la Roqueta and the Peninsula of Las Playas is 300 m. wide with a depth of 14 fathoms in mid-channel.

MAX. SIZE: For berthing alongside max. draft 28ft. 6in.

HEALTH: When vessel arrives at the port the following Authorities will board: Port Health Authority, Customs and Immigration, accompanied by the ship's Agent.

RADIO: Coastal station of Acapulco receiving on 8374 kHz in daytime and on 4180 kHz at night. Transmitting on 8514 kHz in daytime and 4250 kHz at night. Radiotelephone receiving and transmitting on 2715 kHz during the day and on 2182 kHz from 2000-0600 hrs. local time. VHF service available from 0630 to 2300 hrs.

TUGS: 1 tug is required for berthing. Tug's line used.

MEDICAL: Agent should be advised by radio in advance if any medical assistance required. Hospital facilities available.

TANKERS: Tanker moorings operated by Petroleos Mexicanos situated on the Eastern side of the bay. It is strictly prohibited to discharge oily residues in the bay or within 40 miles of the port.

FRESH WATER: Can be supplied by hoses from the quays, rate about 15 t.p.h.

OPENING/CLOSING HATCHES: Is performed by stevedores.

CUSTOMS ALLOWANCES: Crew members are only allowed to retain cigarettes, tobacco and liquor sufficient for their own consumption while vessel is in port.

IDENTIFICATION CARDS: Crew members should carry a passport.

CONSULS:

Denmark	Tel. 2.11.11	Italy	Tel. 2.25.10
France	" 2.43.83	Norway	" 2.19.56
Great Britain	" 2.29.21		

REPAIRS: Minor engine repairs can be effected. No dry docks, only a slipway for vessels up to 100 tons.

REPATRIATION: Can be arranged.

AIRPORT: International Airport situated 22 km. from the port, daily flights to all parts of the world.

TIME: GMT minus 6 hrs. all through the year.

HOLIDAYS: The following holidays can only be worked in case of emergency: 1st January; 5th February; 21st March; 1st May; 5th May; 16th September; 12th October; 25th December; and in addition 23rd May, Anniversary of the Stevedores' Union.

POLICE/FIRE/AMBULANCE: Police tel. 2.00.40; Fire 2.00.42; Ambulance (Red Cross) 2.02.41. and/or 2.00.88.

TELEPHONES: Cannot be connected on board the ship but Master may make calls from the quay.

SHORE LEAVE: Allowed.

AUTHORITY: Capitania de Puerto.

AGENT: Representaciones Maritimas, S.A. c/o Ricardo Careaga E Hijos, S. De R. L., C.M. Aleman No. 187-31 3er Piso, P.O. Box 256. Acapulco, Gro. Mexico. Tel.: 2 23 35. Telex 017 516 Cables: "Maritimex".

COATZACOALCOS: 18.08 N. 94.25 W.

PORT LIMITS: From the centre of the channel at the bar with a radius of 0.5 mile to seaward.

DOCUMENTS:

Customs:

Cargo manifest, original and 4 copies visaed by Mexican Consul at place of origin. If no cargo carried for this port a certificate and 2 copies stating the fact.
Stores List, original and 1 copy.
Personal Effects List, original and 1 copy if vessel is arriving from another Mexican port. Customs release from that port must be produced.

Port Captain:

Clearance from last port.
2 copies Crew List.
3 copies Manifest of cargo for this port.

Immigration:

Crew List, original and 1 copy, bearing consular visa.
Passenger List, original and copy, visaed by consul.
All Crew Passports or I.D. Cards.

Health:

2 copies Crew List.
2 copies Passenger List.
Crew Vaccination Certificates.
Derat Certificate.
When vessels are anchored beyond the breakwater authorities board from the pilot launch.

The following must be made available for inspection.

Registration Certificate of Vessel.
Certificate of Inspection of Deck Machinery.
Certificate of Inspection of Machinery.
Freeboard Certificate.
Tonnage Certificate.
Radio Certificate.
Radio-telephony Certificate.
Emergency Procedure in the Case of Abandoning Ship.
Emergency Procedure in the Event of Fire.
Vessel Insurance Policy.
Copy of the Charter Party (where applicable).

PILOTAGE: Compulsory. Pilot meets vessel off the jetties at Coatzacoalcos Estuary. Master should give Agent information not less than 24 hours prior arrival stating vessels name, flag, and ETA as well as draft.' Pilot boat black hull, white housing and red deck. 2 launches *Alcion* and *Vencedora*. The sound signal for calling the Pilot is 2 long blasts and 1 short blast. The light signal is a blue Bengal light.

There is a new cutter *Sirius*. The pilots' office has a VHF radio station, listening out on Channel 16.

ANCHORAGE: Vessels may anchor between 0.5 mile and 1.5 miles off the breakwater or at the Master's discretion.

MAX. SIZE: Max. draft crossing the bar is 37 ft. The Pajaritos Channel to the bar reaches 42 ft. (will shortly be 45 ft.)

Free Zone: Max. length during the day 200 m., at night 125 m. Max. draft. 31 ft.

Pajaritos: Max. length 225 m. Max. draft 37 ft.

HEALTH: Pratique never given by radio. Vessels granted free pratique when berthed alongside if no contagious illnesses aboard.

RADIO: Telegraphic transmitter type TH 600-M with an open sea range of 500 miles radius, frequencies of 512, 500, 432, and 419.5 kc/s. Telephonic transmitter type TSB-500-Be with approx. range of 500 km., frequencies of 2.182, 2.270, 2.542 and 2.665 kc/s. RDF transmitter type TT-1017-B with approx. range of 300 miles, frequency 312 kc/s. Transmitter/Receiver for radiotelephony VHF type VFD-50PT/PR, with approx. range of 50 miles, frequencies in Simplex operation: Channel 12-156.6 mc/s and Channel 16. International call-up 156.8 mc/s. Duplex operation: Channel 26. Transmission 161.9 mc/s and reception 157.30 mc/s Channel 27. Transmission 161.95 mc/s and receiving channel 157.35 mc/s. At the moment, there is a point to point link-up with national and coastal telegraphs, as well as teleprinters for national and international service No. 078-835 (the latter is said already to be installed and will shortly be operating normally).

TUGS: The Free Zone has the "Servicios Portuarios del Istmo de Tehuantepec S.A de C.V., owners of the tugs *Quetzalcoatl* 2,400 h.p., *Olmeca* 1,600 h.p. and *P.L.M.8* with 600 h.p. for operations in the Free Zone and the Pajaritos Terminal, the first being able to undertake salvaging work due to extensive range of action.

A tug is obligatory for mooring, unmooring or changing position in the port roads. 1 tug for vessels of 2,500 g.r.t. and 2 tugs for vessels larger than 4,000 g.r.t. The signal for calling up tugs is 2 long and 2 short blasts on the vessel's siren. The signal for the tug to withdraw is 1 short, 1 long and 3 short. The tug will repeat the signal to indicate that it has been heard. Tugs are fitted with VHF radio listening out on Channel 16 and during working on the channel which the tug captain is ordered to use.

BERTHING: *Free zone:* this has a quay length of 1,900 m. (1, 2, 3, 4, 5, 6, 7, 8,) with varying depths of water from 29 to 31 ft. All necessary services for vessels are available. During the day, vessels up to 200 m. overall length can manoeuvre, and at night only vessels up to a max. length of 125 m.

Restrictions; Night service is suspended during times of strong currents in the Coatzacoalcos river.

Pajaritos Terminal: In this terminal PEMEX has 3 quays operating and 1 being constructed, those operating being PX1E and PX1W with operational depth of 33 ft. and 30,000 tons gross with lengths of 200 m. PX2E and PX2W with operational depths on the Eastern side of 33 ft. and with 37 ft. on the Western side, admits vessels of 225 m. overall length and 35,000 g.r.t. The Provisional Quay admits vessels with 37 ft. draft. and 35,000 g.r.t. At this terminal, Pemex exports crude oils, fuel oils, and at the PX1E quay ethylene is loaded specifically. In the Western part of the lagoon, there is a manoeuvring basin with a radius of 300 m.

F.F.M. Quay: In the Eastern part of the Lagoon of Pajaritos, the Empresa Fertilizantes Fosfatados Mexicanos S.A. have their plants and a quay of 425 m., running E. — W., this quay being used for discharge of phosphoric rock in 4 mobile hoppers. Also, liquid sulphur is discharged, phosphoric acid is loaded, as are sulphuric acid and superphosphates. It has an operational draft of 33 ft., and takes vessels of 35,000 g.r.t.

STEVEDORES: No ETA advice necessary. Free Port: Straight working hours: from 0800 to 1200 and from 1400 to 1800 hrs. Overtime 100% overcharged according Tariffs. Latest times to order gangs: 0730, 1330 and 1730 hrs. Straight time above hours Monday through Saturday. Sunday and holidays allowed to work except "Legal Holidays". Loading and discharging rates: 25 tons gang/hour using ship's derricks. No shore cranes available. Loading sulphur by conveyor belts at 500 t.p.h., working around the clock.

Private FFM Berth: Loading or discharging operations performed by their own personnel working 24 hours per day. Rate of loading by conveyor belt: 500 t.p.h. Rate of discharging 1,100 tons per day with ships gear.

MEDICAL: Hospital facilities available. Inform Agent in advance if treatment required. Smallpox vaccination certificates inspected on arrival. If certificates expired crew members are re-vaccinated at Health Department.

TANKERS: Also see "Berthing". Tankers regularly moor in the Pajaritos Roads. There are 4 large quays for mooring 7 vessels up to 233 m., with max. draft at the quay of 33 ft.

The provisional Quay has 2 lines of operation of 24 in. with 3 points 8 in. for crude oil and 1 other of 8 in. for crude oil.

DENSITY: Averages 1012.

FRESH WATER: Available at berths in Free Port area, delivered by 1.5 in. hose. Loading rate about 8 t.p.h.

FUEL: Fuel can be supplied at Coatzacoalcos port by tank-trucks when vessels need small quantities. Petroleos Mexicanos (PEMEX) has at Nanchital a loading terminal which is about 3 miles up-river from Coatzacoalcos (max. draft 27 ft. 6 in.) where Bunker C fuel available.

Diesel oil only available at Minatitlan, about 17.5 miles up-river from Coatzacoalcos (max. draft 21 ft.). If vessel bunkers at Nanchital or Minatitlan there will be at least 1 day delay and heavy extra expenses.

Gas freeing equipment for Gas tanker at Nanchital.

DEVELOPMENTS: The entrance channel up to Pajaritos roads has been dredged up to 42 ft. The quays in the Free Zone have been completely reinforced, vessels up to 31 ft. draft being able to come alongside. The warehouses for general cargo at quays 2 and 3 have been completed, with a covered area of 4,000 m. and normal loading capacity of 10,000 cu. m. There are sufficient open areas for positioning heavy loads or machinery. Apart from the lighthouse on the Gavilan Hill, in the Allende area (left bank), the port has light towers indicating the main entrance channel, another 2 to indicate the channel leading to Pajaritos roads. All 4 have flashing lights. The branch leading onwards to the Free Zone is indicated by a small tower with flashing white light. The lights of the promontories of the 2 headlands;— the East light is green, and the West light is red. The channel is marked with black coloured buoys with odd numbers, on the port side entering, and red with even numbers on the starboard side. Both sets of lights are of the flashing type. When continuing upstream towards Nanchital or Minatitlan, the bridge has to be passed under. Its characteristics are: Length 1,375 m. vertical clearance with the bridge up 35 m., with the bridge down 8.84 m. Horizontal clearance which can be used: 60 m. To have the bridge raised, vessels must give 3 long and 2 short blasts on the siren.

CUSTOMS ALLOWANCES: No restriction for free use on board.

CONSULS: Norway and Netherlands.

REPAIRS: Minor repairs may be effected. No dry dock available.

AIRPORT: At Minatitlan, about 40 minutes car drive away. 2 regular flights to Mexico City.

TIME: 6 hours behind GMT.

HOLIDAYS: No work performed on following legal holidays: January 1st; March 21st; May 1st; May 5th; September 16th; October 12th; November 20th; December 25th; and December 1st every six years when Federal Government changes President.

TELEPHONES: No facilities for placing telephones on ships.

POLICE/AMBULANCE/HOSPITAL: Police tel. 2 01 22, Red Cross 2 02 85; Hospital 2 00 30.

SHORE LEAVE: Possible. Crew must have I.D. cards or passports Passengers must have passports.

AUTHORITY: Port Captain.

AGENT: Representaciones Maritimas, S.A. Calle Juarez 320 Altos Coatzacoalcos, Ver. Tel. 2 01 71. Telex 078 822. Cable: "Maritimex", Coatzacoalcos.

LAZARO CARDENAS: 17.59 N. 102.10 W.

The harbour is on Balsas River, also known as Mezcala, about 1 mile from the entrance.

PILOTAGE: Compulsory, night pilotage only if previously agreed.

ANCHORAGE: Vessels should anchor and await pilot in position 358°, 1.5 miles from the Lighthouse. Depth of water 15 fathoms.

APPROACHES: Entrance between 2 stone breakwaters, width at entrance 493 ft. Safe depth over bar for vessels of 40 ft. – 45 ft. draft. Tides are irregular and affected by change of winds, mean rise and fall of 18 in. Navigation channel between the entrance and the basin with a length of 1 mile and an average width of 480 ft., is dredged continuously with an average depth of 46 ft. Turning basin in front of only pier with a maximum diameter of 1,640 ft.

TUGS: 1 tug of 500 h.p. available, compulsory for all vessels over 2,000 g.r.t.

BERTHING: The only pier available is of about 200 m. (658 ft.) of which the first 180 m. have a depth alongside, at low water of 40 ft. Surface area of quay and behind it is 1,500 sq. ft. Another 658 ft. of pier (marginal to the first) is under construction and is expected to be put into service in 1976. Equipment: 1 mobile container crane is located on the only pier, which has a capacity with spreader of 40 tons. Other heavy lift equipment, cranes, etc are owned, rented by Sicartsa and can be obtained at a rent but must be requested in advance.

STEVEDORES: Working hours: 0800–1400 hrs. and 1500–1700 hrs. Monday – Friday. 0800–1200 hrs. Saturday.

FUEL: Not available.

REPAIRS: No facilities.

AIRPORT: Approx. 5 miles from city. 3 flights a day to Mexico City.

AGENT: Representaciones Maritimas, S.A. Lazaro Cardenas. Telex. 017-74534 and 017-73834 in Mexico City.

MANZANILLO: 19.03 N. 104.20 W.

DOCUMENTS:

14 Crew Lists.
20 Passenger Lists.
Derat Certificate.
Vaccination Certificate for each crew member.
Cargo Manifest and one copy to be visaed.
8 additional copies of Cargo Manifest, unvisaed.
10 Bills of Lading, one copy to be attached to each cargo manifest.

PILOTAGE: Pilot station cannot be contacted by radio, and Pilots are ordered by Agents basis Master's ETA.

Pilot boat is black with white wheel-house on which is painted letter "H". International Code signals used. Pilot normally boards vessel about 1 or 2 miles from breakwater but if requested in advance the pilot boat will come out to 5 or 6 miles. Pilot cannot board in rough weather. Vessels waiting for Pilot may anchor about 2 or 3 miles N.W. of breakwater in depths of 12-15 fathoms.

ANCHORAGE: Vessels may anchor in the whole North part of the Bay where depths are 12-15 fathoms at a distance of 1 – 2 miles from the coast.

RESTRICTIONS: Vessels may enter at any time day or night.

MAX. SIZE: No limitation for anchoring in the bay. For mooring alongside, max. length 200 m. max. draft 32 ft.

Also see "Tankers".

HEALTH: Port Health Officer and Immigration Officers board vessel at anchorage. Passengers and crew may be required for inspection. All passengers and crew members must possess Smallpox Vaccination Certificates.

RADIO: Coastal station Manzanillo Radio, call sign XFM, operating 0600-1800 hrs. local time.

TUGS: 1 tug available, compulsory to use tug when mooring alongside. Tug will join vessel as ordered by the Pilot.

BERTHING: Vessels may berth at both sides of the pier or at the North end of the pier.

STEVEDORES: Advise Agent in advance number of gangs required. Discharge rate approximately 20-25 t.p.h. per gang.

MEDICAL: Agent should be advised in advance if medical attendance required on board. Hospital facilities available.

TANKERS: 2 berths available, max. length 650 ft. No restriction on beam. Max. draft: N.E. side 31 ft. (Forward) and 38 ft. (Aft). S.E side 33 ft. (Forward) and 38 ft. (Aft).

FRESH WATER: Should be ordered in advance. Rate of 10 t.p.h. Vessels must furnish own steam for pumping, 2 inch coupling. No barges available for delivery at anchorage.

FUEL: Should be ordered in advance: All grades available. May be expensive due Customs fees.

DEVELOPMENTS: Improvements are in progress to accommodate vessels up to 30,000 tons with a draft of 40 ft.

GANGWAY/DECK WATCHMEN: No shore service available.

OPENING/CLOSING HATCHES: Normally performed by crew members.

CUSTOMS ALLOWANCES: Each crew member may retain 1 carton of cigarettes, and 1 bottle wine/spirits for his own use. No alcohol may be taken ashore.

IDENTIFICATION CARDS: Identification cards or shore passes are necessary for crew going ashore.

CONSULS: Nearest are at Colima and Guadalajara.

REPAIRS: Only repairs to auxiliary machinery can be effected. At Guadalajara hull repairs may be effected provided dry dock not required.

REPATRIATION: Can be arranged.

AIRPORT: Local airport only for internal traffic.

TIME: GMT minus 6 hrs. all the year round.

HOLIDAYS: The following holidays can only be worked in case of emergency: 1st January; 5th February; 21st March; 1st May; 5th May; 16th September; 12th October; 25th December; and in addition 23rd May, Anniversary of the Stevedores' Union.

POLICE/FIRE/AMBULANCE: Police Tel. 4; Fire 23; Ambulance 96.

TELEPHONES: Cannot be connected on board ships.

SHORE LEAVE: Permitted except for crews of Russian, Cuban and Communist Chinese vessels.

Crew members required present their identity cards to Immigration at the gangway. Crew members left behind by vessel must be covered by 10,000 Pesos bond to guarantee repatriation expenses.

AUTHORITY: Capitania de Puerto Edifico Federal.

MINATITLAN: 17.54 N. 94.35 W.

DOCUMENTS: See "Goatzacoalcos."

PILOTAGE: See "Coatzacoalcos Pilotage." Port about 17.5 miles up-river from Coatzacoalcos. Vessels are piloted either up-river or down-river to and from Minatitlan.

ANCHORAGE: Only at Coatzacoalcos. At Minatitlan river is narrowed and anchorage not permitted.

RESTRICTIONS: Vessels may enter harbour only in daylight. Latest time for entry and sailing to and from Minatitlan is 1500 hours.
HEALTH: Pratique never given by radio. Vessels granted pratique at anchor at Coatzacoalcos. Vessels must prepare accommodation ladder, to be boarded by port authorities.
MAX. SIZE: Max. LOA at Pemex berths: 475 ft. Max. LOA at Fiscal berth: 440 ft. No breadth restrictions at both. Max. draft permitted: 21 ft. in fresh water.
TUGS: 1 tug required to accompany vessels past the Coatzacoalcos Bridge. Tugs rejoin vessels in the river on arrival at berth. Tug's lines used. For vessels over 2,000 g.r.t. 1 tug required, over 3,000 g.r.t. 2 tugs required.
BERTHING: Normally vessels dock starboard side to. Petroleos Mexicanos (Pemex) has 8 berths for tankers, where they can load crude, fuel oil, gasoline benzene, xylene, metaparaxylene, toluene and other petroleum derivates. Fiscal berth has a length of 80 m. depth alongside of 22 ft. Actually only used to discharge bulk harmless fertilisers. Discharge performed by elevator at a rate of 800 tons per 24 hours, also by ship's gear using buckets at a rate of 200 tons per day per hatch.
TANKERS: No ballast to be discharged in the river. All ballast to be discharged to shore tanks through 2×6 in. pipe-lines.
STEVEDORES: No ETA advice necessary. Agent or Receivers of cargo order gangs to discharge. Straight working hours from 0700 to 1500 Mondays through Saturdays. Latest time to order gangs 0645 and 1445 hrs.
DENSITY: Averages 1006.
MEDICAL: Hospital facilities available.
FRESH WATER: Available at all berths, but is not recommended.
FUEL: Marine diesel oil and Bunker "C" obtainable at Pemex berths. Bunker "C" also obtainable by barge, and diesel oil only by tank truck.
CUSTOMS ALLOWANCES: No restrictions. Free use on board. 2 Customs guards remain on vessel while alongside.
DEVELOPMENTS: Constant programmes for more berths, sheds, dredging and equipment are under way, but rather slow.
REPAIRS: No dry docks available, but small repairs can be done in shore repair shops.
AIRPORT: About 15 minutes car drive away. Regular flights to Mexico City.
TIME: 6 hours behind GMT.
TELEPHONES: No facilities for placing telephones on ships.

AGENTS: See "Coatzacoalcos".

MORRO REDONDO, Cedros Island: 28.03 N. 115.11 W.

SHIPMASTERS REPORT: (January, 1977)
Morro Redondo: Bulk Salt Terminal 28° 03.5′ N. 115° 11′ W.
PORT LIMITS: No defined limits.
DOCUMENTS:
- 3 Crew Lists in Spanish, visaed by Mexican Consulate in previous port.
- 12 Ordinary Crew Lists.
- 3 Stores and Provisions Lists.
- 3 Lists of Crew Effects.
- 1 List of Crew Vaccinations.
- Clearance from Last Port.
- Certificate of Registry.

PILOTAGE: Pilot arranged by Agent on the basis of ships ETA. Pilot boards when ship is within 3 miles of the berth, from a small MFV type pilot launch, no markings and no VHF. Uses pilot hoist.
ANCHORAGES: None designated but vessels may anchor 2 miles East of berth in 35 fathoms or, alternatively 3.5 miles South of Morro Redondo Point in 15 fathoms.
RESTRICTIONS: None, but berthing in daylight preferred.
MAX. SIZE: Minimum depth alongside 16 m. Maximum air draft to top of hatch at high water 15 m. Largest ship to date 157,000 d.w.t.
HEALTH: Pratique granted by local doctor who boards on arrival. Requires Crew Vaccination Certificates and Master's Declaration of Health.
RADIO: KFS San Francisco Radio or KOK Los Angeles Radio.
VHF: Loading installation calls VHF Channel 16 when ship is in sight and gives any information at this time. VHF is not normally manned so further communication is unreliable.
RADAR: None.
TUGS: 2 tugs join at same time as Pilot, each 2,000 h.p. Tugs lines at no extra charge. Usually 1 tug only for unberthing.
BERTHING: 1 berth only consisting of pontoons and dolphins, also large mooring buoys, 1 ahead and 1 astern, each about 600 ft. distance from berth. 2 mooring ropes must be bent together each end to reach buoys.
CRANES: None.
BULK CARGO FACILITIES: Port is solely for the purpose of loading solar salt in bulk. Loader is belt and spout type and is fixed in position. Vessel must be shifted from hatch to hatch by ship's crew.
STEVEDORES: No special requirements. Average loading rate 2,000 t.p.h.
MEDICAL: No advance notice required, doctor will attend on board. Limited hospital facilities available. Vaccination Certificates for small-pox required.
DENSITY: 1026.
FRESH WATER: Not available.
FUEL: Not available.
FIRE PRECAUTIONS: No special requirements.
CONSULS: None.
REPAIRS: No repairs possible.
GANGWAY/DECK WATCHMEN: Shore gangway only, electrically operated and tended by stevedores. No deck watchmen required.
HATCHES: Opened and closed by ship's crew.
CARGO GEAR: One fixed loader only, controlled by stevedores.
REPATRIATION: Possible, with advance notice to Agent.
AIRPORT: Close to berth. Average 1 flight per day.
TIME: Standard time GMT minus 8 hours. Daylight saving time GMT minus 7 hours from last Sunday in April to last Sunday in October.
TELEPHONES: No telephone contact with mainland.
SHORE LEAVE: Allowed. No special shore passes required.

AGENT: Exportadora de Sol S.A., P.O. Box 150, San Diego, California. Telex 69-7829. Telephone (714) 239-0131. Cables: Essasa Sandiego.

NANCHITAL: 18.00 N. 94.27 W.

DOCUMENTS: See "Coatzacoalcos."
PILOTAGE: See "Coatzacoalcos Pilotage." Port about 3 miles up-river from Coatzacoalcos.
ANCHORAGE: See "Coatzacoalcos Anchorage."
RESTRICTIONS: Vessels may enter Coatzacoalcos only with daylight. Navigation from Coatzacoalcos to Nanchital remains closed from 1630 to 0700 hrs.
MAX. SIZE: Max. LOA 580 ft. No breadth restrictions. Max. draft permitted 27 ft. 06 in.
HEALTH: See "Coatzacoalcos."
TUGS: When vessels proceed to Nanchital, 1 tug accompanies to pass the Coatzacoalcos bridge, according to Port Regulations. Tugs again join vessels when arriving at Nanchital berths. Tug's lines used. For vessels over 4,000 g.r.t. 2 tugs used.
BERTHING: Normally vessels dock port side alongside. When current and circumstances permit vessel is turned around and docked starboard side to. There are 2 docks at Nanchital, called Old Pier and New Pier. Both to load crude oil, No. 6 fuel oil by pipe-line of 6 in. and up to 10 in. Mooring, unmooring, connecting and disconnecting hoses performed by Pemex own labourers.
MEDICAL: Hospital facilities available only at Coatzacoalcos.
BALLAST: Special regulation for tankers that no ballast water to be discharged in the river. Deballasting performed by 2 pipe-lines of 6 in. diameter to shore tanks.
SALINITY: Average 1006.
FRESH WATER: Available at both berths but is not recommended for drinking.
FUEL: Available only at the Pemex Oil Terminal at any time.
DEVELOPMENTS: Constant programmes for more berths, sheds, dredging and equipment are under way, but rather slow.
CUSTOMS ALLOWANCES: No restrictions. Free use on board. 2 Customs guards stay on board. Vessel to provide them boarding and lodging.
CONSULS: None.
REPAIRS/DRY DOCKS: No dry docks available, but small repairs can be done in shore repair shops.
AIRPORT: At Minatitlan, about 1 hour car drive away. 2 regular flights to Mexico City.
TIME: 6 hours behind GMT.
TELEPHONES: No facilities for placing telephones on ships.

AGENTS: See "Coatzacoalcos".

PROGRESO: 21.17 N. 89.39 W.

DOCUMENTS:
- Crew List visaed by the Mexican Consul and 7 simple copies.
- Derat Exemption Certificate.
- Valid Smallpox Vaccination Certificates for all crew and passengers.
- Passports or Seaman's Book for all crew.
- Clearance from last Port of Call.
- Passenger List visaed by Mexican Consul and 7 copies.
- 6 Stores Lists.
- 7 Manifests.
- 7 Bills of Lading (2 to be visaed).
- Tonnage Certificate.
- Certificate of Free Pratique.

PILOTAGE: Compulsory. Pilot boards about 3.5 miles North of the lighthouse from a fast launch. International signals to be used to call Pilot day and night. ETA should be passed to Agent via radio station at least 24 hours before arrival.
ANCHORAGE: Vessels waiting for a berth anchor 3 miles off the Fiscal quay. The anchorage is marked on Chart H.O. 0966.
RESTRICTIONS: No night restrictions. Also see "Max. Size". No facilities for tankers.
MAX. SIZE: Max. LOA, 190 m. Max. draft 16 ft. (arriving), 16 ft. 06 in. (sailing).
HEALTH: The doctor boards the vessel at the quay. Where illness or fever is suspected on board, international rules are followed. If the vessel is arriving from another Mexican port, there is no health inspection. Radio pratique is not obtainable.

Authorities require Smallpox Vaccination Certificates for all crew and passengers, and valid Derat Exemption Certificates. No radio pratique prior to arrival obtainable.

RADIO: Progreso Radio XFN works from 0600 to 1900 hrs. every day and listens on frequencies 2,182 kc/s. and Channel 16 VHF on radio-telephony and 500 kc/s. on radio-telegraphy. Working frequencies are 2,756 kc/s., Channel 14, Channel 13 and Channel

12 VHF for radio-telephony, and 420 and 429 kc/s. on radio-telegraphy. ETA can be passed through this station 24 hours in advance.

TUGS: No tugs available.

BERTHING: One pier heading 355° true. Berth available on both sides, East and West, with 204 m. length on each side, and both with 18 ft. depth alongside.

STEVEDORES: No ETA advice necessary if stowage plan received in advance by Agent. Otherwise, ETA advice for gangs required 6 hours prior to arrival. Stevedores' General Cargo discharging and loading rate about 12 tons per gang/per hour.

MEDICAL: Attention available. The port has a clinic. Hospitals are situated in Merida.

TANKERS: No facilities.

DENSITY: Average 1015.

FRESH WATER: Available from pier by hoses. Fresh water is treated in the plant.

FUEL: Bunkers are available. Delivery by tanker truck equipped with pumps. Diesel and fuel supplied. Agent requires 24 hours notice.

FIRE PRECAUTIONS: No smoking allowed aboard vessels.

GANGWAY/DECK WATCHMEN: It is not necessary. Sometimes Masters require them.

OPENING/CLOSING HATCHES: This work is normally carried out by stevedores, but sometimes is carried out by crew in order to save time in loading or unloading.

CUSTOMS ALLOWANCES: Any quantity to be used on board is permitted.

IDENTIFICATION CARDS: Not necessary, but crew must carry passport or Seamans I.D.

CONSULS: The Consular Offices are located in Merida, the capital of State of Yucatan (20 minutes from Progreso by taxi):

Cuba	tel. 1 66 77	Lebanon	tel. 1 77 76
France	tel. 1 60 13	Switzerland	tel. 1 75 00
Germany	tel. 1 21 77	USA	tel. 1 60 30
Great Britain	tel. 1 67 99		

REPAIRS: Small repairs can be carried out in shore shops. No dry docks available.

REPATRIATION: There are facilities for effecting crew changes and arranging necessary repatriation. All matters are handled by the Office of Immigration.

AIRPORT: International Airport in Merida, about 30 minutes from Progreso by taxi. Daily services to Miami, Fla., by Pan American World Airways and New Orleans La., every 2 days. Other flights to Central America, Jamaica, and Germany.

POLICE/AMBULANCE/FIRE: Police 5 00 26.

HOLIDAYS: January 1st; February 5th; March 21st; May 1st (Labour Day); September 16th (Independence Day); November 20th (Revolution Day); December 1st (every 6 years); December 25th; It is possible to work, paying 100% additional.

TELEPHONE: It is not possible to place telephones on board.

SHORE LEAVE: Crew members are allowed ashore.

AUTHORITY: Harbour Master (Captain of the Port).

AGENT: Representaciones Maritimas S.A., c/o Fernando Patron Nicoli, 27th Street No. 112, Progreso, Yucatan, Mexico. No Telex. Tel. 5 00 52.

PUERTO MADERO: 14.41 N. 92.27 W. (See Plan)

Puerto Madero is located in approximately 14° 41′ N., 92° 27′ W., about 18 miles N.W. of the Ocos River. Tapachula, with a population of about 50,000, is 25 km. from Puerto Madero and connected by a good road.

DOCUMENTS:

10 Spanish Crew Lists.
6 Passenger Lists.
3 Store Lists (Spanish).
5 Cargo Manifests.
1 Arrival Report.
1 W.H.O. Form (supplied by Quarantine Officer).

Vessels are boarded on arrival by 13 officials. Pilot acts as interpreter.

All papers must be correct. Immigration Officer checks crew list against all passports.

PILOTAGE: Pilot boards off the entrance from yellow surf boat fitted with outboard motor, not fitted with radio. Pilot speaks good English.

ANCHORAGE: A good anchorage can be obtained in soft mud between 1 and 2 miles S.W. of the breakwater head in about 7 fathoms. This anchorage, being exposed, is liable to strong swell from seaward.

HEALTH: All Smallpox Certificates individually examined.

RADIO: Salina Cruz.

BERTHING (Port under construction): There are 2 reaches, an expansion basin and a turning basin with a general cargo berth and a banana berth. For the present the general cargo berth only can be used. The project depth is planned to be 10 m. throughout – channels and turning basin. The max. draft the port is expected to handle will be 27 ft. Even in calm weather there is a good swell running and this dissipates in the expansion basin between the first and second reaches of the channel.

The first reach is entered on a heading of 045°(T) and passes between the breakwaters which are 650 m. in length and constructed of smashed rock and are visible on radar at 20 miles.

The semi-submerged wreck of an American dredger lies close N.W. of the Northern breakwater. A flashing green light is exhibited from a lattice work tower on the Northern breakwater while a flashing red light is exhibited from a similar tower on the Southern breakwater. Although the breakwaters are 350 m. apart, an 80 m. channel exists in the centre. The least reported depth is 30 ft. This channel continues for a further 650 m. on the same course of 045° (T). To assist in steering 2 range lights and a day beacon are being constructed.

The second reach is entered on a heading of 000°(T) and narrows to a width of 50 m. and is 600 m. in length. The projected width of this reach is 80 m. At the end of the second reach the channel again turns to 045°(T) and great care must be exercised in negotiating this turn. A small yellow buoy marks the Southeastern side of the channel. The turn towards the berth is very tight and difficult without a tug. The berth itself has a reported length of 150 m.

The turning basin off the dock is reported to be 600 ft. but in actual fact is only 520 ft.

Upon leaving, turning the vessel short round is hazardous even with the help of small tug (750 h.p.).

Pilot who is also dredging Master appeared ready to take over once the turn is completed.

FRESH WATER: Available

REPAIRS: Very minor repairs can be undertaken but very expensive.

GENERAL: Extra meals for about 10 people. Agent will not sign for free issue or extra meals.

Advisable for all vessels entering this port to be well stocked with mosquito repellent.

Crew passes are not necessary for shore leave.

Fresh fruit and vegetables good quality and price, available from Tapachula 20 miles away.

No ship chandler or laundry service.

The only reliable communications are via United Brands, Boston. They forward all ETA's etc. by telephone.

A teleprinter is located in the Fruit Agent's office but is only available during weekday working hours.

Steamship Agent: Empresa de Services de Puerto Madero, Manager Jose Antonio Tellez, Apado La Ponrete numero 5, Tapachula, Chiapas (Province), Mexico. Tel. 1241 and 4210.

Fruit Agent: Snr. Jose Leyba, Apartoa Agricola de Chiapas, Apartoa Sol 311, Tapachula, Chiapas (Province), Mexico. Tel: 1531.

ROSARITO: 32.20 N. 117.05 W. (See Plan)

SHIPMASTER'S REPORT:

GENERAL: There is no port chart or approaches to Rosarito.

There are 3 sea berths only, 2 using anchors and sternbuoys, and 1 single point mooring platform due to come into service Summer 1976. There is a continuous Westerly swell (July) and the berth is very exposed. Discharging a full cargo, it is advisable to commence ballasting as soon as possible to maintain a reasonable draft. There is no objection to this by the receivers.

DOCUMENTS: As for other Mexican ports re visaed Crew Lists etc. Suppliers in Curacao supplied all cargo documents with correct number of copies.

PILOTAGE: Pilot boards about 1 mile West of the berths from a black pilot launch equipped with VHF Channel 9. He speaks good English. The Boarding Officer boards with the Pilot. He speaks no English. The Pilot and Boarding Officer remain on board throughout cargo operations, also pilot/mooring launch is at hand at all times. All cargo operation liaison with the shore is by VHF operated by the Boarding Officer, who also does all Customs, Immigration work, etc., with the Pilot as interpreter.

APPROACHES: Straight forward, with a shelving bottom and ample depth of water up to the berths. Anchorage was found about 1.2 miles off the South buoy berth in 14 fathoms with good holding. Approach in poor visibility, common at this time of year, presented little difficulty once a position of berths is ascertained. Coronado Islands are good radar targets for position fixing.

RADIO: Communications to Agents in Ensenada through Manzanillo Radio XFM and then Ensenada Radio XFE on HF.

Petroleos Mexicano (PEMEX), the Charterers, have their own station at Rosarito which supplies berthing instructions etc. Station XIB83 working on 8690 mHz and 500 kHz. They also keep a listening watch on VHF Channel 9.

OPERATIONS: Local flag tonnage gets preference for the berths. This should have little effect with the single point mooring coming into operation shortly, giving 2 product berths.

The pipe-line is handled by ship's staff. All ullaging etc. done by ship's staff. A comparison between ship's figures, Bladings and shore figure is made on completion of discharge, before clearance is issued by the Boarding Officer.

No difficulty was encountered in maintaining the requested BP of 6 kg. at the manifold using 1/2 pumps. Liaison with the shore is excellent, by Boarding Officer on VHF with hourly checks.

SUPPLIES: No bunkers or fresh water. Provisions can be obtained in small quantities but are difficult to get on board and expensive. Medical assistance can be obtained ashore, but again with the difficulty in getting ashore it would be only in a serious case.

AGENTS: Only communication was on the second day by VHF but did not attend on board ship. This may be explained by the fact that due to the heavy swell it is difficult and sometimes dangerous to clear the breakwater by boat. This is endorsed wholeheartedly by Officers joining the vessel. However they were well attended by the Agent ashore. It is recommended that this port is not used for reliefs unless absolutely necessary. There was no shore leave allowed by me due to this.

SAN CARLOS: 24.47 N. 112.08 W.

SHIPMASTER'S REPORT

DOCUMENTS:
Visaed Crew List by Mexican Consul and 9 copies.
Visaed Cargo Manifest from each loading port and 4 copies.
Derat Exemption Certificate.
Valid Smallpox Certificates for all on board.
Passport or Seamen's Book for all on board.
Clearance from last port of call.

APPROACHES: A very strong current was experienced running from S.E.-N.W. when entering Bahia Magdalena at Pta. Redondo. Caution should be exercised making this approach, because currents can be strong and unpredictable in this area.

PILOTAGE: Compulsory. Pilot boards in Lat. 24.39 N. Long. 112.05 W. from small boat with outboard engine.

Anchorage is also good in this position should it be necessary to await Pilot or berth. The 2 buoys marking the entrance make good radar targets and are distinctive.

RESTRICTIONS: Channel must be navigated at suitable time of tide giving careful consideration to vessel's draft, in order to clear numerous shallow patches. Max. draft to date of vessel navigating channel was 30 ft 4 in. on top of high water.

RADIO: La Paz Radio (XFK) 500 kHz and 441 kHz. Working hours appear to be uncertain, but there is a working arrangement with Agent to transmit messages free of charge.

CHARTS: Chart used to navigate channel was Mexican No. FH. 614. Masters are strongly advised to obtain this chart.

BERTHING: 1 pier 420 ft. long.

FRESH WATER: Available at pier at 10 t.p.h.

COMMUNICATIONS: Very poor. No telex, No telephone and no cable service. Telephone available at Villa Constitucion 57 kms. away by paved highway. Plans are in force to introduce a telephone service in the fairly near future.

CONSUL: If consular advice is required it is best to contact the British Embassy in Mexico City. Tel. 5 11 48 80.

LAUNDRY SERVICE: None.

SHIP CHANDLER: None. A pick-up wagon can be supplied by Agent to obtain essential stores from supermarket at Villa Constitucion.

TAMPICO: 22.15 N. 96.51 W.

PORT LIMITS: Vessels in Mexican ports are considered to be arrived vessels as soon as permission to moor has been granted by the Port Authorities.

Permission to tie up will be granted on the quay or whilst in mid-stream, and occasionally during periods of very good weather a vessel is authorised to anchor in the port entrance.

DOCUMENTS:
1 Crew List visaed by Mexican Consul.
9 simple copies of Crew List.
1 Visaed Cargo Manifest from each loading port.
4 simple copies of Cargo Manifest.
1 Visaed Passenger List or visaed Statement to the effect of no passengers, and 5 simple copies.
2 copies of Store List.
2 copies of Personal Effects List.
Derat Exemption Certificate.
Valid Smallpox Vaccination Certificates for all crew and passengers.
Passports or Seaman's Books of all crew.
Clearance from Last Port of Call.
3 copies of lists of packages containing explosives, inflammable or corrosive materials.

PILOTAGE: Pilot ordered by Agent who needs 24 hrs. ETA prior to vessels arrival. Pilots board vessels 2 miles off the breakwater. Vessels may anchor about 2 miles off the breakwater waiting for Pilot. Pilots have radio-telephone, frequency 2182.

ANCHORAGE: About 2 miles East of breakwater in 40-60 fathoms of water.

RESTRICTIONS: There are no restrictions for movements at night. The drafts of the vessels will be governed by the mooring zones in which they are working. The depths at these berths are as follows:

*Free Zone Quay	30 ft.
Minera Autlan Quay	32 ft.
Petroleos Mexicanos Quay	30 ft.
Mexican Gypsum Quay	26 ft.
Metals and Minerals Quay	29 ft.
Anahuac Cement Quay	23 ft.

The navigation channel to the Mexican Petroleum Maritime Terminal has a depth of 38 ft. and that to the Free Zone 31 ft.
*This depth is subject to constant dredger maintenance, the draft being reported weekly to the Ship Agents.

MAX. SIZE: The max. length is 656 ft. There are no restrictions for beam, The drafts will be those admissible in the corresponding berth used.

HEALTH: No radio pratique. Pratique granted after docking and presentation of documents to Port Authorities. In case of disease or fever on board, Master to give notice to Agent before arrival.

RADIO: Tampico has a coastal station with frequency 2182, as have the Port Captain, the Pilots' office and Gulf Tugs' office. All have the same frequency.

TUGS: 3 tugs are available, intended solely for port manoeuvres, comprising *Guayalejo* 2,000 h.p., *Tamesi* 1,000 h.p., and *Panuco* 800 h.p. Also Petroleos Mexicanos have tugs whose power varies between 1,000 and 3,000 h.p.

BERTHING:
1 berth at the Minera Autlan quay where manganese is moved by moving belt at the rate of 1,200 t.p.h.
5 berths at the Pemex Quay, where oil and its derivates are moved at the rate of 600-800 t.p.h., by means of 4 in., 6 in., 8 in., and 10 in, pipes.
1 berth at the Mexican Gypsum quay where calcium sulphate is moved by moving belt at the rate of 500 t.p.h.
2 berths at the Metals and Minerals Quay, where bulk minerals are moved by 4 moving belts at the rate of 125 t.p.h. per belt.
7 berths at the Tampico Free Zone, where general cargo is moved at the rate of 20 t.p.h. per gang.
1 berth at the Anahuae Cement quay, where bulk cement is moved by means of 10 in. pipes at the rate of 250 tons per pipe, there being 2 ducts.

All quays have lighting for night operation and telephone facilities.

STEVEDORES: No ETA advice necessary of Stowage Plans received in advance by Agent, otherwise ETA advice for gangs appreciated 48 hrs. prior to arrival. Stevedores general cargo discharging and loading rate about 20 t.p.h. per gang. Mineral loading at Metals Pier about 125 t.p.h. per belt (2 conveyor belts available to service both berths).

MEDICAL: Hospital facilities available. No advance notice required.

TANKERS: See "Berthing". Dirty ballast is received ashore.

SALINITY: Average 1006.

FRESH WATER: Available on written request from ship's Agent. Drinking water delivered by pump at the rate of 12 cu. m. per hour.

FUEL: Available preferably at the Petroleos Mexicanos Quays, although with 1 week's advice prior to arrival this service can be provided at the public service quays.

DEVELOPMENTS: Constant programming for more space at wharves, sheds, warehouses, continuous dredging and increasing capacity of operational equipment.

CUSTOMS ALLOWANCES: No allowances to be taken ashore, but reasonable amounts of tobacco and spirits are allowed to be taken out of bond, but to be kept on board for use of crew and passengers only.

CONSULS: Great Britain, Peru, Germany, Holland, Norway, Sweden, Italy, Uruguay and Lebanon.

REPAIRS/DRY DOCKS: There is a floating dock with capacity up to 4,000 gross tons, where hull repairs can be effected, as can work on steering system, machinery, marine auxiliaries and other equipment of less importance.

There are specialist workshops attached to the dock.

GANGWAY/DECK WATCHMEN: No watchmen necessary. Customs guard keeps watch at gangway while vessel alongside.

REPATRIATION: In the port there is an office of the Administrative Secretariat, where the repatriation of any crew member can be negotiated. This negotiation will be for the account of the ship's Agent, who is required to deposit a bond of $10,000 per person.

AIRPORT: At a distance of 10 km. from the port, there are regular flights to Monterrey, Nuevo Laredo, and Mexico City with connections in any direction.

TIME: 6 hours behind GMT.

HOLIDAYS: January 1st; February 5th; March 21st; May 1st; September 16th; November 20th; December 25th; December 1st every 6 years.

FIRE/AMBULANCE/POLICE: Fire Department 2 12 22; Red Cross 2 13 33; Police 2 11 57; Police (Jail) 2 10 32.

AUTHORITY: Superintendency of Port Operation.

AGENTS: Representaciones Maritimas, S.A., Edificio Luz -Piso 5 Despacho 523, Tampico, Tamps. Mexico. Tel. 2 34 77 and 2 46 62. Telex 01430. Cable: "Maritimex, Tampico."

VERA CRUZ: 19.12 N. 96.08 W.

PORT LIMITS: Area bounded by the reef lighthouses outside the breakwater.

DOCUMENTS: See "Coatzacoalcos".

PILOTAGE: Compulsory, advise Agent 24 hours before arrival giving name, flag, ETA and draft.

The Port Captain is to be given a min. of 2 hours' notice by the Agent. This to be done between 0800–1800 (Pilot office hours). Orders for Pilots between 1800-0800 hrs. to be made between 0800–1800 hrs.

The Pilot normally boards within the port limits, but if his services are requested outside such limits the Pilot will proceed to the location, i.e. the anchorage.

The pilot launch leaves from a "T" shaped pier when expected vessel is sighted. The launch has a black hull with white superstructure and false funnel painted black.

ANCHORAGE: In good weather, vessels may anchor in the outer area off the port, in the case of bad weather, to the South of the Isle of Sacrifices (Isla de Sacrificios). If the vessel prefers to anchor within the port limits, it must request the services of the Pilot and on anchoring for its own account within this sector must pay the fees due to the pilotage service.

RESTRICTIONS: In normal weather conditions there are no restrictions on entry and departure, the sole consideration being the draft of the vessel, since if this exceeds 29 ft. the time of the tide must be taken into consideration, and also after a strong North wind, a vessel drawing more than 24 ft. must wait for the tide.

MAX. SIZE: Length 200 m., at berth nos. 4 and 6 or the oil terminal.

HEALTH: The International Health Office gives a 24-hour service for the arrival and departure of vessels. To obtain free pratique on arrival of vessels there is a medical inspection, with submission of the Maritime Health Declaration, signed by the Captain, and examination of documents of Derat Certificate, certificates of vaccination of the crew and passengers; smallpox, cholera, yellow fever, (dependent upon the location from which the ship has come). Examination of crew members or passengers who might be declared as suffering from contagious illnesses. With these formalities fulfilled, free pratique is granted. Free pratique can be granted by radio, provided it is considered that the vessel's arrival will not give rise to the introduction or propagation of illnesses covered by the regulations, and that also the following requirements are fulfilled:

1. Exercise of greater epidemiological vigilance in respect of illnesses covered by International Health Regulations.

2. The Captain's radiogram must be presented to the International Health Delegation eight hours in advance and must invariably fulfil all the stipulations as set out in the attached form.

3. Without prejudice to the foregoing, the Health Doctor or whomsoever he may designate, and where it is considered appropriate, shall go on board for the purpose of receiving the Maritime Health Declaration so that enquiries and verifications as may be considered necessary may be carried out.

Once the vessel has called at a national port, in subsequent national ports the requirements for obtaining free pratique will not be required, provided there does not exist on board any alteration in the health conditions as established in the Maritime Health Declaration.

Medical service to crew members and passengers on board foreign flag vessels is provided by doctors and private hospital institutions, through the intermediary of the consignee ship's Agent.

For possible handling of disease covered by the Health Regulations (smallpox, cholera, yellow fever, bubonic plague), there are isolation wards in the Official Hospitals "Aquiles Serdan" and "Regional de Veracruz".

The Office of International Health has immunisation services required for the diseases covered by the Regulation, which are certified on special international forms, with any cost, to crew members and passengers.

RADIO: Radio station Vera Cruz Radio, call sign XFU. Works on 500, 451, 8514 and 4250 kHz. and others. Also VHF Channels 12, 16, 26 and 27.

TUGS: 2 tugs available; tugs' lines used at no extra charge. Tugs join vessels inside breakwater.

BERTHING: Depths given for low water, tidal range 1 ft..

Pier No. 1	N. and S.	27 ft.
Pier No. 2	S.	23 ft.
	N.	21 ft.
	Head	26 ft.
Pier No. 4		27 ft.
Pier No. 6	S. corner	29 ft.
	S. end	29 ft.
	N. side	27 ft.
	N. head	27 ft.

MEDICAL: doctors, dentists and hospital facilities available (see "Health").

TANKERS: Petroleos Mexicanos berth located in Northern part of port. Max. draft 28 ft. Berthing for 2 vessels of 170 m. LOA. Berth provides 5×8 in. lines for discharge of refined product and 2×12 in. lines for fuel oil.

DENSITY: 1025.

FRESH WATER/FUEL: Available.

Berth	*Location*	*Water connection*	*Diesel connection*
Pier No. 1	North	4 at 2.5 in.	
	Head		
	South	3 at 2.5 in.	
Pier No. 2	North	3 at 2.5 in.	3 at 6 in.
	Head	2 at 2.5 in.	1 at 6 in.
	South	3 at 2.5 in.	3 at 6 in.
Pier No. 4	North	7 at 2.5 in.	2 at 6 in.
	Head	2 at 2.5 in.	3 at 6 in.
	South	8 at 2.5 in.	4 at 6 in.
Pier No. 6	North	3 at 2.5 in.	
	Head	2 at 2.5 in.	
	South	6 at 2.5 in.	5 at 6in.
Coasting	North	6 at 2.5 in.	
	Head	1 at 2.5 in.	
	South	5 at 2.5 in.	
Marginal	Single	4 at 2.0 in.	9 at 3 in. 1 at 2 in.
P. Mex.	Single	7 at 2.5 in. A.P.	6 at 8 in. refined
		1 at 4.0 in. C/I 2 at 3.0 in. C/I 4 at 2.5 in. C/I	10 at 12 in. fuel-oil

CONSULS:

Belgium
Brazil
Costa Rica
Cuba
Denmark
Dominican Republic
El Salvador
Finland
France
Guatemala
Great Britain
Honduras
Holland
Norway
Panama
Spain
Sweden
Switzerland
U.S.A.
West Germany

REPAIRS: Hull and machinery repairs can be effected by "Astilleros de Veracruz" (Vera Cruz Shipyard Company).

DRY DOCKS: "Astilleros de Veracruz S.A." has 4 docks, 2 floating and 2 dry docks. The largest of them is Floating Dock No. 4 with the following characteristics:

Length on stocks	169.210 m.
Internal useful beam	30.400 m.
Height of keel stocks	1.400 m.
Max. draft on keel stocks	8.200 m.
Lifting capacity	12.800 tons

Dock No. 2: with capacity for vessels up to 10.000 tons

Useful length	154.000 m.
Useful beam	19.400 m.
Draft	5.180 m.

Served by a 45 ton capacity crane

Floating Dock No. 3: with 3,000 ton capacity lifting capacity

Useful length	25.900 m.
Useful beam	13.550 m.
Draft	5.800 m.

Served by 2 (two) cranes of 10 ton capacity each.

Dry Dock No. 1

Length	45.720 m.
Useful beam	7.920 m.
Draft	2.130 m.

SURVEYORS: Lloyds, Norska Veritas and Germanischer Lloyd.

GANGWAY/DECK WATCHMEN: Available if required.

OPENING/CLOSING HATCHES: Mechanical hatches usually opened by crew, otherwise by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits per man and will attend as necessary for further issues.

CARGO GEAR: Piers 1 and 2, 4×20 tons, 6×10 ton, 3×5 ton and 10×4 ton mobile cranes. Various cranes at piers 4 and 6. 2 floating cranes available max. lift 46 tons.

REPATRIATION: Possible, arranged by Agent.

AIRPORT: 8 km. from Vera Cruz, flights daily to Mexico City.

TIME: GMT minus 6 hours all year round.

HOLIDAYS: During the year the following holidays are observed: 1st January, 5th February, 21st March, 1st May, 5th May, 16th September, 12th October, 20th November and 25th December.

POLICE/FIRE/AMBULANCE: Police – 2.28.23, Fire brigade – 2.25.00, Red Cross – 2.01.40.

TELEPHONES: Available on most piers but not on vessels.

SERVICES: Provisions, laundries, and dunnage available. Garbage must be removed every 48 hours.

SHORE LEAVE: Possible.

DEVELOPMENTS: A new petroleum quay is to be constructed to take 2 tankers of 40,000 tons.

GENERAL:

Government Secretariat – Local Administration Office

In accordance with the stipulations of Article 75 of the General Local Administration Law, vigilance of foreign crew members in vessels of any nationality tied up in national ports, together with visits or stays by the said crew members will be subject to the following requirements:

I. Heads of Local Government will designate accordingly personnel who will carry out vigilance of the vessel, in accordance with the provisions of Section II of Article 29.

II. Crew members may visit ports during the stay of the vessel, provided they deposit at the Local Administration Office their identity documents which for such purpose may be issued to them and their passports and other documents, all of which will be returned to them on re-embarkation.

III. Shipping companies, their Agents or consignee firms, for all legal purposes shall be responsible for the complete embarkation of crew members and for the costs involved in repatriating any who may remain behind after the vessel sails. When a crew member wishes to stay in the country, he must obtain documentation in compliance with one of the categories as set out in the appropriate Law and Regulations.

SHIPMASTER'S REPORT:

Documents:

1 Visaed and 9 Plain Spanish Crew Lists.
1 Visaed and 5 Plain Passenger Lists.
1 Visaed and 2 Plain Spanish Stores Lists.
2 Crew Customs Declarations.
5 Cargo Manifests.
1 Arrival form.

The Customs require a complete list of all shop goods priced in U.S. Dollars, failure to produce this will cause confiscation and $10,000 fine. The Customs thoroughly check bond and beer locker and seal same. All storerooms are also checked.

The Agricultural Inspector insists that all dry stores are fumigated and kept under seal for 24 hours. All refrigerated stores – except U.S.A. meat is sealed up.

Pilotage: Pilot boards 1 mile W.N.W. of Angeguda de Adentro Light beacon from black boat flying pilot flag.

Tugs: 2 tugs available for berthing.

Restrictions: Port open day and night. Prevailing Northerly winds are sometimes too strong to allow ships movement in harbour.

Health: Health authorities board after berthing.

Radio: ETA to be sent 48 hours in advance via XFB Cuidad de Carmen. Agent orders Pilot.

Fuel: Bunker C and Diesel are available. A mixing machine is being installed to supply intermediate. Bunkers are supplied from most quays and are expensive for foreign ships.

Consul: There is a British Consul.

Repairs: There are 3 drydocks and all repairs can be done.

Surveyors: There are Lloyds and N.B. Surveyors available.

Airport: The airport is six km. from Vera Cruz with twice daily flights to Mexico city.

AUTHORITY: Port Captain.

Monaco

NOTES

Please also advise Shipping Guides (Services) Ltd.

MONACO: 43.44 N. 07.26 E. (See Plan)

PORT LIMITS: The seaward boundaries of the port are materialized by the 2 breakwaters at the Eastern entrance.

DOCUMENTS:

2 Crew Lists.

2 Passenger Lists – 3 Landing Passenger Lists.

2 Store Lists.

1 Manifest (cargo).

1 Bill of Health.

Ship's Register.

PILOTAGE: ETA via Monaco Radio – Channel 16, 12, 23, 15, within range. Pilot boat is a small white tugboat with a black "P" painted on the hull. Meets vessels 1 mile radius from the harbour entrance.

ANCHORAGE: One half mile East of the Southern breakwater lighthouse. Depth at the anchorage 68 m.

MAX. SIZE: Max. length 130 m. Stern to the pier on the West side or alongside the North quay, only from October to March and with 8 days notice. Max. draft allowed: West Pier 8 m; North Quay, 6 m.

HEALTH: Health Declaration must be handed to the Customs. If coming from neighbouring countries (France, Italy, Spain) not requested.

RADIO: Monaco Radio VHF Channel 16. Port operations Ch. 12. Public telephone calls Channel 23 and 25.

RADAR: No port radar service.

TUGS: Pilot boat 96 h.p. available without notice. 1 tug boat 200 h.p. and 1 tug boat 450 h.p. Available without notice.

BERTHING: All 3 quays plus inner sides of the breakwaters and Western "T" pier are available for mooring yachts stern to. The port may be congested during the Summer season. The possibility remains of anchoring off the dock.

MEDICAL: There is a state hospital fully equiped for surgery etc.

FRESH WATER: Can be supplied at all berths alongside the quay. If vessel on roads water may be provided by barge up to 500 tons per day, with one week notice. Tel. Cannes 39.36.12.

FUEL: There is a fuel berth in port for yachts. No heavy fuel.

CONSULS: Most countries are represented in Monaco.

CUSTOM ALLOWANCES: Same as in French ports.

REPAIRS: Only for yachts.

DRYDOCKS: None.

REPATRIATION: Good railway connections.

AIRPORT: Nice – Cote d'Azur. Distance 25 km.

TIME: May to September GMT plus 2 hours. Other months GMT plus 1 hour.

HOLIDAYS: New Year – National Holiday, (Jan. 27); Easter Monday, (May 1st); All Saints Day – His Serene Highness birthday Nov. 19. Harbour services work on Sundays and Holidays.

POLICE/FIRE/AMBULANCE: Maritime police Quai Antonie 1st Tel. 30.22.39; Ambulance/Police Secours Tel. 17; Fire brigade Tel. 18.

TELEPHONE: Available at all berths.

SERVICES: Engine repairs. Electronics. Maintenance for yachts. 220 volts available at all berths. TV aerial sockets at all berths free of charge.

SHORE LEAVE: Crew members allowed ashore.

DEVELOPMENTS: New yacht harbour now under construction.

REGULATIONS: *Recommendations to Ship-Owners, Masters and Crew Members:* Ship-owners, Masters and crew members are strongly requested not to dispose of hydrocarbon, household refuse and other rubbish into the Monaco harbour (i.e. cartons and mainly plastic containers).

Used motor oils and other petroleum residues must be transferred into tanks exclusively provided for this purpose at the beginning of the North and South jetties and on the landing stages facing the Rainier III swimming pool.

These tanks are signposted with panels bearing the words "H Huiles Usees" (used oil) in red letters on a white background.

Household refuse and other rubbish are to be put into garbage containers located around the harbour throughout the year. Furthermore, during the Summer, special individual bags are made available free of charge to all in-coming vessels.

Those responsible for ships equipped with used water tanks or bilges are requested to empty these containers off the coasts of the Principality at a minimal distance of 3 miles.

Those whose ships are not equipped with these used water tanks are requested not to dispose of their used water during their stay in the Monaco harbour, and to use the sanitary installations and facilities made available to them within the harbour.

Offenders infringing the above provisions will be penalized in accordance with the stipulations of Law No. 954, dated April 19, 1974, dealing with the fignt against water and air pollution.

AUTHORITY: Captain J.B. Cornelius – Harbour Master.

Morocco

AGADIR: 30.25 N. 09.38 W.

DOCUMENTS:
- Health Declaration.
- 4 Cargo Manifests.
- 6 Stores Lists.
- 6 Crew Lists.
- 6 Passenger Lists.

PILOTAGE: Compulsory. Pilot boards at port entrance. International code signals used.
ANCHORAGE: Good anchorage in open roadstead.
MAX. SIZE: Up to 29 ft. draft.
HEALTH: Pratique given immediately after berthing when port doctor boards.
TUGS: 2 tugs available, 1 × 350 h.p., 1 × 1,275 h.p.
RADIO: Agadir Radio operates 24 hours a day.
BERTHING: Alongside pier: berth 475 m. long, 9 m. depth; berth 380 m. long, 6 m. depth.
MEDICAL: Doctor and hospital facilities available.
FRESH WATER: Available from pipe-line at berths.
FUEL: Fuel and gas oil available from pipe-lines at berths.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
STEVEDORES: ETA required 24 hrs. in advance to arrange gangs.
OPENING/CLOSING HATCHES: Performed by stevedores.
CUSTOMS ALLOWANCES: Crew allowed normal daily consumption of tobacco, wine and spirits.
IDENTIFICATION CARDS: Required.
CONSULS: France, Spain, Belgium and Portugal represented locally.
REPAIRS: Small machinery and electronic repairs can be effected.
TIME: GMT plus 1 hour permanently.
POLICE/FIRE/AMBULANCE: Police, tel. 23-49; Fire, tel. 22-43; Ambulance, tel. 19.
HOLIDAYS: 1st January, 6th January, 19th March, Maundy Thursday, Good Friday, 1st May, Ascension Day, Corpus Christi, 29th June, 18th July, 25th July, 5th August, 15th August, 12th October, 1st November, 8th December, Christmas Day. Work may be arranged on all holidays except Good Friday.
SHORE LEAVE: Allowed.
AUTHORITY: Director del Puerto.

AGENT: Ernest Corcos, PO Box 54, Agadir. Tel. 24-55 and 33-31. Telex 810-18. Cables: Ercos Agadir.

CASABLANCA: 33.36 N. 07.37 W. (See Plan)

PORT LIMITS: Vessels considered as "arrived" when passing buoy CA 5 in position 33° 37′ 05″ N. 7° 35′ 02″ W.
DOCUMENTS:
- Certificate of Registration.
- Cargo Manifests.
- Crew Lists.
- Passenger Lists.
- Customs Declaration.
- Bill of Health.
- Ship's Entry Declaration.
- International Tonnage Certificate.

PILOTAGE: Compulsory for all merchant vessels of 100 tons and over, in the area between the meridians 7° 37′ 10″ W. (the root of Jetee Moulay Youssef) and 7° 33′ 50″ W. (Table d'Oukacha) and South of the parallel 33° 37′ 40″ N. Pilotage is available day and night. The Pilot meets vessel at the CA5 buoy.

A red flag displayed at the signal station by day indicates that the Pilot cannot come out, on account of the sea, but vessels may enter the port at their own risk, and the Pilot will await them under the shelter of jetee Moulay Youssef. Should bad weather prevent the Pilot from coming out, a vessel should not attempt to enter the harbour at night. The Master may contact the Pilot station for port radar service by VHF Channel 12.

ANCHORAGE: The anchorage outside Casablanca harbour is partially protected from winds between S. and W. but a Westerly swell finds its way into the bay. With a heavy Westerly or North-westerly swell the anchorage becomes dangerous.

The holding ground in most places outside the harbour is poor, but a berth with good holding ground may be obtained in a depth of 13 fathoms N. of jetee Moulay Youssef. There are numerous anchorage berths in the harbour, some at mooring buoys, in depths up to 12 m. 8 (42 ft.).

MAX. SIZE: Max. length permissible, about 884 ft.; max. breadth permissible, about 105 ft.; max. draft permissible, about 32 ft.; but normally 30 ft. for berthing alongside. Tankers: up to 34 ft. draft.
HEALTH: Masters must fill in the declaration of health and display the "Q" flag, to obtain pratique. In the event of any suspected disease or fever on board, Masters have to warn their Agent before the ship's arrival.
RADIO: The name of radio station for ETA cables to Agents, receivers, etc., is Casa Radio.
TUGS: There are 6 tugs of 800–1,500 h.p. 3 of them are sea-going tugs fitted with modern salvage apparatus. Normally tugs join the vessel at port entrance. To call them, 4 long blasts and 1 short for one tug, 4 long blasts and 2 short for 2 tugs, etc. Ship's lines are mostly used.
BERTHING: To arrange berth, ETA message should be given 24 hours before the ship's arrival.

Mooring. When making fast to the jetty by the stern, the anchor should be let go at a sufficient distance from the jetty to allow for a good scope of hawsers.

Vessels are recommended to secure with special 10-in. coir hawser tailed with wire. It is recommended to moor head to the swell, but in bad weather a vessel should be ready to leave at short notice.

CARGO HANDLING: Phosphate loading: up to 5,000 t.p.h. Depth alongside 32 to 26 ft.

Grain Handling: discharging 800 t.p.h., loading 400 t.p.h. Depth at silo berths 30 ft.

Containers: straddle carrier for handling up to 20 ft. containers.
Roll-on/roll-off: three berths for roll-on/roll-off vessels, depth 30 ft.

STEVEDORES: There are 13 stevedoring companies. Normal working days are in two shifts (from 0700 to 1500 hrs. and from 1500 to 2300 hrs.). Ship's Agents arrange gangs in connection with stevedores. Two daily orders (at 1100 and 1600 hrs.) are made to fix the number of gangs.
MEDICAL: It is necessary for Agent to receive advance notice of required medical attention. Hospital facilities available. Only smallpox vaccination certificates are required.
TANKERS: There are 4 tanker berths, *(a)* one for Import and Export of white products and max. permitted draft 34 ft. (Berth P3). *(b)* three berths for Import and Export of black products. These berths (No. 60, 61 and 62) are situated inside the harbour, vessel's draft should not exceed 30 ft.
FIRE PRECAUTIONS: Two firemen remain on board tankers while vessel berthed alongside. One fireman is required for other vessels carrying dangerous cargo.
FRESH WATER: Numerous feeders along berths. Also delivery by barges is possible.
FUEL: All grades available. Ex-wharf or by barge.
CONSULS: The following countries are represented by consuls in Casablanca:

Austria
Spain
Italy
Haiti
Finland
Great Britain
Greece
Germany
Norway
Sweden
Yugoslavia
Brazil
Netherlands
Algeria
Argentina
Belgium
Denmark
France
Poland
Panama
U.S.A.
Portugal

GANGWAY/DECK WATCHMEN: It is necessary to have watchmen on board. They are hired by the ship's Agent.
OPENING/CLOSING HATCHES: This work is normally carried out by stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes are permitted for each crew member to be held out of bond.
IDENTIFICATION CARDS: Needed.
REPAIRS: Only small repairs and dry docking works are carried out.
DRY DOCKS: One large dry dock, 152 m. long and 22 m. wide (lifting power 10,000 tons). Three slips for ships up to 700 tons.
REPATRIATION: Facilities exist for effecting crew change and arranging any necessary repatriations.
AIRPORT: Distance from airport, 25 miles. International connections.
TIME: GMT in Winter, GMT plus 1 hour in Summer.
POLICE/AMBULANCE/FIRE: Police, 2210–74 or 19; Ambulance, 15; Fire, 15.
TELEPHONES: Only arrangements for placing telephones on board passenger ships are possible.
SHORE LEAVE: Crew members are allowed ashore.
AUTHORITY: Directeur du Port.

AGENT: Lasry Maroc, 61, Avenue de l'Armee Royale, Casablanca. Telex: 21949–21092. Tel.: 2688–75 – 2669–46. Cables: "Jolasry".

EL JADIDA (Mazagan): 33.15 N. 08.31 W. (See Plan)

DOCUMENTS: As for "Casablanca".
PILOTAGE: Arranged by Agent, basis vessels ETA given in advance. Pilot boards about 2 miles from the port entrance.
ANCHORAGE: About half a mile from head of North jetty in depths of 13 to 14 m. Hard rock bottom covered in sand. Holding ground is fair only.
RESTRICTIONS: The port comprises an entrance channel 50 m. wide and an outer harbour area 7 hectares, partially dredged to 3 m. depth to make a waiting basin. In the Southern part of the outer harbour is a quay, called the barge quay. 120 m. long, dredged to 6 m. depth.
MAX. SIZE: No limitations for vessels anchoring. For entering harbour, max. length 80 m., draft 5 m., entering at high water.
RADIO. No local radio station. Use Casa Radio for messages to Agent.
TUGS: Available. Normally join vessel 2 miles from port entrance.
CRANES: Two electric cranes and 1 diesel crane available.
MEDICAL: Hospital facilities available. Vaccinations can be arranged.
FRESH WATER: Available at the quay.
FUEL: Can be supplied subject to 24 hours notice.
WATCHMEN: Recommended to employ watchmen.
OPENING/CLOSING HATCHES: Work performed by ship's crew.
CONSULS: The only consular representatives are those of France and Portugal.

REPATRIATION: Can be arranged via Casablanca.
REPAIRS: Small repairs can be done on board, or parts sent to Casablanca. One small dry dock reserved for Port Authority vessels and fishing boats.
AIRPORT: Nearest commercial airport is Nouasseur. The airport at Camp Cazes, Casablanca, operates for internal flights only.
TIME: GMT in Winter, GMT plus 1 hour in Summer.
HOLIDAYS: Sundays and holidays, except for National holidays, can be worked on payment of overtime.
POLICE/AMBULANCE/FIRE: Police, tel. 19; Ambulance, tel. 15; Fire, tel. 15.
TELEPHONES: Cannot be connected to vessel, but telephone situated on the quay.
AUTHORITY: Ingenieur des Travaux Publics.

AGENT: A. Adigard des Gautries, BP 52, El Jadida.

KENITRA: 34.17 N. 06.30 W.

Situated on the left bank of the Oued Sebou, 17 km. from the Atlantic.
PILOTAGE: Pilotage is compulsory for entering and leaving port. Vessels must wait outside the port entrance for the tide. It is possible to enter from 2 hours before until 1 hour after high water during the night, and from 3 hours before until 2 hours after high water during the day. The Pilot boards vessels at river mouth. The Pilot will be on station 2 hours before high water.

On arrival at the Roads or after 0830 hrs., call the Pilotage Department and advise arrival time at the Roads and draft.

Pilotage Department on VHF Channel 16 and 2182.
RESTRICTIONS: From the mouth of the river up to the port is a dredged channel. Depths are 4.20 m. during neap tides and 5.40 m. during spring tides. Height of tide during neap tide is 2.60 m. Height of tide during spring tide is 3.80 m. The constant is 1.60 m.

During the Winter it is recommended to stay outside the port in strong squalls. Ships are advised by Kenitra port radio of the possibilities for entering port.

Between November and April there is a total of 6 or 7 individual days when the port is closed to navigation, due to weather conditions.

Vessels are berthed and unberthed in daytime only at present time.
RADIO: Messages to ship's Agent should be sent through Casablanca radio. In the ETA message to Agent, also advise vessel's draft. There is a radio station at Kenitra for port use only. Watch-keeping hours are only during high water, on 2182 k/Hz.
TUGS: Two tugs of 250 h.p. and one of 130 h.p.
BERTHING: The outer port used only by trawlers, and a mooring quay of 360 m. length belonging to the Royal Moroccan Navy. The length of main quay is 870 m. and includes 10 berths. In addition to the above there is a jetty for wine vessels, and a jetty for oil tankers.
FRESH WATER: Supplied alongside the quays.
FUEL: There are supplies of diesel oil, gas oil and petrol in the port. These products supplied by tanker lorry along the quay.
REPAIRS: There are workshops for small running repairs in the port. There is a slipway for ships up to 400 tons.
CONSULS: The Consular representatives at Kenitra are those of Belgium, France, Portugal.
AIRPORT: The nearest commercial airport is that of Rabat-Sale and there is a small airfield at Kenitra.
AUTHORITY: Directeur du Port.

AGENT: Consortium Industriel Commercial Maritime, 19 Boulevard Imam Ali, Kenitra. Tel. 21 39, 28, 37, 22 56 (2 lines). Telex: 31030 Boutrans 31966 Incomar. Cables: "Incomar Kenitra".

MELILLA: 35.18 N. 02.57 W.

DOCUMENTS:
- Health Declaration.
- 4 Cargo Manifests.
- 2 Stores List.
- 5 Crew Lists.
- 5 Passenger Lists.

PILOTAGE: Compulsory for vessels over 500 tons. ETA to Agent required at least 10 hours before arrival to arrange Pilot. Pilot boards at anchorage near port entrance. International code signals used.
ANCHORAGE: Half a mile East of port entrance, in depths of 14 to 20 m.
RESTRICTIONS: Entrance normally in daylight only. In case of emergency vessel may enter at night.
MAX. SIZE: Up to 32 ft. draft.
HEALTH: Pratique obtained immediately after berthing when vessel boarded by health officials.
TUGS: One tug of 550 h.p. available.
MEDICAL: Doctors and hospital facilities available. Vaccinations can be arranged.
TANKERS: One oil berth for tankers up to 32 ft. draft.
FRESH WATER: Available at all quays.
FUEL: Available subject to advance notice.
GANGWAY/DECK WATCHMEN: Available. Consignee Agents have their own watchmen for goods on the quay.
OPENING/CLOSING HATCHES: This work is carried out by stevedores.
CUSTOMS ALLOWANCES: Crew allowed normal daily consumption of tobacco, wine and spirits.
IDENTIFICATION CARDS: Required.
CONSULS: France and Italy are represented locally.
REPAIRS: All types of engine and hull repairs can be effected for smaller vessels.
REPATRIATION: All facilities available.
AIRPORT: Situated 1 km. from the city. 3 daily flights to Malaga, except on Sundays.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: 1st January, 6th January, 19th March, Maundy Thursday, Good Friday, 1st May, Ascension Day, Corpus Christi, 29th June, 17th July, 18th July, 25th July, 15th August, 12th October, 1st November, 8th December, Christmas Day. Work may be arranged on all holidays except Good Friday.
POLICE/FIRE/AMBULANCE: Police, tel. 1741 or 1744; Fire, tel. 1693; Ambulance, tel. 1441.
TELEPHONES: It is possible to arrange for a telephone to be placed on board.
SHORE LEAVE: Allowed.
AUTHORITY: Ingeniero Director del Puerto.

AGENT: Jose Salama & Co., BP 5, Melilla.

MOHAMMEDIA: 33.45 N. 07.22 W. (See Plan)

DOCUMENTS:
- Bill of Health.
- 3 Crew Lists.
- 3 Passenger Lists.
- 3 Provisions Lists.
- Manifests and Ship's Papers for Agent.

PILOTAGE: Compulsory for vessels entering or leaving the harbour or shifting berth. Pilot available for vessels arriving during night and wishing to enter the basin when conditions are possible.
ANCHORAGE: Three good anchorages in depths of 11 to 6.5 fathoms about a mile N.E. of the entrance, and N.W. and S.E. of the pipe-line area.
RESTRICTIONS: Vessels with a draft over 15 ft. wishing to berth in the basin, are obliged to wait for tide.
MAX. SIZE: Sea line installation: tankers up to 45,000 tons d.w.t.

Imodco Buoy Berth: tankers up to 100,000 tons d.w.t.

For the basin: max. length 150 m., max. draft 6.9 m. (22 ft. 8 in.).
HEALTH: Port sanitary control officer boards immediately after arrival for pratique delivery. In the event of any suspected disease or fever on board, it is necessary to advise by radio to Agent 24 hours before arrival. Pratique is automatic after calling at another port of Morocco.
RADIO: Casablanca Radio station.
TUGS: There are no tugs but 3 Pilot boats of 150 h.p. will assist vessels if necessary, or tugs can be ordered from Casablanca.
BERTHING: Vessels up to 150 m. in length and drawing up to 6.9 m. (22 ft. 8 in.) at Spring tides and 5.4 m. (18 ft.) at Neaps.

Quay No. 1 has a length of 70 m. with a depth of 8.50 m. (28 ft. alongside).

Quay No. 2 has a length of 170 m. with a depth of 5.50 m. (18 ft. alongside).

Quay No. 6 has a length of 60 m. with a depth of 6.00 m. (19 ft. 8 in. alongside).
TANKER BERTHS: Single buoy mooring located in position 33° 44′ 01″ North, 7° 23′ 02″ West in depth of water 70 ft. Diameter of swinging area: 850 m. The buoy is marked by a white light flashing once every 3 seconds, also equipped with radar reflector and fog horn, which sounds, once every twenty seconds.

Vessels may be berthed by day or night. Mooring is effected by 2 floating nylon ropes, each 40 m. long, made fast to the fore end of the vessel.

The buoy is connected to a floating crude oil line, 20 in. diameter, with two flexible hoses of 16 in. diameter. One flexible hose of 8 in. diameter is available for discharging refined products. There are no facilities for discharge of slops or dirty ballast.

There is also a conventional buoy berth, in depth of 50 ft. Diameter of discharge lines 14 in. No slop discharge facilities.

Smaller tankers may also berth at harbour quay No. 1.
STEVEDORES: The loading and discharging capacity of general cargo or timber is 300 tons per day. Gangs are arranged by the stevedores according to the cargo plan given by the consignee to the harbour authorities.
MEDICAL: There is the hospital in Mohammedia, and other hospitals and clinics in Casablanca (16 miles away). Vaccinations can be arranged.
DENSITY: 1025.
FRESH WATER: Water can be supplied at any time alongside the quays at the rate of 15 t.p.h. There is no fresh-water supply to the offshore tanker terminals.
FUEL: Available from Casablanca at 48 hours notice.
FIRE PRECAUTIONS: All tankers are confined by gates and watched over by special firemen.
GANGWAY/DECK WATCHMEN: Services of watchmen are recommended.
OPENING/CLOSING HATCHES: This work is normally carried out by crew. When carried out by stevedores the cost is charged.
IDENTIFICATION CARDS: Passport required and police permit for leaving the harbour.
CONSULS: There is no consul in Mohammedia. All are in Casablanca.
AIRPORT: The nearest airport for international flights is Nouasseur. Casablanca Airport operates internal flights only.
TIME: GMT in Winter. GMT plus 1 hour in Summer.
HOLIDAYS: 1st January; 1st May; 3rd March; 18th November; and any other religious holidays which are not at regular dates. Only on

two days (1st January and 1st May) no cargo work can be arranged.
POLICE/AMBULANCE/FIRE: Police, 21.51; Ambulance/Fire, 15.
SHORE LEAVE: Allowed.
DEVELOPMENTS: A new refinery is to be built at Mohammedia and is due to start production in 1976.
AUTHORITY: RAPC, Port de Mohammedia.

AGENT: Marbar S.A., BP 169, 81 Ave. Houmane, Elfatouaki, Casablanca. Tel. 2607–21. Telex: 21 011, 21 012. Cables: "Barimer Casablanca".

SAFI: 32.19 N. 09.12 W.

DOCUMENTS: Clearance procedure is very simple. 3 Crew Lists, 1 Personal Effects Lists, 3 Passenger Lists and 1 Stores List only are required. Other documents are presented on berthing.
PILOTAGE: Arranged by vessel's Agent, to whom a correct ETA should be given. There is VHF radio contact with the pilot station and Harbour Master's office. The pilot boat is located inside the harbour and the Pilot boards in the anchorage. Pilot ladder only is required.
ANCHORAGE: Recommended anchorage is S.W. of harbour entrance. Safe holding ground for 25,000 d.w.t. vessels. Vessels should keep port entrance clear.
MAX. SIZE: Vessels with a draft of more than 28 ft. and up to a max. of 30 ft. enter and sail at higher water.
HEALTH: Health Officer boards shortly after berthing but Agent must be advised before arrival if suspected disease or fever on board. Health clearance in one Moroccan port holds good for the next.
RADIO: Casablanca Radio for normal traffic or Safi Radio for local R/T traffic. Harbour Radio VHF Channel 16.
TUGS: Tugs stand by vessel inside breakwater and, usually, ship's lines are used.
BERTHING: Vessels berth in order of arrival. Port used for export of manganese and barytes. No night entry after 1900 hrs.
STEVEDORES: Gangs are arranged by vessel's Agent. Night work is possible from 1800 to 2200 hrs. and, very exceptionally, until 2400 hrs.
MEDICAL: Advanced notice of required medical attendance is advisable but not essential. Modern hospital and clinic are available. Smallpox vaccination only is necessary except when vessels have called at cholera and yellow fever ports.
TANKERS: Only small tankers used in this port. White products and gas oil imported; no export. Ammoniac tanker berth max. draft high water 30 ft.
DENSITY: Density varies between 1024 and 1026.
FRESH WATER: Availability not limited, by hoses from quay.
FUEL: Limited supplies gas oil; diesel available but must be stemmed. Fuel oil and large quantities diesel, gas oil can be delivered by tanking lorry from Casablanca.
GANGWAY/DECK WATCHMEN: Watchmen necessary. One watchman day and night.
OPENING/CLOSING HATCHES: Normally done by crew but can be arranged by stevedores with advance notice.
CUSTOMS ALLOWANCES: 200 cigarettes, and one open bottle of spirit allowed each man. Bond is sealed and heavy fines are imposed by Customs for smuggling.
IDENTIFICATION CARDS: These are needed.
CONSULS:

Denmark,	Tel. 30.39	Portugal,	Tel. 23.58
Finland,	Tel. 31.40	San Salvador,	Tel. 28.76
France,	Tel. 27.97	Sweden,	Tel. 29.06

REPAIRS: Major repairs not possible; small workshops only for repairing fishing boats.
REPATRIATION: Repatriation by air or sea through Casablanca, 150 miles away.
AIRPORT: Nearest at Novasseur, served by principal European airlines.
TIME: Local time is GMT in Winter and GMT plus one hour in Summer.
HOLIDAYS: On the following holidays no work is possible: 1st January (New Year's Day); 3rd March (Coronation Day); 1st May (Labour Day); 18th November (Independence Day). Other Moslem and Christian holidays are subject to last minute decisions as far as tariff is concerned, but work can be arranged.
TELEPHONES: No telephones can be placed on board. Public telephone available on the quay during working hours only.
GENERAL: Masters are strongly advised to take local currency from their Agent. Landing of foreign currency encourages black market transactions and incurs confiscation and heavy fines as well as delays by the Customs authorities.
SHORE LEAVE: Police permits are required by Liberty men and are delivered by Immigration Authorities.
AUTHORITY: Capitainerie de Port.

AGENT: Mabar S.A. Branch Office of Marbar, Casablanca.

TANGIER: 35.47 N. 05.48 W. (See Plan)

PORT LIMITS: Vessels considered to be an "arrived ship" subject to Charter Party terms, on passing the line joining Pointe de Malabata, 35° 48′ 53″ N. 05° 45′ 00″ W. and the mouth of l'Oued el Youd, 35° 47′ 26″ N. 05° 50′ 00″ W.

DOCUMENTS: Required on arrival:
Health Declaration.
2 Crew Lists.
7 Cargo Manifests.
5 Lists of Passengers Disembarking.
4 Lists of Passengers in Transit.
Required on departure:
5 Cargo Manifests.
5 Manifests of Passengers Embarking.
PILOTAGE: Pilotage is compulsory for ships of more than 50 g.r.t. for entering, leaving and shifting in harbour. Vessels arriving during the night must anchor outside the port, and are boarded by the Pilot after 0600 hrs. the following morning. Pilot on VHF Channel 16. Vessels should advise arrival 6 hours in advance.
ANCHORAGE: There are good anchorages to the East and Southeast of the breakwater head in depths of 10–16 m.
RESTRICTIONS: The harbour area between the breakwater and the extremity of the main pier has a min. depth of 9 m. Max. height of tide is 2.40 m., min. height is 0.10 m. West to S.W. winds from October to May. N.E. to Easterly winds from May to October, often very strong (the Levante).
TUGS: The port owns 4 tugs, 1,500, 500, 375 and 250 h.p. respectively. 2 of these tugs are equipped with fire-fighting equipment.
BERTHING: The port is protected by a breakwater 1,300 m. long on which is a tanker terminal dredged to 9 m. depth, 290 m. of quay dredged to 9 m., 160 m. of quay dredged to 8.50 m. and 100 m. of quay dredged to 5 m. These last 2 berths, which are reserved, the first for large car ferries and the second for the Gibraltar Ferries, are equipped with special ramps for disembarking vehicles.

In the South of the dock enclosed by the breakwater is a pier at which are 2 berths, 1 of 330 m. length dredged to 9 m. over 130 m. length and with 6 m. depth over 200 m. length. The other berth is dredged to 4 m. depth over 100 m. length and to 3.50 m. depth over 100 m. length.

In the Western part of the harbour there is a jetty of 100 m. length with berths on both sides each having depths of 6.50 m. This jetty is used by passenger ferries and is equipped to serve vessels discharging vehicles at the stern.

The port also includes a small jetty called the Yacht Jetty with depths varying from 2 m. at its foot to 3.50 m. at the jetty head. The small harbour inside the jetty includes the quays of the fishing port, the Yacht Club and barge berths.
FRESH WATER: Replenishment of fresh water can be made at all times alongside the quays at the rate of 30 t.p.h.
FUEL: There are no refuelling installations at the quays. Only very small quantities can be supplied by tanker lorries belonging to the oil companies.
STEVEDORES: Normal working hours are from 0800–1200 hrs. and from 1400–1800 hrs. Ships may be loaded and discharged outside these hours on payment of overtime. Usual loading and discharging rates are as follows: 15–18 t.p.h. goods in sacks; 12–15 t.p.h. for bales; 10 t.p.h. for general cargo; 7–8 t.p.h. for cork.
REPAIRS: There are no facilities for repairs in the port.
AUTHORITY: Regie d'Aconage du Port de Tanger.

AGENT: Lasry Maroc (Tangier), 4 rue de la Mediterrannee, Tangier. Telex: 33064. Tel. 335–75–325–76. Cables: "Jolasry".

Mozambique

BEIRA: 19.46 S. 34.50 E. (See Plan)

PORT LIMITS: Vessels are considered to be "arrived ships" when they enter the pilotage area, i.e. when they enter to within a radius of 5 miles from the pilot boat. The custom of the port is that vessels are in "free pratique" only when they have entered port and have been cleared by the Immigration Authorities. Immigration will only clear vessels in port.

DOCUMENTS:

Customs Clearance from last port.
Health Certificate.
6 Crew Lists.
6 Lists Passengers in Transit.
7 Lists Passengers Disembarking.
2 Stores Lists.
2 Lists Deck Stores.
2 Lists Cargo in Transit (main items of cargo only).
6 copies of Manifest of Beira Cargo.

PILOTAGE: Compulsory for all ships other than naval vessels. Ship's name, ETA and draft should be radioed via Beira Radio, call sign CRS, 24 hrs. in advance to Port Captain Beira and owner's Agent.

The pilot boat – black hull, grey upperworks, black funnel with white "P" – is stationed 19° 52′ 47″ S., 34° 57′ 21″ E. Pilot boat call sign CRL H – W/T: listens on 500 kc/s., replies on 480 kc/s., – R/T: listens on 2,182 kc/s., replies on 2,341 kc/s. – VHF: frequency 156.6 Mc/s. (Channel 12).

Unless instructed to the contrary by the pilot boat, vessels with a draft under 25 ft. anchor by "P" buoy, 19° 52′ 47.3″ S., 34° 57′ 21.1″ E., and vessels with draft over 25 ft. anchor between "P" and "A" buoys, 19° 56′ 20.1″ S., 35° 02′ 44″ E.

In bad weather pilot boat may leave above position and enter port. In such cases vessels should anchor as indicated above, weather permitting.

ANCHORAGES: At bar, "P" and "A" buoys as indicated above. There is anchorage for 4-6 ships, depending on size, in inner harbour off Cabedelo sand-pit.

RESTRICTIONS: Ships with draft 18 ft. and under can enter at any time. Ships with draft over 18 ft. generally enter 2 hrs. either side of high water.

MAX. SIZE: Max. permissible length about 800 ft. Max. permissible drafts between 35-37 ft. at springs, about 30 ft. at neap tides.

HEALTH: Vessel to radio "Sanidade Maritima", Biera, their ETA and "All Well". If "All Well", Health Certificate given by Pilot.

RADIO: Vessels to route messages through Beira Radio -call sign CRS. Agents radio ships through same station. Naval Radio Station -call sign CRX 3 available for distress signals.

TUGS: Join incoming vessels at inner anchorage, about 1 mile distant from quays. Ship's lines used. 4 tugs available, up to 3,200 h.p.

BERTHING: No night berthing done unless with prior consent of Chief Pilot, otherwise no specific requirements.

Cais do Pungue: length, 1,679 m.; depth, max. 17 m., min. 10 m.

LW depths alongside wharf, berth No. 1, 33 ft.; No. 2, 31 ft. 03 in.; No. 3, 33 ft. 03 in.; No. 4, 32 ft. 01 in.; No. 5, 26 ft. 09 in.; No. 6, 26 ft. 03 in.; No. 7, 29 ft. 04 in.; No. 8, 27 ft. 02 in.; No. 9, 27 ft. 08 in. and No. 10, 31 ft. 06 in.

Chiveve Cais; length, 446 m.; depth, max. 10 m., min. 3 m.

CARGO-HANDLING FACILITIES: There is a mechanical ore appliance used mainly for minerals like chrome, etc. This appliance has an average loading rate of 400 t.p.h. It is equipped with only one spout.

Mobile Cranes: 25 cranes with capacity 1-10 tons.

Electric Cranes: 52 cranes at Pungoe Wharf with capacity 3-20 tons.

Steam Cranes: 19 cranes at Chiveve Wharf with capacity 3-20 tons.

Molasses: 2 storage tanks, capacity 18,000 tons and 8,000 tons.

STEVEDORES: Ordered by Agent. Vessels should advise Agent their ETA at least 12 hrs. in advance (weekdays), 24 hrs. in advance (week-ends).

MEDICAL: No advance notice required for medical attention, unless urgent assistance necessary. Hospital facilities available. Crew members and passengers should be in possession of valid smallpox and yellow fever certificates (cholera certificate too if from cholera area) on international forms. Vaccination/fever inoculations and certificates may be obtained ashore if required.

TANKERS: Discharge lines white and black oils, 2×10-in. lines feeding into 12 and 14-in. lines leading to storage tanks. Also a 22-in. discharge line for crude oil. No slop discharge facilities. 2 tanker berths, max. permitted drafts about 32 ft.

DENSITY: In harbour area allow 3 to 4 in.

FRESH WATER: Available at all berths, pumping rate about 50 t.p.h. Also available from water barge.

FUEL: Fuel oil 1,000 Secs R. viscosity, marine diesel 43.1 Secs R., diesel 34.1 Secs R. 3-4 days advance notice required. Bunkers delivered when alongside, no bunkering barge available.

GANGWAY/DECK WATCHMEN: Compulsory to employ watchmen to prevent pilferage.

OPENING/CLOSING HATCHES: Can be done by either crew or stevedores. Often done by crew.

SHIP CERTIFICATES: Tonnage Certificate to be produced to Pilot, as certain port dues are based on vessel's registered tonnage.

CARGO GEAR: All gear supplied by stevedores except rope slings, rain tents, and spreaders for heavy lifts.

IDENTIFICATION CARDS: Required. Passport if possible, otherwise Seamen's Book.

CONSULS: British (Tel. 22032), Belgium (23284), France (24074), Greece (23898), Holland (23174), Italy (22197), Malawi (24312), Norway and Denmark (22091), Panama (271519), Rhodesia (24227), Swiss (23137), South Africa (271251).

REPAIRS: Most types of deck and engine repairs are possible, but major repair jobs are not undertaken.

DRY DOCKS: 1 dry dock 115×17×8.5 m., suitable for ships up to 5,000 tons.

REPATRIATION: Facilities exist for nationals of those countries maintaining diplomatic relations with Mozambique. A valid passport is necessary as Immigration authorities do not recognise a Seamen's Book as being a valid travel document.

AIRPORT: Beira Airport situated 7 miles from sea port. Regular flights to all destinations.

TIME: Local time 2 hrs. ahead of GMT. No alterations made to clocks during year.

HOLIDAYS: New Year's Day (1st January); National Day of Portugal (10th June); Corpus Christi (variable date); Assumption (15th August); Beira City Holiday (20th August); Republic Day (5th October); All Saints' Day (1st November); Restoration of Republic (1st December); Immaculate Conception (8th December); Christmas Day (25th December); No cargo work on 1st January and 25th December; on other holidays work continues normally in the port.

POLICE/AMBULANCE/FIRE: Port Police (Tel. 22920); Ambulance (22442); Fire (22222).

TELEPHONES: Can be placed on board. These telephones must only be used for local calls, not trunk calls.

GENERAL: Beira port works 24 hrs. per day, 7 days a week (except 1st January and 25th December) and overtime working is compulsory.

SERVICES Services available for tank cleaning, compass adjusting, minor repairs to radar and radio.

SHORE LEAVE: Crew members are allowed ashore, excepting nationals of those countries not maintaining diplomatic relations with Mozambique.

DELAYS: Generally no delays, but sometimes 24-48 hrs. delay following rain or bunching of arrivals.

AGENT: Allen, Wack & Shepherd, Lda., PO Box 270, Beira, Mozambique. Tel. 22091 (5 lines). Cables "Thaine" or "Allenwack". Telex: 7332 Thain Mo.

MAPUTO: 25.59 S. 32.36 E.

DOCUMENTS:

6 Crew Lists.
1 Stores List.
6 Passenger Lists.
Last Port Customs and Port Clearance.
1 List of Ports of Call.
1 Health Declaration (given by Pilots on arrival).
1 Entrance Report (given by Pilot on arrival).
1 Customs Entrance (given by Agent on arrival).
1 Railway Statistics Form (given by Agent on arrival).

PILOTAGE: Compulsory. Channels in 24-hour use, but sailing after 2400 only by special arrangement with Immigration. Berthing only during day-light. Pilot station about 26 miles from Maputo wharf if South entrance used; 55 miles if North entrance used.

Pilot granted only if 16 hours' notice of ETA given.

On arrival vessels can contact Pilot on VHF Channel 16 (working on Channel 12).

The pilot ladder is used together with the accommodation ladder in order that the Pilot has a climb of 9 ft. on the pilot ladder.

IMMIGRATION CLEARANCE: Inwards: 0600–1800 hrs. only inside harbour proper. Outwards: 0600–2400 hrs. except in special circumstances.

N.B. Vessels at the pilot station cannot obtain pratique because this includes Immigration clearance and can therefore be considered as not having arrived or not being in all respects ready to load.

ANCHORAGE: Inside harbour: One each for vessels drawing 33, 31, 27 and 26 ft. respectively. Six for vessels between 17 and 19 ft. Vessels delayed in berthing are brought in from pilot station at port's convenience.

RESTRICTIONS: Berthing during day-light only. Unberthing 0600 hrs. to 2400 hrs. with exceptions of Matola piers where ships can only unberth during day-light. Ships over 650 ft. may not pass through dredged Channels at night. Ships up to 23 ft. may sail at any time, any tide up till midnight. Thereafter arrangements to be made with the Pilot Department for ETD.

MAX. SIZE:

General Cargo Wharf	Length 750 ft.	Draft 34 ft.–37 ft.*
Matola Oil Pier	Length 750 ft.	Draft 32 ft. 6in.
Matola Ore Appliance	Length 820 ft.	Draft 34 ft.–37 ft.*

*Maximum drafts published by Port Authorities. Approximately 34 ft. to 37 ft. depending on tide.

HEALTH: Pratique granted by Pilot unless disease prevalent on board when Masters should telegraph "Saude" Maputo.

RADIO: Advice of arrival 16 hours before to the Port Captain or Chief Pilot and Port Health should be sent through the station CRX (Naval), operating 24 hours on 500 kc/s., replying on 437 kc/s., also 2000 to 0500 hrs. GMT on 8356 to 8376 kc/s. (replying 3642 kc/s.)

and 0800 to 2000 GMT on 12534 and 12564 kc/s. (replying 1299 kc/s.). All other non-official messages through station CRL, operating 0200–1800 GMT on 6 Mc/s. at even hours, 0400 to 1800 GMT on 4 Mc/s. at even hours plus 30 minutes (answering on 4259 kc/s.). Continues watch 0200–0400 GMT on 4 Mc/s. Radio telephone through CRL on 2132 kc/s. at even hours plus 45 minutes 0600–1700 GMT answering on 4415 kc/s.

VHF: Pilot boat (Inhaca Station) and port radio operate on Channel 16 (calling) and Channel 12 (working) from 0530 to 1830 hours.

TUGS: 4 tugs available, 3,200 h.p., 3,200 h.p., 1.500 h.p. and 1,200 h.p.

BERTHING: Carried out at all times between 0000–0600 hrs. at the Main wharves. At Matola Ore berth vessels must berth only at permissible times according to tides.

Main Wharf: All facilities owned and operated by Caminhos de Ferro de Mocambique (CFM), except stevedoring.

Dimensions: Wharf is in an uninterrupted line running roughly N.E./S.W., accommodating 12–15 vessels. Length: 3,033 m.

For loading or discharging bulk grain there are 2 Buhler machines at a berth with 33 ft. depth of water LWOST. About 120 t.p.h. A recent vessel averaged 2,900 tons per day.

Coaling Appliance: The coaling appliance can berth vessels of LOA 750 ft., beam 91 ft. 10 in. and a max. draft of 34 ft. 06 in.

The best loading rate, in theory, is about 600 t.p.h., however, in practice, allowing for shunting trucks, warping ship, etc., average rate is about 400/500 t.p.h.

The length of the chute is 181 m. and it operates between angles of 46 degrees and 58 degrees to the perpendicular. At 46 degrees the tip of the chute is 4.80 m. above wharf level and 9.50 m. from the wharf edge. At 58 degrees the tip of the chute is 7.60 m. above wharf level and 11.80 m. from the wharf edge. At lowest spring tide the water at the coaling berth is 5.90 m. below wharf level and at highest spring tide 2.15 m., the difference between max. extremities being 3.75 m.

Sugar Terminal: The daily intake capability of installation is 2,000 metric tons and it has storage facilities in three sheds with a capacity of 40,000 metric tons each. It has a nominal loading capacity of 750 metric tons. The stowage within each hold is done by means of a telescopic trough and a mechanical distributor (projector) and is capable of projecting the sugar in various angles and distances. Max. reach of the jib is 17 m. Min. reach of the jib (in use) is 11.50 m. and the limit of inclination of the jib (in use) is ± 15 degrees. Max. draft alongside is 33 ft. 06 in.

Depths alongside:

Berth A	30 ft.
Berth B	32 ft.
Berth C	30 ft.
Berth D	31 ft.
Berth D3	31 ft.
Coal Tip	33 ft.
Berth Frigo	30 ft.
Berth G	33 ft.
Berth H	33 ft.
Wharf extension	40 ft.

Coal Mechanical Installation: Depth about 33 ft. LWOST. Maximum height of chute above wharf 7.80 m., minimum 4.80 m.; Max. size LOA 750 ft. Max. beam 91 ft. 10 in. Max. draft 34 ft. 06 in.

LPG Carriers: Berth at Matola Ore Berth.

Timber: Vessels berth at Matola, Post No. 1 (P.I.). Max. draft 32 ft. Max. LOA, 600 ft. Vessels over 550 ft. LOA and draft over 25 ft. berth and sail during daylight hours only.

CRANES: *Electric cranes:* 82 units with capacity 3 to 20 tons. *Mobile cranes:* 63 units with capacity 4 to 12 tons.

Heavy lift crane with capacity of between 60–80 tons.

STORAGE CAPACITIES:

Ore and Coal dumps: Gorjao Wharf.

	tons
Coal	96,000
Ores	600,000
Copper	40,000
Vermiculite	4,000
Steel, Beams and Billets	46,000
Vanadium	7,000

Oil: Storage capacity 200,000 tons.

Molasses: 4 tanks, capacities 6,000, 9,000, 11,000 and 7,000 tons.

Fruit: 7,500 tons (1.133 cu. m./ton) in 100 chambers.

Fish: 200 tons.

Ore: Matola. Capacity 1.3 million tons. Loading speed for iron ore 3,000 t.p.h. and chrome ore 2,400 t.p.h.

Sugar: See "Berthing".

Containers: Terminal expected to be operational in 1977.

STEVEDORES: *Working Hours:*

Normal:	Weekdays:	0700–1100, 1300–1700
	Saturdays:	0700–1100.
Overtime:	Weekdays:	1900–2300, 0000–0600.
	Saturdays:	1300–1700, 1900–2300.
	Sundays:	All day.

Overtime is compulsory on a daily basis (including Saturdays and Sundays) from 1900–2300 hrs.. and from 0000–0600 hrs.

The responsibility for overtime costs should be clearly defined in the Charter Party.

TANKERS: Matola Mineral Wharf, 40 ft. LWOST, max. length of vessel 820 ft. Matola Oil Jetty, 32 ft. 6 in. LWOST, max. length of vessel 750 ft.

Dolphin berth at Matola (P3) has been erected for tankers. Max. draft 35 ft. Max. LOA 750 ft.

FRESH WATER: Available at all berths, not available ex-barge.

FUEL: Vessels can be supplied from pipe-lines whilst working at all berths, including the Matola Appliance and Tanker jetty, but excluding the new wharf extension, where pipes have been laid but the system is not yet ready for delivering bunkers. The rate of delivery varies between 300 to 500 tons per hour depending on the type of vessel taking bunkers. At present, supplies of gas oil and marine diesel oil are not in very plentiful supply, recommended to stem as far in advance as possible.

MEDICAL: No advance notice required for medical attention, unless urgent assistance necessary. Hospital facilities available. Crew members and passengers should be in possession of valid smallpox and yellow fever certificates (cholera certificate too if cholera area) on international forms. Vaccination/fever inoculations and certificates may be obtained ashore if required. Men for sick parade must first go through the port doctor whose hours are week-days 0800–1130 hrs. and 1400–1730 hrs.; Saturdays 1000–1130 hrs., but always available on an emergency call.

REPAIRS: No dry dock except for small coasters. Facilities for most normal work, except underwater rivetting, cutting and welding, and shaft balancing.

DEVELOPMENTS: Administration are considering the construction of a deep-sea port on the coast between Inhaca Island and the Natal border. This port will be mainly used by coal and iron-ore carriers and have a capacity of approximately 6 million tons per annum. Should this project materialise, the port will be operational by 1978.

CONSULS:

U.S.A.
U.K.
France
Norway
Sweden
Switzerland
Italy
South Africa
Rhodesia
Brazil
Germany
Spain

IDENTIFICATION CARDS: Crew and passengers are issued with Immigration Boarding Permits and they must be carried at all times. (Such permits to be returned to Immigration Officer prior to sailing.)

WATCHMEN: Strongly recommend employing services of a local watchman, who will also control visitors and labour passes.

OPENING/CLOSING HATCHES: Can be done by either crew or stevedores. Often done by crew.

CERTIFICATES: Tonnage Certificate to be produced to Pilot, as certain port dues are based on vessel's registered tonnage.

REPATRIATION: Facilities exist for nationals of those countries maintaining diplomatic relations with Mozambique. A valid passport is necessary as immigration authorities do not recognise a Seaman's Book as being a valid travel document.

AIRPORT: About 5 miles from centre of town.

CUSTOMS ALLOWANCES: Bonded stores are usually not sealed.

HOLIDAYS: No cargo work on 1st January and 25th December, on other holidays, work continues normally in the port.

TIME: Local time 2 hours ahead of GMT. No alterations made to clocks during the year.

SHORE LEAVE: Crew members are allowed ashore, excepting nationals of those countries not maintaining diplomatic relations with Mozambique.

TELEPHONES: A telephone will be placed on board the vessel.

GENERAL: Crew and passengers not to take photographs in the dock area. Permission through Agent required to lower any boats or gear overside into the water or on to the wharf.

Do not immobilize main engines or carry out engine trials at the wharf until permission has been obtained by the Agent as the Authorities require vessels to maintain sufficient steam for main engines to be used at 2 hours notice.

Customs guards to be supplied with meals and accommodation whilst at inner anchorage and alongside the LM wharf otherwise cost per guard will have to be paid by Agent on Owner's behalf.

AUTHORITY: Capitania do Porto de Maputo.

AGENTS: Rennies' Consolidated Lda., Avenida 18 de Mayo 36, POB 351. Tel. 23021. Cables: "Reniform".

MOZAMBIQUE: 14.58 S. 40.45 E.

DOCUMENTS:

- Customs Clearance from last port.
- Port Clearance.
- Health Certificate.
- 6 Crew Lists.
- 6 Passenger Lists in Transit.
- 7 Passenger Lists Disembarking.
- 2 Stores Lists.
- 2 Lists Deck Stores.
- 2 Lists Cargo in Transit (main items of cargo only).
- 6 copies of Manifest of Mozambique Cargo.

PILOTAGE: One Pilot available, 24 hrs. Pilot boat is black and grey. Ships take Pilot near buoy No. 2 (Red Buoy) placed off Goa Island. At night ships should send Morse signals with Aldis lamp to the middle of Mozambique Island (location of Port Office). ETA should be given as soon as possible to Pilot station off Mozambique Island and/or to ship's Agent.

ANCHORAGES: When waiting for Pilot, or in reason of their draft (more than 30 ft.) ships may drop anchor off red buoy No. 2 (0.5 miles seawards). Depths between 60 and 90 ft. Bottom with sand and some broken coral; current from North to South, sometimes up to 4 knots.

MAX. SIZE: Only ships with drafts less than 30 ft. can cross the bar and enter the Port.

HEALTH: Quarantine flag should be flown, even after calling at other ports in this country. Health Certificate given by Pilot.

RADIO: Radio Mozambique call sign CRQ. Also available Maputo or Beira Radio Stations.
TUGS: Tugs are not necessary in this port.
BERTHING: No quay berths. Vessels work cargo at anchor.
STEVEDORES: All requirements on this purpose must be sent to the Agent.
MEDICAL: Medical assistance can be given at any time, even to vessels unable to cross the bar because of draft. Hospital with adequate facilities, and emergency services available.
FRESH WATER: Always available in any quantity. Supplied by barge of 40 tons capacity.
FUEL: Small quantities available.
OPENING/CLOSING HATCHES: By stevedores.
CARGO GEAR: Vessels anchor in bay and load and discharge by lighter and barges.
IDENTIFICATION CARDS: Required.
CONSULS: No local representatives.
REPAIRS: Light repairs can be effected.
REPATRIATION: All facilities available.
AIRPORT: Situated about 7 km. from Mozambique. Connections to Beira and Maputo every day.
HOLIDAYS: 1st January; 2nd March; 1st and 10th June; 15th August; 5th October; 1st November; 1st December; 8th December; 25th December. Cargo handling can be arranged on these days.
POLICE/AMBULANCE/FIRE: Maritime Police, Customs and Agents will always be on board during stay.
TELEPHONES: No telephones, but walkie-talkies are available; arrange with Agent.
AUTHORITY: Capitania do Porto de Mocambique.

AGENT: Companhia Comercial Joao Ferreira dos Santos, SARL, Caixa Postal No. 1, Mocambique. Cables "Jorreirantos Mocambique".

NACALA: 14.32 S. 40.37 E.

PORT LIMITS: The line joining Ilha Gomen to Cabo Columulomo Light at the entrance of Bay of Fernao Veloso.
DOCUMENTS:
- Customs Clearance from last port.
- Port clearance from last port.
- Health Certificate.
- 6 Crew Lists.
- 6 Lists Passengers in transit.
- 7 Lists Passengers Disembarking.
- 2 Stores Lists.
- 2 Lists Deck Stores.
- 2 Lists Cargo in transit (main items of cargo only)
- 6 copies of Manifests of Nacala Cargo.
- 2 Lists of Dangerous Cargo.

PILOTAGE: Permanent and compulsory for entering harbour. Pilot boat situated at harbour entrance.
ANCHORAGE: Fine natural harbour. Entrance half a mile wide, depths up to 60 m. Good anchorage for any size vessels. Sand and mud bottom.
MAX. SIZE: For anchoring, no restrictions. For berthing, up to 31 ft. draft.
RADIO: Radio Naval Nacala operates permamently on 2182 kHz.
HEALTH: Vessels to radio "Senidade Maritima", their ETA and "All Well" (or otherwise). If "All Well", Health Certificate given by Pilot.
TUGS: One available, 1,000 h.p.
BERTHING:
Old Wharf: There is a pier with berths for four vessels with a length of 426 m.

Depths: Wharf 1: 24 ft.
,, 2: 21 ft.
,, 3: 30 ft.
,, 4: 30 ft.
Cranes: 12 cranes available 9×5 tons
2×10 tons
1×20 tons

New Wharf: There is a pier to berth two vessels.
Depth: 45 ft.
Cranes: There are no shore cranes available at this stage.

CRANES: 12 electric cranes with capacity 1 to 20 tons. 1 Floating crane with capacity of 25 tons. 16 Mobile cranes with capacity 2 to 7 tons.
STEVEDORES: Working hours 0700 to 1100 hrs., 1300 to 1700 hrs. Overtime 1900 to 0600 hrs.. Two local stevedoring firms.
FRESH WATER: Available from hydrants on the quay at the old wharf.
FUEL: Available from connections on the quay. Must be ordered well in advance. Only Gas oil available.
MEDICAL: No advance notice required for medical attention, unless urgent assistance necessary. Hospital facilities available. Crew members and passengers should be in possession of valid smallpox and yellow-fever certificates (cholera certificate too if from cholera area) on international forms. Vaccination/fever inoculations and certificates may be obtained ashore if required.
GANGWAY/DECK WATCHMEN: Compulsory, under supervision of Immigration Department.
OPENING/CLOSING HATCHES: Can be done by either crew or stevedores. Often done by crew.
CERTIFICATES: Tonnage Certificate to be produced to Pilot, as certain port dues are based on vessel's registered tonnage.
REPATRIATION: Facilities exist for nationals of those countries maintaining diplomatic relations with Mozambique. A valid passport is necessary as immigration authorities do not recognise a Seaman's Book as being a valid travel document.
TIME: Local time 2 hours ahead of GMT. No alterations made to clocks during year.
SHORE LEAVE: Crew members are allowed ashore, excepting nationals of those countries not maintaining diplomatic relations with Mozambique.
HOLIDAYS: New Year's Day (1st January); National day of Portugal (10th June); Corpus Christi (variable date); Assumption (15th August); Nacala City Holiday (16th September); Republic Day (5th October); All Saints' Day (1st November); Restoration of Republic (1st December); Immaculate Conception (8th December); Christmas Day (25th December). No cargo work on 1st January and 25th December; on other holidays work continues normally in the port.
DEVELOPMENTS: A new pier: length 462 m., depth 45 ft. under construction. Expected to be operational by 1977. It will be equipped with 14 cranes with 5, 10 and 20 tons capacity.
AUTHORITY: Capitao do Porto de Nacala.

AGENT: Companhia transitaria Joao Ferreira dos Santos POB 45 Nacala. Cables: "Transan-Nacala".

PORTO AMELIA: 13.00 S. 40.28 E.

DOCUMENTS:
- 6 Crew Lists.
- 6 Lists of Passengers Disembarking.
- 6 Lists of Passengers in Transit.
- 1 Master's Declaration.
- 1 Stores and Provisions List.
- 1 Health Declaration.
- 5 Sets Cargo Manifests.
- 2 Sets non-negotiable Bills of Lading.
- Clearance Documents from last port.

PILOTAGE: It is necessary to order by radio request to Agent 14 hours before arrival.
ANCHORAGE: Vessels may anchor South of the dock about 300 m. off. Other suitable anchorages will be indicated by the Pilot.
RESTRICTIONS: Vessels may enter with Pilot at any hour day or night.
MAX. SIZE: Draft up to 27 ft. 6 in. for berthing.
HEALTH: In case of contagious disease on board, the Port Health Authorities must be advised in advance.
RADIO: Send messages through Beira radio.
TUGS: None available
BERTHING: One berth, length 182 m., depth alongside 28 ft.
STEVEDORES: In ETA message to Agent, indicate number of gangs required and advise quantity and description of cargo for discharge.
MEDICAL: In case of urgency advise Agent by radio before arrival. Hospital facilities available. Vaccinations can be performed.
FRESH WATER: Available.
FUEL: Available.
GANGWAY/DECK WATCHMEN: Not necessary as there is a permanent guard on board.
OPENING/CLOSING HATCHES: Performed by stevedores.
CUSTOMS ALLOWANCES: Bond is not sealed and no restrictions made.
IDENTIFICATION CARDS: Required by police.
CONSULS: Only Germany is represented locally.
REPAIRS: Facilities available.
REPATRIATION: Can be arranged.
AIRPORT: Situated 7 km. away. Flights to Beira and Maputo daily.
TIME: GMT plus 2 hours. No alterations during the year.
HOLIDAYS: No work performed from 1700 hrs. Christmas Eve until 0600 hrs. 26th December; no work performed from 1700 hrs. New Year's Eve until 0600 hrs. on 2nd January. Work may be arranged on the following holidays: 10th June, 15th August, 5th October, 1st November, 1st December, 8th December.
POLICE/FIRE/AMBULANCE: Police, tel. 2828; Hospital, tel. 2211.
SHORE LEAVE: Allowed. Except for nationals of countries not maintaining diplomatic relations with Mozambique.
AUTHORITY: Capitao do Porto de Porto Amelia.

AGENT: Companhia Comercial Joao Ferreira dos Santos, SARL, POB 13, Porto Amelia. Cables: "Jorreirantos-Porto Amelia".

Nauru Island

NAURU: 00.32 S. 166.56 E.

DOCUMENTS:
International Declaration of Health, 1 copy.
Clearance from last port.
Crew Lists, 2 copies.
Passenger Lists, if any, 2 copies.
Manifest, 1 copy.

PILOTAGE: Pilotage is available on request without charge; Masters are advised to avail themselves of this service. It is necessary that Masters, through Radio Nauru, inform telegraphic address Nauruphos Nauru of ETA 48 hours before arrival, confirming or altering this 12 hours before arrival. Nauruphos will reply through Radio Nauru on receipt of second message giving time for the vessel to close in to 0.5 mile West of loading plants, where pilot will board. In case of adverse weather or congestion, Masters will be notified by radio, or by VHF Channel 16, 156.8 Mc/s with range of about 40 miles. Vessels are handled inwards in daylight only, and should fly flag when approaching island. A safe and clean pilot ladder should be provided, a good lee made for the pilot to embark.

ANCHORAGES: No anchorages are available owing to the extreme depths of water. Vessels waiting normally drift off and return at daybreak or when instructed to do so.

RESTRICTIONS: Tide and draft have no bearing on entry but it is normal not to handle vessels into berth in darkness. However, vessels are unmoored at all hours.

MAX. SIZE: Vessels have been handled up to an overall length of 630 ft. Beam should not exceed 90 ft., but there are no draft limitations.

HEALTH: Masters of vessels approaching Nauru are required to send a telegram addressed to the Quarantine Officer, Nauru within 24 hours of arrival. The telegram should state the name of last port, date, presence of any infectious disease. On receipt of telegram, the quarantine officer will send reply indicating whether or not pratique is granted. It is still necessary to fill out the International Declaration of Health and hand this to Boarding Officer after berthing.

RADIO: Nauru Radio station, call sign C2N. Should, through atmospheric conditions, difficulty be found in raising Nauru, it is suggested that the message be passed through Sydney or any other convenient coastal station. Port Radio VHF, calling Channel 16, working Channel 12, permanent service.

TUGS: No tugs available for berthing.

BERTHING: Such special requirements which relate to berthing in the port are contained in a Letter of Advice to Ship Masters issued by the BPC. Shore labour normally boards the vessel with the pilot to assist in mooring to the buoy system.

STEVEDORES: As stevedoring is carried out by Nauruphos, no separate advice is required. Loading rate of bulk phosphate is as high as 3,000 t.p.h.

MEDICAL: Medical treatment can be given at short notice. Limited hospital facilities are available, and emergency surgery can be carried out. Smallpox vaccination is required, and cholera if the vessel has come from an infected area.

TANKERS: Lengths and drafts as for bulk phosphate vessels. 8 inch discharge line to shore storage tanks.

DENSITY: Normal salt water all states of tide.

FRESH WATER: Island water is imported, and water will be supplied only in cases of emergency.

FUEL: Island stocks are imported for use in the phosphate industry, and only limited quantities of heavy fuel or diesel oil can be made available in cases of extreme urgency.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Carried out by crew.

SHIP CERTIFICATES: Deratisation certificate only.

CUSTOMS ALLOWANCE: No restrictions apply.

CARGO GEAR: Cargo gear should be up to the standard demanded in Australian ports.

CREW IDENTIFICATION CARDS: Some form of identification, passport, discharge book, or identity card should be carried by crew members.

CONSULS: An Australian Representative is resident on the Island.

REPAIRS: The phosphate industry requires good workshop facilities of various kinds for maintenance of their own heavy plant and such workshops are kept busy at all times. Small repairs such as welding, brazing, lathe work, etc., can be carried out, but only when essential to allow the vessel to proceed on its voyage. Main engines cannot be immobilised whilst the vessel is moored to any section of the buoy system.

REPATRIATION: Repatriation can be arranged. No facilities for crew changes.

AIRPORT: 2 weekly services operated by:
(1) Fiji Airways to Nauru via the Gilbert and Ellice Islands Group to Fiji.
(2) Air Nauru to and from Australia.
Air Nauru operates a fortnightly service from the Marshall Islands to Nauru.

TIME: Local time is GMT plus 11.5 hours. No alterations during the year.

HOLIDAYS: Christmas Day, New Year's Day, and Good Friday are normally closed holidays. Other National holidays occur during the year but normally work carries on, on these days.

POLICE/AMBULANCE/FIRE: All emergencies are handled by the Harbour Masters, one of whom remains aboard the vessel throughout the time the vessel is attached to the mooring system.

TELEPHONES: Telephones are put aboard for the use of island staff working the vessel.

SERVICES: No special services available.

SHORE LEAVE: This may be granted at the discretion of the Master but should in all cases terminate at 1700 hrs.

PORT REGULATIONS: No vessel may immobilise main engines whilst moored to the buoy system. Main engines should be on instant readiness, deck power should be available at all times, and the vessel must proceed to sea when instructed to do so by the Harbour Master.

DELAYS: Normally no delays should be expected. Vessels could wait a day, or possibly 2 due to port congestion, but this seldom happens; delays can occur due to adverse weather, the duration of which is unpredictable.

AUTHORITY: The Harbour Master, appointed by The Nauru Phosphate Corporation, Nauru.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Netherlands

AMSTERDAM: 52.22 N. 04.54 E. (See Plan)

PORT LIMITS: Notices of Readiness will only be accepted (subject to C/P terms) if vessel has actually arrived at Amsterdam, which means that vessels have to enter from sea and pass the locks at Ijmuiden, proceeding through the North Sea Canal to Amsterdam. There are various buoys and quays available where vessels can be moored waiting for final discharging berth.

DOCUMENTS:

Health Certificate. Forms obtainable from sea Pilot.
Crew List in triplicate.
2 copies of Crew Manifest for cigarettes, cigars, spirits, etc., belonging to crew.
Passenger List in triplicate.
1 copy of Manifest.
1 copy of Bills of Lading.
Dangerous Cargo List.
Ship's Register.
1 copy Stores List.

PILOTAGE: Pilotage is compulsory. A pilot vessel cruises at sea in the vicinity of Ijmuiden between the light whistle buoy and the moles.

In order to avoid delays, Masters who require a Pilot must advise their ETA not less than 4 hours in advance to "Pilotage Ijmuiden". This advice must be amended, if vessel's ETA changes more than 2 hours from the original advice.

The text of the message must contain: *(a)* the words "ETA-pilot", *(b)* expected time arrival (group of 4 figures) in middle European time, *(c)* draft with indication of unit applied, *(d)* port of destination.

"Pilotage Ijmuiden" can be informed via Scheveningen Radio or via VHF Channel 12. Pilotage and navigation is possible at night.

Pilotage by Helicopter: When the pilot service by pilot cutter has been suspended owing to weather conditions it is possible to take a Pilot on board vessels by helicopter. Helicopter pilotage is carried out for vessels which have an obstacle free hoisting area on deck of min. 15 ft. diameter. Deck plans should be provided in advance.

Restrictions:

1. Min. visibility 800 m. at 150 ft. above sea level.
2. Max. wind force 10 (55 kts.).
3. Severe turbulence and icing conditions at or below 150 ft.

Pilot Ladders: Pilots strictly adhere to regulation 17b, Chapter V of the International Convention for the Safety of Life at Sea, which reads as follows:

"Whenever the distance from sea level to the point of access to the ship is more than 30 ft. (9 m.), access from the pilot ladder to the ship shall be by means of an accommodation ladder or by another equally safe and convenient means."

ANCHORAGE: Anchoring in Ijmuiden outer harbour, North Sea Canal and in harbour of Amsterdam is prohibited.

RESTRICTIONS: Entry possible at night. Official max. draft is 43 ft. (salt water). By permission of Government Harbour Master at Ijmuiden it is possible to enter with max. draft 45 ft. (s.w.). Such permission to be applied for at least 14 days prior to arrival.

MAX. SIZE: Vessels proceeding to Amsterdam have to pass locks at Ijmuiden. Dimensions of Northern lock (biggest): 1,312 ft. long, 164 ft. wide 49 ft. 2 in. deep.

RADIO: Cable Agents giving ETA draft, cash and other requirements via Scheveningen Radio/PCH.

RADAR/VHF: Harbour radar is installed at Ijmuiden. In bad visibility radar assistance will be given for incoming ships day and night. A radio portophone is provided by Pilot. Direct communication between incoming and outgoing ships and commanding post of locks is possible by means of VHF radio telephone, Channel 11. Government patrol boats are also equipped with VHF installations. The Radio-Radar Station (Redeplot) can also be contacted via VHF Channel 12 before approaching Ijmuiden.

TUGS: Sea-going tugs available between piers at Ijmuiden assisting vessels, into locks or outer harbour. Harbour tugs available in locks assisting vessels to Amsterdam. The rates include use of tug hawser.

BERTHING: Possible at night. If no berth available vessels may be moored on buoys.

BRIDGES: Vessels proceeding to Oil Harbour, Coen Harbour, Vlot Harbour and installations in Eastern part of port pass railway bridge over North Sea Canal at Zaandam. Notices indicating distance from bridge have been placed at 500 m. at either side and notices to stop at 150 m. at West side and 225 m. at East side. When bridge closed Masters must stop their ships and must on no account proceed unless signal is given that passage is allowed. Bridge is opened regularly in accordance with time-table of Netherlands Railway.

STEVEDORES: In order to enable Agents to order gangs in time it is recommended to keep Agents duly informed about ETA. No ETA to stevedores necessary.

MEDICAL: If immediate medical assistance will be required in the locks at Ijmuiden, Agents must receive advance notice.

BULK HANDLING FACILITIES: *Grain:* The Silo installation of IGMA at Vlothaven depth alongside 49 ft. 3 in., has main jetty 1,200 ft. length to accommodate 2 vessels up to 80,000 tons d.w.t. Ships unloaded by 4 mobile pneumatic suckers, with capacity 400 t.p.h., and 3 floating elevators. Daily discharge capacity about 17,000 tons.

On discharging side maximum gear height above water line 92 ft. On loading side maximum gear height above water line 36 ft.

Ore, Coal, etc: NV Overslagbedrijf Amsterdam in West harbour, quay 2,600 ft. length, max. draft about 49 ft. 3 in. Discharging rate of gear up to 60,000 tons per 24 hours. Loading rate about 2,500 t.p.h.

Maximum outreach of loading and discharging gear 137 ft.; max. height of loading discharging gear above water level 51 ft. Four high speed gantry cranes in use.

NV Havenbedrijf Rietlanden Quay length 2,500 ft. depth 35 ft. Capacity about 8,000 tons per day.

Phosphate: Albatross Fertiliser Works Jetty, depth alongside 31 ft. Two grab cranes with daily capacity of 8,000 tons.

Containers: Length of quay 465 m. Roll-on/roll-off berth: 140 m., depth alongside quay 36 ft.

The berth is equipped with 2 gantry cranes with lifting capacity of 50 tons and 1 multi-purpose crane with a capacity of 30 tons.

Ferry Terminals (Roll-on/Roll-off terminals): Scandia Terminal in the Suezhaven, 10.5 nautical miles from the sealocks in Ymuiden. Total area 50,000 sq. m., marshalling area 28,000 sq. m., quay length 400 m. shedspace 2,300 sq. m., modern passenger building.

Another terminal is located in the Coenhaven, 11 nautical miles from the sea-locks in Ymuiden. It is equipped with a ramp with movable link span (twin construction), 40 ft. wide and 63 ft. long and has 2 more berths for roll-on/roll-off vessels. The water depth is 33 ft. The terminal also includes a passenger hall (1,000 sq. m.), 3 ha (7.5 acres) of parking space and ample shed space. A mobile container crane (35 tons capacity), side-loaders (20 tons), tug musters, slave trailers, flats, containers and fork-lift trucks are available.

Minerals: Eggerding & Co. B.V. Length of quay 400 m. Depth alongside 33 ft. Discharge is carried out by floating cranes.

TANKERS: *Mobil:* Two jetties, one for vessel of 30,000 tons and another for vessel of 80,000 tons. Max. draft 44 ft. 6 in. pipe-line connections 10 and 12 in.

One jetty for coast tankers or LPG tankers up to 2,500 tons.

The receiving rate for crude oil is 4,000 cu. m./hr. The loading rate varies from 400–1,900 cu. m/hr. depending on grade.

Fresh water available from jetty. Fuel available, pipe-line 8 in. Facilities available for dirty ballast if vessel to load at berth. Max. capacity 10,000 tons. Stores by barge or truck (Jetty not accessible to trucks).

Amatex: Five jetties, depth alongside 32–41 ft. Pipe-line connections 6 in. –12 in.

Receiving rate, 4–1,200 t.p.h. depending on grade and back pressure, if any. The loading rate is about 1,000 t.p.h. depending on grade.

Fresh water available by barge. Fuel available by barge. There are no facilities for dirty ballast. Stores mainly by truck (Jetties not accessible to trucks).

Comos: Two jetties, depth alongside 42 ft. Pipe-line connections 8 in. and 12 in. Four jetties available for seagoing vessels and barges up to a max. draft 14 ft. 9 in.

The receiving capacity is about 2,000 t.p.h. and loading rate up to about 1,000 t.p.h.

Fresh water available by barge. Fuel available by barge or pipe-line. Stores by truck. There are no facilities for dirty ballast.

Smid & Hollander: One jetty for receiving crude oil, max. draft 36 ft. 2 in. Fresh water and fuel available by barge. Stores by truck (Jetty not accessible to trucks).

Shell: One jetty available for bunkering purposes. Max. draft 32 ft.

Noord Europees Wijnopslagbedrijf B.V.: One jetty, depth alongside 20 ft. Fresh water and fuel available by barge. Stores by truck.

DENSITY: Amsterdam is not a tidal port. The water is brackish to fresh.

FRESH WATER: Drinking and boiler water can be supplied by barge, or if connection available, from shore. Price depends on quantity ordered.

FUEL: All grades of fuel are available. Advance notice 48 hours.

FIRE PRECAUTIONS: No repair work to be carried out to tankers without permission of Harbour Authorities. Usual non-smoking precautions, etc.

GANGWAY/DECK WATCHMEN: Not required. Dependent on commodity of cargo.

OPENING/CLOSING HATCHES: Liner vessels by crew or by stevedores, payable per man per hour. Tramp vessels as per Charter Party.

CERTIFICATES:

Ship's Register.
Usual Cargo Certificate.
Safety Radio.
Safety Equipment Certificate.
Crew Roll.
All usual certificates required for navigation.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per man or equivalent of tobacco or cigars. Wine and/or Spirits: 5 litres of wine per man. Spirits: total 5 litres for the whole ship.

CARGO GEAR: Usual cargo certificate.

IDENTIFICATION CARDS: Not needed.

CONSULS: Nearly all countries have established consulates at Amsterdam.

REPAIRS: All types of deck and engine repairs are possible including gas-freeing and tank-cleaning.

DRY DOCKS: NDSM: Four dry docks, largest of which length 817 ft. breadth 120 ft., depth 28 ft.

ADM: Five floating docks largest of which length 677 ft. breadth 97 ft. 6 in., lifting capacity 40,000 tons d.w.t.

Other floating docks available for vessels up to 4,500 tons.

REPATRIATION: Facilities for repatriation of crew to any destination are available.

AIRPORT: Distance to Schiphol Airport (served by regular airlines) 15 km.
TIME: GMT plus 1 hour. No alterations during the year.
HOLIDAYS: New Year's Day; Easter Monday; Queen's Birthday (April 30th); Ascension Day; Whit Monday; Christmas Day and Boxing Day.

Cargo can be worked during these days subject to labour being available at premium rates.

POLICE/AMBULANCE/FIRE: Police 222222; Ambulance 355555; Fire 666666.
TELEPHONES: Telephone connections on board are only possible on certain quays (passenger ships). It is possible to rent portable mobilophones.
SERVICES: Two tank cleaning installations, compass adjusting/direction finder calibration, representatives of all leading radio installations, radar and other nautical instruments available.
SHORE LEAVE: Crew members allowed ashore.
DELAYS: Usually no congestion.
AUTHORITY: Dienst der Havens en Handelsinrichtingen.
AGENT: Wm. H. Muller & Co. Amsterdam B.V., "Havengebouw", 7 De Ruyterkade, Amsterdam. Telegrams "Mineral". Telex 12058. Tel. (020) 6 34 56.

DELFZIJL: 53.20 N. 6.54 E. (See Plan)

LOCATION: On the estuary of the River Ems, opposite Emden.
DOCUMENTS: See "Rotterdam".
PILOTAGE: Pilot boats normally cruise at Wester-Ems buoy. During bad weather they withdraw into estuary, but never further than Borkum Roads. Pilot boats listen on Channel 6 and pilot office on Channel 14 VHF; distance from pilot station to Delfzijl 32 miles. Pilot service compulsory for all vessels drawing over 22 dm. Foreign vessels may call Pilot on 2182 kHz. and Netherlands vessels on 2391 kHz. Traffic between the cutter and the vessel will be held on 1657 kHz.

Approaching vessels from sea should inform the Pilot commissioner of their ETA in M.E.T. with a notice at least 4 hours in advance via Scheveningen – Radio (PCH); the pilot cutter may be informed via VHF.

The ETA message should contain the following details: *(a)* ETA Pilot Westereems (time in M.E.T. in a group of 4 figures); *(b)* Draft; *(c)* Port of destination.

Departing vessels should apply for a Pilot at least one hour before ETD; the request should be made to the office of the commissioner.

Pilotage from Delfzijl is not compulsory. On request however a Pilot may be put at the Master's disposal for a trip to Emden. This is not applicable for a trip from Emden to Delfzijl or Eemshaven.

ANCHORAGE: Anchoring in harbour area prohibited. On roads, ships up to 4,000 d.w.t. anchor near buoy B.W. 14. Larger vessels should anchor in Doekegat.
ENTRANCE: New harbour entrance lies opposite the village of Oterdum about 5.2 m. South-east of the old entrance. The new entrance extends to reach the deep water of the Bocht van Watum, and lies at a point about 600 m. West of the dredged channel between the Bocht van Watum and the Oostfriese Gaatje near Paapsand Sud.

New harbour entrance has an initial depth of NAP −10 m., and a bottom width of 200 m. The harbour channel has the same depth, and a width of 100 m. NAP=Normal Amsterdam Level.

MAX. SIZE: Port is now accessible to vessels with draft up to about 28 ft. (8.50 m.) which may arrive or sail without waiting for high water.
TUGS: 1 tug of 900 h.p., 3 tugs of 800 h.p. and 1 tug of 400 h.p. available. Tugs use ship's lines.
RADIO: Cable to Agents via Radio Scheveningen. PCH.
VHF: The Harbour Master's office is equipped with a VHF installation, Channel 14. During office-time the station is constantly manned (0800–1200 hrs. and 1300–1700 hrs.); during other hours the station is manned during the last quarter of every hour.
BRIDGES: Bridge to the Damsterhaven may always be worked. Bridge to the Oosterhornhaven will be handled from Monday to Saturday. On Sunday bridge may be opened on special request.
CARGO HANDLING: Public quay is equipped with 14 cranes to work general cargo. Five of these may also be used to handle bulk cargoes (fertilisers, grain).

There is in the outer harbour a private facility to discharge alumina, methanol, a bulk salt-loading terminal and a deep sea berth to handle molasses.

DENSITY: Ranging between 1007 and 1020, depending on the tide.
FRESH WATER: Available along new quay in unlimited quantities.
FUEL: Fuels in limited quantities for coasters are always available. For bunkering of larger vessels, arrangements should be made in advance.
GANGWAY/DECK WATCHMEN: According to police regulations, Master has to keep watchmen on board.
OPENING/CLOSING HATCHES: Normally carried out by ship's crew.
CONSULS:

At Delfzijl		*At Groningen*	
Denmark	tel. 05960–16333	Belgium	tel. 050–138222
Finland	tel. 05960–16800	Germany	tel. 050–139922
France	tel. 05960–13778	Norway	tel. 050–189444
Sweden	tel. 05960–16333	Spain	tel. 050–137879

REPAIRS: Most engine and deck repairs can be carried out by two local shipyards.
DRY DOCKS: Dry-docking is limited to ships up to 3,000 d.w.t. with a draft not exceeding 32 dm. For larger vessels, dry-docking facilities exist in the nearby port of Emden (Germany).
CERTIFICATES: The tonnage certificate should be shown to Harbour Master on first call every year.
HEALTH, MEDICAL ATTENDANCE, HOLIDAYS, LOCAL TIME, CUSTOMS ALLOWANCES: see "Rotterdam".
AUTHORITY: Port of Delfzijl Authority.
AGENTS: Maritima Scheepvaart en Handelmaatschappij B.V., De Vennen 52, Delfzijl. Tel (05960) 18989. Cables "Maritima". Telex 53153.

DORDRECHT: 51.49 N. 4.40 E. (See Plan)

DOCUMENTS: See "Rotterdam".
PILOTAGE: Vessels have to enter New Waterway at Hook of Holland and proceed to Dordrecht via this New Waterway and the River Oude Maas. Masters of vessels bound for Dordrecht should state destination in ETA message as Pilots for Dordrecht embark from pilot cutter at roads. Deep-draughted vessels may have to exchange Pilots just inside breakwaters at Hook of Holland. (See Rotterdam "Ordering a Pilot").
ANCHORAGE: At sea off Hook of Holland (see "Rotterdam"). No anchorage between entrance to New Waterway and Dordrecht.
RADIO/RADAR/VHF: No radar service on River Oude Maas or Dordrecht.
RESTRICTIONS: Max. LOA 175 m. Max. breadth 23 m. Max. draft 29 ft. 6 in. Max. breadth is discussable as 25.90 m. could be allowed. For tankers min. visibility 500 m. (1,640 ft.). For dangerous cargoes, see "Rotterdam". The Pilot will decide the number of tugs required for passage on the Oude Maas, usually a min. of 3–4.
TUGS: Tugboats ordered by Pilot when entering New Waterway. Tugs normally meet vessels at Dordrecht.
CRANES: 2 Transporting bridges 15 tons each, 2 Portal cranes 12.5 tons each, 1 Portal crane 7 tons, 1 Floating crane 7 tons, 3 General cargo cranes 6, 5 and 3 tons capacity.
BRIDGES: Bridges across the River Oude Maas are opened day and night. Sea traffic has preference over shore traffic.
TANKERS: Oil installation of Gebr. Broere N.V. has seven tanker berths. There are other tanker berths for small tankers. No slop (residue) storage facilities.
REPAIRS: Yards of various capacities available for all types of repairs.
FRESH WATER: At oil installations fresh water can be supplied from shore. Or supply by waterboat.
CONSULS:
Denmark tel. 32177 Norway tel. 32177 France tel. 33231.

Other consulates at Rotterdam at 20 km. distance.

POLICE/AMBULANCE/FIRE: Tel. Police 30333; Ambulance and Fire 33333.
AIRPORT: Rotterdam and Amsterdam airports at a distance of 30 and 90 km. respectively served by regular airlines.
PILOT CUTTERS, HEALTH, MEDICAL ATTENDANCE, BUNKERS, CUSTOMS ALLOWANCES, HOLIDAYS: See "Rotterdam".
TIME: GMT plus 1 hour. Summer 1977 plus 2 hours.
AGENTS: See "Rotterdam.

EEMSHAVEN: 53.27 N. 06.50 E. (See Plan)

New port under construction.
LOCATION: About 15 km. N.W. of Delfzijl, on the bank of the River Ems.
DEVELOPMENTS: Harbour became operational in 1973. Initially harbour accessible for vessels up to 36 ft. (10.97 m.) draft and about 40,000 tons d.w.t. Eventually port is expected to be suitable for vessels of up to 42 ft. draft (12.80 m.).

Ample facilities for the handling of unit loads and roll-on/roll-off traffic will be offered. A bulk cargo terminal is planned, and a separate basin is projected where vessels loaded with highly inflammable cargo may be discharged safely, unhindered by passing vessels.

The depth of the bar to be passed in the Oude Westereems-Doekegat is about NAP −11 m. Therefore the harbour entrance, keel and turning have a depth of NAP −12 m. However, the ringdike of the port entrance has been laid so wide, that when the bar is deepened, to NAP 14 m., it will be also possible to dredge the harbour (entrance, keel and turning basin) 2 m. deeper without much difficulty.

The bottom width of the entrance is 250 m., measured sheer at the entrance-axis. This measure is equal to the length of the biggest ship to be expected. The bottom distance between both piers is about 320 m.

AGENT: See "Delfzijl".

FLUSHING: 51.27 N. 03.35 E. (See Plan)

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
1 Store List.
1 Personal Effect List.
Ship's Register.
1 Manifest or Bill of Lading.

PILOTAGE: Position of pilot cutters in the Scheldt Estuary: Pilotage is compulsory.

Wielingen (Southern approach) or via Scheur: Vessels approaching the Scheldt estuary from the English Channel pass the lightvessels Sandettie Banks and Westhinder. The Belgian pilot cutter *Wandelaar* is stationed near Buoy A1 at 51° 22′ N. and 02° 53′ E. this cutter has a black hull with a white number on her bow, a yellow funnel with black top and flies a red flag with the letter "P" in white.

A vessel bound for Flushing to discharge, bunker, load, to embark or disembark passengers or for repairs will be provided with a Dutch Pilot, who will take the vessel into harbour. Other vessels for Flushing (sheltering, awaiting orders, unplanned repairs, etc.) will be provided with a Belgian Pilot to Flushing-Roads, where a Dutch Pilot comes on board to take the ship into harbour.

Oostgat (Northern approach): Vessels approaching the Scheldt estuary from the North can take a Pilot in the vicinity of the S.B.Z. lightbuoy (51° 42.3′ N. and 03° 14.3′ E.) where a Dutch pilot cutter is stationed, flying a blue flag with the letter "L" in white. As a rule vessels bound for Flushing are provided with a Dutch Pilot.

ETA Messages: Masters' telegrams via Scheveningen Radio, call sign P.C.H., are passed on to Agents 24 hrs. a day, week-ends inclusive.

For this reason it is advisable that Masters communicate with Agents via Scheveningen Radio, via which station Agents also route their messages to vessels.

Vessels bound for the River Scheldt should cable, at least 4 hours in advance, their:

1. ETA "Wandelaar" (Southern Approach) to: "Pilotage Ostend", via Ostend Radio (OST):
2. ETA "Steenbank" (Northern Approach) to: "Pilotage Flushing", via Scheveningen Radio (PCH).

The ETA message should contain the following details: *(a)* the words "ETA Pilot Wandelaar or Steenbank". *(b)* ETA central European time shown in a group of four figures. *(c)* draft (S.W. or FW) with indication of unit applied. *(d)* port of destination and berth.

Pilot cutters may be contacted on VHF Channel 6.

During bad weather both pilot cutters shift to Flushing Roads.

APPROACHES:
Approaches to the Scheldt Estuary are:

		Depth MLWS	*Max. Neap*	*Draft SW Spring*	*Keel Clearance*
S. Channel:	Wielingen	28′	35′	38′ 03″	5′
	Scheur	34′ 6″	42′	45′	5′
N. Channel:	Oostgat	25′ 6″	31′	34′	5′

ANCHORAGE: The roads of Flushing offer a safe and spacious anchorage with a sandy bottom. Vessels anchoring in the roads are recommended to do so Southward of the Koopmanshaven (the Western harbour of Flushing) at not less than 0.75 of a mile from the Northern Coast. In this part of the roads depths vary from 10 m. (33 ft.) to 26 m. (85 ft.).

The greatest depths and the strongest tides are encountered on the Southern part of the roads. When lying there vessels are less exposed to the risk of collision in foggy weather etc. and are well away from vessels proceeding up and down the river, manoeuvring for the purpose of landing and/or embarking Pilots, and from ferry boats crossing between Flushing and Breskens.

At the Northern part of the roads the tidal stream slackens gradually until H.W. is reached and under normal conditions of tide and wind the ebb stream is already felt along the shore from half an hour after H.W. until one hour after L.W. From one hour after L.W. the flood tide sets in again and is felt until shortly after H.W.

At the South side of the roads the tidal stream is running until slightly over an hour after H.W. when the stream slackens and turns. Two hours after H.W. the stream is running in N.W. direction gradually veering West.

MAX. SIZE: *Flushing East Harbour:* Entrance 34 ft. 4 in. at MLWS. A depth of 38 ft. planned alongside the quay.

Max. draft at Buoys at entrance 43 ft.

Outer Harbour: West side, max. draft 33 ft.

Inner Docks: Max. depth 24 ft.

Total: Max. length 280 m., max. draft 49 ft. (S.W.), max. d.w.t., 100,000 tons. However, draft is controlled by the depth in the approach channels.

HEALTH: No certificates required. In event of any disease or fever contact Agents.

RADIO: All messages to Agents via Scheveningen Radio.

Flushing Radio can be reached by VHF Channel 14. Harbour tugboats and pilot cutters operate on VHF Channel 6.

RADAR/VHF: Port radar service, none. River service under consideration. Flushing Radio Channel 14. Every 5 min. each hour this station transmits information regarding visibility, water-level, hindrances, anchorages, etc. Harbour tugs Channel 6.

TUGS: Join vessels in Flushing roads. Vessel's lines usually used. No extra for tug lines. For contract holders 5% reduction.

BERTHING: *Outer Harbour:* West side, quay of 1,150 ft. long, depth of water 33 ft. LWOST. Quay height above sea level 2 m. at high tide and 7 m. at low tide. In Northern part of Outer Harbour a landing stage with length of 360 ft. Depth at low tide 20 ft. Depth at HW 29 ft.

Flushing East Harbour: Quay length 1,300 ft. Depth 36 ft. LWOST.

Inner Docks: A double lock and sluice give access from Outer Harbour to inner docks and canal through Walcheren. Largest lock length 455 ft., width 72 ft., depth on still LWOST of 17.5 ft. The other lock is 213 ft. long, 26 ft. wide, and 10 ft. deep. Sluice 113 ft. wide, 28 ft. deep. Constant depth of water at quay 24 ft.

STEVEDORES: Provided by N.V. Haven Van Vlissingen (Port of Flushing Limited). Tel.: 01184-5070. Telex: 55137.

MECHANISED CARGO HANDLING: Quay length 1,300 ft. equipped with 2 portainers suitable for handling 20 up to 40 ft. containers.

Roll-on/Roll-off service between Flushing and Ramsgate. Daily service, later on probably twice a day. Vessels berth in the Inner Docks. At Flushing-East, Ro-Ro facilities for deep sea vessels.

TANKERS: Vessels carrying over 4,400 gallons of combustible liquids with a flash point up to 21° C., or over 22,000 gallons with flash point up to 55° C. require Harbour Master's permission for entry.

Two discharging berths alongside the quay. Discharge lines three of 8 in. diameter with capacity of about 2,000 t.p.h.

Total: See "Max. Size".

One jetty for tankers up to 100,000 d.w.t. and three jetties for barges and coasters with depth of 18 ft. and 34 ft.

Connections:

Commodity	Loading arms
Fuel oil	2×12 in.
Clean products	2×10 in.
Bunkers (fuel oil only)	1× 8 in.

The two fuel oil loading arms can also be used for the discharge of crude oil. The loading arms are hydraulically operated.

Deballasting: One 12 in. and one 10 in. loading arm can also be used for the discharge of dirty ballast water in unlimited quantities at the rate of about 1,800 t.p.h.

Capacities: Discharging rate of crude oil and the loading rate of fuel oil amount to about 2,000 t.p.h.

Supplies: Water obtainable from jetty. Bunkers by barge. Stores by small vehicles max. axle load 12 tons.

MEDICAL: Two hospitals available.

DENSITY: About 1024.

FRESH WATER: Can be supplied either alongside the quay or by water boat. Possible to supply fresh water in Flushing roads weather permitting.

FUEL: All grades obtainable from major oil companies and supplied by barge only.

Economical bunkering arrangements can be made at the sheltered anchorage Schaar van Everingen, a few miles up river from Flushing. No harbour dues. Max. draft HW Neaps 41 ft. Springs 43 ft.

DEVELOPMENTS: In Flushing E. the quay of 1,300 ft. length to be extended by 140 m. with depth alongside 38 ft. LWOST.

GANGWAY/DECK WATCHMEN: Available but not compulsory or necessary.

OPENING/CLOSING HATCHES: On liners by crew or stevedores, ship's option.

CERTIFICATES: On arrival, ship's register only.

CUSTOMS ALLOWANCES: 200 cigarettes for each member of crew and total on board out of bond 5 litres spirits and 100 litres wine.

CARGO GEAR: The port is equipped with modern mobile cranes, which can be used both in the outer harbour and in the inner docks, with the following capacities:

2 cranes – 25 tons	2 cranes – 10 tons
3 cranes – 12 tons	1 crane – 8 tons

Floating cranes are available with capacities of 225, 75, 40 and 8 tons.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	tel. 15151	Germany	tel. 0118–1764
Denmark	tel. 14520	Norway	tel. 12272
France	tel. 12373	Sweden	tel. 16828

REPAIRS: All repairs possible.

DRY DOCKS: Largest 705 ft. 5 in., width 98 ft. 4 in. and four smaller docks.

REPATRIATION: All facilities available for crew changes; good railway connections.

AIRPORT: Rotterdam (Zestienhoven) 125 km.; Brussels (Melsbroek) 150 km.; Amsterdam (Schiphol) 180 km.

TIME: GMT plus one hour.

HOLIDAYS: New Year's Day (January 1st); Easter Monday; Queen's Birthday (April 30th); Ascension Day (May 15th); Whit Monday; Christmas Day (December 25th); Boxing Day (December 26th).

Work can be arranged on above days, however dependent upon permission of the Docker's Inspection.

POLICE/AMBULANCE/FIRE: Police 3333; Ambulance and Fire 2323.

TELEPHONES: Not possible to place telephones on board except for vessels berthing at the shipyard "De Schelde".

SERVICES: Compass Adjuster; Radio/radar services also calibration of the Direction Finder, Seamen's Home (Mission to Seamen); Lloyd's Sub-agents; Ship's Laundries.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.

AUTHORITY: *Outer Harbour:* N.V. Haven van Vlissingen.

E. Harbour: The Port Authority of Flushing.

AGENT: Wm. H. Muller & Co. Scheepvaartagenturen B.V., 16 Boulevard de Ruyter, Flushing. Tel.(01184) 1 2171. Telex 55068. Cables "Mineral".

GRONINGEN: 53.15 N. 06.34 E. (See Plan)

The port is connected with the Ems Estuary via the Eemskanaal and the lock at Delfzijl.

DOCUMENTS: Clearing is done at Delfzijl.

PILOTAGE: For the approach of the lock see "Delfzijl".

The length of the lock is 120 m. and the width 16 m. Depth over sill at low water 3.9 m. and at canal level 6.07 m.

On the locks canal-pilots are available but pilotage on the canal is not compulsory. The length of the canal is 14 miles and it has a least depth of 5.2 m. There are 3 bridges all 16 m. wide.

MAX. SIZE: Maximum size for ships passing lock and navigating canal; beam 13 m. and draft 4.5 m.

TUGS: Available at Delfzijl and Groningen.

BERTHING: *Hunzehaven*: South side 300 m. quayage, railway connected, max. draft 4.5 m., two grab cranes 3.5 ton, two general cargo cranes 3 ton.

Oosterhaven: North side 150 m. quayage, max. beam 12 m., max. draft 3.6 m., two grab cranes 3 ton.

Deense haven: Three mooring buoys, max. draft 4.5 m.

Eemskanaal: private silo max. beam 12 m., max. draft 3.9 m. private timber yard max. beam 12 m., max. draft 3.6 m.

Van Starkenborghkanaal: private silo max. beam 9.6 m., max. draft 2.9 m. private timber yard max. beam 9.6 m., max. draft 2.9 m.

STEVEDORES: Available.

MECHANICAL CARGO HANDLING: Silo's with equipment for bulk-handling of grain on Eemskanaal and Van Starkenborghkanaal.

MEDICAL: 3 hospitals available.

FRESH WATER: Freely supplied by Authority's water boats.

FUEL: By barge only.

CERTIFICATES: On arrival, ship's register only.

CONSULS: Belgium, tel. 138222; Norway, tel. 189444; Spain, tel. 137879.

REPAIRS: All repairs possible.

DRY DOCKS: Transverse slipway, length 100 m.

AIRPORT: Eelde, 10 km. from Groningen, daily services to Schiphol.

TIME: MET.

HOLIDAYS: New Year's Day, Easter Monday, Queen's Birthday (30th April), Ascension Day, Whit Monday, Christmas Day, Boxing Day.

POLICE/AMBULANCE/FIRE: Police tel. 121212; Ambulance tel. 123456; Fire Brigade tel. 123456.

TELEPHONES: Can be placed on board alongside Hunzehaven quay.

AUTHORITY: Harbour Master, Gemeentelijk Havenbedrijf.

IJMUIDEN (YMUIDEN): 52.28 N. 04.34 E. (See Plan)

Also refer to "Amsterdam".

DOCUMENTS:

- 2 Personal Effects Lists.
- 2 Stores Lists.
- 3 Crew Lists.
- 3 Passenger Lists.
- Declaration of Health.

PILOTAGE: On entering and leaving Ijmuiden Government pilotage is compulsory. A pilot vessel with Pilots cruises at sea in the vicinity of Ijmuiden between the light whistle buoy and the moles.

In order to avoid delay, captains, who require a Pilot must advise their ETA not less than 4 hours in advance to "Pilotage Ijmuiden". This advice must be amended, if vessel's ETA changes more than 2 hours from the original advice.

The text of the message must contain:

a. The word "ETA-Pilot".
b. Expected time arrival (group of 4 figures) in middle European time.
c. Draft with indication of unit applied.
d. Port of destination.

"Pilotage Ijmuiden" can be informed via Scheveningen Radio or via VHF Channel 12. Pilotage and navigation are possible at night.

Pilot from Helicopter: When the pilot service per pilot cutter has been suspended owing to weather conditions it is possible to take a Pilot on board vessels by helicopter. Helicopter pilotage is carried out for vessels which have an obstacle free hoisting area on deck of minimum 15 ft. in diameter. Deck plans should be provided in advance.

Helicopter rates:

Dfl. 3,740.	– per flying hour.
Dfl. 210.	– per sling transfer.
Dfl. 300.	– overtime from 1880 until 0600 hrs. and on Sundays and holidays.

Restrictions

1. Minimum visibility 800 m. at 150 ft. above sea level.
2. Maximum wind Force 10 (55 kts.).
3. Severe turbulence and icing conditions at or below 150 ft.

Harbour Master's office can be contacted by VHF Channel 11 to obtain information for safe navigation and rapid locking. In adverse weather vessels may receive radar assistance from Port Operations for entering harbour.

ANCHORAGE: Vessels may anchor off Ijmuiden outside the breakwaters.

MAX. SIZE: For North Sea Canal, entrance lock 1312 ft. long, 164 ft. wide. 49 ft. depth. Density: 1016.

Maximum permitted draft is 43 ft. in salt water, only after consultation and with permission of Government Harbour Master at Ijmuiden may the max. draft be extended to 45 ft.

HEALTH: Pratique granted automatically on arrival after completion of Maritime Declaration of Health. In case of suspected disease on board notify Agent by radio before arrival advising full details.

TUGS: Available. Meet vessel in harbour entrance if required.

BERTHING: Coal and ore cargoes discharged to Blast Furnace and Steel Works Company in Outer Harbour.

Quay 1: Length of quay: 1,360 ft. Depth alongside quay: East part 31 ft. at LLWS, West part 37 ft. at LLWS.

Opposite the quay there are 3 dolphins available where one vessel can wait for a loading/discharging berth (up to 34 ft. draft).

Equipment:

1 crane, lifting capacity 15 tons, max. outreach 57 ft.
2 cranes, lifting capacity 30 tons, max. outreach 57 ft.
1 crane, lifting capacity 30 tons, max. outreach 63 ft.

Finished products such as rolling mill products, pig-iron, cast iron, steel ingots, slabs and coils are handled.

Quay 2: Length of quay: 1,800 ft. Depth alongside quay: 48 ft. 09 in. at LLWS. Max. draft; the entrance to Outer harbour is accessible to vessels up to 43 ft. draft and with special permission of the harbour authorities up to 45 ft. draft.

Equipment:

3 bridgecranes, lifting capacity 40 tons each, max. outreach 115 ft. 2 conveyor belt systems (capacity 6,000 t.p.h.).

Despatch:

About 45,000 tons iron ore per 24 hours. About 30,000 tons coal per 24 hours.

Quay 3: Length of quay: 825 ft. Depth alongside quay: 37 ft. LLWS. On this quay exclusively steel products will be loaded.

Equipment:

2 cranes with a capacity of 60 tons each. Outreach 70 ft.

Inner harbours: These harbours are mainly used for loading or discharging smaller vessels having drafts between 13 ft. and 21 ft. 6 in.

Finished products such as rolling mill products, pig-iron, cast iron, steel ingots, slabs, coils but also fertilisers are handled.

DEVELOPMENTS: Proposed new outer port to be built South of South Harbour Entrance Mole to accommodate vessels up to 62 ft. draft.

STEVEDORES: *Working Hours:* In the Outer harbours round the clock, also on Sundays and holidays.

In the Inner harbour round the clock except from 1400 hrs. on Saturdays until 0600 hrs. on Monday.

FRESH WATER: Available from quay.

FUEL: Available by barge.

MEDICAL: Doctors, hospital and all services available.

CUSTOMS ALLOWANCES: 200 cigarettes for each crew member; 5 litres spirits for whole ship.

CONSULS, REPAIRS: And all general information; refer to "Amsterdam".

AUTHORITY: Rijkshavendienst Ijmuiden.

AGENT: See "Amsterdam".

ROTTERDAM: 51.55 N. 4.24 E. (See Plan)

DOCUMENTS: Maritime Declaration of Health, obtainable from River Pilot. Crew list in duplicate on special Dutch forms, obtainable from Agents. Ship's Register. Store list. Crew custom declaration showing quantity cigars, cigarettes, tobacco, spirits, wine, radios, cameras, etc., and souvenirs for each crew member.

Crew and passenger lists to show date of last vaccination against smallpox, for vessel coming from suspect zone within last 14 days.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg".

PILOTAGE: River pilotage compulsory from sea to harbour area and vice versa, except vessels in ballast drawing less than 7 ft. 3 in.

Harbour pilotage compulsory from fairway to berth in harbour area and vice versa, except for vessels under 475 g.r.t.

Pilot Cutters: Cruising continuously, day and night, off entrance to New Rotterdam Waterway, one North of line North Mole/Maasbuoy and one near Maasbuoy. Characteristic signals:

1. By day pilot flag, being a blue flag with white letter "L", displayed from main top mast.
2. At night, lights as prescribed by Regulations for Preventing Collisions at Sea.
3. During bad visibility the fog signal prescribed by rule 15 of these Regulations.

Ordering a Pilot:

1. Vessels bound for New Rotterdam Waterway should cable, at least four hours in advance, ETA pilot station and draft to:
   (a) Pilotage Hook of Holland via Coastal Station Scheveningen Radio (PCH) or
   (b) Coastal Station Maassluis Radio (Radio Dirkzwager) by VHF Channel 12 (Port operations) or
   (c) Pilot Station Maas at Hook of Holland by VHF Channel 20.

   This ETA notification shall, with due observance of the aforementioned 4 hours period, be rectified if the ETA will be more than 2 hours later than the ETA last reported.

   Without prejudice to this provision the Master shall indicate his requirement for a pilot by displaying the prescribed visual signals when his vessel arrives within visual range of the pilot vessel.

   The ETA message shall contain:
   (a) The words "ETA pilot"
   (b) ETA (group of 4 figures) in Central European Time
   (c) Draft of vessel including unit of measurement (feet or decimetres)
   (d) Port of destination.

   Please note that vessels which do not comply with the abovementioned regulations and fail to state their ETA timely or accurately, may only be provided with a pilot 4 hours after their arrival at the pilot station, provided that other vessels which reported themselves correctly will not be delayed.

2. Vessels bound for Port of Dordrecht should also state their destination, as pilots for Dordrecht embark from pilot cutter on roads.
3. Vessels bound for Europoort should also adopt following procedure:
   (a) Vessels equipped with VHF should notify via Channel 12 or 14 their ETA pilot station at least 1 hour in advance to Maassluis Radio Dirkzwager.
   (b) Vessels not equipped with VHF should cable same information to Europoort Rotterdam via Scheveningen Radio (PCH).

On arrival at pilot station vessels requiring Pilot are to display following signals, separately or together:

1. *By day*, International code signal "G". Pilot flag, viz., vessel's National Flag with white border from foremast.
2. *By night*, Morse signal "G" by flash light. Blue lights at intervals of 15 minutes. A bright white light shown just above bulwark for one minute at short intervals.
3. *During bad visibility*. At least 3 seconds after the normal fog signal the international code signal "G". Pilot vessel will answer: the normal fog signals, followed after at least 3 seconds by international code signal "H" (I have Pilot on board).

Pilotage for deep draft vessels and helicopter Service:

Vessels drawing 57 ft. (SW) and over must make use of the "Eurochannel" between the "Euro One Buoy" and the "Centre Maas Buoy". Pilots are embarked as follows:

up to 57 ft. SW – at the pilot station near the Centre Maas buoy
57 ft.–68 ft. SW – by helicopter:
(a) in rendezvous position 52° N. 03° E.
(b) at the VLCC anchorage off Hook of Holland.

For vessels drawing over 57 ft. (SW) 1.5 times the pilotage tariff Sea – Hook of Holland is applicable.

Helicopter pilotage is regularly carried out for vessels which have an obstacle-free hoisting area on deck of min. 15 ft. in diameter. Deckplans should be provided in advance.

Restrictions:

1. Min. visibility 800 m. at 150 ft. above sea level.
2. Max. wind force 10 (55 kts.).
3. Severe turbulence and icing conditions at or below 150 ft.

Pilot ladders: Whenever the distance from sea level to the point of access to the ship is more than 30 ft. (9 m), access from the pilot ladder to the ship shall be by means of an accommodation ladder or by other equally safe and convenient means.

ANCHORAGES: Recommended anchorages:

1. South of the Maas Centre Buoy
2. Vessels drawing 57 ft. or more at the approximate position 52° 00′ N. 03° 00′ E.
3. Emergency anchorage for deep-draft vessels NW of Maas Centre Buoy.

RESTRICTIONS: *Dangerous Cargoes: (a)* explosive cargoes in quantities of over 1,000 kgs.; *(b)* gas in bulk (Class 2, IMCO); *(c)* poisonous liquids (Class 6, 1 IMCO); *(d)* inflammable liquid with a flash point of less than 56° C., of which the gas may form an explosive mixture with air, and which liquids are not mixable with water. (Class 3, IMCO).

Masters of vessels carrying dangerous cargoes have to report 24 hours and 4 hours prior to arrival at the pilot station respectively one hour before leaving their berth to "Pilotage Hook of Holland" via Scheveningen Radio (PCH) or to "Maassluis Radio Dirkzwager" on VHF Channel 12 (port operations) stating: name and call sign, nationality, g.r.t., draft, the code word IMCO, nature and quantities of the above mentioned substances, the way of packing of the goods mentioned under "a" and vessel's ETA pilot station resp. the expected time of departure from her berth.

Vessels carrying dangerous cargoes should fly flag "B" during daytime or show 2 red lights at night.

Between half an hour and one hour before entering resp. before leaving their berth vessels should also report to "Post Waterweg of the Rijkshavendienst" on VHF Channel 14 stating: name, position and their obligation to show the above mentioned dangerous cargo signals. (Flag B resp. 2 red lights).

Fog: Tankers will not be allowed to manoeuvre in fog, i.e. in visibility of less than 500 metres (1,640 ft.).

Entry times: Depend on prevailing circumstances, as follows:

Europoort:

Ore carriers – Any time.

Tankers:

up to 61 ft. (SW) draft – Any time.
over 61 ft. (SW) draft – 1 hour before until 2 hours after high water at Hook of Holland.

Vulcaanhaven Vlaardingen: Between 33 and 39 ft. at slack high tide only.

Botlek:

(a) Between 31 ft. and 37 ft. any time except between 4 hr. and 1 hr. before high water at Rotterdam.
(b) 38 ft. and 39 ft. at slack low or at slack high water, depending on circumstances.
(c) 39 ft. to 44 ft. only at slack high water.

Vessels with a length over 200 m. (656 ft.) can only enter at slack tide.

Waalhaven:

Same as Botlek, but vessels with a draft of 39 ft. fresh water, which are over 800 ft. in length, must first discharge part cargo in Botlek from where, after draft has been reduced to 37 ft. fresh water, they can be shifted to Waalhaven.

Other basins: Any time.

MAX. SIZE:

Entrance and river area	*Channel width in m.*	*Max. SW draft (High tide)*	*Keel-clearance*
Euro 1 buoy – Euro 5A	600	68 ft.	20%
Euro 1 buoy – Euro 5A	1,200	65 ft.	20%
Euro 5A buoy – Maas centre	600	68 ft.	17.5%
Euro 5A buoy – Maas centre	1,200	65 ft.	17.5%
Maas centre buoy – Entrance	600–400	68 ft.	15%
Entrance – Europoort	400–350	68 ft.	10%
Entrance – Botlek	250	44 ft.	10%
Botlek – Waalhaven	250	40 ft.	10%
Waalhaven – Rijnhaven	200	34 ft.	10%

For vessels drawing over 65 ft. (SW) the "Selship Procedure" (Selected Ship Procedure) will remain in force, which means that special permission to enter the port is required from the Government Harbour Master This procedure is expected to be terminated in the course of 1975, when alternative rules for entering will be issued.

Shifting: Vessels which have been partly discharged at Europoort/Maasvlakte terminals should arrive at the Botlek entrance half an hour before high tide at Rotterdam. The following rules in view of length and draft apply:

Max. length overall	*Max. draft allowed*
up to 259 m. (up to 850 ft.)	44 ft. SW
259–266 m. (850 ft.–875 ft.)	42 ft. SW
266–274 m. (875 ft.–900 ft.)	41 ft. SW
274–305 m. (900 ft.–1,000 ft.)	39 ft. SW

HEALTH: Master has to fill in and sign Maritime Declaration of Health which is handed to him by Pilot. Vessels subject to medical inspection have to hoist flag signal ZV (at night two white lights horizontally placed).

RADIO: Recommended radio station: Scheveningen Radio, call sign PCH, via which station also Agents send messages to vessels.

RADAR/VHF: Chain of seven shore-based radar stations permits navigation during all weather conditions. Radio and radar station Pilot Maas, at Hook of Holland, communicates via VHF Channel 20.

VHF range = about 15 miles.

Radar range = about 14 miles in South-west and West direction, and 10 miles in North direction.

Captains are requested to call this station, especially during bad visibility, well in advance of arrival at pilot station. Pilot Maas provides vessels within range with nautical information and acts as a link with pilot cutters.

Radio and radar station, known as "Rijkshavendienst Waterway", located in Europoort now operates a 24-hour service. It acts as communication post for safety for shipping outside entrance to New Waterway and on Waterway. The station can be contacted by inward bound vessels, but must be contacted by vessels before departure from Europoort by VHF Channel 14, call-sign "RHD Waterway". Station also gives nautical information on situation on New Waterway every half hour via VHF Channel 14 in English.

MEDICAL: All medical facilities available. Advance notice only in emergency or if attendance required during week-end.

TUGS: Tugs normally join vessel on river when nearing the basin where vessel will be accommodated. Vessel's towing lines used. On departure from Europoort the tow ropes, fastened to the stern, must be supplied by the tugs.

BRIDGES: New Waterway connects port of Rotterdam with North Sea, without any locks or bridges. Only to reach some shipyards, situated East of Rotterdam, vessels have to pass the "Maas-Bridges" (Koningshaven), which are on working days opened at regular times

GENERAL CARGO FACILITIES:

	Maximum FW draft at low water	*Cranes No.*	*Cranes Capacity*
Schiehaven	9.0 m.=29 ft. 6 in.	9	5–17.5 tons
Lekhaven	10.0 m.=32 ft. 10 in.	8	5–25 tons
Merwehaven I	10.0 m.=32 ft. 10 in.	8	5–17.5 tons
Merwehaven II	10.0 m.=32 ft. 10 in.	5	3–25 tons
Maashaven	9.0 m.=29 ft. 6 in.	10	5–20 tons
Waalhaven, Pier 1	10.5 m.=34 ft. 6 in.	13	5–25 tons
Prinses Beatrixhaven	10.0 m.=33 ft. 00 in.	9	3–25 tons 4 banana-elevators 80,000–100,000 cartons of 20 kg. per 8 hours.
Waalhaven, Pier 6	11.0 m.=36 ft.00 in.	9	5–30 tons

The 17.5-ton cranes are mainly used for the handling of containers and steel. In combination these cranes can lift 28 tons. 2 floating cranes – max. capacity 5 tons each.

Parkhaven	8.0 m.=26 ft. 3 in.	10	15 tons
Jobskade	8.5 m.=28 ft. 00 in.		
Jobshaven	8.0 m.=26 ft. 3 in.		
Merwehaven II	6.0 m.=19 ft. 8 in.	5	5 tons
	10.0 m.=32 ft. 10 in.		
	8.0 m.=26 ft. 3 in.		

BULK HANDLING FACILITIES:

Key to table.

1. Berth.
2. Length of quay in metres and feet.
3. Maximum draft at MLW (S) salt water, (F) fresh.
4. Equipment.

5. Max. height of discharging gear above high water-level.

1	2	3	4	5
Europoort C.V.	645 m.=2,116′ (disch. section) 550 m .=1,804′ (loading section)	59′ S	3 unloading towers conveyor belts 3 stacker reclaimers 2 loading machines	24 m.=78′ 8″
Europoort Silo B.V. (Bunge)	230 m.=755′	52′ 6″ S	2 unloading towers conveyor belts, silos, barge loading installation	32 m.=105′
"Botlek" B.V.	250 m.=820′	42′ 8″ S*	2 unloading bridges	18.3 m.=60′
	250 m.=820′ (disch. section)	38′ S	conveyor belt 1 stacker	
	200 m.=656′ (loading section)	29′ S	1 reclaimer 2 loading machines	
Frans Swartlouw	548 m.=1,800′	42′ 8″ S	2 level luffing cranes	29.6 m.=97′
St.Laurenshaven	345 m.=925′	38′ 4″ S	1 transporter bridge	25.2 m.=82′ 10″
Botlek	(disch. section)		1 transporter bridge	16.5 m.=54′ 3″
	180 m.=591′ (loading section)	23′ S	2 transporter bridges conveyor belts 2 loading machines	15.2 m.=49′10″
Frans Swartlouw Vulcaanhaven Vlaardingen	640 m.=2,100′	37′ F	3 transporter bridges 4 el. cranes conveyor belt 1 phosphate loading mac.	16.0 m.=52′ 6″
G.E.M. Botlek	2×(245 m.= 803′) (disch. section)	42′ 8″ S*	5 shore elevators conveyor belts and silos	21 m.=69′
	2×(142 m.=465′) (loading section)	32′ S	5 floating elevators	
Chemiehaven (derivatives)	220 m.=722′ (vessel's length)	32′ 6″ S	2 chain transporter machines	
S.H.V. Waalhaven	345 m.=1,322′ (5)	36′ 1″ F	4 unloading bridges	16.9 m.=54′
	400 m.=1,312′ (7)	37′ 3″ F	3 unloading bridges	18.9 m.=62′
Ekom	680 m.=2,231′	69′	2 unloading bridges	27.5 m.=90′

*Max draft allowed at high water in Botlek =44′ S.W.
Vulcaanhaven =39′ F.W.

Discharge/Loading Rates: Maximum unless stated.

Installation	*Discharge Rate* (t.p.h.)	*Loading Rate* (t.p.h.)
Europoort C.V.	6,900 4,500 (Av.)	6,000
Europoort Silo B.V.	2,400	1,200
Botlek B.V.	2,000 1,600 (Av.)	4,400 1,000 (Av.) for vessels up to 15,000 d.w.t.
Frans Swartlouw	400/650	Dependent on
St. Laurenshaven	1,400 and 650	size of barge.
Botlek	450 each	8,000
Frans Swartlouw Vulcaanhaven Vlaardingen	1,950 500	Phosphates 600
G.E.M. Botlek	2,100 2,400	2,000 for vessels up to 25,000 d.w.t.
Chemiehaven		Dependent on size of barge.
S.H.V. Waalhaven Pier 7	1,400/1,600	Dependent on
S.H.V. Waalhaven Pier 5	1,400/1,600	size of barge.

(*V.O.M. Maasvlakte:* A new bulk-cargo transhipment installation is in operation).

	Quay length	*Max. draft*
seagoing vessels	600 m.=1,968 ft.	69 ft. (SW)
	675 m.=2,214 ft.	53 ft. (SW)
barges	500 m.=1,640 ft.	17 ft. (SW)

However, it must be borne in mind that the maximum draft at the river entrance and Europoort is 65 ft. (SW).

2 cranes: Total max. capacity	6,000 tons of ore per hour.
Total average capacity	3,000 tons of ore per hour.
Maximum outreach	45 m.=148 ft.
Lifting capacity	50 tons.
Grab weight	20 tons.
Storage capacity	1.7 million tons.
Max. gear height above high water	27.5 m.=90 ft.
2 mobile barge loading machines:	
Maximum outreach	20 m.=65 ft. 8 in.
Total maximum capacity	12,000 t.p.h.
2 Stacker/reclaimer combinations:	
Total maximum capacity	6,000 t.p.h.

Conveyor belt system between the discharging section in the Beercanal and the loading section in the Hartelcanal, also for stacking and reclaiming.

SPECIALISED CARGO-HANDLING FACILITIES:
Container vessels:

1. *Prinses Beatrixhaven:* Max. draft 33 ft. (FW).
2. *Prinses Margriethaven:* Max. draft 42 ft. (FW).
3. *Prins Willem Alexanderhaven:* Max. draft 40 ft. (SW). 2 and 3 are operated by E.C.T., capacity 500,000 containers. Length of quay, 3,000 m. Operates 12 container cranes, 4 used exclusively by Sea/land. Also handles roll-on/roll-off vessels.
4. *Waalhaven* (Pier 7): Max. draft 41 ft. (FW). Operated by Unitcentre B.V. operates 4 container cranes. Length of quay 500 m., 800 m. in near future.

L.A.S.H.: Vessels discharge and load at buoys in Waalhaven.

Average permissible draft at buoys 35 ft. (SW). Max. draft at buoys 6 and 12, 40 ft. (SW).

Esso Chemie N.V.: The fertiliser plant in Europoort produces ammonia, urea, nitric acid, calcium ammonium nitrate.

Max. size: 15,000 d.w.t., length 650 ft., draft 34 ft. in S.W. Can accommodate 1 vessel 15,000 d.w.t. and 3, 4,000 d.w.t.

TANKER BERTHS:

Europoort

Installation	*Basin*	*No. of berths*	*Max. SW draft*	*Hoses*
Shell (No. 104)	Beneluxhaven	1	68 ft.	4 at 16 in.
(No. 103)	4th Petr. haven	1	57 ft.	4 at 16 in.
(No. 102)	4th Petr. haven	1	52 ft.	4 at 12 in.
(No. 101)	4th Petr. haven	1	46 ft.	4 at 12 in.
Maatschap	4th Petr. haven	2	46.5 ft.	3 at 12 in.
(Chevron/Esso)	5th Petr. haven	2	68 ft.	3 at 16 in.
Gulf	5th Petr. haven	1	53 ft.	4 at 12 in.
		1	47 ft.	5 at 10 in.
		1	42 ft.	
B.P.	6th Petr. haven	2	68 ft.	4 at 12 in.
		1	43 ft.	4 at 10 in.
		1	40 ft.	4 at 10 in.
		2	38 ft. and 32 ft.	
Maatschap Europoort Terminal	7th Petr. haven	2	68 ft.	4 at 16 in.
Europak	7th Petr. haven	2	68 ft.	4 at 16 in.
Matex Europoort	7th Petr. haven	1	68 ft.	
		1	39 ft.	
MOT	8th Petr. haven	2	68 ft.	
Botlek				
Esso	3rd Petr. haven	2	38 ft.	2 at 10 in.
		1	38 ft.	
Nieuwe Matex	3rd Petr. haven	6	39 ft.	4, 6, 8, 12 and 16 in.
Paktank	3rd Petr. haven	3	39 ft.	4, 8 and 14 in.

Pernis (Max. LOA 810 ft.)

Installation	*Basin*	*No. of berths*	*Max. draft*	*Hoses*
Paktank	2nd Petr. haven	2	36 ft. SW	10 and 14 in.
	1st Petr. haven	2	32.6 ft. FW	8 and 10 in.
Shell	1st Petr. haven	7	39.5 ft. FW	4 at 8 in.
	2nd Petr. haven	7	35 ft. FW	4 at 8 in.
Chevron/ Texaco	2nd Petr. haven	1	32 ft. FW	3 at 12 in.
		1	35 ft. FW	3 at 12 in.
Mobiloil	2nd Petr. haven	1	33 ft. FW	6 and 8 in.

No facilities for discharging dirty ballast at Mobiloil, Chevron/Esso at 5th Petrol Haven and Paktank.

No bunkers (ex-installation) at Mobiloil, Paktank 1st and 2nd Petr. Haven and Matex Europoort.

Maasvlakte: No restrictions on length or beam. On entering tugs are made fast just inside the breakwater. On departure tugs hawsers must be used aft. Max. draft 68 ft. Two berths available. Storage capacity 2.1 million tons. No bunkers available ex-installation. Shore facilities for dirty ballast available.

DENSITY: *Europoort* – At high water 1025; at low water 1022.

Botlek At high water 1014; at low water 1001.

Waalhaven and other basins in the Rotterdam port area: at high water 1004; at low water 1000. All depending upon amount of fresh water carried down river.

STEVEDORES: Normal working hours:

1. *Bulk cargoes except grain:* Monday 0730 – Saturday 1400 hrs. uninterruptedly.

2. *Bulk grain:* Monday–Friday 0730–1130; 1200–1600 hrs. Saturday 0730–1130; 1200–1530 hrs. Nightshifts: Monday–Thursday 1630–2030; 2100–0045 hrs. Friday 1630–2030 hrs.

3. *General cargo:* Monday–Friday dayshifts 0730–1600 hrs. Nightshifts: 1630–0045 hrs.

4. *Oil:* Continuously, including weekends, except the oil storage companies Pakhoed and Nieuwe Matex, which work from Monday till Friday during daytime only, unless overtime arrangements are made.

Agents should be kept closely advised of vessel's position. In view of ordering gangs for next morning/evening Master's final ETA message is required before 1400 hrs. For work on Monday mornings a final ETA is required before Friday 1400 hrs.

OPENING/CLOSING HATCHES: On liners by stevedores. On tramp vessels by crew; stevedores lifting beams.

FRESH WATER: Can be supplied ex quay at many berths. Where no shore connections are available and at buoys: by waterboat.

FUEL: All types of oil bunkers can be supplied by means of barges or ex shore installations for tankers. Coasters can take bunkers ex installation during their inward or outward passage. Advance notice is required for vessels which are only 24 hours or less in port and for bunkering during week-ends.

FIRE PRECAUTIONS: No floating objects are allowed alongside tankers during discharge or loading of dangerous cargoes and during ballasting.

CUSTOMS ALLOWANCES: Spirits: first arrival each month, 5 litres per vessel plus one bottle per man. Otherwise, 0.75 litre per man with a max. of 5 litres per vessel. Wine: 5 litres per man.

Each crew member permitted out of bond 200 cigarettes, or 25 cigars, or 500 gm. tobacco.

DEVELOPMENTS: Maasvlakte: An oil terminal is under construction and partly operational. The first phase of construction consists of 25 tanks, capacity of 120,000 cb.m. each, a jetty for tankers up to 350,000 d.w.t. and a jetty for tankers up to 500,000 d.w.t.

The breakwater has been lengthened by 3 km. at the entrance to the new waterway.

The expected future draft for Maasvlakte is 72 ft. (SW).

A L.N.G.-installation is expected to be operational in 1977; storage capacity 75 million cbm.

The Grain Elevator Company (G.E.M.) plans to start the construction of a transhipment installation in Europoort for bulk carriers of up to 100,000 tons d.w.t.

The expected future draft for Maasvlakte is 72 ft.

GANGWAY/DECK WATCHMEN: Recommended.

CERTIFICATES: Ship's Register and Derating Exemption Certificate.

CONSULS:

Austria
Belgium
Bolivia
Brazil
Costa Rica
Cuba
Denmark
Dominican Rep.
Ethiopia
El Salvador
Finland
France
Germany
Great Britain
Greece
Haiti
Honduras
Iceland
Ireland
Italy
Japan
Luxembourg
Mexico
Monaco
Morocco
Nicaragua
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Portugal
Spain
Sweden
Switzerland
Tunisia
Turkey
Uruguay
U.S.A.

REPAIRS: Yards of various capacities are available for new building, engineering and all types of repairs.

DRY DOCKS: Largest dry dock for vessels up to 500,000 d.w.t. with tank cleaning installation for largest vessels.

REPATRIATION: All arrangements for crew changes and repatriation can be made.

AIRPORT: Rotterdam airport Zestienhoven (distance 6 km.) and Amsterdam airport Schiphol (distance 70 km.) are served by regular airlines.

TIME: During the whole year GMT plus one hour.

HOLIDAYS: New Year's Day; Easter Monday; Queen's Birthday (30th April); Ascension Day; Whit Monday; Christmas Day (25th December) no work; Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Police head office tel. 14.31.44; Alarm and accidents tel. 14.14.14; Ambulance tel. 13.50.00; Fire tel. 99.

TELEPHONES: At major shipyards, oil and grain terminals telephone is placed on board without extra charge.

DEGASSING/CLEANING: Free translation of circular issued 17th April 1973 by the Docks Industry of the Municipality of Rotterdam, reads: Safety requirements in regard to degassing/cleaning of tanks and/or holds on board ocean tanker vessels.

A recent accident during cleaning activities of tanks having contained combustible gases or liquids, poisonous or not, has resulted in the following directives to maintain the safety and to protect the environment in the dock area.

The articles 55 and 56 of the Port Regulations Rotterdam (Municipal Gazette 1971, No. 3) prescribed a written consent of the Port Superintendent for degassing/cleaning. To obtain such a written consent on behalf of an ocean tanker vessel, the Captain should apply to the Office of the Port Superintendent, Department of Dangereous Substances, at least 24 hours before the actual cleaning. Conditions may be made in respect of, and amongst other things:

(a) safe cleaning procedure, and
(b) presence of an expert.

To that effect an investigation may be held on board as to a safe rinsing procedure, and relevant subjects, in consultation with the ship's management.

A statement may be demanded from the Captain stating whom he charges with the supervision of the activities. From this person expertise is demanded, to the satisfaction of the Port Superintendent. This "Expert" may be a member of the ship's crew, respectively a person to be designated by the Owner (e.g. a laboratory expert). Without the express consent of the Port Superintendent cleaning must not be started.

These measures have become effective at once and are applicable to all ocean tanker vessels, of which the tanks to be cleaned have contained a combustible liquid as its last contents with a flash-point lower than, or equal to, 55° C.

For ships berthed at a shore tank-cleaning station and handled by that company, the cleaning-company concerned shall be liable for a safe treatment and consequently no separate consent shall be required.

In the following summary, the ship's data necessary to obtain a consent has been stated.

The cleaning of tanks, as indicated in this circular, is not permitted without the consent of the Port Superintendent of Rotterdam. Concerning stench-causing substances further directives will be issued.

It will be tried to restrict the delays possibly occurring as a result of this new regulation minimum.

Summary: By "degassing" to be understood: Degassing or ventilating a tankage, steaming or cleaning and the activities related thereto.

Reporting: At least 24 hours before commencement of the cleaning activities the ship (ship's Agent) should make a request by Telex to the Port Superintendent of Rotterdam (Port co-ordinating centre) to obtain a consent pursuant to Art. 55 or 56 Port Regulations Rotterdam. 35 Lloydstraat, Rotterdam. Telex: GEVST 25720.

The following data should be stated when making the application: (1) name ship; (2) nationality; (3) tonnage in g.r.t.; (4) name Agent; (5) berth where cleaning is to be carried out; (6) indication of tanks to be cleaned; (7) correct technical denomination of the last 2 products carried in these tanks; (8) expected time of commencement cleaning; (9) cargo still on board; (10) by whom cleaning will be carried out (ship's own crew respectively name cleaning company); (11) destination slush (remaining on board respectively discharge to . . .).

AUTHORITY: Havenbedrifzj der Gemeente, Rotterdam.

AGENT: Wm. H. Muller & Co's Scheepvaartagenturen B.V., Westerlaan 1 Rotterdam-3002. Tel. 010–36.43.00. Telegrams: "Mineral". Telex 21245 (3 lines).

TERNEUZEN: 51.20 N. 03.49 E. (See Plan)

DOCUMENTS: Also see "Rotterdam". Customs clearance takes place in the docks, except vessels bound for Belgium. Clearing of ships comprises the production of a document signed by the Master, accompanied by the following documents in triplicate: Cargo and Crew Manifest, and Stores List. Masters are requested to have Crew List completed beforehand to avoid delay in the lock.

PILOTAGE: Compulsory for all vessels entering, leaving, and navigating inland waterways. Sea Pilot meets inward vessels at buoy A1, 51° 22.00′ N. 2° 53.24′ E. for ships entering by Wielingen channel; or at Middensteen Bank buoy, 51° 39.30′ N. 3° 19.00′ E. for ships entering by the Oostgat channel.

In Wielingen channel Belgian and Dutch Pilots available. In Oostgat channel a Dutch pilot cutter is stationed. Belgian pilot boat carries at the masthead a red flag with a white letter P, the Dutch pilot boat has a blue flag with a white letter "L". Communicate with pilot cutter by VHF Channel 6.

Warning: In approaches Masters may encounter fishing boats steaming a parallel course about 300 ft. apart. The net is being towed between the two vessels. If there is danger of fouling the net, the fishing vessels will display by day International Code flag D, or by night a searchlight from each vessel.

ANCHORAGE: Vessels anchor outside fairway where depth is at least 49 ft. Mud bottom and good holding ground.

RESTRICTIONS: No restrictions on night entry.

MAX. SIZE: Controlling depth 31 ft. 4 in. Keel clearance 3 ft. 0 in. Height of tide 12 ft. to 15 ft. A vessel of max. draft 40 ft. 6 in. can reach Terneuzen in most circumstances.

Ships not exceeding the following dimensions are allowed to pass through west lock and canal: length 230 m., breadth 31 m., draft in fresh water (canal) 11.75 m.

With special permission: length 245 m., breadth 33 m., draft in fresh water (canal) 12.25 m.

HEALTH: Arriving vessels are only subject to medical examination when arriving from countries where contagious diseases reported or when such cases suspected on board. Medical Officer will board in Terneuzen roads or Outer Harbour.

RADIO: Communicate via Flushing radio Channel 14, 156.70 mHz. 24-hour watch kept. From five minutes past every hour to ten minutes past the hour switch to Channel 16 for traffic list and navigation reports.

Communicate before entering the West outer harbour Terneuzen by VHF Channel 11 (156.55 kHz), 24 hours watch kept.

Each hour a weather bulletin, navigation reports and warnings are given.

TUGS: Towage not compulsory. Tugs can be ordered from Terneuzen tugboat company or Towage and Salvage Union Ltd. respectively by Channel 13, 156.65 mHz, and Channel 3, 156.15 mHz. Stations manned continuously for ordering tugs and general information.

MEDICAL: Two modern hospitals available.

FRESH WATER: Available from water barge.

FUEL: Fuel oil and lubricating oil available from lighter or tanker barge. Bunker coal not available.

GANGWAY/DECK WATCHMEN: Available. Tariff increase 100% on Sundays and holidays.

OPENING/CLOSING HATCHES: Can be effected by crew or stevedores.

CUSTOMS ALLOWANCES: See "Rotterdam".

IDENTIFICATION CARDS: Not required.

REPAIRS: Terneuzen Shipbuilding Yard situated at junction of East and West Canal branches. Able carry out hull and engine repairs. Floating cranes and diving equipment available.

DRY DOCKS: Dry-docking only possible for coasters, length 345 ft. width 39 ft. 6 in., draft 11 ft. 6 in.

TIME: GMT plus one hour.

HOLIDAYS: See "Rotterdam".

SERVICES: Repairs of radio radar, etc., can be effected.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Plans made to widen and deepen Outer Harbour, also extension to southern Canal Harbour and Zevenaardok Harbour.

AGENT: See "Flushing".

VLAARDINGEN: 51.54 N. 04.20 E.

On the Waterway about 5 miles from Rotterdam.

DOCUMENTS: See Rotterdam.

PILOTAGE: Harbour pilots are always available.

TUGS: Available.

BERTHING: *Old harbour (municipal):* For tugs and inland craft. Depth at entrance 10 ft. at LW. Total length of quay 2,000 m.

Koningin Wilhelminaharbour (municipal): Depth 12 to 17 ft. at LW. Length of quay 1,300 m.

Vulcaan harbour (private): Suitable for vessels up to a draft of 10 m. (33 ft.) at LW. Stevedoring by: Frans Swarttouw's Havenbedrijf.

Length of quay for cargo-handling: 750 m. Phosphate loading jetty (on riverside) for barges 140 m. 3 electric 16-ton cranes, 3 electric 6-ton cranes and two 5-ton mobile-cranes. Belt conveyors on phosphate jetty. Large shed with a capacity of 30,000 tons and 6 storage tanks with a total capacity of 90,000 tons for various bulk cargoes.

Nieuwe Matex Wharfs (private): 3 berths for sea-going vessels on riverside up to 35 ft. draft at LW. Several berths for barges and coasters on innerside of jetty up to 22 ft. draft.

Large tank installation; bonded warehouses. 424 storage tanks (total) capacity 450,000 cu.m. for vegetable and mineral oils, molasses, latex and chemicals.

Lever's Soap Company Jetty (private): Jetty 75 m. max. draft 10 ft. at LW. (no harbour dues).

N.V. Van Neerbos Ind. en Handel My. Jetty (private): Length of jetty 70 m., max. draft 10 ft. at LW. 1 electric 3-ton crane.

Royal Shell Jetties (private): 4 jetties, length 25 m. each, with berths for vessels up to 12 ft. draft. Tank installation for mineral oils; 77 tanks, total capacity 412,640 cu.m.

Harbour dues by arrangement.

Windmill Fertilizer Works Harbour (private); Length of harbour 300 m. max., draft 11 to 14 ft. at LW. One jetty on riverside, length 105 m. Max. Draft 16 ft. at LW. Harbour dues by arrangement.

FRESH WATER: Available by barge.

FUEL: Available by barge.

REPAIRS: *Ship Repair Yard "H.V.O."* All kinds of repairs undertaken. Dry dock for vessels of 4,000 and 900 d.w.t. in Koningin Wilhelminaharbour. Broadside slipway of 400 ft. (cap. 3,500 tons) in Vulcaanharbour (Western part). Outfitting quay of 1,100 ft. length.

Machinefabriek Kreber: Builders and repairers of boilers, engines and various kinds of dredgers.

AIRPORT: Rotterdam Airport (designed for international short and medium haul air traffic) lies at a distance of 10 km. from the Vlaardingen port area.

AUTHORITY: Municipal Harbour Master.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Netherlands Antilles

BARCADERA, Aruba: 19.29 N. 70.00 W. (See Plan)

The industrial harbour of Aruba, situated three miles S.E. of Oranjestad.

DOCUMENTS: Documents and all general information, refer to "Orangjestad".

PILOTAGE: Compulsory.

RESTRICTIONS: Harbour open day and night. Depth of water in entrance and throughout harbour is 36 ft. Swinging basin width 1,000 ft.

MAX. SIZE: Up to 12,000 g.r.t.

TUGS: Available.

BERTHING: 1,150 ft. of dockside accommodation.

FRESH WATER: Not available.

FUEL: Can be supplied.

AUTHORITY: See "Oranjestad".

BONAIRE TERMINAL: 12.13 N. 68.23 W. (See Plan)

OPERATORS: Bonaire Petroleum Corporation N.V. Transhipment Terminal receives crude oil shipped from its source in Very Large Crude Carriers (VLCCs). The crude is stored in tanks on shore and reloaded into large and medium range tankers for subsequent unloading at a refinery or other terminal.

LOCATION: The steel jetty is situated on the South coast of the northern portion of the Island of Bonaire in Lat. 12° 13′ 12.9″ N. and Long. 68° 23′ 17.2″ W.

DOCUMENTS:

3 Crew Lists.
1 Stores List.
1 List of personal effects of crew leaving.
1 Medicine and Drugs List.
Health Certificate from last port.

PILOTAGE: Compulsory. The Pilot-Berthing Master will board the vessel at the established arrival point in Lat. 12° 10′ N. and Long. 68° 25′ W., which is 3.6 miles, 208° True from the jetty.

The Pilot will embark from one of the tugs or launches assigned to assist the vessel in the berthing operation. The Pilot will assist the Master in every way possible to manoeuvre the vessel from the arrival point into the berth with the assistance of the 2 tugs and utilizing the services of the 2 mooring launches to run mooring lines from the vessel to the breasting and mooring dolphins.

ANCHORAGE: There is no anchorage area at Bonaire for tankers; therefore, if the berth is occupied, vessels will be appropriately instructed to remain within radio/telephone (VHF Channels 16 and 13) radius pending advice with respect to a clear berth or other advices.

NAVIGATION: Navigable waters surrounding Bonaire Island are clear; however, the coasts of the Island are steep-to and should be avoided. The currents in the offing and off the points of the Island set Westward. On days with little wind a weak current sets to the Westward, generally parallel with the coast from Kralendijk Roads toward Wekoewa Point and parallel to the coast line in way of the jetty. It is urged that reference be made to the British Admiralty South American Pilot Volume V or United States HO Pub. 22 Sailing Directions for the West Indies Volume II or equivalent publication of the Netherlands Government.

Lacre Point, on which a light is shown, is at the Southern extremity of Bonaire. A light is situated on Boca Spelonk, the Eastern mid-point of the Island. Seroe Bentana Light, situated near the Northern extremity of the Island, is visible for approach from the N.E. through N.W. South of 250°/070° on the West side of the Northern end of the Island this light is obscured and then jetty lights and Radio Netherland Towers may be used for bearings.

Prevailing winds are the E.N.E. trade winds.

HAZARD ZONE: *Radio Transmitting Installation:* Vessels approaching Bonaire should remain clear of an area within a radius of 3 nautical miles from the Radio Netherlands Towers situated on the Island of Bonaire in Lat. 12° 13′ N. and Long. 68° 19′ 15″ W. This area is noted as a danger area due to strong radiation from the powerful radio transmitters on shore. Bonaire Terminal is situated sufficiently West of this area to be well clear of any radio radiation influence.

RADIO: When a vessel leaves its loading port, the shipper should advise the date of anticipated arrival at Bonaire. For vessels departing from remote loading ports, the estimated arrival date should be revised at least once each week while the vessel is en route.

A government wireless/telegraph station operates daily from 0700 to 2130 hrs. local time (1100 to 0130 GMT). Vessels bound for Bonaire should route their messages for Bonaire through Curacao Radio (PJC).

Arrival Advice: The Master should advise his estimated time of arrival not less than seventy-two (72) hours in advance, again forty-eight (48) hours in advance and again twenty-four (24) hours prior to arrival, and this last message should be revised if an unusual change in the estimated time of arrival should occur. Wireless telegraph messages of this nature must be sent to the ship's Agent who, in turn, will immediately relay the information to the Terminal management.

The text of any one of the arrival advices should contain the following data in addition to the declared time of arrival:

1. Draft of vessel, fore and aft.
2. Available fittings, i.e. number and diameter of connections at deck manifold system for prompt connecting of two 24 in. and/or two 12 in. steel swivel loading arms.
3. Any conditions which may affect loading or unloading operations.
4. Any unusual condition which may require abnormal attention prior to berthing.

VHF: International VHF Maritime Band Communication should be commenced within a radius of thirty (30) miles from the Terminal, or more, if possible. The Terminal may be called on International VHF Channel 16 (156.800 mHz). When radio/telephone contact with the Terminal has been established, communication should then be shifted to Channel 13 (156.650 mHz).

After initial radio/telephone contact has been established, radio/telephone communication with the Terminal will remain on Channel 13. This will include communication with the two tugs and the two mooring launches on standby, all of which will be available to assist the vessel into the berth.

Mooring, Unmooring VHF Communication: Communication on Channel 13 during the immediate approach and mooring procedure will be confined rigidly to berthing operations which includes all directives from the Berthing Master to the tugs, the mooring launches and the jetty. The only messages which may interfere with these communications will be those caused by an extreme emergency.

After the vessel has been secured in the berth and the Berthing Master has cleared all berthing operations, communication on VHF Channel 13 will be secured and all base VHF receivers will be returned to guard Channel 16 pending an emergency or when the Berthing Master resumes his function for a departing vessel. It is to be noted that hand radio/telephone sets transmit and receive only on Channel 13. The base sets in the terminal office and on each of the tugs and launches is equipped with radio/telephone equipment for transmitting and receiving on Channels 16 and/or 13.

Radio/Telephone UHF (Private Frequency): Communication between the platform and the vessel and the Terminal before, during and after transfer of product will be via portable intrinsically safe, hand carried, radio/telephones on a private UHF frequency.

Radio/Telephone VHF Resume use Departing: When the vessel is ready to depart and the Berthing Master has boarded and resumes his function, VHF radio/telephone communication will again be established on International Maritime Channel 13 between the vessel's bridge, the 2 tugs, the 2 mooring launches and the jetty so that the casting off operation may be properly accomplished.

Radio Telephone – Guard Call Channel 16: After the Berthing Master disembarks and the tugs are dismissed, and the vessel has departed full away, it is expected the vessel will resume a guard watch on Channel 16. The terminal station may be called on Channel 16 and/or 13.

TUGS: Tug assistance is compulsory. Mooring launches are available.

HEALTH: There are no health formalities; however, a health certificate from the last port must be presented to the Agent for submission to local health authority.

CUSTOMS/IMMIGRATION: When the vessel is secure in the berth and the gangway is landed on deck, the Immigration Officer, the Customs Officer and the Agent will board to attend formal entry of the vessel.

Immigration: Two copies of the crew list are to be ready for presentation to the Immigration Officer. Crew members must all be presented for Document check without delay or interruption of vessel's operation. Terminal gate watchmen are required to check all personnel re-entering the terminal. Therefore, appropriate crew passes are to be issued to each Crew member prior to shore leave.

Customs: The Customs Officer will require one crew list, one stores list, one list of personal effects for those crew men leaving the vessel at Bonaire and one list of all medicines and drugs. The Customs Officer with the assistance of the ship's Agent will prepare the Inward Clearance document. This document is to be signed by the Master. Upon completion of the above formalities, the vessel is declared free and shore leave may be granted.

BERTHING: The least depth of water in way of Berth No. 1 is 110 ft. (33.5 m.).

Mooring Facilities: Berth No. 1 consists of an operating platform 132 ft. 10 in. (40.48 m.) long facing the sea and 94 ft. (28.65 m.) wide toward the shore with two 24 in. and two 12 in. swivel jointed steel loading arms for the transfer of petroleum products. The waterfront side of the platform is 22 ft. 3 in. (6.787 m.) inside and away from the ship's side.

Breasting Dolphins: There are 6 breasting dolphins, 4 of which are designed for the vessel to rest against and to which forward and back spring lines are to be secured to heavy quick-release mooring hooks. At each end of the system of breasting dolphins there is one landing dolphin offset to allow a vessel 5° off the parallel line to land against the berth system. These are noted "a" for the offset dolphin and the main dolphin is noted "b". The dolphins are numbered from No. BD1a and BD1b in the west and through BD2, BD3 and BD4b and BD4a to the east. The centre line of the berthing facility is 17 ft. 5 in. (5.3 m.) East of the centre line of the operating platform. This point is well marked on the seaward panel of the platform with a 4 in. wide white reflecting vertical stripe. BD2 and BD3 are each 135 ft. (41.148 m.) West and East of this white vertical stripe. BD1b and BD4b are each 80 ft. (24.384 m.) further West and East respectively, from BD2 and BD3.

Mooring Dolphins: Inshore 215 ft. (65.532 m.) perpendicular from the berthing line are 6 mooring dolphins. These dolphins are numbered from MD1 In the West to MD6 in the East MD3 and MD4 are each 350 ft. (106.680 m.) West and East from the centre line of the mooring structure system noted by the white vertical stripe on the seaward face of the operating platform. MD2 and MD5 are each 250 ft. (76.200 m.) West and East respectively, from MD3 and MD4. MD1 and MD6 are each again 250 ft. (76.200 m.) West and East respectively, from MD2 and MD5.

Capstans: On each of the breasting and mooring dolphins there is a small capstan with sufficient power to heave up on to the deck of the dolphin a ship's mooring line for securing to the heavy quick-release hooks.

Mooring Lines: Prior to coming alongside, the vessel must have all mooring lines on station and available on that side which will be to the berth. Bearing in mind that the product transfer is via steel swivel loading arms, it is imperative that the forward and back spring lines be adequate to maintain a minimum fore and aft motion of the vessel to remain within the limitation of the envelope of the loading arms.

Spring Lines – Breasting Lines: The first lines lead out will be the forward and back springs after which the forward and after breasting lines lead to the appropriate mooring dolphins, and then the bow and stern lines lead to the appropriate mooring dolphins. The procedure may be altered in accord with physical equipment on the ship, weather and sea conditions, along with other circumstances, all subject to the Berthing Master's requirements and combined approval of the Master and terminal management.

Mixed Mooring Lines Prohibited: Mixed moorings are prohibited, i.e. a wire and a fibre rope in parallel service is undesirable due to unequal elasticity. All mooring lines must be so arranged that loss of effect cannot occur when slacking off or heaving in one line, as required, due to the rise or lowering of the vessel during discharge or loading of cargo.

Mooring Machinery – Deck Winches: All deck machinery used for the heaving in and control of mooring lines must be operable. A vessel having deck machinery in poor state of maintenance to that point where mooring lines cannot be hove tight or brakes that tend to slip under tension will be sufficient reason to require consideration of terminal management to refuse connecting of the steel loading arms, or if same are already connected and the mooring lines become insecure, all transfer of product will be stopped and the steel loading arms disconnected pending correction of the mooring situation.

Surge-Tension Controls Prohibited: Wire mooring lines not on winch drums are not to be-used for spring lines. Mooring wires secured on surge and tension controlled winches are prohibited. All mooring lines must be secured positively, i.e. on winch drums with the brake properly drawn tight or properly secured on bitts.

Power to Deck Machinery: At no time during the period the vessel is in berth is the power to operate deck machinery to be shut off.

Motion of Vessel in Berth: The vessel, while loading arms are connected, must not be permitted any motion alongside or away from its proper position in berth.

Surveillance of Mooring Lines: Mooring lines must remain under constant surveillance during unloading and loading operations. Failure to ease tension on mooring lines during unloading or failure to maintain proper tension on mooring lines while loading will be sufficient reason to stop transfer of product.

Fire Warp – Emergency Towing Wire: After the vessel is all fast fore and aft, an emergency wire of suitable quality and strength to tow the vessel should be positioned on the offshore bow and the after offshore quarter of the ship. This towing wire should be so secured that the eye may be readily picked up by a towing vessel. It is required that the length of the wire hawser should be not less than one-half again that of the highest freeboard of the vessel at the point of its location on the ship where the ship end is well fast on bitts.

EMERGENCY SIGNAL: In the event of any form of emergency such as fire, bursting of transfer piping, overflow of vessel's cargo tank, etc., the Operating Platform emergency signal will be an intermittent signal on the general alarm system for not less than 15 seconds.

The vessel will use its own emergency signals in the event of any emergency on board. To coordinate any emergency procedure, the personnel on the Operating Platform must be advised of the vessel's emergency signals.

In the event of any emergency either on board the vessel or the operating platform all oil transfer must be stopped and all oil transfer valves closed.

LOADING: *Electric Bond – Earthing:* Prior to manoeuvring the loading/unloading steel mechanical loading arms toward the vessel from the Operating Platform, the electric bond wire must be connected to a clean metal contact on the vessel's oil cargo transfer system.

The electric bond wire shall not be disconnected until the loading/unloading mechanical arms have been disconnected and manoeuvred well clear of the vessel.

The flame proof switch on the jetty will remain open until the electric bond wire has been connected to the ship. Prior to disconnecting the electric bond wire from the ship, the flame proof switch on the jetty will have been opened.

Connection to Oil Transfer Piping Systems: In the berth there are two 24 in. and two 12 in. steel pipe swivel jointed loading/unloading arms. This equipment is entirely controlled from the deck of the Operating Platform. Connection of the fittings requires clean flat faced flanges on the vessel's oil transfer piping deck manifold, using a proper gasket, to ensure a secure tight connection.

Cargo and Ballast Transfer: Before transfer of cargo or ballast may be started, the Chief Officer and the Terminal Representative will ensure that all necessary controls and safety measures have been attended. A Declaration of Inspection is to be signed by a responsible Ship's Officer and the Terminal representative certifying that all precautionary measures have been taken, that all equipment used in the transfer operation is in proper order and that all concerned are in agreement on the proper procedure of the operation.

Discharge of Cargo: Upon advice from the Terminal Marine Supervisor to the Ship's Officer in charge that oil transfer may be started, the Officer will arrange for the initial flow to be slow with sufficient pressure to permit inspection of all transfer piping and connections for any leakage. When the terminal personnel advise they are receiving product, the flow may be increased to the rate agreed upon.

Completion of Cargo Discharge: After all cargo tanks have been drained and the pumps have lost suction and the discharge of cargo has been declared finished, the flow of product will have stopped. With the agreement between the Ship's Officer and the Terminal Marine Supervisor, the oil transfer valves on the Operating Platform will be closed. All product remaining in the unloading arms will be drained back into the vessel. If the vessel's pipe-line system does not allow the complete draining of the arm into a container or via a drain hose led into a cargo tank. *No product will be permitted to drain out onto the open deck of the vessel!* After the arms have been completely drained, they may be disconnected and the ends blanked off to prevent any drippage of oil.

Loading of Cargo: Upon advice from the Ship's Officer in charge that oil transfer may be started, the Terminal Marine Supervisor will arrange for the initial flow of product into the vessel. When the Ship's Officer advises that he is satisfied that product is flowing in accord with the loading programme, he will advise the terminal personnel and the flow will be increased to the rate agreed upon.

Communication, Audible, Visual: Constant contact with the personnel on the Operating Platform during the topping off procedure is mandatory! The rate of flow of product is to be adjusted to that point where complete control is constant and that in the event of an emergency immediate shut down will not create any pressure surge on the shore transfer piping.

Topping Off of Cargo Tanks: Every precaution must be observed to avoid over-filling of any tank or causing any listing of the vessel. Observance of the trim by the stern shall be constant to avoid any undue strain upon the vessel's longitudinal structure. The cargo tanks and pipe-lines thereto on most tankers are segregated into groups. One tank in each group should be selected for the overflow relief tank by maintaining the level of liquid considerably lower than the other filling tanks to permit prompt relief of that tank reaching an overfilled level.

Completion of Loading: After all cargo has been loaded all product remaining in the loading arms will be drained into the vessel. If the vessel's pipe-line system does not permit complete draining of the loading arms, then arrangements must be made to drain the arm into a container or via a drain hose led into a cargo tank. *No product will be permitted to drain out onto the open deck of the vessel!* After the arms have been drained they may be disconnected and the ends blanked off to prevent any drippage of oil.

BALLAST: *Ballast Loading:* Should the vessel have permanent ballast tanks with entirely separate pipe-lines and ballast transfer system sea water ballast may be loaded in accord with the Master's requirements.

Sea water ballast is not to be loaded into any cargo tanks or through any oil transfer system while there is any cargo on board the vessel. In the event of an emergency, special arrangements must be agreed upon with the terminal management for the loading of ballast into any cargo tanks before all of the cargo has been completely discharged.

The vessel's Senior Officer in charge will personally supervise the arrangement of the pumproom system for the ballasting operation. The Public Cargo Inspector will accompany the Officer into the pumproom to break the seals on the sea suction valves.

No sea suction valve may be opened until all down coming pipe-lines have been drained and are completely free of product and the down coming valve closed. In most instances the pumps should be operating just prior to opening the sea suction valve.

Ballast loading will be under the entire control of the ship's personnel and it is expected that all normal loading precautions will be observed.

Deballasting: En route to Bonaire the vessel should have thoroughly cleaned certain appropriate tanks for the containment of clean ballast for discharge overboard. Only dirty ballast (oil contaminated sea water) and tank cleaning slops are to be discharged into the terminal's ballast receiving system.

Ballast, Oily Water, Discharge: Under no circumstances will dirty ballast water be discharged overboard within a radius of 50 miles from any Netherlands Antilles Island.

Ballast Discharge to Shore; The quantity of ballast to be discharged into the terminal will be measured prior to commencement of discharge. After the steel loading arm to be used has been connected to the ship's manifold, the discharge of ballast water will be accomplished in the same manner as the discharge of cargo.

Tank Bottoms and Slops: Upon completion of the deballasting operation, all of the vessel's tanks will be inspected and approved for the reception of cargo. The sea suction valves will then be sealed in the closed position by the public inspector or by a Bonaire Petroleum Corporation N.V. representative. Any bottoms and slops remaining must have the approval of terminal management prior to "loading on top".

MEDICAL: Modern facilities are available for medical and dental treatment. A "Medical Service Request" form must be signed by the Master for crew members requiring medical or dental attention.

In the case of crew members having to be left behind at Bonaire for hospitalization or otherwise, Master must sign authorization guaranteeing expense of attention rendered and repatriation.

FUEL: Bunkers for steam propelled tankers are contemplated. Bunkers may be arranged through the ship's Agent and may be delivered to the vessel at Curacao or Aruba.

Bunker Transfer: During the period of time the vessel is in berth, the transfer of bunkers from one tank to another is prohibited. All bunkers to be consumed while in port must be available in that tank from which bunkers are normally consumed.

FRESH WATER: Fresh water on Bonaire is desalinized sea water and the supply is minimal. Small quantities may be supplied upon advance notice.

REPAIRS: There are no repair facilities on the Island of Bonaire. Upon sufficient advance notice, special service personnel and minor mechanical repair work may be arranged from Curacao. Transportation for such service personnel is via scheduled airline.

POLICE/AMBULANCE/FIRE: Tel. 8000.

CARGO INSPECTION: Along with the Government Boarding Officers the representative of the petroleum inspecting organization mutually engaged by the Shipper and Bonaire Petroleum Corporation N.V. will board the vessel for the purpose of gauging the cargo tanks, obtaining the temperature of the cargo and obtaining required samples. His function is to protect the interest of the vessel as well as the Shipper and the consignee. Every assistance is to be rendered to expedite his function on board the vessel. An Officer should accompany the Inspector while on board and should assist by making available all information requested such as cargo tank calibration tables, etc. Cargo transfer may not be commenced without the approval of the Inspector.

Completion of Discharge of Cargo – Inspection: Upon completion of discharge of the cargo, the Inspector will examine all of the cargo tanks and will sign the tank inspection certificate.

Loading Cargo, Inspection: In the case of a vessel arriving to load cargo, the Inspector will examine all of the cargo tanks to determine the condition of the cargo tanks for reception of the cargo. Upon completion of loading all of the cargo, the Inspector will gauge the cargo tanks, take temperatures and samples as required.

Incomplete or Part Cargo: In the event the vessel does not complete the discharge of cargo, or does not load a full cargo, the Inspector will board the vessel to gauge the cargo tanks to record the amount of cargo in the vessel after transfer operations have been completed.

Cargo Pumproom Sea Suctions: Prior to loading or unloading the Public Inspector will certify that the sea suction valves connected to the vessel's oil transfer system are closed, lashed and sealed. *Do not lock these valves under any circumstances.* These valves are to be sealed in the *Closed* position and sufficiently lashed so they may not open due to vibration or any other reason.

STORES/PROVISIONS/LAUNDRY: All stores and provisions are imported into the Island of Bonaire; however, small quantities of provisions may be obtained. There are no deck and engine stores available. Upon sufficient advance notice, small items not available on Bonaire may be obtained from Curacao.

Laundry service in small quantities may be arranged for through the ship's Agent.

BULLEN BAY, Curacao: 12.11 N. 69.01 W.

(See Plan)

Bullen Bay is an open bay on the South coast of Curacao, 8 miles N.W. of Willemstad.

DOCUMENTS: Documents and all General information, refer to "Willemstad".

PILOTAGE: There is a resident Pilot at the bay. Pilotage is compulsory and is rendered day and night.

ANCHORAGE: There is no anchorage in the bay.

MAX. SIZE: 500,000 d.w.t. on full draft LOA 1,350 ft.

TUGS: Compulsory. 2 tugs of 4,500 h.p. with 50 tons bollard pull. One tug of 2,500 h.p. with 35 tons bollard pull.

BERTHING: *Curacao Oil Terminal:* Curacao Oil Terminal (COT) located at Bullen Bay facilitates economical trans-shipment of Eastern hemisphere crude arriving in very large crude carriers (VLCC's) for storage and on-carriage in smaller ships to draft restricted U.S. ports.

Jetties:

1 – 500,000 d.w.t. tanker jetty
1 – 350,000 d.w.t. tanker jetty
1 – 250,000 d.w.t. tanker jetty
2 – 100,000 d.w.t. tanker jetties
1 – 70,000 d.w.t. tanker jetty
2 – Tugboat jetties

Total tank capacity: 17,750,000 barrels

1 – 1,000,000 barrels capacity	– 1,000,000
16 – 750,000 barrels capacity	– 12,000,000
6 – 375,000 barrels capacity	– 2,250,000
38 – small tanks capacity	– 2,500,000

Pipe-lines: Main track consists of 5 strings of 36 in. pipe. The jetties carry 2 strings of 36 in. pipe in a loop. The loading rate is up to 12,000 t.p.h. Tankers' discharge rate is up to 25,000 t.p.h.

Deballasting: Capacity 4,000 t.p.h. per jetty. Ballast treatment produces affluent of less than 20 parts per million (20 ppm) oil content.

Throughput:

Transhipment	1,200,000 barrels per day
Refinery import	250,000 barrels per day

Operators: Curacao Oil Terminal NV, PO Box 660, Willemstad, Curacao, Netherlands Antilles. Telex No. Curacao 1175.

FRESH WATER: Fresh water available at the piers.

FUEL: Bunker facilities for all grades are available at a rate of 3,800 barrels per hour.

AUTHORITY: Harbour Master of Curacao.

CARACAS BAY, Curacao: 12.04 N. 68.52 W.

Caracas Bay is an open bay on the South coast of Curacao, 6 miles S.E. of Willemstad. This port, mainly used by tankers, bunker ships and big passenger liners, is specially fitted as an oil terminal.

DOCUMENTS: Documents and all general informations, refer to "Willemstad".

PILOTAGE: There is a resident Pilot at the bay. Pilot service is compulsory and rendered day and night.

ANCHORAGE: There is no anchorage in the bay.

MAX. SIZE: Vessels with a max. overall length of 1,050 ft. and max. draft of 47 ft. can be accommodated.

TUGS: Tugboats operate from Willemstad. A tug is automatically provided for vessels exceeding 16,000 g.r.t. or 700 ft. length. For smaller vessels it is recommended that if a tug is required it be ordered in advance from Willemstad, otherwise there will be a wait of about one hour.

BERTHING: Two piers owned by "Shell Curacao Ltd." are built at the East side of the bay, naturally protected from prevailing wind and sea, with depths up to 47 ft. alongside. Vessels dock directly with their port-side along the piers. Pier No. 2, with a depth alongside of 47 ft., and pier No. 3, with a depth alongside of 47 ft., are newly built concrete piers/quays, modern and equipped for handling oil in bulk, with enough platform to serve also as passenger terminal. The biggest cruise ships moor along these piers regularly.

The oil is transported through pipe-lines from the refinery at Willemstad to the storage tanks at Caracas Bay. Two ships can bunker simultaneously. New electrically-driven centrifugal pumps, metering and blending equipment at the bay stand for efficiency to reduce bunkering time. Subject only to the capacity of ships receiving connections, loading rates up to 2,000 t.p.h. of bunker oil can readily be achieved.

FUEL: The piers are built as oil piers, modern and equipped to supply any kind of bunker or lubricating oil to any vessel.

FRESH WATER: Fresh water can be obtained via pipe-line on the wharves.

STEVEDORES: Lighters and longshoremen are supplied from Willemstad.

REPAIRS: Small repairs can be done at the bay through working barges alongside.

GENERAL: Clearance, port administration, port charges and regulations are the same as at Willemstad.

AUTHORITY: Harbour Master, Curacao.

FUIKBAY, Curacao: 12.03 N. 68.50 W.

Fuikbay, on the South coast of Curacao, 7 miles South-east of Willemstad, is an inland bay with a 147 ft. wide navigable entrance. The depth of this harbour is 26 ft.

DOCUMENTS: Documents and general information, refer to "Willemstad".

PILOTAGE: Pilotage is compulsory.

RESTRICTIONS: As a rule vessels only enter this port during daylight. Sailing can take place day and night.

ANCHORAGE: There is an anchorage area in the West side of the bay.

MAX. SIZE: Vessels can enter and leave with a max. draft of 24 ft. and a max. length of 360 ft.

BERTHING: This bay is mainly used as a loading terminal of the "Mining Company Curacao" for export of phosphate rock mined out of the "Tafelberg". There is one berth under the conveyor which transports the phosphate rocks from shore into the holds of the vessel alongside. Depth alongside is 28 ft. There is also a 84 ft. berth available for handling explosives or other cargo, usually named Westwerf. Only small vessels with a max. draft of 8.25 ft. can come alongside. Vessels with more draft can moor with the help of floats between ship and quay.

The piers are privately owned by "Mining Company Curacao" situated on private territory of this company.

FUEL: This port has no bunker facilities, so vessels bound for this port must take bunkers in Caracasbay or Willemstad before or after calling at this port if bunkers are desired.

GENERAL: Other services such as tugboats, repairs, power, etc. are rendered from Willemstad. 5-ton mobile crane available.

AUTHORITY: Harbour Master, Curacao.

KRALENDIJK, Bonaire: 12.15 N. 68.20 W. (See Plan)

DOCUMENTS:

	Customs	*Immigration*	*Agent*
Passenger list	1	1	1
Crew list	1	1	1
Personal effects list of crew	1		
Store list	1		
Curio list	1		

PILOTAGE: Pilot service is compulsory.

ANCHORAGES: Unlimited. Depth 30 ft. and over.

RESTRICTIONS: Notify the Agent at least 24 hrs. in advance. No tide.

MAX.SIZE: Length 1,050 ft., also see "Berthing".

INWARD CLEARANCE: Inward clearance is effected on board immediately on docking. Immigration Officer arrives on board immediately after docking. Passengers disembarking at Bonaire must present themselves for documents check.

Customs Officer boards immediately after docking and together with a representative of the Agency's Shipping Department the inward clearance document of the vessel (in ballast or with cargo in transit, as the case may be) is prepared and signed. This document must be signed by the Master. Occasionally the Customs Officer may insist that the Master sign in his presence. Only upon completion of the above formalities, usually carried out in a very short time, is the vessel declared free and passengers and crew may go ashore. It is recommended that one of the public rooms be made available for the purpose of inward clearance in order to avoid congestion in the purser's office.

HEALTH: No health formalities.

RADIO STATION: A Government Radio Station operates daily from 0700 to 2400 hrs. In case of emergency Bonaire Radio can be contacted by telephone. Vessels bound for Bonaire should route their messages for Bonaire through Curacao Radio (PJC). The Government Radio and Telephone Station maintains daily telephonic communication with Curacao, also with the United States, Europe, etc.

TUGS: Two 4,300 h.p. tugs are available. The Agent should be notified in advance if a tug is required, in order to make the necessary arrangements with the Petroleum Company.

BERTHING:

North Pier:

Berthing space	225 ft.
Depth	34 ft. alongside at LW
Height	6 ft.

Max. permitted load factor on pier is 2,000 kilos per sq. m.

Vessels of max. 30,000 g.r.t. or a max. length of 738 ft. are allowed to berth alongside.

Southern Pier:

Length	394 ft.
Width	46 ft.
Depth	50 ft.alongside
Height	6 ft.
Length of connecting bridge from shore to pier	199 ft.
Width of connecting bridge from shore to pier	68 ft.

Mooring facilities:

A: Double Mampaey easy-release electrical capstans (100 tons each)
B: Two (2) bollards 50 tons each
C: Double Mampaey easy-release electrical capstans (100 tons each)
D: Bollards of 50; 25 and 10 tons (every 20 m.)

Fendering: Vredestein Gigant Fenders; Block fenders and D-fenders (made of rubber).

Roll-on/roll-off Facilities: Vessels of max. 66,000 g.r.t. or a max. length of 1,050 ft. are allowed to berth alongside.

Max. permitted load factor on pier is 2,000 kilos per sq. m.

For the mooring and unmooring at the pier shore labourers are engaged by Agents at the expense of the shipping line. Motor-boats are available for running lines.

CARGO HANDLING: About 5 miles South of Kralendijk there is a special pier for bulk handling of salt.

STEVEDORES: There are no regular stevedores (longshoremen) available in Bonaire. For cargo handling operations ordinary labourers are engaged by the Agents for account and risk of the ship.

Working Hours: Monday-Friday 0700-1200 hrs. and 1300-1600 hrs. Overtime possible.

MEDICAL: Modern facilities are available for medical and dental treatment. A "Medical Service Request" form must be signed by the Master or other authorised officer for crew members requiring medical or dental treatment. In case of crew members having to be left behind at Bonaire for hospitalisation or otherwise, Master must sign an authorisation guaranteeing expense of treatment and repatriation.

FRESH WATER: Limited quantities of fresh water from the Government Water distillation and power plant can be supplied at the pier.

BUNKERS: On advance request, bunkers are delivered by craft at rates comparable to those in Curacao or Aruba.

GANGWAY/DECK WATCHMEN: Watchmen are not necessary but recommended; Overtime as usual.

OPENING/CLOSING HATCHES: This work is normally carried out by crew.

IDENTIFICATION CARDS: Passengers. No landing cards required, but some ships carrying a large number of passengers furnish landing cards to passengers for their own control of passengers returning on board. Crew. No landing cards required.

REPAIRS: There are no facilities for carrying out major repairs.

HOLIDAYS: The following are the official holidays observed in Bonaire: New Year's Day (Jan. 1st); Good Friday; Easter Monday; Queen's Birthday (April 30th); Labour Day (May 1st); Ascension Day; Whit Monday; Kingdom Day (December 15th); Christmas Day (December 25th); Second Christmas Day (December 26th). Religious holidays: August 15th (Assumption Day); November 1st (All Saint's Day).

TIME: 4 hours. slow of GMT. No summer time kept.

AIR SERVICES: There is a good daily airplane service between Bonaire and Curacao. 3 or 4 flights a day with good connections at Curacao with the international services to and from many parts of the world.

CUSTOM OFFICERS ON BOARD: 1 or 2 Customs Officers will remain on board during the vessel's stay in port. Such officer(s) must be furnished meals at regular meal hours.

TELEPHONES: Telephone connection can be placed on board ships at the pier.

POLICE/AMBULANCE/FIRE: Police, tel. 8000; Ambulance, 8000; Fire, Tel. 8000.

GENERAL:

Live Animals: The importation of dogs, cats, horses and certain other animals is permitted, provided these animals are accompanied by a certificate issued at place of origin by a licensed Veterinarian, stating that the animal in question is free from any contagious disease.

Dogs must have, in addition, a certificate of Rabies Inoculation. All animals imported (including birds) will moreover be examined on arrival.

Prohibited Imports: The importation of the following is strictly prohibited: Parrots and parakeets, absinth, explosives, firearms, ammunition and firework, except with prior permission from local authorities. All kinds of narcotics and drugs, the sale and use of which is regulated by International Conventions, except for legitimate use by and for sale to drugstores by duly accredited importers. Unauthorised reprints of copyrighted scientific and literary works cf art. Copper, bronze and nickel coins, except for account of the Government of the Netherlands Antilles. Obscene printed matter.

Immigration Law: All passengers disembarking in Bonaire as temporary visitors, for business purposes, on vacation, or in transit to other destination, must be in possession of:

(a) Valid passport/birth certificate.
(b) One passport photograph.
(c) Smallpox vaccination certificate, not over 3 years old.
(d) A return ticket, through ticket or passenger-order to next destination outside of the territory of the Netherlands Antilles.
(e) All documents and visas necessary for continuing to next destination or return to place of origin.
(f) Sufficient means to be able to support themselves during their stay in the territory.

No visa is required from a Netherlands Consul on any of the aforementioned documents.

AUTHORITY: Harbour Master, appointed by the Island Government of Bonaire.

ORANJESTAD, Aruba: 12.31 N. 70.02 W. (See Plan)

DOCUMENTS:

Clearance from last port.
Deratisation Exemption Certificate.
Ship's Register.
Manifest of Cargo (or ballast), or Bills of Lading for import goods and transit goods separately.
Crew List (4 copies).
List of Stores on Board (2 copies).
Consignee Mail (if cargo for discharge).
Passenger List (if any passengers).

The passenger list must carry full names, ages, sex, nationality and occupation of passengers landing at Aruba. The ultimate destination of in-transit passengers must also be shown on the passenger list.

Deratisation Exemption Certificates can be renewed at Oranjestad, Barcadera and St. Nicholas.

Outward clearance, cargo documents and list of outgoing passengers are delivered on board by the Agent's representative, thereby making it unnecessary for Masters to visit the Customs Office to obtain outward clearance.

PILOTAGE: Masters are requested to advise Agents of their expected time of arrival at least 48 hours in advance. Arrival messages should include advice regarding cash or other requirements. This information is particularly necessary in order to give prompt attention to vessel's requirements and to avoid delay after arrival.

Pilots are government employees and pilotage is compulsory for vessels from 50 g.r.t. upward entering or leaving the harbour. Pilots board inbound vessels within 2 miles of shore. The Agent's representative will arrange for Pilots to board vessels as necessary. Inbound vessels should close the West entrance of the harbour as near as prudently possible and make a lee to facilitate the Pilot's boarding.

Every vessel arriving or departing must provide and properly secure a pilot ladder which conforms with the standards of construction normally accepted by international safety standards. Failure to provide such a ladder may result in the Pilot's refusal to board a vessel.

ANCHORAGE: Anchorages, suitable even for deepest draft vessels, are located outside the protecting reef along the whole length of the Western and S.W. coast. The depth of water ranges from 10 to 35 fathoms. Because of the sharply shelving nature of the bottom in this area, it is recommended that the services of a Pilot be obtained in taking up an anchorage. Ships are anchored only during daylight hours.

TUGS: A tugboat of 1,000 h.p. is available for assisting vessels to and from the docks. The tug-boat is fitted out with radio-telephone which is open on 2182 mc. while tug is in operation.

MINIMUM DRAFTS: For tankers arriving or sailing in ballast the following minimum drafts are required for manoeuvring under normal weather conditions:

G.R.T.	*Forward*	*Aft.*
16,600 (T-2)	8 ft.	18 ft.
18,000	8 ft.	18 ft.
27,000-30,000	10 ft.	20 ft.
30,000-36,000	14 ft.	22 ft.
37,000	14 ft.	24 ft.
46,000	16 ft.	26 ft.

MAX. SIZE: The harbour itself has a depth of 36 ft. at MLW. The safe salt water draft approved for entering and leaving is 33 ft. Vessels normally enter via the West channel and depart via the East channel.

HEALTH: The port doctor will visit an arriving ship only if there is a case of quarantinable disease on board, if the ship has no clean bill of health or if one of the preceding ports of call has been declared to harbour a quarantinable disease. The Netherland Antilles bill of health is free of charge.

RADIO: Shore station for R/T communication with 24-hour service. VHF Channel 16, 156.80 mHz (calling); Channel 11, 156.55 kHz (working channel).

HF 2182 kHz, 2558 kHz (working frequency transmitter), 2158 kHz (receiving frequency SSB).

BERTHING: In total there are 4,070 ft. of dock length available to accommodate ocean-going vessels and 1,090 ft. of dock for small craft, of which:

1,720 ft. with 36 ft. of water alongside
2,350 ,, ,, 34 ,, ,, ,, ,,
460 ,, ,, 16 ,, ,, ,, ,,
230 ,, ,, 10 ,, ,, ,, ,,
400 ,, ,, 6 ,, ,, ,, ,,

STEVEDORES: Stevedoring is performed at a fairly fast rate compared with other ports in the Caribbean area. All cargo has to be handled with ship's tackle, while on the docks and in the warehouses fork-lift trucks are used for transportation of merchandise. General cargo is handled at an average of 8 tons per gang per hour.

MEDICAL: Excellent medical and dental attention is available at any hour of the day or night to crew members of all vessels.

FRESH WATER: Boiler and drinking water of purest quality is supplied by hose from the docks at a rate of 200 t.p.h. (in special cases 400 t.p.h.).

FUEL: The port of Oranjestad is an official Esso bunker station. All grades of bunker fuels can be supplied from shore tanks at a rate of 1,500 barrels an hour. A minimum of 48 hours advance notice is required.

REPAIRS: There are no facilities at Aruba for major ship repairs. Local workshops can do repairs of minor nature. Preliminary advice regarding such minor repairs should be included in ETA messages and work requisitions for repairs should be prepared for handing to the Agent's representative immediately upon arrival.

Radar, radio and gyro repairs can be carried out. However, it is important that Masters radio in their requirements as early as possible and give a brief reference as to the nature of the breakdown or fault of the equipment concerned.

While alongside vessels must be prepared to move at 1 hour's notice. Engine repairs to the effect of demobilizing the vessel may only be carried out with special permission.

SURVEYORS: Representatives of the American Bureau of Shipping, the Lloyd's Register of Shipping and the Norske Veritas are resident in the area. Masters may request the surveyors' services through the Agent.

BALLAST: Vessels must arrive with sufficient ballast to permit safe handling. All vessels should enter port with clean ballast that can be pumped over board when alongside, as it is prohibited to pump dirty ballast into the harbour.

GANGWAY/DECK WATCHMEN: An efficient and continous watch must be maintained on deck and in the engine-room of all ships while in port, and a sufficient number of men must be on board at all times to move vessels either for harbour operations purposes or in emergency situations.

OPENING/CLOSING HATCHES: This work is normally carried out by the crew.

AIRPORT: The port of Oranjestad – the commercial and tourist harbour of Aruba – is only 5 miles by road from the jet airport. The connection by air with the U.S.A. and Europe are very good and rather frequent (TCA, KLM, VIASA); other airlines operating in Aruba are: ALM, LAV, Aerocondor, and Caribbair.

POLICE/AMBULANCE/FIRE: Police, Oranjestad, tel. 1000; Ambulance, Oranjestad, tel. 2010/1234; Fire Alarm, tel. 00.

CONSULS: The following countries have consular representatives at Aruba:

Brazil
Chile
Colombia
Costa Rica
Denmark
Dominican Republic
Great Britain
Guatemala
Haiti
Italy
Lebanon
Liberia
Nicaragua
Norway
Panama
Peru
Portugal
San Salvador
Spain
Sweden
Switzerland
Venezuela
West Germany

Necessary for Masters of Panamanian and Italian flag vessels to visit Consulates at Oranjestad to present documents and receive despatches. Other Consulates have similar requirements. Masters may check with Agent for clarification.

DEVELOPMENTS: Landing stage for roll-on/roll-off vessels with depth alongside 33 ft. under construction near Harbour Office.

TIME: Local time is 4 hours slow of GMT. Vessels are requested to use local time in ETA messages and when dealing with their Agents.

CUSTOMS GUARDS: Local authorities assign 1 or more Customs guards to each vessel during its stay in port; the charges for guarding are for the account of the vessel. These officials must be provided with meals on board at regular meal hours.

SHORE LEAVE: Under normal circumstances no restrictions are imposed by the Government Immigration Authorities on shore liberty. Masters are requested to endeavour to have all crew members on board prior to departure time, so that the ship will have no delay in sailing.

AUTHORITY: Eilandgebied Aruba, Haven en Loods Dienst.

PHILIPSBURG, St. Maarten: 18.05 N. 63.10 W.

Philipsburg, capital of Netherlands St. Maarten, lies in a well-protected bay in the S.E. corner of the island. The only obstruction to the harbour is "Proselyte Reef" or "Man-of-War-Shoals", located 17' 56" N. 63' 04" W., with a min. depth of 2.5 fathoms. Entrance to the harbour can be accomplished by passing either to the North or the East of this reef.

DOCUMENTS:

Crew List: Immigration 1 copy.
Agent 1 copy.
Passenger List: Immigration 1 copy.
Agent 1 copy.
Store List: None required.
Ship's Register: Pilot will require to see this document for obtaining the official tonnage.

Note: No special form is prescribed for the above documents, consequently these may be made out in Company's regular form. No consular visa required on any of the above documents.

Immigration: Immigration officer boards ship immediately after docking. Passengers and crew are usually free to disembark immediately after boarding.

Agency Personnel: Agency personnel boards immediately after vessel is docked together with Immigration Officer.

PILOTAGE: Pilotage is compulsory and performed by Government pilots. Ships bound for the pier at Philipsburg should await the Pilot at a max. distance of 1 mile from the line Point Blanche -Fort Amsterdam.

Pilot Ladder: Jacob's ladder, in clean and sound condition is sufficient.

Time to Berth: From pilot station to pier, about 15 to 30 minutes.

ANCHORAGE: Ample suitable anchorage area available with sufficient depths of water for several large ships simultaneously.

If and when the pier is already occupied by another cruise-ship, cruise-ships can proceed to anchorage, in which case communications between ship and shore to be by ships' own launches.

For ships proceeding to anchorage, pilotage is also compulsory.

RADIO: The Government radio and telegraph service operates daily from 0700 L.T. to 2400 L.T. worldwide.

Radio Telephone: VHF Channel 10 and 155,925 mHz.

ETA Messages: ETA messages should be sent to Agent preferably in local time at least 24 hrs. in advance and any changes occurring thereafter should be advised.

Use of Ship's radio in port: Prohibited.

TUGS: None available.

BERTHING: The new concrete pier at Philipsburg is located at Point Blanche in Great Bay and has a length of 210 m., with an additional 60 m. of berthing space, located at a 60° angle to the finger pier. Min. depth is 34 ft. of water. 4 fenders of steel spring and rubber are located along the berthing space.

Height from sea-level to the deck of the pier at high tide is 4.02 m., at low tide 4.48 m. Ship will lie with port side to the pier.

Mooring and Unmooring: 3 dolphins are located in an extended line of the berthing space for mooring. Min. required size of openings in shackles is 40×50 cm. Mooring boat is available.

Equipment: Cranes are available with a capacity of 20 tons max. Forklifts up to 8 tons and sufficient flat-bed trailers and low-buoys are also available.

STEVEDORES: There are 3 gangs available. Each gang has a total of 9 workers.

MEDICAL: Government physicians are available in Philipsburg and there is also a small, but up-to-date hospital operated by the Netherlands Antillean Government. A "Medical Service Request" form must be signed by the Master or other authorised officer for crew members requiring medical treatment.

Dental facilities available.

FRESH WATER: Available.

FUEL: No facilities for carrying out repairs except for radio and radar (Radio Holland).

SURVEYORS: There is a representative of Lloyds on the island.

AIRPORT: The island is served by A.L.M. (Dutch Antillean Airlines), Air France, Eastern Airlines, K.L.M. (Royal Dutch Airlines), L.I.A.T. (Leeward Island Air Transport), Prinair.

There are direct, almost daily flights, to and from New York and Miami connecting to other major places.

TIME: 4 hours slow of GMT.

HOLIDAYS: The following Official holidays are observed in St. Maarten: New Year's Day (January 1st); Good Friday (varies); Easter Monday (varies); Queen's Birthday (April 30th); Labour Day (May 1st); Ascension Day (varies); Whit Monday (varies); St. Maarten Day (November 11th); Kingdoms Day (December 15th); Christmas Day (December 25th); Boxing Day (December 26th).

TELEPHONE: Service from ship to shore is not available.

GENERAL:

Ship's Bars and Shops: No restrictions and these may remain open for business while in port.

Laundry: Available.

Wind: Prevailing winds on the island between the months of March and December are East to South, velocity 6 to 10 knots. Between December and March winds are generally North to East at a velocity of 8 to 15 knots.

Tide: The tidal range in Philipsburg is at most 2 ft., but regularly not more than 1 foot.

Current: The current outside Philipsburg harbour changes from Easterly to Westerly, with a max. velocity of 2 knots. At the Pier the current generally runs from North to South, with an average velocity of 0.5 knot.

Gangways: No gangways are available from the pier and ship's gangways will have to be used.

Ship's Launches: There are no restrictions on the use of ship's launches.

Stores: Available.

Garbage: No disposal facilities available.

Port Health: No regulations or requirements.

Customs: None.

AUTHORITY: Harbour Master.

AGENTS: S.E.L. Maduro & Sons (Windward Island) Inc., Emmaplein, PO Box 63, Philipsburg, St. Maarten N.A. Telegraphic Address: Maduroship Stmaarten. Tel 2202/2207.

ST. NICHOLAS, Aruba: 12.26 N. 69.55 W.

(See Plan)

DOCUMENTS/HEALTH and all General Information, refer to "Oranjestad".

PILOTAGE: Pilotage is compulsory. Pilot boards off West Entrance within 2 miles of the shore. Inbound vessels are expected to approach the entrance as near as prudently possible and make a lee to assist Pilot boarding.

A pilot service for anchoring off Lago Aruba terminal during the hours of darkness is now available upon the Master's request, providing radar and echo sounder are functioning properly.

RESTRICTIONS: The port is open for day and night navigation, allowing vessels to enter and leave at any hour. The harbour has a depth of 42 ft., while the East and West channels are 45 ft. deep. The safe salt water draft approved for entering is 39 ft., for leaving - 41 ft. Vessels normally enter via the West channel and depart via the East channel.

RADIO: Radio-telephonic communication is possible on wavelengths of 156.70 and 156.80 MC/VHF (Channels 14 and 16).

TUGS: 2 diesel-powered tugs are used for berthing and unberthing.

MAX. SIZE: Tankers up to 500,000 d.w.t. at Reefberth No. 2, depth alongside, 105 ft. MLW. Also see "Reefberth".

BERTHING: All port facilities are controlled by Lago Oil and Transport Company.

The max. limitations for vessels using San Nicolas facilities are:

Berths	*Length* (ft.)	*Beam* (ft.)	*Salt water max. draft* (ft.)	*Bow to manifold* (ft.)	*Deadweight*
1 South	745	UNL	39	376	50,000
1 North	740	110	39	356	50,000
2 South	800	110	40*	400	50,000
2 North	780	110	39	356	50,000
3 South	900	130	41	440	90,000
3 North	850	120	40	390	80,000
West Pier	650	UNL	34	350	25,000
HDS Pier	700	UNL	30 ft. 6 in.	UNL	30,000 (dry cargo only)

Note: *2 South - 40 ft. mean draft with recommendation load with 1 foot trim by stern or 39 ft. 6 in. forward and 40 ft. 6 in. aft.

The max. entering draft is 41 ft. even keel salt water. The following is the suggested ballast draft for vessels.

MDWT	*Fore (ft.)*	*Aft (ft.)*
10–20	8	18
20–30	10	20
30–40	14	22
40–50	14	24
50–90	16	26

REEFBERTHS:

VLCC anchorage: When anchoring is necessary, Masters of VLCCs may wish to anchor in the following position; 12° 24′ N., 70° 07′ W., approx. 12 miles West of San Nicolas Harbour in approx. 25 fathoms.

Pilot Station: 2 to 3 miles West of San Nicolas Harbour entrance. When Pilot is boarding, the vessel should be on an Easterly course with a speed of about 2 knots.

Embarking Pilot, Loaded VLCCs: On the port side with either pilot hoist or conventional pilot ladder.

Ballast VLCCs: On the port side with a combination of accommodation ladder and conventional pilot ladder, or with only accommodation ladder.

Disembarking Pilot, Loaded VLCCs: On the starboard side with either pilot hoist or conventional pilot ladder.

Ballast VLCCs: On the starboardside with a combination of accommodation ladder and conventional pilot ladder, or with only accommodation ladder.

Tugs: Three tugs will be used, using their own towlines. "Esso Oranjestad" and "Esso San Nicolas" are each 3,000 h.p. "Cardon" is 2,500 h.p. The latter will be replaced in August 1976 by the "Esso Santa Cruz" of 5600 h.p.

Docking: Always portside to, with approx. 8 shackles out of the starboard anchor, which will have been walked out prior to docking to about the first shackle in the water.

Approach Velocity: RB I and RB II are equipped with a doppler system. Contact between doppler operator and pilot is by VHF radio, Channel 12. RB II, later also RB I, is equipped with "traffic lights".

Approach velocity 00–20 ft./min.=green.
20–27 ft./min.=amber.
above 27 ft./min.=red.

When the vessel is receding, the light is always green.

Mooring Launch: Used for all lines, except for the spring lines fore and aft.

Mooring Capstans: All mooring and breasting dolphins are equipped with capstans, 2 ton pull capacity, 100 ft./min. line hauling capacity.

Max. Size:

	MDWT	*Max. LOA* (ft.)	*Beam*	*Depth* (ft.)	*Max. draft* (ft.)	*Pier Heading*	*Approach angle*
RB I	40–400	1200	UNL	80	75	130° true	15°
RB II	40–500	1400	UNL	105	95*	114° true	10°

*With an approach angle of less than 10° draft up to 100 ft. can be permitted.

Sailing Draft Ballast VLCCs: abt. 25 ft. fore and 35 ft. aft.

Lines and Winches: Mooring lines assumed to be 1.625 in. dia. steel wire with a breaking strength of 90–100 tons.

Mooring winches assumed to have about 25 metric tons heave capacity and 55 metric tons brake holding capacity.

Combination of a wire and a synthetic line to a single dolphin will not be permitted.

Mooring lines will not be stressed beyond 55% of their breaking strength.

Self tensioning is not permitted. Automatic winches should be used on manual brake.

Synthetic tails on wires should have a higher breaking strength than the wire to which they are connected. The eyes of the tails should be protected from abrasion with suitable coverings, and tails should be connected to wires with suitably designed shackles.

A max. of only 2 layers of line to be allowed on working or tension drum of split drum winches.

Current and Wind: Current is less than 0.2 of a knot 90% of the time. Wind is less than 20 knots 70% of the time, and less than 25 knots 97% of the time.

Wind direction		*Current direction*	
True	*% of time*	*True*	*% of time*
20°– 40°	2	40°– 70°	24
50°– 60°	6	100°–110°	17
70°– 80°	33	140°–240°	10
90°–100°	40	260°–290°	24
110°–120°	13	320°–340°	25
140°–170°	1		
220°	5		

Wind tolerance: At 30 m.p.h. steady, loading will be discontinued, and the loading arms will be drained. Tugs will be called out; engine to be confirmed ready for use.

At 35 m.p.h. steady, arms will be disconnected.

At more than 40 m.p.h., the vessel will be taken off the berth.

Loading Arms: RB I; four 16 in. cargo arms with 12 in. bolted flange connections. One 8 in. bunker arm (No. 5 arm, the most westerly arm). RB II; five 16 in. cargo arms with 16 in. connections.

Discharge/Loading Lines: RB I 36 in., 3,000 ft. long. RB II 56 in., 4,000 ft. long.

Radio Contact: Contact between loading Master, control room, marine office by VHF and UHF. Particulars will be given by loading Master.

Bunkers: RBI; through bunker arm (No. 5). RB II; through any of the 5 loading arms with reducers.

Water: Available on RB I and RB II.

Provisions: By launch; to be taken on board by ship's lifting gear on the port quarter.

Shore Leave: No pedestrian traffic allowed between ship and main gate. Arrangements for crew transportation can be made with Agent, or by calling the Marine Office.

FRESH WATER: Fresh water can be supplied ex-wharf.

FUEL: All grades of bunkers available.

Sea Berth: Vessels arriving for bunkers only with a draft greater than 41 ft. must use the Sea Berth (Reef Berth.) As the berth is used for crude oil trans-shipment bunkering vessels can expect delays. Also the following considerations apply:

1. Vessels working cargo have priority over vessels bunkering.

2. In assigning tugs, vessels working cargo take priority. (3 to 4 hours tug service required at the sea berth.)

3. Mooring launches require 48 and 24 hours notice.

4. Vessels using the berth must have 12 good mooring lines. All mooring winches and equipment will be inspected and must be in good order. Vessels may not be docked if equipment is faulty.

5. In the event of marginal weather, deep draft vessels calling for bunkers may not be docked.

REPAIRS: A local workshop can do minor repairs.

PORT FIRE PROTECTION: The port of St. Nicolas is very well equipped with modern equipments for fire-fighting and fire prevention.

BALLAST: Tankers must arrive with clean ballast only. Clean ballast will be discharged overboard after docking. Only slops can be discharged to the disposal facilities ashore.

SPECIAL REGULATIONS: Strict compliance with Harbour Safety Regulations is mandatory. Stringent regulations prohibit the transportation of alcoholic beverages through Lago refinery and harbour area. No liquor or beer may be taken on board or removed from vessels except only bonded stores ordered by the Master.

SHORE LEAVE: As all ship's personnel when going ashore have to walk over the docks and the company's concession, nobody is allowed to leave the docks without a proper pass. Passes which are valid for the day of issue and the following day only, entitle personnel to proceed from the dock at which their ship is berthed to the main refinery gate and vice versa. Shore passes are not valid for the refinery area.

POLICE/AMBULANCE/FIRE: Police, 5000; Ambulance, 5050; Fire, 00.

AUTHORITY: Lago Oil and Transport Co.

SINT MICHIELSBAY, Curacao: 12.09 N., 69.01 W.

Sint Michielsbay, on the South coast of Curacao, 5 miles N.W. of Willemstad, is an open bay, naturally protected from prevailing winds and sea.

PILOTAGE: Compulsory.

ANCHORAGE: In the bay 650 ft. out of the coast in 130 ft. water is laid a mooring buoy, which gives a good anchorage to vessels which, because of dangerous cargo, quarantine or because of a defect cannot enter another port of Curacao.

BERTHING: Vessels moored with their stern to the buoy and their bow anchors are heaved out to hold the foreship from the coast.

REPAIRS: Repairs or handling cargo can be carried out by way of barges. A landing jetty for barges is available.

GENERAL: Other services as tugboats, lighterage, stevedoring, etc. are rendered from Willemstad.

AUTHORITY: Harbour Master, Curacao.

WILLEMSTAD/EMMASTAD, Curacao: 12.06 N. 68.56 W. (See Plan)

DOCUMENTS:

For Immigration:
- 2 copies of Crew List.
- 2 copies of List of Passengers Landing at Curacao (if any).
- 2 copies of List of Passengers in Transit (if any).

For Customs:
- 1 copy List of Stores (deck, engine and steward department).
- Manifest of Cargo for Curacao, if any, in duplicate, on special form called "Vrachtlist".
- Manifest of Cargo for Curacao, in transit, for trans-shipment to other ports, if any, in duplicate.
- Manifest of Cargo on Board, in transit, if any, in duplicate.
- 2 copies of Tally Books of Cargo for discharge at Curacao, if any.

If the ship is in ballast only the store-list is required.
- 1 copy Crew List.
- 1 copy Passenger List landing at Curacao.

PILOTAGE: Pilotage is compulsory. Rendered day and night. Pilots are government officials and are stationed at Willemstad, Caracasbay and Bullenbay. The Harbour Master is also the head of the Pilot Service.

Vessels bound for Curacao should proceed to Willemstad harbour except when they have specified orders for another bay. Vessels in sight of Willemstad will be contacted by the signal station at Fort Nassau for further orders. From this same station lights are shown to direct the traffic in port. Vessels should stay 0.75 miles off shore West of the harbour entrance to await Pilot. The pilot motor boat is identified by a blue flag with the letter "L" at daytime and a red light above a white at night-time.

ANCHORAGE: As a rule there is no anchorage area in the harbour of Willemstad, but in the Eastern part of the Schottegat there is one pair of mooring buoys available to await berth or orders for limited time subject to permission and conditions from the Harbour Master.

2 vessels alongside each other can be safely moored at buoys. Depth: 38 ft.; distance between the buoys from 900 ft.

RESTRICTIONS: The harbour of Willemstad consists of a 1,400 yd. long and min. 270 ft. broad channel, the Santa Anna Bay, with depths from 50 ft. to 79 ft. and an adjacent inner bay, the Schottegat, a 150-acre body of water with a depth of more than 10 ft. and a max. of 79 ft.

The navigable portion of the entrance of the port is 865 ft. wide, marked on either side by a light-buoy, and the min. depth is 50 ft.

BRIDGES: Santa Anna Bay is crossed by 2 bridges, the Queen Emma floating pontoon bridge and the new, fixed bridge.

The pontoon bridge opens day and night for in and outgoing vessels. There will no longer be any waiting period at the harbour entrance. Automobile traffic will be diverted to the new bridge and those on foot will have continuous ferry service available. Ships will have overall preference for openings.

The new fixed bridge, dominating Willemstad's skyline and the entrance to Schottegat Bay, is 185 ft. high, (clearance 180 ft.) enabling the biggest vessels to pass under. The bridge is of box girder construction and is open to automobile traffic only. No smoking is permitted by passing motorists, and glare-proof lights are installed to prevent interference with light signals that harbour pilots rely on when bringing a ship through the channels.

MAX. SIZE: Length 1,000 ft., draft 45 ft.

RADIO: Port Operations Station (Operated by Harbour Authorities): Location, Fort Nassau. Call sign, Fort Nassau. Frequencies, International Channels 16 (156.80 Mc/s.), calling and safety; 12 (156.60 Mc/s.), working, first choice; 14 (156.70 Mc/s.). Watchkeeping, 24 hours on Channel 16. Type of operation, Simplex, Frequency modulated. Range, 20 to 25 miles.

Main Private Station (Operated by Shell Curacao N.V.): Location, on the Zwartberg. Call sign, Shell Curacao. Frequency, international Channel 25 (receiving, 157.25 Mc/s.); (transmitting, 161.85 Mc/s.). Type of operation, Duplex working, frequency modulated; operated by remote control from Shell's telephone exchange; ask operator for connection with party desired. Range, 20 miles. Watch-keeping, 24 hours on Channel 25; normal daily business, 0730 hrs. till 2400 hrs.; urgent business only, 2400 hrs. till 0730 hrs.

Tug Base Station: Location, on the Zwartberg. Call sign, Marine Department – for tug movements only and in an emergency to direct the tugs. Watchkeeping during office hours. Central Post – for tug movements only. Watchkeeping 24 hours. Shell Curacao – for emergency calls to tugs only after having been alerted on Channel 25. No watchkeeping. Frequency, International Channel 14 (156.70 Mc/s.). Operation, Simplex – frequency modulated. Operation by remote control from Shell's Marine Department, Central Post and telephone exchange.

Tug Mobile Stations: Location, 1 on each tug. Call sign, Koraal, Passaat, Karet, Schelde, Picu, Buni, Mula and Anglegarth. Frequency, International Channels 16, 12, 14, 9, 8 and 6. Watchkeeping, 24 hours on Channel 14. Operation, Simplex – frequency modulated.

HEALTH: The port doctor will visit only if there is a case of quarantinable disease on board. The Netherlands Antilles Bill of Health is free of charge.

TUGS: Compulsory for all tankers longer than 700 ft.

L. Smit & Co. International Tug Service has a permanent ocean towage and salvage base in the port of Willemstad. There is always a powerful salvage tug at the station which has been especially equipped to deal with casualties and a harbour tug of 1,350 h.p.

Shell Curacao has stationed here three sea-going motor-tugs, 1,250 h.p. and 2,250 h.p.

The Curacao Dry Dock Company has a motor-tug of 350 h.p. and one of 225 h.p.

There are a few harbour tugs available varying from 60 to 300 h.p. and about 80 lighters to receive the cargo or to bring the cargo alongside a vessel varying from 60 to 250 ton capacity.

BERTHING: There are berths on either side of the Santa Anna Bay North of the pontoon bridge, with depths varying from 18 to 33 ft. alongside, generally used for bunker, cargo and passenger ships.

On the Eastern side four wharves: the Handelskade, depth 18 ft.; the Kleinewharf, depth 24 ft.; Grotewharf, depth 31 ft.; and Salazar, depth 24 ft.

On the Western side six wharves: the Matheywerf, depth 23 ft.; Westwerf S., 25 ft.; Westwerf N., 36 ft.; Nieuwewerf, 33 ft.; Motetwerf, 33 ft.; Oranjewerf, 19 ft.

In the Schottegat there are seven more berths, generally used for bunker, cargo or passenger ships.

Prins Hendrikwerf which closes the Western corner Santa Anna Bay/Schottegat, has a depth of 35 ft.; however, ships with a draft of more than 35 ft. can be moored by way of placing rafts of 10 ft. width between vessel and the quay.

At the Eastern part of the Schottegat are the Admiral Brion Wharves, which has 3,000 ft. docking space available with 34 ft. depth alongside.

In the Schottegat on the peninsula of Asiento are situated the 14 piers owned by Shell Curacao Ltd., which are mostly used by tankers; however, other vessels are enabled to use these wharves for bunker facilities. Valentijnpier No. 5 may be used for general cargo.

The names and the depths alongside these piers from West to East are: Pier I, 32 ft.; Piers II and III, 34 ft.; Pier IV, 40 ft.; Pier V, 46 ft.; Pier VI, 41 ft.; Pier VII, 34 ft.; A-pier, 34 ft.; Pier VIII, 46 ft.; Margrietpier (two berths), 35 ft.; Pier IX, 36 ft.; Pier X, 33 ft.; Pier XI, 19 ft.

The Schottegat also has about 4,000 ft. of quay available for repairs. The names of the wharves, lengths and depths alongside are: Beatrix I and II, 1,300 ft. – 21 ft.; Beatrix III, 400 ft. fore 10 ft., aft 35 ft.; Beatrix IV, 350 ft. – 31 ft.; Beatrix V and VI, 1,000 ft. – 37 ft.; E.E.C. Quay, 1640 ft. – 40 ft.

In the Schottegat is a special berth, Bernhardkraan, with fixed sheerlegs for the purpose to discharge or to load heavy lifts up to 150,000 kgs. Depth alongside this berth is 30 ft.

Storage capacity for liquid petroleum products is 4,600,000 tons in tanks of Shell Curacao Ltd.

Docking of cruise ships in Willemstad harbour: The following piers are regularly used by cruise ships and cargo ships:

Nieuwewerf, Motetwerf: West side St. Anna Bay. Type: quay. Construction: sheet piling, concrete top, stelcon plates floor.

Length: 1,200 ft. Draft: 33 ft. Height above water: 4 ft. One transit shed each: Nieuwewerf, width 65 ft., length 216 ft., area 14,000 sq. ft. Motetwerf, width 65 ft., length 216 ft., area 14,000 sq. ft. Open space area 200,000 sq. ft. One warehouse facility 6,500 sq. ft.

Oranjewerf: On West corner St. Anna Bay/Schottegat. Type: quay. Construction: iron piles, concrete top,concrete floor. Length: 418 ft. Draft: 19 ft. Height above water: 6 ft. Special bunker pier, cargo handling mostly via lighters alongside.

Prins Hendrikwerf: In the Schottegat near West corner St. Anna Bay. Type: quay. Construction: iron piles, concrete top, concrete floor. Length: 700 ft. Draft 34 ft. Height above water: 5 ft. One transit shed: width 65 ft., length 385 ft., area 25,000 sq. ft. Open space area 100,000 sq. ft. No warehouse facilities.

Admiral Brion Wharves: Nos. 1, 2, 3, 4, 5 and 6 situated at the East side Schottegat. Type: quay. Construction: sheet iron cells with concrete top, asphalt floor. Total length: 3×1,000 ft. Depth: 34 ft. Height above water: 5 ft. Two transit sheds: one with width 65 ft., length 680 ft., area 44,000 sq. ft.; one with width 65 ft., length 330 ft., area 21,000 sq.ft. Open space area 510,000 sq.ft. A special platform for Ro/Ro ships has been constructed. Maximum draft: 33 ft.

Kleinewerf, Grotewerf, Salazarwerf: East side of St. Anna Bay. Type: quay. Construction: sheet piling, concrete top, asphalt floor. Total length wharf: 1,470 ft. Maximum draft alongside 24–31 ft. Height above water: 2 ft. One transit shed, width 65 ft., length 330 ft., area 21,500 sq. ft. Open space area 154,000 sq. ft.

SLOP RECEPTION FACILITIES: Available at all Shell Terminals.

FRESH WATER: Fresh water for drinking purposes and use in boilers is available day and night in sufficient quantities at all wharves. Fresh water is also delivered alongside by means of water barges, delivery rate 50/100 t.p.h.

FUEL: Besides the Shell piers there are two bunkering installations: namely, the "Admiral Brion Wharves" comprised of six berths and the "Motet" bunkering installation comprised of four berths.

The "Admiral Brion Wharves" bunkering installation is directly supplied from the refinery by means of two pipe-lines with diameters of 12 and 8 in. The pipe-lines run the full length of the piers, each with five bunkerpits, from which the oil can be delivered directly to the ships via a mobile blending unit if this is required. The capacity of the pipe-line and the pumps is 600 t.p.h. for fuel oil and 300 t.p.h. for diesel oil. Gas oil is also available.

The bunkering facilities of the "Motet" installations in Otrabanda, which are comprised of seven storage tanks and pumping facilities, are supplied through two pipe-lines of 12 and 6 in. diameter from the refinery. The rate of delivery, by gravity and pumps, is 600 t.p.h. for fuel oil and 500 t.p.h for diesel oil.

Modern fuel blending facilities are available at all installations in Willemstad.

REPAIRS: The Curacao Drydock Company Inc. has repair yards, two graving docks and one floating dock laid out in the Schottegat.

The largest graving dock is 919 ft. long, width of entrance between wheel fenders 152 ft. and a depth of water over sill of 27 ft. 10 in. Suitable for up to 120,000 d.w.t. Movable cranes of 25 and 75 tons lifting capacity are fitted alongside the dock.

The Curacao Drydock Company Inc. has 6,000 ft. of repair wharf with varying depths up to 40 ft. Cranes alongside up to 75 tons lifting capacity. A floating crane with capacity of 30 tons and a mobile truck crane of 140 tons also available.

Electric shore-power A.C., D.C. 110, 220 or 440 volts can be supplied directly from shore at wharves of Shell Curacao Ltd. and at other wharves from generators on barges. Shell can also supply steam directly from the shore at a pressure of 8–15 kg/cm.

STEVEDORES: Gangs must be engaged between 0600 and 0630 hrs. for the day, on weekdays and Saturdays. For work on Sundays and holidays, gangs must be ordered between 0600 and 0630 hrs. on Saturday or the workday preceding the holiday. Masters of vessels carrying out cargo operations are consequently recommended to advise Agents their ETA well in advance of above deadlines.

TIME: Curacao time 4 hours slow of GMT.

HOLIDAYS: New Year's Day, Good Friday, Easter Monday, Queen's Birthday, Labour Day, Ascension Day, Whit Monday, Kingdom Day, Christmas Day, Second Christmas Day. "No work", holidays for cargo operations: New Year's Day, Good Friday, Labour Day and Christmas Day.

GENERAL: Customs Officers remain on board on duty during the vessel's stay in port. They must be fed by the ship and are entitled to the equivalent of officers mess or first-class dining saloon.

REGULATIONS: Both anchors should be ready for immediate use. Defects of engines, steering gear, anchor gear and other defects which influence manoeuvring abilities of the vessel should be reported before entering, to the Harbour Master. Vessels carrying explosives must obtain a permit from the Harbour Master before entering.

DEVELOPMENTS: During 1973 a new repair quay, 2,500 ft. long and 41 ft. deep was built, with a trial berth on the inner side for ships up to 1,000 ft. with a maximum draft of 40 ft.

AIRPORT: There are daily international flights from Dr. Albert Plesman Airport.

ALM: Frequent daily trips to Aruba and Bonaire. Daily flights to Miami and New York. Regular air services to St. Maarten, Caracas, Maracaibo, Colombia, Haiti, Sto. Domingo, Puerto Rico, Trinidad and Paramaribo.

Eastern Airlines: Daily flights to Puerto Rico and transfers to all points.

American Airlines: Daily flights to New York and transfers to all points.

VIASA: Regular scheduled flights to Caracas, Sto. Domingo, Paris and Amsterdam.

Aerocondor: Daily flights to Colombia.

LAV: Many daily flights to Caracas.

KLM: Daily flights to Amsterdam, Lisbon, Madrid, Frankfurt and Zurich.

Ferry: Ferry's Del Caribe S.A. runs a regular service with a new modern ferry which carries 1,200 people and 120 automobiles. This ferry has regular service between Curacao and Coro, Venezuela on Monday, Tuesday, Wednesday and Thursday. On Thursday the ferry also goes to Aruba and Punto Fijo, Venezuela.

AUTHORITY: The Harbour Master.

AGENT: SEL Maduro & Sons Inc., Schouwburgweg 16, POB 304, Willemstad, Curacao, Netherlands Antilles. Tel. 76900. Telex: 1092 Selms NA. Cables: "Maduroship".

NOTES

Please also advise Shipping Guides (Services) Ltd.

New Caledonia

NOUMEA: 22.16 S. 166.27 E. (See Plan)

DOCUMENTS:

Ship's Register.
Safety Certificates.
Cargo Manifests.
List of Dangerous Cargo.
Passenger List.
Crew List.
Crew Personal Effects List.
Bonded Stores List.

PILOTAGE: Compulsory for vessels over 60 m. LOA. ETA to Port Captain and Pilots required 24 hours in advance. The two access channels to Noumea are Boulari channel (Amadee light) and Havannah channel. Pilot boats are wooden launches about 15 m. long equipped with VHF. Harbour Master's office and pilot station on Channel 16 during office hours.

Boulari Channel: Pilot boards 1 mile off, on the alignment of the Amadee high and low lights.

Havannah Channel: Pilot boards off Goro light on the alignment of the leading lights on Cap N'Dua.

In bad weather, pilot launches will remain on these leading lines, but as close as possible to the channel entrances.

Pilot should be ordered at least 6 office hours before departure or moving.

ANCHORAGES: Available in the outer and inner roads of Noumea, as indicated by the Pilot. Prohibited zones are marked on the chart.

RESTRICTIONS: Vessels may enter and anchor at any time, mooring may be effected at night.

MAX. SIZE: Tanker buoy berths designed for 20,000 d.w.t. and 45,000 d.w.t. Draft limited to 13 m. by a bar between the reef and the port.

HEALTH: Unless vessels have signalled that there is suspected disease or fever on board, free pratique is given automatically by radio request to the Capitaine du Port or by the Pilot.

RADIO: All messages by coast station Noumea, call sign FJP. Harbour Master's office equipped with VHF, Channels 16, 12 and 14, operated during normal working hours.

TUGS: Tug's service is compulsory. One tug of 1,200 h.p. and 1 of 500 h.p. available to assist.

BERTHING: At old Port Authority quay, draft limited to 7.50 m. New quay of 700 m. to accept vessels up to 10 m. draft and over 200 m. length. Private berths of Nickel Company are dredged to accommodate 9 m. draft.

STEVEDORES: Service provided by four private companies. 2 or 3 days' notice required to arrange work.

MEDICAL: Doctors, hospital, and 3 private clinics available. Smallpox vaccinations are compulsory.

TANKERS: Buoy berth, max. draft 40 ft. Shell berth (at Nickel Company), max. draft 9 m. at HW.

DENSITY: 1026.

FRESH WATER: Supplied by pipe-line at the quays; rate, 40 t.p.h.

FUEL: Several grades available from Shell, Mobil and Total.

GANGWAY/DECK WATCHMEN: Recommended, but not compulsory.

OPENING/CLOSING HATCHES: Can be performed by stevedores if required.

CUSTOMS ALLOWANCES: 200 cigarettes per man. Additional allowance can be made after 10 days. Max. 3 bottles spirits per man. Wines and beer not limited.

IDENTIFICATION CARDS: Recommended that crew carry Seamen's Books.

CONSULS: Australia, Belgium, Indonesia, Italy, Japan, Norway and New Zealand are represented locally.

REPAIRS: Many engine, hull and electronic repairs can be effected. Slipway for small vessels.

REPATRIATION: All facilities available for crew change and repatriation.

AIRPORT: Tantouta Airport situated 50 km. from Noumea. Several connections a week to all parts of the world.

TIME: GMT plus 11 hours. No alterations during the year.

HOLIDAYS: 1st January, Easter Monday, 1st May, Ascension Day, Whit Monday, 14th July, 15th August, 1st November, 11th November, 25th December. Work may be arranged on Sundays and holidays.

POLICE/AMBULANCE/FIRE: Police, Tel. 17; Fire, Tel. 18; Ambulance, Tel. 721.21.

SHORE LEAVE: Allowed.

SHIPMASTER'S REPORT:

Communications: Radio W/T. Short wave service and MF service very good. First message to state which passage used – Draft – Tonnage – and nature of dangerous cargo, this should be sent at least 24 hours before arrival, Agent and Harbour Master required this message.

Radio Telephone. Service available.

VHF. Available to Harbour Office and Pilot Station during office hours 0715 to 1115 hrs. and 1330 to 1730 hrs. Monday to Friday 0800 to 1100 hrs. on Saturdays. Pilot vessel when at Havannah Passage keeps VHF watch one hour before the last given ETA. In our case we made contact with the pilot vessel when 12 miles from Havannah Passage. If at anchor VHF contact to Agents can be made via Harbour Office.

Pilotage: Boarding ground. Canal de Havannah. The Pilot boards the vessel when on the leads, but inside the reef, when the vessel is off Port Goro. The three leading lights stand out well at night time, each light is individually powered in case of failure, in our case they were seen 25 miles away. During strong S.W'ly winds the Pilot will board in the lee of Loro Reef. As the leads do not stand out so well in day time, night time seems to be the best arrival time. This channel has been swept to a depth of 34 ft. Strong cross currents can be expected at the entrance to Havannah Passage.

Anchorages. See CHINPACS for area dangerous due to mines. Otherwise vessel anchors Grande Rade.

Quarantine. Pratique granted by Pilot, Health Signal not required unless notifiable sickness on board.

Controlling Factors: Berthing times. Vessels are now berthed at any time, the usual side to being Starboard side, a 1,200 h.p. tug being used to assist.

Depth of Water. The least sounding taken at No 1 Berth was 32 ft., the other two berths are said to have 33 ft. of water at them.

Length. No limit at berth.

Berthage. 700 m. at the New Wharves.

Stevedoring. Working time. 0700 to 1100 hrs. then 1300 to 1700 hrs. and overtime from 1800 to 2200 hrs. The labour will also clean out the hatches provided one gang is actually working cargo, otherwise they stop when cargo work is all finished. Saturday is not an overtime day. Only Sunday is an overtime day. Good Friday and Easter Saturday are considered normal working days. The Stevedoring is good, with a fast working rate, but I regret to state that some pillage took place. As regards unprotected cars, the most minor marks were claimed against the vessel, these were repudiated.

Documents:

1 Cargo Manifest.
1 List of Dangerous Cargo.
2 Crew Lists.
1 Crew Personal Effects List, this list to include currency held, (French Forms accepted).
1 Bonded Stores List.
1 Health Form.

AUTHORITY: Port Autonome de Noumea.

NOTES

Please also advise Shipping Guides (Services) Ltd.

New Zealand

GENERAL: All ports.

The New Zealand Ministry of Agriculture and Fisheries requires a Shipmaster's Bond and Guarantee (Form Ag.L35) to be completed in triplicate if vessel is carrying animals, i.e. cats, dogs, fish, birds, etc.

In addition all overseas vessels are required to complete in duplicate a Meat Locker Declaration (Form Ag.L36).

AUCKLAND: 36.52 S. 174.46 E. (See Plan)

DOCUMENTS:

3 Copies Passenger List.
3 Copies Crew List.
1 Copy Search List (Form 2).
1 Copy Stores List (Form 3).
1 Copy Prohibited and Restricted Immigrants.
1 Copy Poisons List.
1 Copy Animals and Birds List.
1 Copy List of Firearms (not cargo).
1 Copy Arrival Manifest (Form 1), plus 2 for other ports visited (Reg. Form 16 refers).
1 Copy of List showing the gross tonnage of cargo for discharge in New Zealand.
3 Copies Shipmaster's Bond and Guarantee (Form Ag.L35).
2 Copies Meat Locker Declaration (Form Ag.L36).

PILOTAGE: Vessel approaching port to give 24 hours notice by radio. A second notice confirming or amending first to be sent 4 hours before expected time. Signal Station on Mt. Victoria, call sign ZLEA, calling frequency 2182 kc/s, working frequency 2012 kc/s. VHF, call sign "Auckland Port Control", Channel 12 and 16. Continuous listening watch on Channel 16.

Pilot launch is 64 ft. long, single mast, painted white. Name is *Akarana*. Standard flag and lights are shown. Word "Pilot" painted in black on white above cabin. Pilots board 1 mile North of Rangitoto Beacon, but will proceed farther when necessity arises. Good pilot ladder with manrope required to within 5 ft. of water-line with proper lighting at night. Heaving lines will be needed for mail and for portable radio.

ANCHORAGE: For vessels waiting Pilot: Gulf Anchorage No. 1 bearing 000° distance 2 miles; No. 2 bearing 006° distance 2.5 miles; No. 3 bearing 012° distance 3 miles. Bearings and distances from Rangitoto Beacon.

All inner anchorages in pilotage area can be indicated by Pilot. All anchorages are in 11 to 18 fathoms with good holding ground.

RESTRICTIONS: Ships may enter harbour at any time of day or night. Main channel has least depth of 11 m. chart datum. Vessels with greater draft must wait for tide to make and enter at Harbour Master's orders. Tankers not berthing immediately on arrival anchor as directed at one of gulf anchorages.

MAX. SIZE: No limits, within reason, on the length or breadth. Controlling depth at chart datum: entrance 11 m.; Rangitoto Channel 11 m.; anchorages 9.8 to 18.29 m.; berths 6.09 to 12.19 m.

HEALTH: 24 hours before arrival time, despatch message to Port Health, Auckland. Message to state ETA, last port, and date of departure therefrom, number of crew, number of passengers and state of health. 12 hours before arrival confirm ETA.

Doctor boards by way of vessel's shipside gangway (not pilot ladder) when in harbour. This gangway to be ready immediately on arrival in order to avoid any delay. A responsible person should meet doctor at head of gangway and conduct him to appropriate person.

Papers required:
Completed Maritime Declaration of Health.
Derating Certificate.
Complete Crew List with dates of last smallpox vaccination.
N.B. Crew and Passenger Lists to be certified as being correct by the Master.
List of Addresses of Disembarking Passengers.
List of Dangerous Cargo on board.

Pratique is granted initially, and covers all subsequent coastal movements in New Zealand for that voyage. Radio pratique can be granted only after prior approval from New Zealand Health Department.

Vessels requesting pratique should exhibit appropriate International Code Signals by day and night until pratique is granted.

RADIO: Station for routing traffic to the Auckland area is Auckland Radio. Call sign ZLD. Working both W/T and R/T on continuous watches.

RADAR: Radar station with range of 72 km. located on Mt. Victoria 36° 49′ 42″ South, 174° 47′ 57″ E. Masters may call on radio telephone and request particulars of their bearing and range as shown on radar screen. Responsibility for the use of this information rests entirely with Master of vessel.

TUGS: 4 tugs available. Tugs join vessel East of Eastern Tide Wall. Tugs supply lines at no extra charge.

BERTHING: Tankers berthing at Eastern Tide Wall, BP Depot, must berth in accordance with weather and tidal conditions. Tankers must arrive at Pilot station not later than half an hour before sunset, otherwise berthing will be postponed until following morning.

Depth of water: Bledisloe 9–10 m.; Captain Cook 8–10.5 m.; Eastern Tide Wall 10–10.5 m.; Hobson 4–6 m.; Jellicoe 9–11 m.; Kings 8.5–9.5 m.; Marsden 2.8–8 m.; Princes 9–11 m.; Queens 9–10.5 m.; Wynyard 9–11 m.; Freyberg 9–11 m.; Fergusson 11–12.2 m.

BRIDGES: Navigation in daylight hours only under Auckland Harbour Bridge. Navigation span is 138 ft. to 131 ft. above MHWS for 250 ft. each side of centre.

STEVEDORES: Labour commences at 0730 hrs. In order to ensure labour for this time ETA should be received at Agent's office before 1500 hrs. previous day, or before 1500 hrs. previous Friday for a Monday start. Delays on radio messages may be up to 3 hours.

MEDICAL: In case of urgent medical attention being required, Agents can arrange for doctor to board in stream at any notice. Hospital and ambulance services available 24 hours. If any smallpox vaccinations have expired this must be included in ETA advice.

TANKERS: There are 3 tanker berths, 2 with 11 m. depth LWST suitable for tankers up to 182.9 m. LOA. 1 berth in depth 8.5 m. LWST for vessels up to 170.7 m. LOA.

Any size pipe-lines can be used, oil companies have all reducing pieces needed.

No facilities for slop discharge.

DENSITY: Always 1025.

FRESH WATER: Fresh water always available. Delivery rate 100 t.p.h., through canvas hoses. AHB supplies all equipment.

FUEL: Light fuel oil, diesel, gas oil and heavy fuel are available. To be ordered in ETA notice.

FIRE PRECAUTIONS: In addition to usual precautions, Class I tankers are under extra security with a nightwatchman from Harbour Master's staff in addition to the normal tanker guard.

CONTAINER HANDLING FACILITIES: Fergusson Wharf Complex at Eastern end of port includes roll-on/roll-off sections and 457 m. of berthage for container vessels. Water depth maintained at 12.19 m. LWST. 2 Container cranes. 8.9 hectares Terminal area.

Note: Bledisloe Wharf is being developed as a Roll-on Terminal with two link span equipped berths. When completed present Terminal will be transferred from Fergusson Wharf, for Roll-on vessels.

GANGWAY/DECK WATCHMEN: Watchmen are necessary. Best to use crew.

OPENING/CLOSING HATCHES: Crew can open completely mechanical hatches only. All other hatches opened by waterside workers.

CERTIFICATES: Register, Deratisation, Load Line, Safety Equipment, Safety Radio, Articles of Agreement, are main Certificates required.

CUSTOMS ALLOWANCES: 1 bottle of spirit (in use) *or* 1 bottle of wine (in use) *and* 12 quart bottles (or the equivalent) of beer, 200 cigarettes *or* half a pound of tobacco *or* 50 cigars. For ship use only. To be declared on Search List.

CARGO GEAR: Preventer guys must be entirely wire. All blocks and shackles must be moused. Safety strops on all heel blocks. All wires, ropes, chains and blocks to have Certificate of Test.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium
Denmark
France
West Germany
Norway
Chile
Latvia

Greece
Italy
Japan
Netherlands
Portugal
Finland
Peru
Venezuela

Panama
Philippines
Sweden
U.S.A.
Brazil
Korea
Switzerland

REPAIRS: Any ship repairs can be carried out. A slipway can take vessels of 600 tons displacement and up to 211 ft. LOA.

DRY DOCKS: Max. size of vessel that can be accommodated in Calliope dry dock is 181 m. LOA and 19.8 m. beam. Water on sill at MHWS 33 ft.

REPATRIATION: All facilities exist for repatriation.

AIRPORT: 8 miles from harbour to airport. Served by all major international airlines.

TIME: Local time is GMT plus 12 hours throughout the year, except when Summer time applies, November to March.

HOLIDAYS: No work is done on these days: New Year's Day (1st January); Good Friday; Easter Monday; Anzac Day (25th April); Queen's Birthday (first Monday in June); Labour Day (fourth Monday in October); Christmas Day; Boxing Day; Waitangi Day early February. In addition, each Province has an Anniversary Day and a Waterside Workers' Picnic Day. In Auckland these are in last half January.

POLICE/AMBULANCE/FIRE: All emergency services are called through one telephone number. Dial 111 and state service required.

TELEPHONES: Telephones at all berths. Cost is $2.08 fee phone per day, plus the cost of any overtime incurred in connecting or disconnecting any such telephone. Telephones (coin operated) may be hired for use of crew on application to Post Office.

GENERAL: *Refuse Disposal:*

It is important that no refuse be allowed to pass into tidal waters either directly or indirectly. This is covered by strict Government Regulation.

Masters should ensure that refuse is lowered into refuse boat "Manui" and not thrown into boat from any great height.

No refuse will be collected from stern of vessel as this is hazardous for collection craft. A suitable site in way of the flat side of the vessel on off shore side should be chosen.

SERVICES: Services include tank cleaning, compass adjusting, all cargo surveying, average adjusting, etc. Tank washings may be pumped to road tankers.

SHORE LEAVE: Crew members may go ashore.

REGULATIONS: All guests aboard vessel in the evening must have passes signed by the Master. All visitors' passes expire at 2300 hrs.

All ships in port are subject to the Rules and Regulations contained in the Harbours Act 1950, and the By-laws of the Auckland Harbour Board. On first visit to the Port copies of these and other relevant Regulations are supplied to ships.
AUTHORITY: Auckland Harbour Board.

BLUFF: 46.37 S. 168.22 E.

DOCUMENTS: See "Auckland".
PILOTAGE: Pilotage is compulsory. Pilots board vessels from a launch within a 3-mile radius of signal station on Stirling Point, and always well to seaward of 6 fathom line. Arrangements regarding boarding will be made by radio-telephony, wireless-telegraphy, or visual signals from signal station.

Vessels, other than those which are exempt from pilotage, must not proceed inside Bluff Foreshore Light without a Pilot.

Pilots do not usually board vessels between sunset and sunrise except in reasonable weather.

Caution: Vessels stopping to pick up a Pilot are particularly warned not to approach entrance shoal too closely, especially during flood stream as stream sets strongly on to entrance shoal, North-eastward.
Coastal Pilots: Coastal Pilots are available on 24 hours notice for piloting service from Tairoa Head to Milford Sound.
ANCHORAGE:
Southward of Stirling Point: In fine weather vessels missing tide may anchor in 10 to 12 fathoms with Stirling Point lighthouse bearing about 356° and Dog Island lighthouse bearing about 108°.
Eastward of Dog Island: A good anchorage for vessels delayed longer than 6 hours awaiting to enter Bluff is situated 5 miles East of Dog Island.
RESTRICTIONS The safest time to enter the harbour is at slack water. Strict attention should be paid to signals passed from the signal station on Stirling Point. No vessel should attempt to enter without a Pilot, unless possessing local knowledge.

Least depth in fairway is 28 ft. on Northern edge of Channel Rocks; also 25 ft. (about 1 cable West North-westward of the tidal stream indicator beacon).
MAX. SIZE: Length, 620 ft., overall beam, 95 ft. Maximum draft permissible in approach channel: 30 ft. 0 in. at HW, 22 ft. at LW. The Board has been carrying out extensive blasting and dredging in the entrance channel and it is anticipated that a further increase in the present port draft of 30 ft. in the entrance channel will be increased to 34 ft. but this will be publicised at the time when it can be confirmed without doubt what the new actual port draft will be.
HEALTH: Radio pratique available at Berth.
RADIO: A signal station is situated on Stirling Point and is connected by telephone with harbour officials. A continuous watch is maintained and vessels can communicate by the International Code of Signals or the Morse Code. There is a radio-telephone at signal station. Call sign is ZLRW, calling frequency is 2,182 kc/s. and the working frequency is 2,012 kc/s. VHF radio having Channels 16 and 12. Watches are maintained from 33 to 40 minutes past the hour, every hour. After radio-telephone contact has been established further listening watches can be made by mutual agreement.
TUGS: Two tugs are available. Both twin-propulsion Voith Schneider vessels of 1,200 i.h.p. and 15.3 tons static pull and 2,600 h.p. and 30 tons. Both vessels are equipped for fire fighting and deep sea salvage work.
BERTHING:

	Berth No.	*Dredged depth l.w. (draft 2 ft. less or maximum)* ft.	in.
Island Harbour			
	1	26	
	2	26	
	3A	30	
	3	35	
	4	35	
	5	35	
	6	30	
Old Main Wharves:			
	11	31	6
	12	29	
	14	26	6
Tiwai Wharf:		34	

STEVEDORES: Agents require ETA in advance to arrange labour for cargo handling.
MEDICAL: Port doctor available through Agents. Nearest hospital is at Invercargill City, 16 miles from Bluff. Medical service whilst at sea; through Awarua radio.
TANKERS: Tankers are berthed at No. 11 berth only, main wharf. Side connections are to be used. Only 1 pipe-line connection on wharf.

It is not permitted to commence the discharge of oil cargoes during the hours of darkness. No vessel carrying a cargo of motor spirit or having discharged such cargo will be handled during the hours of darkness.

Oil cargoes for Tiwai Point discharged at Tiwai Wharf.
DENSITY: 1025.
FRESH WATER: Available alongside all berths.
FUEL: Bunkering facilities are available. Boiler fuel is supplied by 8 in. diameter pipe-line located at No. 11 berth, old wharf. Delivery rate 240 t.p.h. Limited quantities of coal, light diesel oil and lubricating oil can be arranged for delivery by road or rail to the wharves.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Usually carried out by stevedores, unless automatic then by crew.
CUSTOMS ALLOWANCE: See "Auckland".
IDENTIFICATION CARDS: Not required.
REPAIRS: Major repair work can be undertaken by the following: 2 small machine shops at Bluff; a foundry at Invercargill; a slipway for vessels of up to 500 tons displacement at Bluff. A diver is available for underwater inspections.
REPATRIATION: Facilities exist.
AIRPORT: Internal air services from City Airport, Invercargill, 16 miles by road. Connecting with international airports of Christchurch, Wellington and Auckland.
TIME: GMT plus 12 hours. Summer Time GMT + 13 hrs. from November to February inclusive.
HOLIDAYS: Christmas Day; Boxing Day; New Year's Day; Second of January; Watersiders' Picnic Day (4th Monday, January); Good Friday; Easter Saturday (except by special arrangement); Easter Monday; Easter Tuesday; Labour Day; Anzac Day; Reigning Sovereign's Birthday.
POLICE/AMBULANCE/FIRE:

	Tel. (Emergency)	*(Other)*
Ambulance	Bluff 111	Ingrill 4119
Police	Bluff 111	8844
Fire Brigade	Bluff 111	

TELEPHONES: By arrangement, all vessels can be connected with telephone system.
SERVICES: Compass adjusting, refuse collection daily.
SHORE LEAVE: Allowed.
AUTHORITY: Southland Harbour Board.

GISBORNE: 38.42 S. 178.02 E. (See Plan)

PORT LIMITS: All of Poverty Bay within a line from the Northern point of Young Nick's Head to Tuaheni Point.
DOCUMENTS: See "Auckland".
PILOTAGE: Telegraphic address – Harbour Master, Gisborne. Advance notice – 24 hours of ETA and further confirmed at 4 hours of ETA. VHF Channel 12.

Pilot boat is painted white, 45 ft. in length; exhibits pilot flag or lights. Pilot boards on line of leads (332°) 2 miles from breakwater light.
ANCHORAGE: Vessels awaiting Pilot and berth anchor with Tuaheni Light bearing 084° 3.2 miles in 10 fathoms of water.
RESTRICTIONS: Vessels may be berthed at night according to size, draft and weather conditions.
MAX. SIZE: Maximum length, 570 ft. OA. Beam, No restriction. Draft, 29 ft. at HW, 25 ft. at LW; there can be slight variations according to heights of tide and weather conditions.
HEALTH: Same procedure as "Auckland".
RADIO: Auckland Radio ZLD, Wellington ZLW.
RADAR/VHF: Radar service available – arrangements can be made through Signal Station by means of VHF Channel 12.
TUGS: Tug joins vessels in channel outside breakwater. Normally use ship's lines; if tug's lines used, no extra charge.

A new twin screw Schottel Rudder/Propeller 22 m. steel tug is at present being built for the port, and it will be in service by March 1977. With a bollard pull of approximately 14 tonnes, this vessel named "Turihaua" will be able to cope with any shipping using the port in the foreseeable future.
BERTHING: 700 ft. at 32 ft. depth LW; 1,400 ft. at 18 to 20 ft. depth LW.
SPECIALISED CARGO FACILITIES: Two 1,000 tons for bulk grain etc. silos behind No. 7 berth and a conveyor for loading grain etc. in ships.
STEVEDORES: Advice of ETA and particulars of stowage required in order that required number of gangs can be ordered. Hours of work, Monday to Friday, 0700–1200 hrs., 1300–1800 hrs.; Saturday, 0700–1200 hrs.
MEDICAL: No advance advice required for medical attention. Full hospital facilities available.
TANKERS: Tankers discharge fuel oil and bitumen.
DENSITY: 1025 at all stages of tide.
FRESH WATER: Available by 2.5 ins. hoses at approx. 40 t.p.h. per hose.
FUEL: Fuel is at present only available by rail tanker and should be ordered through ship's Agent in advance.
DEVELOPMENTS: It is expected that present overseas berth will be increased from 700 ft. to 1,300 ft. within about 3 years.
GANGWAY/DECK WATCHMEN: Ships at present provide own watchmen.
OPENING/CLOSING HATCHES: Stevedores normally carry out this work.
CUSTOMS ALLOWANCE: See "Auckland".
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Normal maintenance repairs.
DRY DOCKS: One 400 ton slipway.
REPATRIATION: Full facilities available for effecting crew changes and repatriation. However, no seaman's pool operating at Gisborne. Replacement crew must be obtained from either Auckland or Wellington.
AIRPORT: 3.5 miles. Regular internal service.
TIME: Standard Time is related to the meridian of 180° *East*, i.e. 12 hours ahead of GMT.
AUTHORITY: Gisborne Harbour Board.

LYTTELTON: 43.35 S. 172.42 E. (See Plan)

PORT LIMITS: All those tidal waters of the Port of Lyttelton comprised within the area enclosed by the arc of a circle having a radius of 3 nautical miles from the Northernmost point of Adderley Head.

DOCUMENTS: Customs procedure. Overseas vessels, on arrival in New Zealand, should have following papers ready to produce to Customs Officers:

Register.
Names of Owners and Agents.
Crew List.
Passenger List.
List of Prohibited or Restricted Immigrants.
Search List.
Stores List.
List of any stock or birds on board.
List of Poisons.
List of Firearms.
Statement of excess Tonnage of Cargo.
Statement of quantity of Fuel Oil in double bottoms.
Declarations by Passengers arriving in New Zealand.
Baggage Declarations by Passengers for duty purposes.

On departure for overseas, Master or his Agent is required to produce:

Manifest of Cargo.
Stores List.
Crew List.
Passenger List (if any).
Clearance from the Marine Department (if a British ship).

A home trade vessel under *transire* is required to produce her cargo book to Collector of Customs and such particulars as to passengers, crew, and cargo as the Collector may at any time demand. Cargo book shall contain name and port of registry of ship, Name of Master, and date of arrival at, and departure from each port. Particulars as to dates of arrival and departure must be entered not later than 24 hrs. after time of such arrivals and departures.

PILOTAGE: Masters requiring services of a Pilot must notify Harbour Master of their estimated time of arrival and max. draft not later than 1600 hrs. on day prior to arrival (Monday to Friday). If estimated time of arrival is on a Saturday, Sunday or any public holiday which falls on a Monday, notification must be given before 1600 hrs. on previous Friday. International Code of Signals or Morse Code used for communicating with signal station. Station also equipped with radio telephone. Call sign is Lyttelton Harbour Radio, calling frequencies is 2182 kc/s and working frequencies are 2012 and 2162 kc/s, a continuous listening watch being maintained. Radio telephone equipment also installed in the tug, pilot cutter and Harbour Master's office, and same call signs, frequencies and watches are employed. VHF in operation on International Channels 12, 14 and 16.

Pilot vessel is 16.46 m. in length. Equipped with radar, radio telephone and echo sounder. The pilot vessel is located at the tug wharf in inner harbour and any vessel awaiting arrival of the Pilot, should anchor about 1.5 miles to seaward of Godley Heads, in a depth of 16 m. to 18 m. and await instructions.

The limit of pilotage is a line joining Godley and Adderley Heads.

Every facility must be provided to ensure safe boarding of the Pilot.

ANCHORAGES: *Camp Bay:* Permission must be obtained from the Harbour Master before using this anchorage and draft of vessel is restricted to 8.5 m. All vessels drawing more than 8.5 m. whether awaiting a Pilot or not must use the outside anchorage. Vessels using Camp Bay anchorage should anchor with the anchorage lighted leading beacons situated on the Southern shore of Camp Bay, in transit, bearing 195.5°. Each beacon is painted white and exhibits a fixed red light. Vessels may anchor to the westward of this bearing but must not proceed Westward of a line bearing 345° from the rear anchorage beacon.

Note: Anchoring in or near the dredged channel which extends 2 km inside Heads is not permitted.

RESTRICTIONS: Cargo vessels not berthed during hours of darkness, except at Cashin Quay and Gladstone Pier East.

Tankers are berthed during hours of darkness at the discretion of the Harbour Master. All vessels can depart from their berths during hours of darkness. Vessels holding pilotage exemptions may also enter or depart during the hours of darkness.

The following are the controlling depths at mean low water springs, mud bottom in each case;

entrance to port 14.6 m.
dredged channel 11.30 m.
inside anchorage 11.0 m. (Camp Bay)
approaches to berth 11.0 m.–9.8 m.
alongside berths 12.20 m.–8.60 m.

MAX. SIZE: Max. draft permissible for entering or leaving: 11.28 m. at high water and 9.75 m. at low water. Vessels drawing less than 9.75 m. can enter at any state of the tide. Max. size permissible for entry: length 260 m. at Cashin Quay, any additional length contact Harbour Master, 230 m. at Inner Harbour. No limit on vessel's beam.

HEALTH: Master of every ship about to enter a New Zealand port shall, not later than 12 hrs. and not earlier than 24 hrs. before expected time of arrival at that port, inform Port Health Officer by radio of last port of call, date of departure therefrom, and state of health of vessel.

Arrival of vessels. On arrival, vessel showing International Code quarantine signal, should proceed to inspection to await arrival of Port Health Officer. Inspections are normally carried out at berth.

Radio pratique. Certain ships may be granted pratique by radio and hence need not be visited by a Port Health Officer, provided that medical officer carried as part of ship's complement.

Maritime Declaration of Health. Master of all vessels arriving in New Zealand from any port beyond New Zealand shall complete and deliver to Port Health's Officer a maritime declaration of health countersigned by the ship's medical officer, if required.

Crew List and Passenger List. Master of every ship liable to quarantine should be prepared to furnish Port Health Officer a list of all passengers, showing in respct of each passenger, name, sex, race, age, and port of embarkation; and a list of crew giving the name, race, and rating of each member.

RADIO: Wellington Radio, call sign ZLW; Awarua, call sign ZLB; or Auckland, call sign ZLO.

TUGS: Normally join vessel at Parsons Rock Beacon. Tug lines are used, charge for which is included in the overall hire for tug. Number of tugs required depends on type of vessel and draft.

BERTHING: Requirements for berthing at berths 2, 3, 4, 5, 6 and 7 for vessels over 1,000 tons net are; bow out, the anchor to be used and gangway turned in.

STEVEDORES: Waterside labour can be ordered after arrival of ship at 0630 hrs. up to 0900 hrs. For work on Saturdays orders must be placed by 0900 hrs. Friday. Saturday afternoon work to be ordered by 1030 hrs. Saturday.

For supplementary hours labour must be requisitioned by 1500 hrs. previous Friday and confirmed by 0700 hrs. Monday and daily.

SPECIALISED CARGO HANDLING FACILITIES:

No. 1 Breastwork, Inner Harbour: Grain silos. 2,000 tons capacity, 250 t.p.h. loading rate for coastal shipments.

No. 1 Cashin Quay: Bulk Loading Facilities: Woodchips, grain, etc.

Gladstone Pier, East: Bulk cargo discharges: 5×5-ton electric cranes, 3×100-ton mobile bulk hoppers.

Gladstone Pier, West: Roll-on/Roll-off Coastal and Trans-Tasman Cargo Terminal.

No. 2 Jetty West, Inner Harbour: Roll-on/Roll-off Inter-Island Passengers and Cargo Terminal.

MEDICAL: Hospital facilities are available at Christchurch, 9 miles from port, and international regulations apply in regard to inoculations, vaccinations, etc. Agents can be notified at any time of medical allocation required, preferably with 24 hrs. notice.

TANKERS: All tankers berth alongside oil wharf in Inner Harbour. One berth only is available with a max. draft of 11.28 m. A 10 in. line is used for discharging and loading with suitable fittings for reduction to 8 in. Slop or oily residue facilities are not available.

Oil hoses can be connected and disconnected during hours of darkness. Side connections are connected to discharging arms situated at the middle of the oil wharf.

Berthing is generally starboard to, head out.

DENSITY: 1025, salt water.

FRESH WATER: Available at all berths delivered by hose at a discharge rate of 20 t.p.h.

FUEL: Bunkering facilities available: Oiler fuel oil, supplied by 4 in. and 6 in. diameter bunker hose connected to an 8 in. diameter pipeline, located on the oil wharf.

FIRE PRECAUTIONS: Tankers are not permitted to immobilise engines at the oil wharf. Repairs may be carried out at other wharves with Harbour Master's permission. Boiler and galley fires are not required to be extinguished when loading or discharging. All scuppers are to be plugged and cemented in case of spillages.

DEVELOPMENTS: The new container terminal at Cashin Quay No. 3 will be completed by March 1977 and will have the following facilities: Heavy duty berth 285 m., depth alongside 12.2 m., draft 11.3 m., terminal area 8ha, container slots 1600 stacked two high, reefer electrical connections 400, one Paceco 40 tonne single-lift container crane, seven Clark No. 520 straddle carriers – forklifts, container washing and repairs, CFS – No. 2 transit shed 6680 sq.m., Operator – Lyttelton Harbour Board.

GANGWAY/DECK WATCHMEN: All ships must be provided with a watchman whilst at oil wharf; a shore watchman is also required. Watchmen can be ordered at any time by contacting Seamen's Union at Lyttelton.

OPENING/CLOSING HATCHES: This work is carried out by waterside labour.

CUSTOMS ALLOWANCES: 8 ounces and/or 200 cigarettes per man. 1 bottle of wine and/or 1 bottle of spirits per man.

IDENTIFICATION CARDS: Passes are necessary at oil wharf but not required otherwise.

CONSULS: At Christchurch.

Australia	66-221	Belgium	77-905
Denmark	899-099	France	60-085
Italy	62-799	Japan	60-446
Netherlands	65-669	Norway	65-079
Sweden	65-179	U.S.A.	65-864

REPAIRS: Major work can be undertaken at Lyttelton where a machine shop and foundry are available.

DRY DOCK: A graving dock is available for vessels up to 6,500 gross tons and dimensions of dock are floor length 137.15 m., top length 146.75 m., top width 25 m., entrance width 18.90 m., width in way of ships bilge 16.61 m., sill depth at MHWS 6.63 m. A patent slip is available for vessels up to 231 tons.

REPATRIATION: Facilities are available.

AIRPORT: Distance from Christchurch – 6 miles, served by regular airlines.

TIME: Local time is 12 hrs. ahead of GMT, no alteration to clocks.

HOLIDAYS: Holidays throughout year shall be New Year's Day;

Anzac Day; Provincial Anniversary Day; Waitangi Day; Good Friday; Easter Monday; Labour Day; Birthday of Reigning Sovereign; Christmas Day; Boxing Day; and the Harbour Board's employees picnic day (to be held on same day as the Waterside Workers' Union picnic day. No cargo work is carried out on these days.)

POLICE/AMBULANCE/FIRE: For emergency calls from ships telephones, dial 111 and ask the operator for service required.

TELEPHONES: Arrangements can be made with Harbour Master for telephones to be placed on board.

SERVICES: Tank-cleaning and tank-washing facilities are available as well as a compass adjuster.

SHORE LEAVE: Crew members are allowed ashore.

AUTHORITY: Lyttelton Harbour Board, Christchurch.

MANUKAU HARBOUR (Onehunga): 37.03 S. 174.31 E.

PORT LIMITS: All that area of water contained within an area bounded to seaward by an arc of a circle 4 miles radius from the Southern extremity of Paratutai Island.

DOCUMENTS: See "Auckland".

PILOTAGE: Not compulsory, but arrangements can be made with the Harbourmaster at Auckland to supply the services of a Pilot if required. A Pilot will then board a vessel off Te Priau, situated about 2 miles N.E. of South Head main light.

Pilotage District: All those waters of the Manukau Harbour contained within a line drawn 180° to the South shore from Jackie Hill on Kaiteke Point 015.5° – 2.85 miles approximately from the Southern extremity of Paratutai Island).

ANCHORAGES: After crossing the bar it is not advisable to anchor until after rounding Puponga Point, if proceeding to Onehunga; or after rounding Kauri Point (situated about 1.5 miles S.E. of Puponga Point), if proceeding to the Southward.

Prohibited anchoring and fishing area. Within an area extending 2 miles from Destruction Gully front beacon in a 182° direction and having a width of 152 m. (500 ft.) on each side of the transit of Destruction Gully beacons.

Prohibited Anchorage: Within 91 m. (300 ft.) of a sewage submarine pipe-line laid in a 152° direction across Wairopa Channel about 1 mile Westward of Onehunga Wharf. On the Northern shore, 2 white triangular beacons, each bearing the word "Sewer" in black letters, mark the middle of the prohibited anchorage. The pipe-line lies approximately 3 m. (10 ft.) to the Eastward of the beacons when in transit.

Prohibited Anchoring and Fishing Area: Anchoring and fishing are prohibited within an area bounded by a line commencing at the South end of Renton Road (Lat. 37° 00.08′ S., Long. 174° 45.2′ E.); thence running 180° for 8,500 ft.; thence 090° for 19,000 ft.; thence 050° to the shore. The Northern boundary commences at Nganui Point (Lat. 37° 00′ S., Long. 174° 48.4′ E.); thence 090° to the opposite shore.

The above area, adjacent to Auckland International Airport, is marked by following lights and beacons, bearings and distances from Aero light (37° 00.48′ S., 174° 47.31′ E., approx.).

Light F. 088° 45′ 1,936 m. (6,350 ft.)
Beacon 259° 30′ 3,185 m. (10,450 ft.)
Beacon 220° 45′ 2,484 m. (8,150 ft.)
Beacon 183° 15′ 1,890 m. (6,200 ft.)
Beacon 143° 2,317 m. (7,700 ft.)
Light Beacon Qk. Fl. 239° 3,642 m. (11,950 ft.)
Light Beacon Fl. R.2 secs. 122° 45′ 3,466 m. (11,370 ft.)
Light Beacon Fl. R.2 secs. 112° 45′ 3,261 m. (10,700 ft.)
Light Beacon Fl. R.2 secs. 108° 30′ 2,453 m. (8,050 ft.)

RESTRICTIONS: Berthing and unberthing during the hours of darkness is not recommended.

	Controlling Depths Below Chart Datum	*Nature of Bottom*
Entrance to port (Southwest Channel)	5.48 m. (18 ft.)	Sand.
Anchorages	5,486 m. – 7.62 m. (18–25 ft.)	Mud, Shell, and sand.
Channel	3.048 m. (10 ft.)	
Approaches to berth	3.048 m. (10 ft.)	
Berth (Onehunga)	3.962 m.–4.877 m. (13–16 ft.)	

MAX. SIZE: LOA, 300 ft. Beam, No limit. Draft 16 ft.

HEALTH: See "Auckland".

RADIO: The signal station is equipped with both medium frequency and VHF radiotelephone. Call sign is ZLEF and VHF Channels 10, 11, 12, 13, 14 and 16.

Listening watches are maintained as follows—

0800 to 0830 – Call 2182 kHz, work 2012 kHz.
0830 to 0900 – Calling and working 2012 kHz.
1800 to 1830 – Calling 2182 kHz, working 2012 kHz.
1830 to 1900 – Calling and working 2012 kHz.
0800 to 0900 – VHF Channel 16.
1800 to 1900 – VHF Channel 16.

Other times by arrangement.

Note: Should a vessel be crossing the bar during the scheduled watch periods, the signalman will be working on 2012 kHz with that vessel and not listening on 2182 kHz.

Vessels equipped with radiotelephone must maintain contact with the signal station while working the bar.

Weather conditions permitting, information concerning bar conditions will be supplied on request to the signal station. Such information can only be regarded as a guide, as observations are made from the signal station which is situated about 5 miles from the bar and elevated 243.84 m. (800 ft.).

Radiotelephone – Onehunga: A radiotelephone is installed at the office of the Officer-in-Charge at Onehunga. The call sign is ZLEF2 and the working frequency 2012 kHz.

Vessels equipped with radiotelephone, when within Puponga Point, must maintain a listening watch on 2012 kHz for information relative to berthing, harbour traffic or other harbour conditions.

No regular watches are maintained.

VHF: See "Radio".

RADAR: No radar.

TUGS: 1 twin screw *Manukau* is available. 52.5 tonnes gross, 400 b.h.p., static pull 3.5 tonnes. Tug is equipped with both medium and VHF Radiotelephone, Channels 6, 10, 11, 12, 14 and 16.

BERTHING: The principal wharf is situated at Onehunga and is a ferro-concrete structure 293 m. (962 ft.). in length which includes a launch jetty of 17 m. (56 ft.) at the Eastern end, and with a width of 49 m. (160 ft.). A grid for the use of small craft has been constructed immediately North of the wharf. There are small jetties at Cornwallis and Grahams Beach.

The deck level of the wharf is 6.401 m. (21 ft.) above chart datum.

The wharf is connected to the railway system, and the distance from the outside face of the wharf to the centre of the railway track is 3.73 m.

CRANES: 6 ton mobile cranes available. For heavier loads cranes available for hire from outside port.

SPECIAL CARGO FACILITIES: None. Coastwise import, only bulk cargo.

STEVEDORES; Arranged by Agents. See "Auckland".

MEDICAL: See "Auckland".

TANKERS: No facilities.

DENSITY: 1025.

FRESH WATER: Available.

FUEL: Boiler fuel oil, diesel oil, and lubricating oil are available from tank wagons; delivery at the rate of 13,500 litres per hour through a 50 mm. hose. Coal is not kept in stock but can be obtained.

CONSULS: See "Auckland".

REPAIRS: Outside firms are available to do machine shop and foundry work.

DRY DOCKS: No facilities.

SURVEYORS: See "Auckland".

GANGWAY/DECK WATCHMEN: See "Auckland".

HATCHES: See "Auckland".

CUSTOMS ALLOWANCE: See "Auckland".

AIRPORT: 6 miles from port.

TIME: GMT plus 12 hours. Add 1 hour for Summer time October to March.

HOLIDAYS: See "Auckland".

AUTHORITY: Auckland Harbour Board.

NAPIER: 39.29 S. 176.54 E. (See Plan)

DOCUMENTS: See "Auckland".

PILOTAGE: Vessels should advise ETA and draft to Harbour Master Napier 24 hours prior to arrival, ETA to be confirmed or amended 4 hours before original ETA or 4 hours before arrival, whichever first.

VHF pilot boat and watchtower. Listen Channel 16. Work Channel 12.

Pilot boat 65 ft. long, painted white, funnel green over blue with white dividing band and red spoked wheel on white disc and black top. Pilot boards inward vessels on main leads 1 mile East of roadstead buoy.

ANCHORAGES: Anchorage 1 mile East of roadstead buoy. 9 fathoms. Bottom sand and mud.

RESTRICTIONS: Vessels are berthed between 0500 hrs. and sunset. Vessels up to 25 ft. 6 in. draft may berth at any state of tide.

MAX. SIZE: Max. length OA 620 ft,; beam, no limit; draft, 28 ft. 7 in. with extension to 29 ft. Subject to beam of vessel and prevailing conditions.

Tanker and bulk carriers berthed at 29 ft. draft. Subject to prevailing swell conditions and being able to commence discharge immediately on arrival.

HEALTH: Cable port health Napier 24 hours before arrival. Doctor will board on arrival.

RADIO: Cables should be routed through Wellington Radio ZLW. Radio telephone -Napier Watchtower listens 2182 kc/s for 15 mins. at following times; 0400, 0800, 1200, 1600, 2000, 2400 hrs. and by arrangement. Working frequency is 2162 kc/s. VHF listening watch as above for R/T and continuous during office hours.

TUGS: Two tugs take ship's line inside breakwater.

BERTHING: Vessels at max. draft limited to HW. Notification must be received before 1500 hrs. on Friday for any shipping movement over weekend and 1500 hrs. on day preceding public holidays.

SPECIALISED CARGO FACILITIES: Wood pulp store situated adjacent Higgins Wharf South, area 126,000 sq. ft. with 27 ft. clear height.

Bulk fertiliser store adjacent Higgins Wharf, capacity 55,000 tons.

STEVEDORES: ETA required for discharge ships 24 hours before arrival. Loading ships 48 hours before arrival with proposed stowages and vacant spaces. Advice number of gangs able to work. All work done by ship's tackles.

MEDICAL: No prior notice required for medical attention. Hospital facilities available. Advice would be needed of any contagious disease on board in advance.

TANKERS: Standard size discharge lines. All connections supplied by oil companies. Five berths, max. draft 29 ft.

DENSITY: 1025.

FRESH WATER: Available all berths 20T per hour per hose.

FUEL: 220 and 1,000 p/sec. Oil available ex-pipe-line at 110 t.p.h. L/Marine diesel and gas oil ex-road tanker. All at immediate notice. Lubricating oil available. 1 weeks notice. No residue service available.

FIRE PRECAUTIONS: Watchman supplied on wharf at ship's expense when tankers discharging.
GANGWAY/DECK WATCHMEN: Cargo watchmen supplied on request at current award rates.
OPENING/CLOSING HATCHES: Hatches normally opened and closed by stevedores unless automatic type.
CERTIFICATES:

Ship's Register
Health Certificate
Cargo Safety Certificate
Radio Safety Certificate
Load Line Certificate

CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required.
REPAIRS: First class service available.
REPATRIATION: On arrangement with Customs and vessel's Agents.
AIRPORT: Hawke's Bay Airport, served by internal airline 3 miles from port.
TIME: GMT plus 12 hours.
HOLIDAYS: New Year's Day; 2nd January; Picnic Day (last Wednesday in January) (vessels berthed but cargo not worked on any of these holidays); Good Friday; Easter Monday; Anzac Day (25th April); Queen's Birthday (1st Monday in June); Labour Day (nearest Monday 25th October); Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Emergency telephone 111.
TELEPHONES: Connection all berths.
GENERAL: Due to open port and swell, ship's engines to be kept at 12 hours notice of readiness.
SHORE LEAVE: No restrictions.
AUTHORITY: Hawkes Bav Harbour Board.

NELSON: 41.17 S. 173.17 E. (See Plan)

PORT LIMITS: Within 3 miles radius of Nelson Lighthouse.
DOCUMENTS: See "Auckland".
PILOTAGE: Compulsory for vessels of 100 n.r.t. and over. If possible 24 hours notice of ETA to Harbour Master. Confirm ETA before 1600 hrs. Friday if arriving during weekend or public holiday.

Radio telephone 2182 kc/s. and 2162 kc/s., call sign Nelson Harbour Board. Listening watch 10 minutes every 4 hours commencing at 0000 hrs. After contact has been established a further listening schedule can be arranged.

VHF on Channel 16 listening and Channel 12 working. Pilots board inward-bound vessels about 1.5 to 2 miles to seaward of main entrance.

Anchorage awaiting Pilot in depth about 30 ft., mud, with Boulder Bank lighthouse bearing 130° distance 8 cables. Pilot vessel 36 ft. double-ended flush-decked vessel painted orange.

ANCHORAGES: Anchorage as indicated in pilotage or further seaward according to weather conditions, draft and length of stay at anchor.
RESTRICTIONS: Vessels may enter, berth, unberth, or leave during hours of darkness. Overseas vessels (over approx. 380 ft.) enter port on flood tide and usually swing and berth port side to.
MAX. SIZE: Max. permissible length 580 ft. Beam no limit. Draft limits 28 ft. Max. draft at Main Wharf is 26 ft.
HEALTH: Doctor clears vessel after berthing. Pratique automatic after clearance at first port. If suspected disease or fever on board advise Medical Officer of Health, Nelson, by radio and await instructions.
RADIO: ZLW Wellington Radio; ZLB Awarua Radio; ZLD Auckland Radio.
TUGS: Two tugs available, joins vessel inside harbour. Tug's own line used on berthing. Tugs are equipped for fire-fighting.
BERTHING: Vessels should endeavour to make their arrival as early on flood tide as possible.
SPECIALISED CARGO-HANDLING FACILITIES: Facilities are available at one general cargo berth for discharging motor spirits and oil. Another berth is used for loading wood chips pneumatically (the loading equipment is owned by Nelson Pine Forest Limited, Nelson). Common user Roll-on/Roll-off Link span.
STEVEDORES: Labour ordered 0700 hrs. for weekday work; 0900 hrs. Friday for Saturday work. ETA should be received by Agents before these times.
MEDICAL: Advise Agents of any medical attention required, giving up to 24 hours notice. Hospital facilities are obtainable. Smallpox vaccination certificates are required.
TANKERS: Diameter of discharge pipe, 10 in. white products; 8 in. black oil. No slop discharge facilities. Oil tanker berth, one only. Max. draft at berth 26 ft.
DENSITY: Average sea water, 1025.
FRESH WATER: Obtainable at any time. Approximately 20 t.p.h. delivery rate.
FUEL: Marine fuel oil, gas oil. Notice required, 24 hours.
GANGWAY/DECK WATCHMAN: Watchman necessary but usually provided by ship's crew. Shore watchman can be engaged if requested by vessel. Cost in accordance with national award.
OPENING/CLOSING HATCHES: By stevedores only.
CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required.
REPAIRS: Deck and engine repairs are possible. (No underwater damage repaired.)
DRY DOCKS: Slipway available for up to 1,500 ton vessels.
REPATRIATION: Facilities exist.
AIRPORT: Distance 3 miles. Served by internal airline only.
TIME: GMT plus 12 hours. Daylight saving in Summer months, advance clocks 1 hour.
HOLIDAYS: New Year's Day (1st Jan.); 2nd Jan.; Picnic Day (usually near end Jan.); Anniversary Day (1st Monday in Feb.); New Zealand Day (6th February); Good Friday; Easter Monday; Queen Elizabeth II Day (1st Monday in June); Labour Day (4th Monday in October); Christmas Day; Boxing Day. No cargo work on these days.
POLICE/AMBULANCE/FIRE: Police 88309; Ambulance 88299; Fire 81589; Emergency calls, dial 111.
TELEPHONES: Can be connected on board.
SHORE LEAVE: Allowed.
SHORE POWER: 400 v., 3 h.p. 50 Hz, 60 amps max.
AUTHORITY: The Nelson Harbour Board.

NEW PLYMOUTH, Port Taranaki: 39.03 S. 174.03 E. (See Plan)

PORT LIMITS: All waters contained within the area of a circle with radius 2.5 nautical miles whose centre is the trig station on Mount Moturoa in position 39° 03′ 56.8″ S. 174° 01′ 44.9″ E.
DOCUMENTS: *Customs:* See "Auckland".

Agriculture: Shipmaster's Bond List. Meal Locker Declaration Form AGL 36 (2 copies).

Health: Maritime Declaration of Health (issued by Port Health Officer).

PILOTAGE: Compulsory. Telegraphic address "Harbour Master, New Plymouth". 3 days notice preferable with 1 day confirmation. VHF Channel 16. R/T 2182 kc/s.

Pilot boat white with buff deckhouse, either "Rawinia" or "Pilot" in black on side. Pilot taken on board about 1.5 miles due North of Main Breakwater Head.

ANCHORAGE: Vessels can anchor to the West of a line due North from the Main Breakwater head seaward of the 10 fathom line. Good holding on sandy bottom. Not recommended in Northerly weather conditions.
RESTRICTIONS: Ships not berthed during hours of darkness although permitted to sail. Draft max. 30 ft. (9.15 m.) may be exceeded after prior consultation with Harbour Master. Ships under 21 ft. not affected by state of tide. In range 21 ft. to 30 ft. (9.15 m.) time of berthing relevant to high tide.
MAX. SIZE: Max. size 700 ft. (213.4 m.) overall, breadth no limit.
HEALTH: Port doctor boards on arrival at berth. In event of suspected disease on board, will board in pilotage area. Pratique automatic if vessel has already called at another New Zealand port.
RADIO: Radio telephone system operates watches for 15 minutes every 4 hours from midnight. Call sign New Plymouth Harbour Radio, call frequency 2182 kc/s. Working frequency 2012 and 2162 kc/s. 24 hour watch maintained on VHF Channel 16. ETA cables generally received through Wellington Radio. All outward messages routed through Wellington Radio.
TUGS: One tug available. 700 h.p.
BERTHING: In general all ships are swung in basin coming alongside berth stern first. Shore moorings are used.

Breakwater: (Under construction): Length, 122 m.; width, 10 m.; depth alongside LWOST, 5.5 m. For use by oil field barges, supply vessels and fishing vessels. Road transport only.

Moturoa Wharf: Length, 335 m.; width, 27.4 m.

East side of wharf: 1 berth 260 m. long, depth alongside LWOST 10 m. Four 3 tonne portal cranes (5 tonne at reduced radius) 1 berth 76 m. long, depth alongside LWOST 4.9 m.

West side of wharf: 1 berth 137 m. long, depth alongside LWOST 7.9 m. Bunkering point on No. 2 berth. All classes of bulk oil may be discharged at No. 2 berth. Road and rail transport may be used to load and discharge dry cargo.

Newton King Wharf: Length, 366 m.; width, 22.9 m.

East side of wharf: 1 berth 244 m. long, depth alongside LWOST 10 m. 1 berth 50 m. long, depth alongside LWOST 7.6 m.

West side of wharf: 2 berths 366 m. overall, depth alongside LWOST 10 m. One 1.5 tonne and one 2 tonne portal crane. Bunkering points in berths 2, 3 and 4. All classes of bulk oil may be discharged at berths 2 and 4, crudes may be loaded at berths 2 and 4. Road and rail transport may be used to load and discharge dry cargo.

Blyde Wharf: West side of the wharf: length, 426 m., width of apron, 19 m.; width including open storage, 82 m.; depth alongside LWOST, 11 m. Two 2 tonne portal cranes. Rail and road transport may be used to load and discharge cargo. Open hard standings for transit cargo storage are available, a small container facility is provided.

East side of the wharf: Length, 80 m.; width, 5.5 m. and 13.4 m.; depth alongside LWOST, 5.5 m. Road transport only. For use by oil field supply vessels.

One mobile Lima heavy lift crane capacity 70 tons at 12 ft. from wharf edge to 25 tons at 40 ft. from wharf edge available at No. 2 berth.

STEVEDORES: Labour must be engaged between 0700–0900 hrs. Monday to Friday. Agents should be advised ETA at least 24 hours, preferably 72 hours, in order arrange cargo if vessel loading. Normal cargo working hours Monday–Friday 0700–1200, 1300–1700 hrs. Saturday 0700–1200 hrs. Supplementary hours may be worked Monday–Friday. 1700–2300 hrs. if labour available. No work on Sundays.
MEDICAL: Hospital services available.
TANKERS: Black oils 10 in. pipe-line; white oils 8 in. pipe-line. 3 of 4 berths available for tankers, max. draft 30 ft. (9.15 m.). Small de-ballasting tank available.
DENSITY: Sea water.
FRESH WATER: Available all berths from main supply at about 100 t.p.h.

FUEL: Light fuel oil and gas oil pipe-line connected all berths, except Blyde Wharf. Gravity fed at about 100 t.p.h. Can be arranged at 24 hours notice.
FIRE PRECAUTIONS: Tanker berths closed to public with Harbour Board watchman in attendance.
DEVELOPMENTS: New reclamation of 23 acres providing berths for 2 overseas vessels. Is now fully operational. These berths are suitable for handling heavy lifts, PAD type roll-on/roll-off vessels, limited container use and a container cleaning installation is provided.
GANGWAY/DECK WATCHMEN: Not available and not necessary.
OPENING/CLOSING HATCHES: Stevedores must carry out this work.
CERTIFICATES:
Normal Safety Certificates.
Ship's Register.
CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required.
CONSULS: None available locally.
REPAIRS: All repairs except underwater work of a major nature.
REPATRIATION: Facilities exist.
AIRPORT: Is 7 miles from city, 10 miles from port. Served by domestic service only, 2 flights Northbound and Southbound each daily.
TIME: 12 hours ahead of GMT. No adjustment made.
HOLIDAYS: New Year's Day; Stevedores Picnic (4th Wednesday January); Provincial Anniversary Day (2nd Monday March); Good Friday; Easter Monday; Anzac Day (25th April); Queen's Birthday (1st Monday June); Labour Day (4th Monday October); Christmas Day; Boxing Day.
POLICE/FIRE/AMBULANCE: Telephone numbers respectively, 75449, 75505, 75439.
TELEPHONES: Can be connected on board.
GENERAL: Ship's garbage must be in covered containers supplied by Harbour Board and removed daily. Any meats on board vessel on arrival which have been supplied from other than Australia or New Zealand will be sealed off and fresh supplies obtained.
SHORE LEAVE: No restriction.
AUTHORITY: Harbour Master, Taranaki Harbours Board.

AGENT: Newton King Ltd., Shipping Department, 232 Devon Street East, (PO Box 244), New Plymouth, New Zealand. Telegrams, "Kingship". Tel. 75719 (10 lines) Business, 83174 Residence. Telex, N.Z 3275, Answerback "Newking".

OPUA: 35.19 S. 174.07 E. (See Plan)

PORT LIMITS: Commencing at Northern extremity of Cape Wiwiki, thence by a right line to the Eastern extremity of the Nine Pins, thence by a right line to the North Western extremity of Cape Brett.
DOCUMENTS: See "Whangarei".
PILOTAGE: Compulsory Southward of a line from the Western extremity of Kororareka Point following a true bearing of 253° towards the flagstaff at Waitangi Treaty House. Pilotage shall be optional within the waters contained Northward of the above mentioned line and Westward of a line commencing from the Eastern extremity of Tapeka following a 350° true bearing to the Eastern extremity of the Black Rocks, thence in 271° true direction to the mainland. Pilots are available all hours day and night subject to prior minimum notice of 24 hours being received during normal weekday working day. Second notice confirming or amending first to be sent 4 hours before expected arrival. The Pilot supplies Harbour By-laws. Pratique, Agriculture and Customs clearance is normally undertaken on arrival at berth. Pilot vessel under private contract – No VHF contact — Pilot from Whangarei.
ANCHORAGE: Renown Anchorage as per Bay of Islands Chart N.Z. 5122.
RESTRICTIONS: Veronica Channel dredged to 7 m. at Chart Datum. Maximum Draft is 8.53 m.
RADIO: See "Whangarei".
TUGS: Available by arrangement with Northland Harbour Board, Whangarei. At least 72 hours notice required.
BERTH: Total length 214 m., width 12.5 m., overseas berthage on Eastern side of wharf. Depth at berth is 9.45 m. at MLWS. Wharf is serviced by rail.
CARGO HANDLING: Ships own gear. 2 permanent gangs available subject to Stevedore requirements as per Whangarei.
MEDICAL: Hospital and Ambulance at Kawakawa, 8 miles from Opua. Port Doctor at Paihia, 5 miles away.
DENSITY: 1025.
FRESH WATER: Fresh water available – 200 tonnes in storage. 30 cents per 1,000 litres.
FUEL: By arrangement with Oil Companies via road transport.
CUSTOMS ALLOWANCE: See "Whangarei".
CONSULS: See "Whangarei".
REPATRIATION: See "Whangarei".
TIME: See "Whangarei".
HOLIDAYS: See "Whangarei".
POLICE/AMBULANCE/FIRE: See "Whangarei".
TELEPHONES: Telephones available.
SHORE LEAVE: See "Whangarei".
SURVEYORS: See "Whangarei".
AIRPORT: See "Whangarei".
REGULATIONS: See "Whangarei".
DELAYS: See "Whangarei".
AUTHORITY: Northland Harbour Board.

OTAGO, (includes Dunedin, Port Chalmers and Ravensbourne): 45.46 S. 170.43 E. (See Plan)

DOCUMENTS: See "Auckland".
PILOTAGE: Address "Harbour Master, Dunedin." Through coastal radio stations ZLW (Wellington) or ZLB (Awarua) giving ship's name, draft, and ETA. First message 72 hours out, revise 24 hours out: if from another New Zealand port (coastwise) similar message as soon as possible after leaving that port. Subsequent contact with port private radio station Taiaroa Heads on 2182 kc/s. or VHF Channel 16. Pilot boat is 55 ft., white launch, also fitted with same frequencies, which meets vessels as required but does not remain on station otherwise. Boarding position is with Taiaroa Head Lighthouse bearing 170° distant 2 miles; good anchorage in same position, depth 12 fathoms. Pilots can always board in this vicinity provided Master has ship under way at slow speed and obeys Pilot's instructions. Vessels arriving to work general cargo should endeavour to embark Pilot by 0500 hrs. in order to be alongside berth ready to take labour on board at normal commencing hour of 0700 hrs.
ANCHORAGES: With Taiaroa Heads Lighthouse bearing 170° distant 2 miles, good holding ground in all weathers, safe except in very strong Easterly gales which are extremely rare. If this position is already occupied by another vessel, there is ample room close Westward, Northwestward, and Northward. Depths 12 to 16 fathoms.
RESTRICTIONS: Tankers proceeding to or from the oil jetty at Dunedin make passage of the upper harbour in daylight hours only. Otherwise ships are not boarded between midnight and 0500 hrs. as no working time is gained by so doing, unless vessel requires HW for transit.
MAX. SIZE: For berthing at *Port Chalmers:* Max. draft 34 ft. at high water, 29 ft. at low tide. Channel is worked as required by circumstances; it is not restricted to slackwater. Max. size of ship dependent on displacement; largest to date, length 702 ft. but vessels with displacement up to 35,000 tons may safely berth and larger vessels will be considered individually. For berthing in the upper harbour at *Dunedin* or *Ravensbourne*, max. draft 26 ft. high water, 21 ft. zero tide; max. length 603 ft.
HEALTH: Master to radio to Port Health Officer (entry port in N.Z. only) 24 hours before ETA requesting free pratique or declaring adverse state of health. Agents will advise Port Health Officer and Health Department inspectors who will board vessel on arrival, alongside actual wharf if free pratique requested. N.Z. regulations will require sealing of domestic meat chambers and purchase of local meats for use coastwise.
RADIO: Through Awarua Radio ZLB or Wellington Radio ZLW.
RADAR/VHF: Port radio station at entrance Taiaroa Head (Harbour Radio) maintains 24-hour watch on R/T 2182 kc/s. and VHF Channel 16. Radar operated at station on request has range in excess of 20 miles to North and East.
TUGS: Tugs used in vicinity of wharves turning, berthing and unberthing, etc. Tug's lines used without charge.
BERTHING: Some restrictions for larger vessels berthing with flood tide at Beach St. Wharf Port Chalmers.
STEVEDORES: Labour for Saturday work must be ordered by 0830 hrs. Fridays, otherwise by 1430 hrs. for following day. Advise Agents of firm ETA in time to judge this. Evening shift work to 2300 hrs. can be arranged when labour available.
MEDICAL: Emergency medical services and full hospital services always available at short notice. Emergency advice by radio available. Top priority given arrangements for landing urgent cases for medical treatment.
TANKERS: Diameter of lines 8 in.; minor slop facilities only; one tanker discharge berth 700 ft. long, 28 ft. depth alongside at low water. Max. size ship 603 ft. long; draft for channel transit 26 ft.
DENSITY: Harbour density 1024 all states of tide.
FRESH WATER: Fresh water available all berths, approx. delivery rate 20 t.p.h.
FUEL: Bunkers available at oil berth; all grades up to 1,000 secs. Redwood.
DEVELOPMENTS: New George St. Wharf Port Chalmers 1000 ft. long, 45 ft. depth at low water alongside, for container ships. Operative December 1976.
GANGWAY/DECK WATCHMEN: Shore watchman not normally required except at entry to oil jetty, such watchman arranged for by oil company. Ships required to maintain own gangway surveillance.
OPENING/CLOSING HATCHES: Automatic hatch gear may be operated by ship's personnel. Manual hatches by shore labour only.
CERTIFICATES: Normal cargo gear and equipment certificates as required for British ports; also Fumigation (Rats) or Exemption Certificate.
CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required for British subjects. Alien identification cards to be retained on board in case of need.
CONSULS: Consular agencies France, Norway, Denmark, Sweden, Germany, Italy, Netherlands, Portugal.
REPAIRS: All types deck and engine repairs possible; good machine shops, etc.
DRY DOCKS: None.
REPATRIATION: Repatriation arrangements can be made.
AIRPORT: Dunedin is served by all internal main airlines with connections to overseas via Christchurch, Wellington and Auckland. Airport 35 minutes from Dunedin City by car.
TIME: N.Z. Standard Time throughout year is GMT plus 12 hours, except that Summer time now operates from last Sunday in October to first Sunday in March. (Add 1 hour).
HOLIDAYS: As for all N.Z. ports, i.e. January 1st and 2nd; Good

Friday and Easter Monday; Anzac Day (April 25th); 1st Monday in June; Labour Day (Monday, nearest October 24th); Christmas Day and Boxing Day; Waterside Picnic day (Wednesday at end January). Where New Year and Christmas holidays coincide with Saturdays and/or Sundays, holidays are taken following Monday and/or Tuesday. General cargo not worked on these days nor on Sundays: tankers discharge 365 days: ships arrive and depart regardless of holidays. Container ships worked all days except Good Friday and Anzac Day.

POLICE/AMBULANCE/FIRE: Police 76012; Ambulance 77111; Fire Brigade 79111; Hospital 76740; Emergency (serious) dial 111 and ask for any service needed.

TELEPHONES: Slot telephones can be put on board with all local calls free, others by cash in slot.

GENERAL: No special moorings are required. Harbour, though tidal, is landlocked and there is no surge at any berth. Tide rise averages 6 ft. above datum (extremes 5 ft and 8 ft.).

SERVICES: Radar and gyro compass technicians available. Good shop and providore facilities. Compass adjuster usually available.

SHORE LEAVE: Crew members not restricted ashore.

REGULATIONS: No special local regulations, but all N.Z. ports have very strict rules for garbage collection and disposal, etc. and against oil spillage.

DELAYS: Ample berths normally available. Occasional delays for labour shortage or wet weather (rainfall average 30 in. per year). Small quantities bunkers available ex-tank wagons at any berth. Larger quantities obtainable by shifting to oil jetty outside cargo work hours or as otherwise convenient.

AUTHORITY: Otago Harbour Board.

PICTON: 41.17 S. 174.00 E. (See Plan)

PORT LIMITS: A straight line drawn in a 303° direction from Paparoa Point on Arapawa Island to the opposite shore of the mainland. A straight line drawn between East Head and West Head, Tory Channel Entrance.

DOCUMENTS: See "Auckland".

PILOTAGE: Pilotage is compulsory inside a straight line drawn in a 180° direction from Snake Point to the opposite shore, including all the waters of Tory Channel. Pilotage in the Outer Reaches of Queen Charlotte Sound and in Pelorus Sound is optional. Unless otherwise requested, Pilot will board vessels between Long Island and Motuara Island. By arrangement with the Harbour Master, Pilots will board vessels 7 cables east of Snake Point, where a Pilot is not required in the optional pilotage area. By arrangment with the Harbour Master, vessels may enter and leave via Tory Channel, subject to weather, when Pilot will board and leave 1 mile S.E. of West Head Light. Application for a Pilot must be made at least 4 hours before the estimated time of arrival. For vessels arriving at night or during the weekend, application should be made no later than 1530 hrs. on the last previous working day. Pilot boat 14.6 m. in length equipped with VHF radio Channel 16. Call sign "Picton Harbour".

ANCHORAGE: Except during strong N.W. winds, there is a good anchorage Northward of Mabel Island in 16 fathoms for vessels of all sizes.

Quarantine Anchorage. Within the navigable area to Westward of Mable Island enclosed between the foreshore and a line from Kaipupu Point 047° to the Western extremity of Mable Island, thence 349° to Wedge Point. Vessels not in quarantine can use this anchorage.

RESTRICTIONS: Controlling depth in approaches to anchorage is 13 m. MLWOS.

MAX. SIZE: Max. length 201 m. Draft, 11 m. aft, 8 m.–10 m. forward depending on length. Vessels of this size can berth at any state of the tide. Longer vessels may be accommodated by arrangement with the Harbour Master.

HEALTH: First entry at a New Zealand port pratique is granted after vessel berths provided she has a clean bill of health from her last port, otherwise vessel would anchor in the quarantine anchorage, where port Health Officer would board. Once clear at the first port in New Zealand no further pratique is required.

RADIO: Port is equipped with medium frequency and VHF, call sign "Picton Harbour Radio", calling frequency 2182 kc/s. Watch is maintained Monday to Friday, 0900 to 0933, 1140 to 1203, 1540 to 1603 hrs. daily and at other times by arrangement. In addition the following schedule is maintained for communication with the road/rail ferries: 0103, 1140, 1640, 2020, 2050 hrs. Sundays only: 1603 hrs.

TUGS: None.

BERTHING: One overseas wharf 240 m. length with accommodation for two vessels. Depth at wharf up to 11.58 m.

2 road/rail ferry berths 152 m. long with modern terminal facilities for roll-on/roll-off traffic.

STEVEDORES: Agents will provide gangs and other facilities provided Master gives prior notice of his requirements.

MEDICAL: It is necessary for Master to give his Agent as much advance notice as possible. Two doctors reside in the port. Hospital at the port and the main hospital at Blenheim, 35 km. by road. Ambulance service available.

DENSITY: 1025.

FRESH WATER: Supplies available at 30 t.p.h. Cost 75 cents/1,000 gals.

FUEL: By tank wagon only.

GANGWAY/DECK WATCHMEN: Required by general harbour regulations and is generally carried out by ship's deck hands.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: See "Auckland".

CARGO GEAR: Marine Department control this and regulations are issued accordingly. These regulations are very similar to those in the United Kingdom.

IDENTIFICATION CARDS: Not required.

CONSULS: These are stationed at Wellington. (See "Wellington".)

REPAIRS: Small repairs undertaken by three companies.

REPATRIATION: Crew changes can be made.

AIRPORT: Woodbourne -22 miles by road from Picton, served by feeder services to Wellington – Christchurch. Local seaplane service from Picton Harbour.

TIME: GMT plus 12 hours, Daylight saving time, plus 1 hour, in force from October to March.

HOLIDAYS: New Year's Day, Anniversary Day, Good Friday, Easter Monday, Labour Day, Sovereign's Birthday, Christmas Day, Boxing Day, Anzac Day, Watersiders' Workers Picnic Day, New Zealand Day.

POLICE/AMBULANCE/FIRE: Police, tel. 439; Ambulance, through doctor or in case of emergency tel. 207; Fire, ring exchange operator.

TELEPHONE: Facilities exist to place telephones on board.

SHORE LEAVE: Allowed.

AUTHORITY: Marlborough Harbour Board.

TAURANGA (Mount Maunganui): 37.39 S. 176.11 E. (See Plan)

PORT LIMITS: An arc of a circle of 2 nautical miles radius running from the landward boundary of the foreshore on Matakana Island, and thence into the Bay of Plenty to a position intersection of a right line with North Rock Light, bearing 273°; thence to North Rock Light; thence in a 180° direction to the landward boundary of the foreshore, and having as its centre, trig. station A, Mount Maunganui, Block 6 Tauranga Survey District.

DOCUMENTS:

3 Crew Lists
3 Passenger Lists
1 Search List (on regulation form)
1 Bonded Store
1 Gift List
1 Inward Report Check List (C. Form 98)
1 Declaration by Master of Restricted Immigrants
1 M.O.T. Declaration of Safety Certificate
1 Maritime Declaration of Health
1 Cargo Manifest (for each Port of discharge)
1 De-Rat
1 Clearance, Last Port
1 Poisons on Board
1 Firearms on Board
1 Ship's Papers

PILOTAGE: Pilotage is compulsory for merchant vessels of over 100 tons net tonnage; Pilot boards vessel about 2 miles N.E. of North Rock light structure. If due to adverse weather conditions, the Pilot is unable to embark, the pilot launch may, in certain circumstances, lead the vessel into smoother waters and embark abreast No. 2 light buoy. All vessels inward bound must give 24 hours notice by radio of their expected time of arrival off the port limits. If bound from Auckland or near ports, vessels send their expected time of arrival immediately on departure from that port.

A second message confirming or amending the first is to be sent 4 hours before the ETA. Should, however, the vessel expect to arrive later than her 24-hour message, her 4-hour message shall be sent 4 hours before the ETA given in her original message.

All communications, which should be addressed to "Harbour Master, Tauranga", will be attended to at all hours of the day or night.

The pilot launch, which is 15 m. in length, is painted white and equipped with R/T 2182 kHz, 2162 kHz, and 2012 kHz, VHF Channels 16, 14, 12, 8 and 6, and radar.

Vessels awaiting to enter Port may find suitable anchorage in 12 fathoms, 2 miles N.E. of Mount Maunganui. The holding in sand and shell is good in all but extreme conditions.

ANCHORAGES: 3 sheltered anchorages are situated in the Western Channel of Tauranga Harbour, these include the Quarantine and Explosive Anchorage, and are available for vessels of 152 m, and a maximum draft of 6.86 m. (H.W.).

RESTRICTIONS: Vessels may enter, berth, unberth, or depart during hours of darkness in fine weather. Tankers are handled during daylight only except tankers in ballast and gas free which may sail at night. Vessels over 95 m. generally enter or depart on HW or LW slack.

MAX. SIZE: Max. length permissible is 190 m. (200 m. at Harbour Master's discretion), no restrictions on beam. Max. arrival and departure draft at high water is 9.75 m. and at low water 8.23 m.

HEALTH: Radio notification to be sent to "Port Health Tauranga", ragarding state of health of crew and ETA 24 hours before arrival.

Pratique is granted by Port Health Officer on arrival. Notification should be made by radio to Port Health in case of suspected disease or fever on board.

Pratique is automatic if vessel has been previously cleared at another New Zealand port. Radio pratique may be granted in case of passenger vessels or such vessels as carry a doctor on board.

RADIO: Nearest coastal radio station to Port of Tauranga ia "Auckland Radio" – call sign ZLD.

The Harbour Board Watch Office, call sign "Tauranga Harbour

Radio", is fitted with VHF and R/T; a continuous listening watch is maintained on Channel 16 and 2182 kHz.

RADAR/VHF: Radar is fitted to the pilot launch and 1 tug. VHF is fitted to both tugs and pilot launch. Channels 16, 14, 12, 8 and 6 available.

TUGS: 2 tugs are available, each with a bollard pull of approximately 15 tons. They usually join inward vessels in the vicinity of the Harbour entrance. Tug's lines are normally used, for which there is no extra charge.

BERTHING: Berthing normally takes place 30 minutes after negotiating harbour entrance at HW or LW slack. The quay type concrete wharf 1842 m. in length, (nominally eleven berths), is fitted with wooden spring piling and rubber buffers. A linkspan is situated in the centre of the wharf area.

STEVEDORES: ETA to stevedoring companies is usually worked in conjunction with ETA to Harbour Master.

MEDICAL: Unless specifically required for arrival, Agents do not require advice. Local medical practitioners are consulted and services of one public and one private hospital are utilised. Smallpox certificates are required.

TANKERS: Discharge of black and white products is done through a single 2540 mm. pipe-line. The flexible connection between the discharge lines and ship is 2030 mm. There are no slop facilities available. Chemical tankers are loaded and discharged at the same berth, No. 9, where the max. permissible draft is 9.75 m.

DENSITY: Salt water, 1025.

FRESH WATER: Fresh water is supplied by pipe-line at 20 tonnes per hour, prior arrangements must be made with the Harbour Master for quantities in excess of 1,000 tonnes.

FUEL: Bunkering connections are placed at Nos. 1, 2, 3, 4, 5, 6 and 9 berths. Quantities of L.F.O., 200 secs, Redwood No. 1 and H.F.O. 1,000 secs, Redwood No. 1 can be supplied by prior arrangement with the Oil Companies.

FIRE PRECAUTIONS: In addition to the normal precautions, a fence is erected around tankers to prevent unauthorised access to the berth. A Watchman from the Harbour Master's Staff is also placed on duty at the gate. Both tugs are equipped for fire-fighting.

DEVELOPMENTS: An increase of draft to 10.67 m. is planned for in the near future.

GANGWAY/DECK WATCHMEN: Ship's watchmen are usually employed by overseas ships.

OPENING/CLOSING HATCHES: Usually performed by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes or 250 grams tobacco. 1 part bottle of spirits or wine.

IDENTIFICATION CARDS: Not required.

REPAIRS: All types of engine and deck repairs are possible. A slipway can take vessels of 610 tonnes displacement and up to 56 m. length.

REPATRIATION: All facilities exist.

AIRPORT: The airport is situated 1.6 km. from the wharf and is served with regular internal flights to other main centres where overseas flights may be connected with.

TIME: GMT plus 12 hours.

HOLIDAYS: New Year's Day; 2 January; Picnic Day and Anniversary Day, both in latter part of January; Waitangi Day, 6 February; Good Friday; Easter Monday; Anzac Day, 25 April; Queen's Birthday, 1 June; Labour Day, 26 October; Christmas Day and Boxing Day (12 days).

POLICE/AMBULANCE/FIRE: All connected through automatic exchange, Emergency No. 111.

TELEPHONES: Telephones are placed on board all ships when they arrive.

SERVICES: Local compass adjusters and Surveyors are available. Ships stores can be provided by local Providore firms. Fumigation can be arranged. Ships' garbage is collected daily. No facilities for discharge of tank washings exist.

SHORE LEAVE: Crew are permitted ashore at Master's discretion.

AUTHORITY: Bay of Plenty Harbour Board. Mount Maunganui.

AGENT: Russell & Somers (Bay of Plenty) Limited, 194 Maunganui Road, POB 5087, Mount Maunganui. Tel. 53059. Telex: 2942 "Lumberco". Cables: "Rusticated" Mount Maunganui.

TIMARU: 44.24 S. 171.19 E. (See Plan)

DOCUMENTS: See "Auckland".

PILOTAGE: Pilotage is compulsory, and Pilots are available day and night. A vessel requiring a Pilot should remain 1 mile seaward of Eastern Extension Mole, and should not proceed Northward of line of leading lights on Benvenue Cliff.

ANCHORAGES: A vessel should anchor in a depth of not less than 12.8 m., sand, and Eastward of harbour light structure, and not within 1 mile of Eastern Extension Mole.

RESTRICTIONS: Tidal conditions may affect the time of entering harbour.

MAX. SIZE: Length, 198.1 m.; beam, No limit; draft, 8.38 m., at Harbour Master's discretion. Time of berthing vessels of over 6.4 m. draft will depend on tidal conditions and at Harbour Master's discretion.

HEALTH: Due to exposed nature of anchorage, incoming vessels are examined and pratique is granted after a vessel berths. In event that vessel is quarantined, she will be required to return to anchorage without any contact being made with shore.

RADIO: Timaru Harbour Board has a radio telephone station equipped with both medium frequency and VHF installations.

Call sign "Timaru Harbour Radio", calling frequency 2182 kc/s., working frequency 2162 kc/s. Fixed watches maintained for a period of 15 minutes every 4 hours, e.g.: 0345–0400, 0745–0800, 1145–1200, 1545–1600, 1945–2000, 2345–2400 hrs. (New Zealand Standard Time) and at other times mutually arranged. VHF call sign is Timaru Harbour, Channels 6, 12, 16.

TUGS: 1 tug, 1100 h.p. and Pilot launch/tug, 200 h.p. available.

BERTHING: Moorings supplied at all berths.

SPECIALISED CARGO-HANDLING FACILITIES: *All weather mechanical loaders:* 4 all-weather mechanical meat loaders. Each machine is capable of loading 720 units per hour, to a max. of 2,500 units per hour. Also butter, cheese, frozen vegetables can be handled.

Bulk Handling: A modern bulk-handling installation capable of handling grain, lucerne and certain types of minerals. Intake rates: grain 120 t.p.h.; lucerne 100 t.p.h. Ship's loading rate: grain 800 t.p.h.; lucerne 680 t.p.h. Ship loader equipped with belt weigher. Wharf conveyor has max. belt rate of 1,000 t.p.h. Total silo storage at present available 7,250 tonnes of lucerne or 8,500 tonnes of grain. Inert gas protection provided for lucerne.

STEVEDORES: Gangs must be ordered before 0700 hrs. weekdays, and before 0900 hrs. Friday for Saturday work.

MEDICAL: Full medical facilities are available as required, including an excellent public hospital.

TANKERS: 1 tanker berth, discharge through 8-in. hoses.

DENSITY: Specific gravity 1025 at all states of tide.

FRESH WATER: Available at all berths, delivered at up to 25 t.p.h.

FUEL: Bunkers available, heavy and medium fuel oil. 24 hours advance notice required.

FIRE PRECAUTIONS: When tankers are discharging, access to wharf is prohibited except to those holding passes. Fire-fighting equipment is placed in readiness on wharf.

DEVELOPMENT: Main consideration in future planning is increasing the depth of water in the entrance channel and in the port.

GANGWAY/DECK WATCHMEN: Available if required.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCES: See "Auckland".

IDENTIFICATION CARDS: Not required.

REPAIRS: Most deck and engine repairs can be undertaken.

REPATRIATION: Facilities exist for effecting crew changes and arranging necessary repatriations.

AIRPORT: Two flights each day to and from Wellington. Christchurch International Airport is 160 km. north of Timaru.

TIME: Approximately March–October New Zealand Standard Time (GMT plus 12). Approximately November–February New Zealand Daylight Saving Time (GMT plus 13). Actual dates of changeover to and from Daylight Saving Time decided annually.

HOLIDAYS: New Year's Day; 2nd January; Picnic Day (port holiday Monday of the week in which 29th January falls); New Zealand Day, (6th February); Good Friday; Easter Monday; Anzac Day (25th April); Queen's Birthday (first Monday in June); Dominion Day (third Monday in September); Labour Day (last Monday in October); Christmas Eve (work ceases midday); Christmas Day; Boxing Day. Work can be arranged only by private negotiation on a voluntary basis.

POLICE/AMBULANCE/FIRE: Emergency No. 111 and ask operator for service required. Other than emergency calls: Police, 84-199 Timaru; Ambulance, 5278 Timaru; Fire Brigade, 7089 Timaru.

TELEPHONES: Can be supplied to vessels at all berths.

SHORE LEAVE: Allowed.

AUTHORITY: Timaru Harbour Board.

WANGANUI: 39.56 S. 175.04 E.

PORT LIMITS: Arc of a circle of 3 nautical miles radius centred at the flagstaff at Castlecliff, sited 39° 56′ 49″ S. 174° 59′ 23″ E.

DOCUMENTS: See "Auckland".

PILOTAGE: If Wanganui is first N.Z. port, initial application for Pilot and vessel's ETA should be passed to local Agent by radio through one of three Post Office radio stations. If not first N.Z. port, this information should be given to local Agent by Agent at previous port. Final details settled when R/T contact made between pilot station and ship.

Pilot launch "Karere", LOA, 41 ft. painted white, high midship wheelhouse. Pilot boards at anchorage position. International signals for Pilot should be used if no R/T contact made.

ANCHORAGES: One anchorage for vessels awaiting to enter.

RESTRICTIONS: Port worked day or night at high water when bar conditions are suitable.

MAX. SIZE: Length 350 ft., beam no limit, draft dependent on bar depths at particular time but usually 15 ft. max. at high water springs. No installations outside main port area.

HEALTH: See "Auckland".

RADIO: Wellington Radio ZLW. R/T frequencies 2182, 2162, 2012.

VHF: Channels 16 and 14.

TUGS: No tug available. Pilot launch used for swinging.

BERTHING: Berthing takes place at high water slack.

SPECIALISED CARGO-HANDLING FACILITIES: *No. 6 Berth:* pipeline for bulk cement connecting wharf with adjacent silos.

No. 1 Wharf: direct handling into cool store for fruit.

Portable hoppers used for bulk cargoes to load directly into railway wagons.

There are no facilities for containers, roll-on/roll-off traffic, liquid chemicals or LPG carriers.

CRANES: One mobile crane, capacity 4 tons.

STEVEDORES: Requirements for labour should be given with ETA and request for Pilot. At least 24 hours notice required.

MEDICAL: 24 hours notice required if possible. Hospital facilities available. Inoculations, certificates, etc.

DENSITY: 1020 at HW. 1005 at LW. These figures vary greatly according to amount of freshwater in river.

FRESH WATER: Plentiful supply through wharf hose connections. Rate of delivery depends on height of ship's filling pipe above wharf level.

FUEL: All grades available but ship has to pump out of road tankers. Amount of notice depends on grade required.

DEVELOPMENTS: Development plan in course of preparation but as yet no details of size of any possible new installations or draft increases.

GANGWAY/DECK WATCHMEN: Watchman necessary, either crew member or shore watchman.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCES: See "Auckland".

IDENTIFICATION CARDS: Not required.

REPAIRS: Minor deck and engine repairs possible.

REPATRIATION: Facilities exist but more easily accomplished at a main port.

AIRPORT: About 6 miles. Airport caters for internal services only.

TIME: N.Z. Standard Time (12 hours in advance of GMT) is kept throughout year.

HOLIDAYS: As Auckland, except Anniversary Day holiday which is that held in Wellington Province. No cargo is worked on these days.

POLICE/AMBULANCE/FIRE: Ambulance, 8909; Police, 4488; Fire Brigade, Wanganui, 8185; Fire Brigade, Emergency 111.

TELEPHONES: Arrangements can be made for placing telephones on board.

SHORE LEAVE: Allowed.

DELAYS: Fresh onshore winds could make entrance unworkable for a vessel waiting to enter. Cargo work stops in rain and in unusually strong wind. Bunkering would be slow if large amount of bunkers required.

AUTHORITY: Wanganui Harbour Board.

WAVERLEY HARBOUR, North Island: 39.50 S. 174.37 E.

LOCATION: Waverley Harbour is located on the West coast of the North Island of New Zealand in the Northern end of the South Taranaki Bight.

PORT LIMITS: Waverley harbour is defined as being all that area of water bounded by the line of mean high water spring tides, and having as its seaward limit the arc of a circle of 2 nautical miles radius centred at 39° 49.6′ S. 174° 36.5′ E, near the mouth of the Wairoa Stream.

DOCUMENTS: Besides the Port Health Doctor, other Government personnel boarding the vessel by helicopter for inward clearance are: 1 Port Health Officer, 1 Customs Department Officer, 1 Agriculture Department Officer.

Port Health Officer will inspect Deratisation Certificate and (possibly with Agriculture Officer) inspect food store rooms, refrigerated spaces, galley, pantry, etc.

Customs Officer: The Customs Boarding Officer acts for the Immigration Department and the Marine Department and will inspect the following ship's documents: Register, Loadline Certificates, Safety Equipment Certificates, Radio Certificates.

The following documentation is required on Inward Clearance:
List of Prohibited Immigrants (Form Lab. Imm. 290).
4 Crew Lists.
Inward Manifest/Nil Declaration.
Search List (Reg. Form 2) Crew.
Stores List.
Poisons Lists.
Firearms List.
2 copies of List covering birds, animals, and fish on board (certified by Master).
Passenger List (if any).

For Outward Clearance (Customs):
2 copies of Special Red Printed Outward Manifest (front page) with attached Ship Printed Manifest.
2 copies of Stores List.
2 copies of Crew List.
5 copies of Embarking Passenger List.
2 copies of Transit Passenger List.
1 Passenger Arrival Card (Lab. Imm. 290) for any crew or passenger leaving vessel.

Agriculture Officer: on arrival:
2 copies of Ship's Meat Locker
Reg. 1966 Agl. 36.

The Boarding Officer will inspect the vessel's meat locker and inspect the garbage containers.

Australia, United States, Canada and New Zealand meat not loaded in the place of origin, and Japanese meat will be sealed up on vessel's arrival by the Agriculture Officer.

At sailing time, the Agriculture Officer may attend to check on garbage, sealed lockers, etc., together with the Customs Officer, who issues the Port Clearance, to check if all crew are aboard, and that the Bonded Stores Seal is intact.

NAVIGATION AIDS: SBM – radar reflector, white flashing light, one flash every 9 seconds, range 6 miles.

Leading Lights: In transit bearing 355° 33′.

Range Lights: In line bearing 312° 03′.

All four light towers are of louvred timber construction, painted white with vertical centre line painted red.

The pumphouse building immediately to the West of the two leading lights is prominent with a radar visibility to 15 miles.

PILOTAGE: Pilotage is compulsory for Waverley Harbour and under control of the Waverlev Harbour Master.

It has become customary for vessels to await the Pilot in a position 2 miles South of the SBM. Vessels equipped with VHF will be contacted accordingly when within range. Information on weather conditions and time of Pilot boarding will be advised through this media.

Due to the nature of the coastline adjacent to Waverley Harbour and the weather conditions experienced, the transportation of the Pilot (and other port official personnel) is effected by helicopter, from a pad adjacent to the Administration building. It must be ensured that radio antennas running respectively from foremast to bridge and bridge to aft, as the case may be, are lowered clear in good time prior to the arrival of the helicopter and the landing area cleared of loose gear and portable foam fire equipment properly charged, available for immediate use at the landing area.

Berthing to the S.B.M. is normally effected in daylight only, dependent on weather conditions, visibility and flying conditions being acceptable to the helicopter pilot and in concurrence with the Master of the vessel.

For night flying a wind sock will be erected for the helicopter pilot's observation of wind direction, and vessel is to be floodlit overall.

ANCHORAGE: The recommended anchorage off the port is a rectangular area 0.75 miles East and West, and 1 mile North and South of a position 3 miles South of the SBM. The bottom is sandy in 11 to 12 fathoms and the holding ground is reported fair.

A safe anchorage for vessels having to leave the buoy and/or to await suitable weather to moor to the buoy is recommended in Golden Bay. Distance is approximately 90 miles S.W. of Waverley, the approaches are clear and the lights on Farewell Spit and Separation Point, of 15 miles and 12 miles respectively, most reliable. The holding ground is good and depth of water 15 to 16 fathoms.

WEATHER: The Harbour and SBM is exposed to the West through South to South-east. The swell conditions caused by Westerly and South-westerly weather are considerably reduced by the shallow ground to the Westward, but Southerly swell rolls in unhindered. Very sudden changes of weather are experienced on this coast with the rapid movements Eastward of cold fronts over the Tasman Sea.

PRATIQUE: Vessels arriving at Waverley on consecutive voyages Japan/New Zealand and with all personnel holding valid International Certificates for smallpox should radio to "Health, Wanganui" 24 hours before arrival Waverley, advising number of passengers and crew, and "All Healthy" in which case pratique is automatically granted without any acknowledgement to the vessel.

If a vessel has any suspected diseases on board and if any crew member does not hold a valid International Certificate for smallpox, this information should be stated in the radio message to "Health, Wanganui". The Port Health Doctor will then attend on board on arrival for inspection of all International Health Certificates, and carry out vaccinations as required.

The doctor will supply on arrival N.Z. Maritime Declaration of Health Form H-Q2 for completion by the vessel. It is customary to procure an additional form for the following voyage to facilitate easy inward health clearance thereafter.

RADIO: There is no Government Radio Station at Waverley. Vessels trading to Waverley use ZLD Auckland Radio, ZDB Awarua Radio, or ZLW Wellington Radio.

Advice of Arrival: Vessels to radio ETA to "Wavemarine" Waverley on departure from last port, and 48 hours and 24 hours prior to arrival.

In addition to the vessel's ETA to "Wavemarine", arrival draft and details of the hatch loading plans should be advised.

Vessels equipped with VHF should listen in on Channel 14 (156.7 mHz) when in range of Waverley Harbour.

Base Station is at the Shiploading Pump Station, on board the tender vessel *Wairoa* and a remote control unit is fitted in the main administration building. Mobile units are also employed during the loading operation.

Base Station Channels are:

Channel 6	– 156.3	mHz Intership.
Channel 9	– 156.45	mHz Private and Loading.
Channel 14	– 156.7	mHz Port Operations/Docking.
Channel 16	– 156.8	mHz Safety.

Meteorological information for shipping is broadcast by the Coast Radio Stations ZLW, ZLB and ZLD at frequent scheduled times. ZLW broadcast by radio telegraph on 417.5 kHz, ZLD 487.5 kHz.

BERTH DESCRIPTION: The single point mooring buoy of 11 m. diameter is moored in 57 ft. at low water, 1.5 miles from the shore in position 39° 51′ 02.2″ S. 174° 35′ 52.14″ E.

BERTHING: Vessels will be secured to the S.B.M. by a single 21 in. nylon hawser with chafing chains at each end.

When the carrier approaches the buoy, the tender vessel "Wairoa" will receive a 3 in. messenger rope from the carrier. "Wairoa" will then shackle the messenger to a 10 in. polypropylene pick-up rope. The carrier heaves the messenger and pick-up rope inboard until the chafing chain passes through the bull nose.

Dedicated ships secure the chafing chain to a quick release hook fitted for this purpose.

Ships without a quick release hook should advise "Wavemarine" by radio on departure from last port.

It is essential that two or three good heaving lines be available with the messenger rope in the first instance to pass to the tender vessel, to avoid any delays in mooring.

HOSES: The floating loading hose string comprises ten 35-ft. lengths of hose, with the shipboard end supported by a steel buoy. After mooring is completed the tender vessel will tow around the floating hose underneath the pick-up derrick, plumbed over the manifold connection on the port side of the foredeck abaft the forecastle head. The pick-up buoy of the hose-end will have shackled into it a 30-ft. length of polypropylene, of 7 in. circumference, to which is attached a 100-ft. length of 2.25 in. circumference for passing to the vessel. The 7-in. polyprop is hove up to the rail and hooked into the vessel's cargo hook. The flange elbow with attached camlock coupling is then hove up and connected to the vessel's deck hose manifold. The hose is presently supported on the ship's derrick and stayed fore and aft after coupling up has been completed.

It has been estimated that after the iron sand slurry has been loaded, and the excess water decanted from the surface of the cargo, that the bulk density of the iron sand should be 190 lb. to the cubic foot.

LOADING: All compartments to be loaded should be clean with all drain sumps and double bottom butterworth hole filter places clear.

If weather conditions permit, the vessel should arrive with the after hatch lid of each hold open to facilitate visual inspections of the hold decanting eductors.

FRESH WATER/FUEL: Not available.

REPAIRS: Emergency repairs can be arranged, including radio.

MEDICAL: The Port Health Doctor is a qualified doctor of medicine and can be acquainted of any medical problems affecting any crew member; the necessary arrangements can then be made for treatment aboard or ashore, as convenient.

CUSTOMS ALLOWANCES: See "Auckland".

CONSULS: There are no consular representatives at the port of Waverley.

REPATRIATION: Lists of personal effects, accounts of wages, etc., of any vessels' personnel left ashore, hospitalised or deserted, should be available to Agent as early as possible.

A letter of authorisation is required if the Agent is to provide accommodation, meals, medical attention, transportation or travel expenses, and/or cash advances for account of vessel.

SHORE LEAVE: Shore leave for vessel's personnel is not practicable.

GENERAL: No Port Authority personnel remain on the vessel during the loading period at the SPM Buoy.

The Marine Department require that all vessels, while moored, "shall at all times be kept in readiness to proceed to sea".

The Pilot who is the loading master for Waipipi Iron Sands Limited will accept the Notice of Readiness for the vessel, and acts as Agent for all the vessels requirements. It is customary for the Pilot/Loading Master/Agent to be accommodated on board the vessel during her period on the buoy.

Whistle signals in an emergency may be used for medical, police, etc., as required.

Storing is accomplished by helicopter, cost of which is borne by the ship.

No garbage is to be thrown over the side of the vessel whilst she is on the New Zealand coast and moored to the buoy. Garbage must be retained on board and not dumped until the vessel is one day's steaming clear of the Northern point of New Zealand.

AUTHORITY: Waipipi Iron Sands Limited.

WELLINGTON: 41.18 S. 174.46 E. (See Plan)

PORT LIMITS: All the waters comprised within the harbour of Wellington having as their outward seaward limit the arc of a circle running from the landward boundary of the foreshore at Fitzroy Bay and thence into Cook Strait and thence to the landward boundary of the foreshore at Island Bay, such arc being an arc of a circle 3 nautical miles radius and having its centre at a point on the Outer Rock in the harbour of Wellington.

DOCUMENTS:

Port Health Authorities.

Maritime Declaration of Health (1 copy).

Crew List, stating name, rank, sex, nationality and date of smallpox vaccination. (1 copy).

Port Health Officer will also wish to sight each member of crew's smallpox Vaccination Certificate.

Current International Derating Exemption Certificate.

Customs Authorities. See "Auckland".

Agent.

Crew List, stating name, occupation, rank, sex and nationality (1 copy).

Freight Manifest (3 copies).

Note: Manifests should be airmailed by loading port to arrive in New Zealand at least one week prior to vessel's arrival.

Stowage Plan, airmailed same as Manifest (2 copies).

Agricultural Authorities.

Port Agriculture Inspection Instructions – Ship's Meat Locker Regulations 1966.

PILOTAGE: Compulsory, pilot vessel is not normally on station outside entrance, and all vessels requiring a Pilot are required to give 24 hours notice by radio of their expected time of arrival off port limits. A second notice confirming or amending the first is to be sent 4 hours before expected time of arrival. In event of a ship expecting to arrive earlier than the time given in 24-hour message, 4-hour message shall be sent 4 hours before the new expected time of arrival. Should vessel expect to arrive later than her 24-hour message, her 4-hour message shall be sent 4 hours before expected time of arrival given in her original 24-hour message. All communications which should be addressed "Harbour Master, Wellington", will be attended to at all hours of the day or night.

Should it not be possible to give previous notice of arrival it may be up to 1.5 hours after a vessel is sighted by signal station on Beacon Hill before a Pilot can board.

Pilots normally embark or disembark South of Pencarrow Head, but in the event of heavy Southerly weather, it may be necessary to embark or disembark Pilot in smooth water at or near the compulsory limit.

ANCHORAGES: Depth in anchorages up to 60 ft.

Fairway. Within portion of harbour lying inshore and to Westward of a line drawn from Easternmost point of Oriental Bay, in a 344° direction, to Kaiwharawhara Shore.

Inner Anchorage. Within portion of harbour laying between the Eastern boundary of fairway anchorage and a line drawn from Point Jerningham, in a 354° direction to Kaiwharawhara Shore.

Outer Anchorage. Within portion of harbour Eastward of inner anchorage.

Note: Vessels anchoring in outer anchorage should take up a position well up towards Kaiwharawhara.

Explosives Anchorage: Within that portion of the harbour contained in a circle with a radius of 0.3 nautical miles having as its centre a point bearing 000° true, distant 1.45 nautical miles from Point Halswell Light Beacon or in such other place within the Harbour of Wellington as may be specified by the Harbour Master on any occasion having regard to weather conditions.

Caution: It is advisable when anchoring (especially when in light draft) to drop two anchors in an Easterly and Westerly direction, veering from 75 to 90 fathoms of cable, as it frequently blows hard with heavy gusts of wind off the high land that surrounds harbour, causing a vessel to sheer about. In very strong winds a ship will lie much easier by having both anchors down. A strict watch should be kept.

Prohibited Anchorages. Anchorage is prohibited within 500 ft. of the jetty situated on the N.E. side of Somes Island.

RESTRICTIONS: Controlling channel depth is 37 ft. 09 in. below chart datum. All vessels may enter, berth, unberth, or depart during the hours of darkness. Tankers do not usually berth or depart during the hours of darkness. Berthing is carried out at any state of the tide.

Tides: Rise of tide varies between 0.75 m. and 1.35 m. Tidal rate neaps 2 knots, springs 2.5 knots.

MAX. SIZE: Max. draft 33 ft. LW with no swell. Size no limit.

HEALTH: *Health Officer's Examination Ground.* Within that portion of the harbour contained in a circle with a radius of 0.2 nautical miles, having as its centre a point bearing 347° (true), distant 0.56 nautical miles from Point Jerningham Light Beacon or in such other place within the Harbour of Wellington as may be specified by the Harbour Master on any occasion having regard to weather conditions. Until pratique has been granted vessels arriving from ports beyond New Zealand must not proceed inwards beyond the limits of this area.

RADIO: Medium frequency; Call sign is ZLEG, calling frequency only 2182 kHz, working frequency 2012 kHz. Vessels working on the port and calling 2182 kHz should listen for reply on 2012 kHz. A continuous watch is maintained on 2182 kHz.

VHF: Call sign "Wellington Harbour Control", on Channel 16. Working Channel 12 and Channel 14. A continuous watch is maintained on Channel 16.

Port operations. Vessels equipped with radio-telephone when within harbour limits must maintain a listening watch on 2182 kHz or Channel 16 to ensure immediate contact if required. Only calls for information on harbour conditions, berthing or safety of navigation will be accepted.

When a vessel is notified by radio-telephone or Morse lamp of berth allotted she must confirm this with Pipitea Wharf signal station prior to berthing.

Note: Beacon Hill and Pipitea Wharf signal stations, pilot launches and tugs are equipped with both medium frequency and VHF radio-telephone. Harbour Master's Office and Union Steam Ship Co. of New Zealand Ltd. tugs are equipped with VHF radio-telephone.

TUGS: The Harbour Master may direct the Master of any vessel to engage the services of a tug, and also direct the manner in which the tug shall be used. 2 × 2,700 b.h.p. Voith Schneider tugs, guaranteed bollard pull 28/31 tons, speed 12 knots, also equipped for fire fighting and salvage duties. Both tugs owned by Wellington Harbour Board.

1 tug, 850 b.h.p., operated by Union Steam Ship Co. of N.Z. Ltd. available within port limits for bunkering purposes.

BERTHING:

	Berth No.	Length of wharf metres	Maximum length of vessel metres	Maximum draft metres
Overseas Passenger Terminal	2	238	213	10.3
Overseas Passenger Terminal	3	259	244	10.3
Taranaki Street Breastwork	—	233	152	7.0
* Taranaki Street Terminal	—	152	152	8.2
Queen's	1	224	No limit	8.2
,,	2	93	85	7.3
,,	3	92	85	5.8
,,	4	114	122	7.0
,,	5	79	76	5.5
Waterloo	2	114	107	6.7
,,	3	107	122	6.7

BERTHING: *(continued)*—

	Berth No.	*Length of wharf metres*	*Maximum length of vessel metres*	*Maximum draft metres*
†Inter Island	2	150	143	7.9
,, ,,	3	213	183	8.5
Glasgow	1	84	67	4.9
,,	2	218	213	9.8
,,	3	240	229	10.1
King's	1	91	67	4.9
,,	2	251	244	10.1
,,	3	240	229	10.1
Thorndon Container	1	292	No limit	11.3
Thorndon Container	2	292	No Limit	11.3
Aotea Quay	—	1,122	No limit	10.7
‡Rail/Road Ferry Terminal	1	143	142	9.8
Rail/Road Jetty	—	68	61	6.4
‡2nd Rail/Road Ferry Terminal	2	147	142	10.1
Petone	—	111	107	4.3
Point Howard	—	158	182	10.0
Seaview Wharf (Under construction)	—	—	—	—
Burnham	—	256	No limit	9.1
Miramar East	—	140	122	7.0
Miramar West	—	165	170	8.2

*Linkspan variable width 5 flaps to 20 ft. max.
†Linkspan.
‡Linkspan facilities served by rail.

DEVELOPMENTS: *Development 1976 – Containers:*

Thorndon Container Wharf situated South of Aotea Quay breastwork has a quay length of 584 m. for two berths, depths at low water 12.5 m. Two container gantry cranes, one transfer terminal container crane, twelve straddle carriers, five fork lifts, one travel lift, six 20 ton container trailers and thirteen battery fork lifts for vanning operations. Seventeen hectares of terminal with eight hectares open area for handling and storage, shedded area 5,577 sq. m. Ground container slots for 1,651 containers (TEU) can stack two or three high, 1,392 reefer units and 92 tower units, container wash bay 80 containers a day.

Tankers: Seaview Wharf under construction is an oil tanker wharf 97.5 m. in length, berthing dolphins 190 m. apart, mooring dolphins 213 m. apart, size of vessel 213 m. maximum, designed for vessel draft of 12.8 m. (See harbour entrance max. draft).

Development 1978: Container terminal by 1978, total area will be 24 hectares, 18 hectares for container handling, shedded area 13,490 sq. m., reefer points 1,392, tower units 203, (TEU), ground container slots for 2,756 (can stack 3 high) container wash 150 per day, 3 gantry container cranes, 3 tugs – 31 ton bollard pull.

Kaiwharawhara: Future reclamation for bulk handling container and roll-on berths.

TANKERS: Tankers can berth alongside Point Howard Wharf, Aotea Quay, Burnham and Miramar Wharves. Side connections are to be used at all wharves. During hours of darkness pipe-line must not be disconnected without first obtaining permission from Harbour Master. All precautions must be taken to avoid oil pollution of harbour. Scuppers must be plugged and sawdust kept at hand in case of spillage.

Point Howard and Seaview wharves are exposed to weather and in the event of a Southerly gale special attention must be paid to vessel's moorings.

No facilities are provided for discharge of tank washings other than when a vessel is on the floating dock.

DENSITY: 1025.

FUEL: Available at tanker discharging wharves.

FRESH WATER: Available at all wharves, delivered by hose (4 hoses per vessel max.), 50 t.p.h.

DRY DOCKS: *Floating dock.* A floating dock capable of lifting vessel of 17,272 tonnes displacement is available.

Slipway: Patent slipway available to accommodate vessel up to 508 tonnes.

Floating Crane. Harbour board has an 80-ton revolving and self-propelling floating steam crane of sufficient radius and height to serve the largest vessels when floating in light draft conditions.

REPAIRS: Major repairs can be undertaken. There are machine shops and foundries. Diving equipment and the services of trained divers are available for underwater inspections and repairs. Marine Radio and Radar Services, compass adjusters.

GANGWAY/DECK WATCHMEN: Shore watchmen available.

OPENING/CLOSING HATCHES: Work normally carried out by stevedores. Only time crew are to open and close top hatches is when advised by stevedore. In case of hydraulic hatches in tweendecks, crew are to open and close, not stevedores.

STEVEDORES: Available. No particular ETA advice required except as normally sent by Master.

MEDICAL: 4 hour's notice is sufficient for Agent to mobilise the service concerned. For minor attention it is sufficient that Master advises Agent on arrival. Hospital facilities are available. Current International Certificates of Vaccination against smallpox are required by the Authorities.

CERTIFICATES: Customs Department require ship's Register on arrival. Marine Department require:

Load Line Certificate.
Tonnage Certificate.
Certificate of Registry.
Convention Certificates, i.e.
  Safety Equipment Certificate.
  Safety Radio-telegraphy Certificate.
  Safety Construction Certificate.
  Exemption Certificate (if any).
  If passenger ship, Passenger and Safety Certificate.
  Cargo Gear Register.
  Certificates for all Cargo Gear, i.e. runners, spans, shackles, swivels, etc.
  Deratification Certificate.

CUSTOMS ALLOWANCES: See "Auckland".

IDENTIFICATION CARDS: Not required.

CONSULS: Arab Republic of Egypt, Argentina, Australia, Austria, Belgium, Great Britain, Canada, Chile, People's Republic of China, Czechoslovakia, Denmark, Ecuador, Finland, France, Federal Republic of Germany, Greece, Iceland, India, Indonesia, Ireland, Italy, Japan, Republic of Korea, Malaysia, Mexico, Netherlands, Norway, Papua New Guinea, Philippines, Singapore, Poland, Portugal, Romania, South Africa, Switzerland, Thailand, U.S.A., U.S.S.R., and Yugoslavia.

REPATRIATION: Facilities are available for crew changes and arranging any necessary repatriations.

SHORE LEAVE: Crew members are allowed shore leave at all times.

AIRPORT: Situated 4.5 miles S.E. of City Wharves by road; regular internal and Australian services.

TIME: Local time is GMT plus 12 hours in Winter, (Daylight saving during Summer months).

HOLIDAYS: New Year's Day (1st January); 2nd January; Wellington Province Anniversary Day (22nd January); Waterside Workers Union Picnic Day (generally observed on Monday of the week 29th January falls); New Zealand Day, (6th February); Good Friday; Easter Monday; Anzac Day (25th April); Sovereign's Birthday Observance (first Monday in June); Labour Day (fourth Monday in October); Christmas Day (25th December); Boxing Day (26th December).

Note: Pilotage services available public holidays. Container vessels at container berths work on public holidays.

POLICE/AMBULANCE/FIRE:

	Routine	*Emergency*
Wharf Police	723-000	Dial 111 and ask operator for service required
Ambulance	722-999	
Fire Brigade	850-188	

TELEPHONES: Vessels may be connected to telephone system at city berths by application to the Harbour Master.

GENERAL Garbage may only be disposed of in accordance with strict Government regulations. The normal method of disposal is overside to self-propelled garbage vessel in special cans supplied. Daily collections are made or as arranged through the Harbour Master.

SERVICES: *Shore Electricity:* Available at all berths. Type AC, voltage 230-400, cycles 50, amperage 60.

AUTHORITY: Wellington Harbour Board.

WHANGAREI: 35.45 S. 174.21 E. (See Plan)

PORT LIMITS: From a point due South of the summit of Sentinel Rock, thence to a point 5 cables due East of Sentinel Rock, thence to a point 5 cables due East of Bream Head, thence to a point 5 cables due East of Tutukaka Head, thence to Tutukaka Head.

DOCUMENTS:

3 copies Passenger List.
3 copies Crew List.
1 copy Search List (Form 2).
1 copy Stores List (Form 3).
1 copy Prohibited and Restricted Immigrants.
1 copy Poisons List.
1 copy Animals and Birds List.
1 copy List of Firearms (not cargo).
1 copy Arrival Manifest (Form 1).
1 copy List showing the gross tonnage of cargo for discharge in New Zealand.

PILOTAGE: Compulsory. Pilots embark on the line of leads 141°/321° at the seaward extremity of Pilotage District, i.e. up to 1.5 miles South-eastward of the Fairway Buoy. In heavy Easterly weather, it may be necessary for pilot vessel to lead ship in through the Outer Channel and embark in the lee of Frenchman Island.

Pilots are available all hours day and night subject to prior minimum notice of 24 hours being received during normal week-day working hours. Second notice confirming or amending first to be sent 4 hours before expected arrival. The Pilot supplies a set of Harbour bylaws. Pratique, agriculture and customs clearance is normally undertaken on arrival at berth.

Pilot boat is equipped with VHF. Working frequency is Channel 12, but Channels 6, 8 and 16 are also fitted. Pilot vessel *Manaia* – call sign ZM3830; pilot vessel *Ngapuhi* – call sign ZM2146. Range approximately 20 miles. *Manaia* painted blue, varnished housing, yellow funnel: *Ngapuhi* painted blue, white housing, yellow capping rails – pilot ladder with manropes required.

ANCHORAGE: Is situated 5 to 10 cables. Eastward of the Fairway Buoy in 12 to 20 fathoms of water in the section enclosed by the Fairway Buoy bearing 225° T to 315° T. Holding ground good in fine sand, but exposed to Easterly weather.

Harbour Anchorage. At Marsden Point, 2 cables West of Passage Island light, in 5 fathoms of water. Max. draft 24 ft. Good holding ground, sand and shell bottom.

RESTRICTIONS: Controlling depth in entrance channel 50 ft. MLWS. Depth in upper harbour channel maintained at 28 ft. MLWS.

MAX. SIZE: Marsden Point: Oil Refinery dolphin berths, LOA 1,000 ft., draft 50 ft., Cargo berth LOA 600 ft., draft 28 ft.

Port Whangarei: LOA 600 ft., draft 31 ft.

HEALTH: All vessels examined by Health Officer on arrival.

RADIO: The station is Marsden Point, Whangarei. Call sign "Whangarei Harbour Radio" Continuous 24-hour watch is maintained on VHF Channels 16 and 12, range 40 miles. Medium frequency, listening watch on 2182 kc/s., working frequency range 200 miles. Station transmits on 2012, 2045, 2162 and 4136 kHz.

RADAR: Tugs and pilot boat *Manaia* fitted with radar.

TUGS: Available. Tugs equipped with VHF. Tugs usually secure to vessels entering in vicinity of Frenchman Island. Numbers of tugs normally used are 1 tug for vessels up to 25,000 tons d.w.t., 2 tugs for vessels up to 45,000 tons d.w.t., 3 tugs for vessels up to 65,000 d.w.t. 4 tugs over 65,000 d.w.t. Unberthing: 1 tug is normally required for vessels under 25,000 d.w.t., and 2 tugs for all other vessels, subject weather conditions.

BERTHING: Marsden Point Oil Berths (2) – operated by the New Zealand Refining Company, Marsden Point. LOA 1,000 ft., max. draft 50 ft.

Marsden Point Cargo Berth (1), LOA 600 ft., max. draft 28 ft.

Port Whangarei berths (3), LOA 600 ft., max. draft 31 ft.

Portland berths (3), bulk cement berth LOA 270 ft., max. draft 18.5 ft.; bagged cement berth LOA 210 ft., max. draft 12.5 ft.; cargo berth LOA 350 ft., max. draft 18.5 ft.

SPECIALISED CARGO HANDLING FACILITIES: Portland bulk cement loading jetty. Port Whangarei, 7 portable hoppers for use discharge of bulk cargoes. Cargon system of butter loading.

STEVEDORES: Confirmation of arrival time 4 hours before ETA or revised ETA, whichever is earlier is required. Notice of arrival during a week-end or public holiday must be given not later than 1400 hrs. on the last working day preceding arrival.

MEDICAL: Hospital and dental services available.

TANKERS: Are berthed at all hours day and night. Vessels of 30,000 tons d.w.t. and upwards are usually berthed portside to berth at slack water, and should position ship's gangway 20 ft. upstream of hose connections prior to arrival.

Slop reception facilities are available. Diameter of load and discharge line 10 in. ASA.

DENSITY: 1025.

FRESH WATER: At Northland Harbour board wharves by hose 20 t.p.h. at 30 cents per 1,000 litres. Refinery jetties limited and arranged by refinery.

FUEL: Available from berths (viscosities 3,500 secs. red 1. 1,500 secs. red 1 and MDO).

OPENING/CLOSING HATCHES: Usually carried out by stevedores.

CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes or 0.5 lb. tobacco or 50 cigars permitted each crew member. Wine/spirit: one opened bottle wine/spirits for each crew member.

IDENTIFICATION CARDS: Refinery passes are required when berthed at the Refinery wharves. Passes are brought on board by Agent.

CONSULS: None.

REPAIRS: Most repairs undertaken.

DRY DOCKS: None. 1 slipway capable of receiving vessels up to 1,500 tons d.w.t.

REPATRIATION: Facilities exist.

TIME: GMT plus 12 hours. Daylight saving time observed from early October to early March.

HOLIDAYS: The following are recognised holidays: New Year's Day; 2nd January; Anniversary Day (usually last week January); New Zealand Day (6th February); Good Friday; Easter Monday; Anzac Day (25th April); Sovereign's Birthday (First Monday in June); Labour Day (fourth Monday in October); Christmas Day; Boxing Day; Waterside Workers Picnic Day.

POLICE/AMBULANCE/FIRE: Telephone 111 for emergency, and ask for service required.

TELEPHONES: Available at wharves.

SHORE LEAVE: Allowed.

FIRE PRECAUTIONS: Fire fighting tug on duty 24 hours a day. Tankers to have fire wires fore and aft.

SURVEYORS: Lloyds – New Zealand Government, Marine Division of the Ministry of Transport.

AIRPORT: 8 miles from Port Whangarei; regular daily internal flights.

SERVICES: Tank cleaning, radio and radar repairs. Compass adjuster from Auckland.

REGULATIONS: Issued by Pilot on arrival.

DELAYS: Tidal delays and berth vacancies.

AUTHORITY: Northland Harbour Board.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Nicaragua

CORINTO: 12.28 N. 87.11 W. (See Plan)

ARRIVED SHIP: Vessels are considered as arrived only after having negotiated the entrance channel and are safely inside the proper harbour; vessels at the Pilot station are not considered as having arrived.

DOCUMENTS:

Clearance	1	visaed			
Crew List	3	,,	6	unvisaed	
Store List	3	,,	6	,,	
Passenger List	3	,,	6	,,	
Cargo Manifest	3	,,	17	,,	
Ballast Manifest	2	,,	6	,,	
Health Declaration	—	—	1	,,	
Passenger in Transit	—	—	8		
Mail List	—	—	9	,,	
Bills of Ladings			1	complete	set
Voyage Memorandum	—	—	9	,,	sets
No Passenger List	—	—	9	,,	,,
Cargo Tally Books			18	books	

Note: Documents must be legalised at the last port of call before proceeding to Corinto.

PILOTAGE: The Port Authority must receive in writing from Agents advice regarding vessels ETA 72 hours prior to vessels arrival and a confirmation 12 hours. There is no VHF apparatus in use, therefore all advice must be sent through Agents by cable via Balboa or Limon station. Pilotage is compulsory on all vessels exceeding 500 gross registered tons or exceeding 7 ft. draft. Pilot boards 1 mile off Isla de El Cardon.

ANCHORAGE: The anchorage inside the harbour can accommodate 6–10 vessels, depending on size and draft.

RESTRICTIONS: The port is open 24 hrs.; however, entry is restricted in accordance with tide and vessels draft. Access channel and turning basin dredged to 13.35 m. Due allowance should be made for heavy swell if necessary. Speed limit 8 knots in Corinto Bay, and 5 knots in the vicinity of berths or other craft.

MAX. SIZE: Maximum permissible length 650 ft., 80 ft. beam. Draft controlled by depth of water in approach channel and state of swell.

HEALTH: After entry and vessel has berthed or anchored, 3 long blasts are given requesting free pratique; after these blasts the Authorities board the vessel together with the Agent's representative and proceed with distribution of the documentation. In the event of any suspected disease on board, the action to be taken will be given by the Representative of the Health Department. There is no automatic pratique even though vessel is proceeding from another port in the same country.

Although the port is open 24 hours, vessels arriving after 2100 hrs. are not boarded by the authorities until 0600 hrs. the following day, unless the vessel will berth and commence operations immediately. This being the case, free pratique is granted regardless of the hour. This arrangement is restricted to 0100 hrs. as gangs are not allowed to commence operations after that hour.

RADIO: ETA cables are generally routed via NBA Balboa Station or TIM Limon station, and received through Tropical Radio & Telegraph or All America Cable.

TUGS: Compulsory for berthing and berthing. The tug joins vessel just after vessel passes Buoy No. 7. Tug's lines are generally used: however, at times ship's lines are used. There is no charge for use of tug's lines. 1 tug of 1,100 h.p. and one launch of 167 h.p. available.

BERTHING: There is no preferential berthing, and berthing is indicated by the Port Authority. Vessels are attended to in the manner "first come first served".

There are 3 piers available:

1 A concrete pier, length 370 m., depth 35 ft. at low water.

2 A wooden pier, length 160 m., depth 24.5 ft. at low water.

3 A special berth with conveyor-belt system for loading of carton boxes such as bananas, frozen meat, as well as the handling of inbound and outbound cargoes such as fertiliser and cottonseed meal. Bananas can be loaded into 4 hatches at one time at a rate of 4,500 boxes per hatch per hour. Depth alongside at low water is 35 ft.

STEVEDORES: Gangs work in shifts of 8 hours, commencing at 0700 and ceasing at 2330 hrs. Meal hours are 1200–1300 and 1800–1900 hrs. Work from 1900 Saturday to 0600 hrs. Monday, and on holidays is at double time.

MEDICAL: There are several doctors in the port and most of the Agents have a particular doctor to their service. Hospital facilities are also available. No particular inoculation is required.

TANKERS: The only tankers which frequent this port are those of Esso Standard, Parcel Tankers and the Athel Line. There is only 1 tanker berth and each of the above-mentioned companies have their particular load/discharge lines.

The Esso tankers only discharge oils, the Athel tankers load out molasses, the Parcel tankers discharge solvents and occasionally others load out cotton seed oil.

There are 9 lines belonging to the consignees ranging from 4 in. to 12 in.

Exports: Molasses is loaded at 180 t.p.h. with a 12 in. line, and peanut oil with portable pumps at a rate of 60 t.p.h. per pump.

Imports: Discharge rates.

Aviation gasoline	300	t.p.h.	8	in.	pipe
Solvents	100	,,	6	,,	,,
Diesel	100	,,	6	,,	,,
Asphalt	100	,,	6	,,	,,
Tallow	80	,,	4	,,	,,

Pumping is done by the vessel in each case.

DENSITY: 1025.

FRESH WATER: Fresh water is available and is supplied from connections on the pier, by gravity, at a rate of approximately 10 t.p.h.

FUEL: The only fuel available at this port is diesel.

DEVELOPMENTS: Projected installation of bulk handling plant, additional warehouses and extension of pier 1,500 ft. with 2 transit sheds, new administration building, stevedores shed, equipment shed and repair shops; redesigning of range lights and buoys and increasing amount of same, also area for Industrial Park. Completion expected mid 1978.

GANGWAY/DECK WATCHMEN: After entering, 2 Custom Officers are placed on board all vessels and their meals must be furnished on board.

OPENING/CLOSING HATCHES: If vessel is equipped with regular hatch boards or pontoons, stevedores open and close hatches as well as swing out booms. However, if covers are of the McGregor type or mechanical, the crew has to do the job.

CERTIFICATES: Ship's Registry Certificate is required from ships making their first call at the port.

CUSTOMS ALLOWANCE: There is no limit on tobacco allowance to be held out of Bond but crew members are only permitted to take 2 packages of 20 cigarettes ashore. Crew not permitted to take any alcohol ashore. Anyone trying to do so will be subjected to heavy fines.

IDENTIFICATION CARDS: All crew members except Officers are requested to submit to the gangway watchman, proper identification with a photograph such as seaman book or passport.

CONSULS:

Colombia	El Salvador	Mexico
Costa Rica	France	Panama
Denmark	Guatemala	Sweden
Ecuador	Honduras	Venezuela

REPAIRS: There are no repair shops available only for minor welding jobs.

AIRPORT: The airport is approximately 160 km. from the port and served by regular airlines with daily flights.

REPATRIATION: Can be effected.

TIME: Local time is Central Standard Time, GMT minus 6 hours. There are no alterations during the year.

HOLIDAYS: January 1st; Holy Thursday; Good Friday; 1st & 3rd May; 14th & 15th September; October 12th; December 25th. As a rule, no labour is available on these holidays. However, it is known with the exception of Labour Day and Good Friday, work can be arranged if said arrangements are made in due time prior to arrival of the vessel.

POLICE/AMBULANCE/FIRE: Police 269; Ambulance 313; Fire 421.

SHORE LEAVE: Crew members are allowed shore leave.

AUTHORITY: Autoridad Portuaria de Corinto.

PUERTO CABEZAS: 14.01 N. 83.23 W.

DOCUMENTS:

1 Clearance from Last Port.
10 Voyage Memorandums.
11 Crew Lists.
10 Passenger Lists.
10 Stores Lists.
1 Bill of Health.
12 Ballast Manifests.
13 Manifests of Cargo.
4 Bills of Lading.
10 sets Tally Books.

PILOTAGE: ETA required 24 hours before arrival at the port. The Pilot uses a boat with an outboard motor and boards about one mile off the port. Agent advises the Pilot the date of arrival, he goes out when he sees vessel.

ANCHORAGE: Vessels can anchor about 0.5 mile South of the wharf. Depths in anchorage 20-22 ft.

MAX. SIZE: Max. length, 400 ft. Draft 19 ft. 6in. Difference between high and low tide is 18 in.

HEALTH: The inspection takes place on arrival. It is not necessary when the vessel comes from some other port in Nicaragua.

RADIO: The Nipco has a radiophone for personal use, but they make contacts with vessels. The frequency is 2738. It is better to use or send radiogram via Radio Tropical in Managua.

TUGS: There is no tug service.

BERTHING: There is wreck in front of the wharf. The location is: 14° 0′ 57″ North, 82° 22′ 4″ West, 1,200 yd. from wharf end.

STEVEDORES: The Agent advises stevedores arrival of vessel. They discharge 8 tons of general cargo each hatch (one gang) per hour.

MEDICAL: Not necessary to advise the need of a doctor, only for emergencies. One hospital and two other doctors, apart from the official doctor of the port.

TANKERS: There are 2 pipes of 6 in. diameter on the wharf. There is no special berth for oil tankers.

DENSITY: 1025.

FRESH WATER: The fresh water is carried to the wharf by truck or from one pipe on the wharf. The boiler water gets to the vessel by the pipe on the wharf.

FUEL: Gasoline, diesel oil and lubricants are supplied by Texaco. Arrangements are made at the arrival of the vessel.

DEVELOPMENTS: A hydrographic survey has been completed in the port zone and surrounding area to establish the best place for future port facilities or whether expansion should be made to the existing port. This survey is being effected in view of projected installation of paper and pulp industry and forthcoming development of agricultural and mineral products which could be exported through the port.

The Port Authority is taking the necessary steps to get technical and financial help to make a general survey of the zone in order to find an adequate and/or protected site to place the new port installations. Port plans are combined with the paper and pulp industry, which is supposed to be installed in the next few years.

GANGWAY/DECK/WATCHMEN: It is not obligatory. It is customary to have two custom guards in the gangway.

OPENING/CLOSING HATCHES: The opening and closing of hatches is done together by the crew of the vessel and the stevedores.

CUSTOMS ALLOWANCES: Each of the crew can take 2 packs of cigarettes with the seal broken, and one bottle of wine or liquor opened.

IDENTIFICATION CARDS: Not needed, just passport or seaman's book.

CONSULS: Only consul of Panama available locally.

REPAIRS: Minor repairs only can be effected.

REPATRIATION: It is possible and only a passport needed. Necessary to go to the capital by air, thence to any part of the world.

AIRPORT: Distance of airport from wharf is about 2 kilometres. Service every day to the capital except Sundays and holidays. The name of the only airline is Lineas Aereas de Nicaragua (Lanica).

TIME: Local time is Central Standard Time, GMT minus 6 hours.

HOLIDAYS: Holidays are 1st January; Holy Thursday; Good Friday; 1st May; 14th July; 14th and 15th September; 12th October and the 25th December.

SHORE LEAVE: The crew is allowed to go ashore after the vessel is received by the Authorities.

DELAYS: Delays in berthing can be expected from bad weather.

AUTHORITY: Autoridad Portuaria de Puerto Cabezas.

PUERTO SOMOZA: 12.12 N. 86.46 W.

DOCUMENTS:

Clearance from previous Port.
6 copies Voyage Memorandum.
6 Stores Lists.
6 Passenger Lists or negative declaration, 3 to be visaed.
6 Crew Lists.
8 Cargo Manifests, 3 to be visaed.
8 Tally books.
6 Lists of Mail, Explosives or Drugs if carried.

Nine crew lists and six store lists should be despatched by the Nicaragua Consul at loading port if possible, otherwise they are forwarded by Agents from the Panama Canal.

PILOTAGE: Optional by local Pilots. Leading lights are installed, at the entrance to the port, prominently sited on a hill. Several buoys indicate exact anchorage positions.

Tankers: A Pilot is provided by the oil company in agreement with the Panama Canal Authority. Pilot boards about 0.5 mile West of the sea berth.

ANCHORAGE: About 1.75 miles off port entrance, depth is 30 ft. at low water, and about 45 ft. at high water.

RESTRICTIONS: Port is open day and night without exception.

MAX. SIZE: Tankers at Sea Line Terminal up to 850 ft. length and 41 ft. draft.

HEALTH: Port Health inspector boards all vessels on arrival.

RADIO: There is a radiotelephone installation at the Customs office. No VHF.

TUGS: Not available for manoeuvring vessels. Five small tugs employed for shifting lighters.

BERTHING: No quays for ocean-going vessels. Vessels work cargo to lighters at the anchorage.

STEVEDORES: Port has four gangs of forty men each for boarding vessels.

TANKERS: *Sealine Terminal.* The sea berth is situated in approximate location 12° 10′ N. 86° 49′ W., about two miles off shore in a depth of 47 ft. There are five mooring buoys, two at the bows and three at the stern of the vessel. The first lines to the buoys should each consist of two good ropes lashed end to end to effect the length required. Five lines are normally used at each end of the vessel.

Strong winds may delay berthing or cause vessel to vacate the berth once moored. Sailing at night is not recommended for safety reasons. The discharge hose is lifted on the port side by ship's crew.

MEDICAL: Doctor available in case of emergency. Nearest hospital at Leon, 35 km. away.

FRESH WATER: Not available for supply to ships.

FUEL: Not available for supply to ships.

OPENING/CLOSING HATCHES: Normally performed by stevedores. Mechanically operated hatches are opened by ship's crew.

CUSTOMS ALLOWANCES: Each crewman allowed two packets of cigarettes. No wine/spirits allowed to be taken ashore.

IDENTIFICATION CARDS: Seaman's Book required for going ashore.

CONSULS: Nearest at Leon, 35 km. distant.

REPAIRS: Small items for repair can be sent to Leon, 35 km. away.

REPATRIATION: No facilities for crew changes. If crew member left behind, Agents are responsible for his repatriation at vessel's expense.

AIRPORT: Las Mercedes international airport at Managua, 75 km. away.

TIME: Central standard time, GMT minus 6 hours. No alterations.

HOLIDAYS: All holidays can be worked.

POLICE/FIRE/AMBULANCE: Police available locally. Nearest fire and ambulance stations are at Leon, 35 km. away.

SHIPMASTER'S REPORT: Port authorities board the vessel at 0600 hrs., either at outer anchorage or at discharging anchorage. There is no night work performed unless the vessel reaches discharging anchorage with last daylight.

In general, stevedores are well acquainted with handling cars. Vessels carrying cars, for Pto. Somoza should avoid loading No. 1 hatch for this port. As there is a permanent swell at anchorage, barges cannot lie safely under No. 1 hatch.

There is a Pilot available, on request, who also acts as stevedore-foreman.

AUTHORITY: Administracion de Aduana. Puerto Somoza

NOTES

Please also advise Shipping Guides (Services) Ltd.

Nigeria

BONNY: 04.26 N. 07.09 E. (Inshore Terminal)
04.11 N. 07.14 E. (Offshore Terminal)

(See Plan)

OPERATORS: The Shell-B.P. Development Company of Nigeria Ltd.

DOCUMENTS:

7 Crew Lists.
3 Vaccination Lists.
3 Maritime Declaration of Health.
8 Lists of Last Port of Call (6 weeks).
6 Lists of Birds & Animals.
7 Passenger Lists.
1 Stores List.
1 Personal Effects List.
2 Arms & Ammunition Lists.
1 Clearance Last Port.

Agent: Requires NPA lights and buoy dues form.

PILOTAGE: *Inshore berths:* Pilotage is compulsory. Pilots board off Fairway Buoy; incoming ships must *not* enter Bonny Channel without a Pilot on board.

Offshore berths (SBMs): Berthing Master will board vessel on arrival or at anchorage, and remains on board throughout and acts as loading master. On arrival at anchorage contact Berthing Master on VHF Channel 14 call sign "Ocean Berthing Master".

N.B. also contact Bonny Terminal on Channel 14 on arrival at Offshore anchorage to ensure vessels arrival etc. is recorded.

ANCHORAGES: *Inner Berths:* West of Fairway Buoy in 8–9 fathoms.

Outer Berths: 3 miles South of manifold platform in position 4° 11.2′ N. 7° 14.2′ E.

Vessels must not proceed inshore of this position without a Pilot. When at anchor listening watch must be kept on VHF Channel 14 and this Channel must not be used for intership communication.

RESTRICTIONS: The maximum draft to which a vessel can load at Bonny is governed by three factors viz.

1. Datum Depth in Bonny Channel.
2. Height of the tide.
3. The underkeel clearance allowed.

Datum depth of the Bonny Channel is dependent on the amount of dredging; at the present time Datum depth is 38 ft. 6 in.

Tide is variable but the relevant factor is the height of the tide at the time the vessel will transit the Channel. The underkeel clearance allowed is dependent on the time of the year and is related to the height of the swell expected to be encountered in the Bonny Channel.

The present allowances are as follows.

		ft.	ins.
1/1-15/2	=	2	6
16/2-15/3	=	2	9
16/3-31/3	=	3	0
1/4-30/4	=	3	3
1/5-15/5	=	3	6
16/5-31/5	=	3	9
1/6-31/8	=	4	0
1/9-15/9	=	3	9
16/9-30/9	=	3	6
1/10-15/12	=	3	3
16/10-31/10	=	3	0
1/11-15/12	=	2	9
16/12-31/12	=	2	6

Thus it can be seen that the max. draft at any particular time is equal to:

Datum Depth plus Height of Tide minus Underkeel Clearance Allowance.

A typical calculation would be as follows:

		ft.	in.
Datum Depth	=	38	6
Height of Tide	=	+ 7	0
		45	6
Underkeel Clearance Allowance		3	9
Max. Draft	=	41	9

MAX. SIZE: *Inshore Terminal:* Min. size approximately 18,000 tonnes or 161 m. (530 ft.). Max. length 269 m. (850 ft.). Max. beam no restriction. Max. draft, see "Restrictions".

Offshore Terminal: Min. size 45,000 tonnes s.d.w.t. Max. size 300,000 tonnes s.d.w.t. Max. length no restriction. Max. beam no restriction. Max. Draft 22.8 m. (75 ft.).

HEALTH: Q-flag to be shown on arrival, except if from another Nigerian port, yellow fever and small-pox inoculations compulsory. In case of suspected disease on board, advance notice to Agent advisable. Valid Yellow Fever and Smallpox Certificates to be produced for all crew members. Also Deratisation Exemption Certificate.

RADIO: Original ETA message should be sent via Lagos Radio to the Lagos Agents at least 72 hours before arrival. 48 hours before arrival at the Fairway Buoy a further ETA message should be sent to Lagos Agents. When anchored at the Fairway Buoy contact Bonny Terminal on Channel 14, passing date and time of arrival (same for Harbour Master Bonny), keeping watch on VHF Channels 14 and 16. Failure to comply with the requirements for ETA messages may result in delays in berthing the ship.

BERTHING: *Inshore Terminal:* There are 4 berths (CBMs) designated A, B, C and D, from upstream. A, C and D consisting of 5 buoys (1 astern, 1 on each quarter, 1 ahead and 1 on the inshore bow). A, C, D are flood tide berths. B is ebb and flood tide berth consisting of 6 buoys, the 6th buoy is on the offshore bow or quarter depending on which direction the ship is berthed.

Tankers berth on the flood tide (or ebb at berth B) using the offshore ships anchor as an additional mooring point. Ships moor by means of 40 mm. wires (provided by the Terminal) one 40 mm. wire is picked up from each of the buoys and ship's ropes are not normally used. Mooring is carried out by ship's crew; and care must be taken to ensure that the mooring wires are laid out in a seamanlike manner to prevent runs and kinks forming in the wires. Mooring wires must not be kept on tension winches, but stoppered off by means of Carpenter's stoppers provided by the Terminal, and then "turned up" on the bitts. Two men from the Terminal are put on board the vessel to assist the ship's crews position and set up the Carpenter's stoppers.

Vessels must be equipped with hose-handling derricks with a SWL lifting capacity of not less than 5 tonnes.

Vessels must arrive with clean ballast.

Load-on-top system operates at Bonny, but slops cannot be accepted ashore. Maximum loading rate: 5,000 t.p.h. (1/1/74).

Grades handled: both light and medium crudes.

Offshore Terminal: Two SBMs fitted with two 16-in. double nylon mooring lines and 1 hose string terminating in two 16-in. diameter end hoses.

No. 1 SBM is S.S.W. of the Platform. No. 2 SBM is S.S.E. of the Platform and they are designated Bonny West and Bonny East respectively.

Berthing effected under guidance of berthing master and local assistant who both remain on board throughout loading operations. Accommodation for both to be provided. Whilst berthed a mooring rope must be ready on the poop deck so that the mooring launch (line boat) may, in the event of the vessel riding up on the SBM, make fast and tow to re-align vessel.

Vessels must be equipped with hose handling derricks with a capacity of not less than 7 tonnes.

Vessels must arrive with clean ballast.

Load-on-top system operates at Bonny but slops cannot be accepted ashore. Max. loading rate 8,000 t.p.h. (1/1/74).

Grades handled Bonny light crude only (1/1/74), the maximum lifting is restricted to 150,000 tons as at 1/1/74.

HOSES: *Inshore Terminal:* Vessels should endeavour to present two 12-in. diameter 150 ASA connections on the port side of the vessel when berthing at A, C, D, berths. On B berth two 16-in. 150 ASA connections should be provided on the port or starboard sides of the vessel – dependent on whether the vessel is berthing on ebb or flood tides. Vessel's hose handling derrick to be rigged and plumbed overside. Hoses will be connected by shore labour, but winchmen must be supplied to operate the ship's lifting gear. The derrick runner must be equipped with a suitable hook. The estimated weight of each hose string at berths A, C and D, when lifting with the ship in light condition is between 3 and 5 tonnes. Ships fitted with only 5 tonne derricks should exercise care when lifting to avoid shock loads. On "B" the estimated lifting weight is between 5 and 7 tons.

Weight of Hoses: Indication only of approximate weights of hose strings in tonnes (including fittings, floats, and pick-up buoy). Assumed total lift of 7.6 m. (25 ft.) above deck level and vessel in light draft condition with hoses full of crude oil SG 0.850.

d.w.t.	*16 in.* I.D. Hoses tonnes	*12 in.* I.D. Hoses tonnes
100,000	8.3	4.9
70,000	7.5	4.5
50,000	7.3	4.4
35,000	7.1	4.2
18,000	6.3	3.7

Offshore Terminal: Port or starboard side amidships (dependent on which SBM is used). Vessels should endeavour to present two 16-in. standard 150 ASA connections on arrival. Ships crew are required to connect and disconnect the hoses under the advice of the berthing master and/or his assistant. A derrick SWL at least 7 tonnes must be rigged ready on both port and starboard sides and plumbed clear of this side. Derrick runner must be equipped with suitable hook.

Weight of Hoses: Indication only of approximate weights 16-in. I.D. hose strings in tonnes (including fittings, ftoats, and pick-up buoys with all hoses full of crude oil SG 0.850. Assumed lift is 7.6 m. (25 ft.) above deck level, with vessel in light draft condition.

d.w.t.	tonnes
200,000	8.9
100,000	8.1
70,000	7.3
50,000	7.0
35,000	6.9

SHORE LINE SYSTEM: *Inshore Terminal:* Crude oil is loaded at berths A, C, D via 32 in. submarine lines and 2 strings of flexible hoses each consisting of 3 lengths of 16 in. hose and 3 lengths of 12 in. hose at the ship end, and via a 28 in. submarine line and 2 strings of 16 in. flexible hose at berth B. Reducers are made available by Terminal on request.

Offshore Terminal: Vessels load through SBM from shore through a 48 in. diameter line, thence through a 24 in. diameter floating hose which is terminated by a "Y" piece and two 16 in. diameter hose tails which connect to the ships manifold. Loading rates up to 8,000 t.p.h. may be expected. The 48 in. submarine loading line from the Terminal is some 20 miles in length, therefore

great care must be exercised during loading when ships valves are manipulated to avoid pressure surges. Pressure recorders are normally fitted at the spool piece between ships manifold and tail end of the hose string to monitor pressure changes generated on board the vessel.
BALLAST: No facilities for dirty ballast, no tank cleaning facilities.
MEDICAL: Hospital at Bonny with limited capacity. New hospital expected to be ready before the end of 1976.
DENSITY: *Inshore Terminal:* 1015 at Low Water particularly during rainy season.

Offshore Terminal: Salt.
FRESH WATER: Available by barge at rate of 15 t.p.h. 48 hours advance notice required as barge comes from Port Harcourt.
FUEL: Available only by barge from Port Harcourt.
CUSTOMS ALLOWANCES: 200 cigarettes per man per 7 days. 1 wine or 1 btl spirit per officer per 7 days.
IDENTIFICATION CARDS: Crew to carry passport or seaman's book whilst ashore.
CONSULS: Nil.
REPAIRS: Nil. See "General".
REPATRIATION: Possible via Port Harcourt and Lagos.
AIRPORT: 28 miles by river, to Port Harcourt, then 7 miles by road, twice daily to Lagos, no international flights.
TIME: GMT plus 1, no change.
POLICE/AMBULANCE/FIRE: Contact Via Harbour Master or Shell/BP, VHF 14 or 16.
SHORE LEAVE: Not permitted.
GENERAL: Accommodation ladder must be rigged – used in conjunction with pilot ladder at offshore terminal – and for direct access in inshore terminal. Limited medical assistance available but in extreme emergencies only. Treatment of minor ailments and vaccinations etc. is under no circumstances available. It may be possible in the event of an accident to obtain medical advice. Contact terminal VHF Channel 14 in first instance. Pollution of the sea by dirty ballast bilge discharge or any other means will result in heavy fines, or in severe cases, imprisonment. Any attempt on the part of the boarding officers to persuade the Master to supply more than normal representation should be resisted. In the event of any problem arising over such a matter full details should be *reported to the Agent*. Nigerian flag to be flown. Air letter forms are not acceptable unless with Nigerian stamps.

Delays: Inshore berths: None.

Offshore berths: Worst weather period June–September when heavy swell may be encountered.

Immobilisation of engines: Not permitted at the berth. Not permitted at SBMs. Not advised at sea anchorage due to indifferent holding ground and the existence of obstructions and foul ground in the vicinity.

Loading: Ships are required to load cargo as rapidly as possible by day and night in accordance with the terms of their charter parties.

This means that ships are expected to load as fast as Shell-BP can supply or they can safely receive. The question of how fast a ship can load is the responsibility of the Master having regard to his Owner's instructions, the charter party and the experience of ship's personnel. However, as further guidance and in absence of any instructions to the contrary, ships are expected and nominations of vessels are accepted by Shell-BP on the understanding that ships will be able to accept a bulk loading rate per hour of not less than ten per cent of the summer deadweight of the vessel.

At offshore berth the Berthing Master acts as Loading Master during loading operations and is provided with walkie-talkie radios to ensure adequate ship/shore communication.

Loading Masters visit each vessel, and Masters are requested to co-operate in the completion of the Shell-BP Tanker Port Performance Time Sheet by ship and shore personnel at all terminals. Only crude oil is handled at Shell-BP terminals, loading temperatures and specific gravities of the two grades of crude, Bonny Light and Bonny Medium are reasonably constant and are approximately:

Bonny Light	0.823 at loading temperature
Bonny Medium	0.890 at loading temperature

Early Departure Procedure: A modified early departure procedure is in operation at Bonny Offshore Terminal. Masters are requested to sign all documents in blank, retaining in their possession Masters' consignee copies. On completion of loading, the berthing Master will supply Masters with a copy of the figures required for the completion of the retained documents. Masters requested to complete these before the departure of the vessel. Customs and Agency representatives will normally board vessels during the daylight hours. Depending on other commitments of the offshore launch, it may be necessary to request Masters to provide temporary accommodation for these officials.
AUTHORITY: Nigerian Ports Authority.
AGENT: Alraine (Nigeria) Ltd., 26 Creek Road Apapa. POB 265, Apapa. Tel. 47770. Telex 21 244. Cables: "Freight Lagos".

BRASS RIVER (Offshore Terminal): 04.04 N. 06.17 E.

SHIPMASTER'S REPORT: (NOVEMBER, 1976).

DOCUMENTS:

1 Maritime Declaration of Health.
2 Vaccinations Lists.
6 Crew Lists.
4 Passengers Lists.
2 Stores Lists.
2 Personal Effects Lists.
4 Arms and Ammunitions Declarations.
4 Lists of Animals and Birds.
4 Lists of Ports of Call (last 6 weeks).
Clearance last port.

APPROACHES: Coast line is well defined on high definition radar at a distance of 12 to 15 miles and sounding machine will assist efficently while approaching.

Terminal consists of a central platform showing two flashing lights (one red and one white) – letter "U".

Two SBM's: No. 1 situated 1 mile East of the platform is equipped with a Racon (letter "A"). No. 2 situated 1 mile West of the platform.
PILOTAGE: Berthing Master will board the vessel 2.5 miles North East of the platform. Contact "Brass Terminal" on VHF Channel 16 for berthing instructions and immediately on anchoring to ensure that vessel's arrival is recorded.
ANCHORAGE: 2.5 miles N.E. of the platform.
RESTRICTIONS: Vessels berth in day hours only.
MAX. SIZE: About 250,000 d.w.t.
PRATIQUE: Agent, Health and Customs Officers board at same time as Berthing Master.
RADIO: ETA to be given via Lagos Radio, 120, 72, 48 and 24 hours before arrival at the Terminal anchorage.
TUGS: None available.
BERTHING: Effected under the guidance of Berthing Master assisted by a party of 4 Nigerian people and ship's crew.

Whilst berthed a mooring rope must be ready on the poop deck so that the mooring launch, in the event of the vessel riding up on the SBM, may make fast and tow to realign the vessel.

Each SBM is fitted with 2 nylon mooring ropes connected on a single chain and two hose strings with 16 in. end hoses. Position of hoses connection: amidship port side. Vessel should endeavour to present on arrival 2×16 in. connections on port side. A derrick of 7 to 10 tons SWL with a suitable hook must be rigged ready on port side.
MEDICAL: No facilities but assistance may be given on an emergency basis.
FUEL: Not available.
FRESH WATER: Not available.
DENSITY: About 1025.
REPATRIATION: No crew changes possible.
SHORE LEAVE: Not permitted.
GENERAL: Crude oil handled is: Light Nigerian Crude API=44.0. Temperature about sea temperature, R.V.P.=10.5. Two of the four Nigerian crew stay on the forecastle head and maintain security watch throughout loading operations. Accommodation must be provided for Berthing Master and 2 men. Accommodation ladder is not required. Pilot ladder or pilot hoist are more suitable because of the swell. Immobilization of engine is not permitted at SBM's.

Early Departure Procedure: Masters are required to sign all documents in blank. On completion of loading, seals are controlled by customs officer and Agents complete Master's and Consignee's copies of documents whilst ship is disconnecting and leaving berth.
TERMINAL OPERATOR: The Nigerian AGIP Oil Co. Ltd.

BURUTU (inc. Warri): 05.21 N. 05.31 E.

DOCUMENTS:

7 Ports of Call Lists.
5 Crew Lists.
5 Kroo boy Lists.
2 Animal Lists.
2 Arms and Ammunition Lists.
9 Manifests.
2 Summaries.
1 extra Manifest for transhipment cargo.
3 Stores Lists.
2 Crew Declarations.
2 Inward Reports.
2 NPA Master's Declaration.
2 NPA ship's particulars.
1 Customs Clearance.
1 Declaration of Health.
1 Vaccination List.

PILOTAGE: No compulsory pilotage. local Pilots or rather river guides, available at Escravos. No communication is possible with these guides from Burutu.
ANCHORAGES: 1 anchorage known as "the pool", opposite Okorodudu Town; max. draft for pool anchorage 14 ft. MLWS. Further anchorage at Forcados for vessels waiting to proceed to Burutu or Warri.
MAX. SIZE: Restricted only by draft. Official depth 21 ft. MLWS, governed by actual depth on Escravos bar which does vary from time to time and being dredged for increased draft. Latest information always available from Nigerian Ports Authority, Lagos.
HEALTH: International pratique regulations prevail. Pratique *not* necessary when coming from another port in Nigeria.
RADIO: Station, Port Burutu. Watch kept from 0730–1200, 1400–1700 hrs. on week-days and 0730–1200 hrs. on Saturdays on 2182 kc/s R/T and Channel 16 VHF.
TUGS: No tugs available.
BERTHING: No specific requirements to berthing. Berth number is hoisted on flagpole situated on No. 4 berth. Ships berthed in order of arrival.

Warrl		*length*	*draft*
1	Buoys Fore and Aft	525 ft.	21 ft.
2	Buoys Fore and Aft	525 ft.	21 ft.
3	Single Buoy	No limit	21 ft.
4	Main Wharf	525 ft.	21 ft.
5	Canal Berth	1055 ft.	20 ft.

Burutu

Two vessels normally berth alongside the wharves. The main wharf being some 750 ft. in length and a smaller wharf of some 300 ft. There is plenty of water alongside these berths and the depth that a vessel can load to is controlled by the Burutu flats which are 13 ft.

STEVEDORES: Advice given on radio during transit Escravos-Burutu is quite adequate. Normal rates approximately 13/15 ton per hook hour.

MEDICAL: Fully equipped hospital under supervision of resident medical officer situated at Burutu.

TANKERS: Only small coastal tankers use Burutu to periodically replenish bulk tanks, which have capacity for 1,800 tons gas oil and 900 tons fuel oil, used primarily for consumption by local vessels.

DENSITY: Fresh water.

FRESH WATER: Limited amount available in wet season from shore line at rate of 4 t.p.h.

FUEL: No fuel available.

FIRE PRECAUTIONS: Small fire station situated in port area. No specific fire precautions required.

GANGWAY/DECK WATCHMEN: Considered advisable have gangway/deck watchmen.

OPENING/CLOSING HATCHES: Normally carried out by stevedores, except in ships fitted with Mcgregor hatches.

CUSTOMS ALLOWANCE: 200 cigarettes; part bottle.

IDENTIFICATION CARDS: Either discharge books, or passports advisable.

CONSULS: No consulates at Burutu.

REPAIRS: Dockyard has four slipways which can accommodate most creek and river vessels up to tonnage of 600 tons. Management of dockyard in hands of qualified engineers who are able carry out afloat, hull and/or machinery surveys as required. Limited deck, hull and engine repairs can be carried out.

REPATRIATION: Facilities exist for individuals but not for crew changes.

AIRPORT: Small airstrip 1.5 hours away by launch, where daily scheduled flights by small twin-engined aircraft operate to Lagos.

TIME: GMT plus 1.

HOLIDAYS: January 1/2, March 9/10, April 12/15, June 8, October 1, December 25/26. Cargo may be worked on all these holidays except Christmas Day, Good Friday and Republic Day.

POLICE/AMBULANCE/FIRE: No telephone numbers – all these services available in port area.

TELEPHONES: Facility available for connecting telephones on board.

SHORE LEAVE: Crew members allowed ashore.

AUTHORITY: Nigerian Ports Authority, Burutu.

AGENT: Alraine (Nigeria) Ltd., 4 Khalil Road, POB 374, Warri. Tel. Warri 341. Telex via Lagos 21.244.

CALABAR: 04.57 N. 08.27 E.

Situated on right bank of Calabar River, 42 miles from sea.

DOCUMENTS, and all general information, refer to "Lagos".

PILOTAGE: Not compulsory, but the services of the Harbour Master can be requested for pilotage duties.

MAX. SIZE: The max. recommended draft for vessels using the port of Calabar is 19 ft. 6 in., which is, at present, governed by a depth of water on Duke Town Crossing of 12 ft.

BERTHING:

(*a*) Pool Anchorage, 3 ocean going vessels.
(*b*) Millerio Wharf, 1 ocean going vessel.
(*c*) Cement Wharf, 1 ocean going vessel.
(*d*) Ivy Wharf, 1 coaster vessel. This wharf has been damaged seriously and is not in use at present.

Moorings: One mooring berth is available for main line ships Pilot Service.

AIRPORT: At Calabar.

AUTHORITY: Nigerian Ports Authority.

ESCRAVOS: 05.30 N. 05.00 E. (See Plan)

DOCUMENTS: Required and brought out by Pilot:

4 Nigerian Ports Authority/Masters Declaration.
2 Customs and Excise (Form C 13).
4 Ship's Report (Gulf) } on behalf of Agent.
2 Requests for Service }

The sailing clearance will be completed after B/L figure of cargo loaded is available, and will be delivered to the ship before sailing.

PILOTAGE: Compulsory. Boarding area is in a position 3 miles W.N.W. of the berth operation platform.

Supervisor Pilot's Report: From my personal experience here at the Tank Farm, I can add that in poor visibility or when Tankers approaching this Terminal are having difficulties with their Radars, I am guiding them to proper anchorage using a small R.D.F. which is located at the local airport – Heliport in the Tank Farm and used by local aircraft traffic. The signal comes as "ES" (·   · · ·) on 305 kcs and gives a good bearing from a distance of 30 miles. This is not an official Navigational Aid, but I have used it successfully for many years and besides, when you have nothing else in the area, this is a great help to obtain a line-position.

NAVIGATION AIDS: Berth Operations Platform is a conspicuous steel structure 85 ft. high and is approx. 1 mile from Berth No. 2, between the berth and the shore. On top of this structure is a heliport, which at night is surrounded by red lights. In the event of a power failure a green intermittent light will be shown from one corner of the seaward side of the platform.

A RACON reflector is mounted on this platform for easy identification of the Gulf Sea loading area. Radar transmission from the incoming vessel triggers the RACON Unit which responds with the Morse Code letter "G" (– – ·), followed by a solid tail. This signal is observed visually on the ship's radar screen and appears very close to the point where the radar echo of the berth operations platform itself should appear.

ANCHORAGE: Vessels required to anchor on arrival will anchor in position approx. 3 miles W.N.W. of the berth operations platform, i.e. in a position Lat. 05° 31′ 00″ N., Long. 04° 57′ 30″ E., or as otherwise instructed.

On approaching the terminal, VHF contact can be established with the Mooring Master on Channel 16 and the vessel will be advised of which berth has been nominated for her cargo. At the same time, the vessel will be advised where the Mooring Master will board. In cases where VHF contact is not made, the vessels will remain in the anchorage area until such time as contact is made by radio or the pilot boat. Vessels are advised to anchor only in the stated area due to the existence of submarine pipe-lines in other areas.

Anchorage is forbidden in the mooring area.

RESTRICTIONS: Mooring and unmooring operations will be undertaken by day and by night under normal weather conditions.

Notice of Readiness will be accepted by the Company representative on arrival providing that the ship is in all respects ready to load.

MAX. SIZE: The Escravos Terminal consists of two Single Buoy Mooring Berths Nos. 2 and 3 only, the conventional Sea Berth (Berth No. 1) having now been de-commissioned.

The location of the Sea Terminal Berth No 2 (SBM) for vessels up to 100,000 d.w.t. is off the North of the Escravos River in a position Lat. 5° 30′ 37″ N., Long. 4° 59′ 25″ E., and has a min. depth of water of 72 ft. at LWS.

Berth No. 3 (SBM) for 350,000 d.w.t., vessels is situated 4.25 miles W.S.W. of No. 2 berth in a position Lat. 5° 29′ 29″ N., Long. 4° 55′ 54″ E., and has a min. depth of 105 ft. at LWS.

RADIO: Vessels bound for Escravos must advise their ETA to Gocon, Lagos, 72 hours and 24 hours before arrival -the message to contain the vessel's name, ETA, Master's name. A 24-hour watch is maintained on VHF Channel 16, in the Senior Mooring Master's Office, and ships are usually able to make contact on this Channel at a distance of 20 to 30 miles on the seaward side of the Berth Operations Platform. Channel 10 is used for internal traffic and ship berthing operations.

MOORING: Before arrival at the pilot boarding area, it will be necessary to ensure that the following moorings are ready for use on arrival at the berths:

Four mooring ropes – buoyant lines if possible, e.g. polypropylene, on the forecastle head.

When the vessel is within reasonable distance of the buoy, two ship's lines will be carried by the mooring launch to the floating buoy lines and secured to same, these lines will then be heaved aboard. As the buoy ropes come clear of the water it will be noted that chains are attached to them. These chains are to be secured to the bitts in such a manner that the nylon is outside of the extreme length of the ship; i.e. so that the chains will absorb any chafing if the buoy line crosses the bow. There are two buoy lines.

Power must be available at all times on deck winches and windlass while vessel is at the berth.

A mooring line must be available aft, secured to the bitts and of sufficient length to enable a tug-boat to pick up the eye and tow on it to realign the vessel if necessary. If available, a buoyant line is also preferred in this position.

CARGO: Nigerian Light Crude -API 36° approx. Temperature 85° F. (fairly steady throughout the year).

HOSES: Lifting, connecting, disconnecting, lowering and other handling of hoses will be performed by the ship's crew, as advised by the Company representative, and where possible the Company will provide a pipe-line gang to assist the ship's crew. At all times handling of hoses will be performed by the ship's crew, as advised, and a deck officer must be in attendance.

Both derricks must be rigged and ready for use on arrival and vessels are cautioned that the weight of each hose is at least 3 tons under favourable conditions. Where possible, it is requested that the derrick runner is on one winch and the topping lift on another, as this will make the hose-handling operation much smoother and faster. In any case, members of the ship's crew will be required to operate the winch or winches.

As no equipment will be supplied from the shore; it is essential that all vessels nominated for this port have an adequate supply of gaskets, nuts, bolts, spanners, tools, etc. ASA reducers for use with the Camlock connections can be supplied in an emergency in the standard sizes. Failure to have these items will lead to delay in berthing and could even lead to a situation where the vessel was not accepted by the port. Such delays would be for the ship's account.

Berth No. 2: Loading is through an SBM which is approx. 33 ft. in diameter and held in position by 4 chains secured to piles sunk into the seabed. 1×16 in. floating hose is secured to buoy and has a 12 in. tailing piece attached to it with 12 bolt holes ASA 150 flanges; they are also fitted with Camlock connections. It is proposed to fit another 12 in. tailing piece to this buoy at some future date.

Berth No. 3: Is a larger version of No. 2 and more heavily moored with 8 chains secured to piles sunk into the seabed. There is 1×24 in. floating hose with 2×12 in. tailing pieces. These are ASA flanges with Camlock connections, similar to those at Berth No. 2.

BALLAST: *Deballasting and Loading Procedures:* Vessels proceeding to Escravos to load must arrive with sufficient clean ballast for safe manoeuvring. A vessel arriving with dirty ballast will incur costly delays as it is not permitted to discharge dirty ballast to the sea. The "Load on top" system is accepted at this port and vessels are requested to arrive with the slop tank "settled out" as far as is possible and so avoid any chance of pollution of the Terminal waters from this particular tank.

The Nigerian Government has very strong views on pollution and vessels are warned that a very careful watch is kept at all times to ensure that pollution does not take place, or that if pollution should occur it is controlled as quickly as possible.

All vessels are cautioned to keep a close watch on the floating hose (or hoses) towards the end of deballasting, as it is possible, under certain conditions of weather and tide for the hose to become trapped under the fore-foot of the vessel. Should this situation appear likely to arise vessels are requested to attempt to keep the fore-foot submerged by transfer of water or bunkers, etc. If the hose becomes foul, it must be disconnected and towed clear causing considerable delay to the vessel.

During the hours of darkness it is requested that searchlights from bridgewings and approved floodlights be used to illuminate the surrounding water to facilitate detection of oil and assist generally in loading operations. Vessels are advised that failure to supply sufficient lighting could result in cargo operations not being allowed during the hours of darkness. Such delay would be for the ship's accounts.

After the ballast tanks have been inspected and found to be satisfactory, deballasting will commence on the advice of the Company Representative. When all the ballast has been discharged, the tanks will again be inspected and if ready for cargo a dry certificate, if presented, will be signed by the Company representative. In any case, cargo will be loaded when both ship and shore are ready to commence operations. In no circumstances will the vessel be expected to load at a faster rate than that requested by the Master. It is the ship's responsibility to check that the requested loading rate is not being exceeded. The Company for their part will make every effort to maintain the requested rate and will advise of any alteration of loading rate immediately; prior warning being given if circumstances permit.

Simultaneous Deballasting and Loading: In order to reduce the turn around time at this Terminal, but with close attention to safety, vessels will be permitted to load cargo and discharge ballast simultaneously, provided that no contamination of cargo or pollution of the Terminal waters can occur. Vessels desirous of adopting this method of loading can do so, but will be required to advise the Company in writing, stating that the vessel accepts full responsibility if this method of loading results in contamination of cargo and/or pollution of the Terminal waters.

Throughout the deballasting and cargo operations, a deck officer must be on deck with sufficient crew members to safely handle the operation. Company representatives will be on board throughout to co-ordinate terminal and marine operations and will be in constant communication with the terminal by portable and/or ship's VHF sets. Before loading commences the amount of cargo required must be given to the Company Representative in writing and the Terminal will, in conjunction with the vessel, arranged to stop the flow of cargo at this predetermined figure.

THERE ARE NO FACILITIES AVAILABLE TO DISCHARGE EXCESS CARGO SHOULD THE VESSEL OVERLOAD.

The Company Representative will advise on the detailed procedure for shutting down and disconnecting, but briefly, after cargo is completed and oil has ceased to flow, loading valves on the shore and Berth Operation Platform (BOP) will be closed. Then and not before, the vessel's manifold valves may be closed.

Do not close ship's valves against incoming oil as such procedure creates excessive pressure which may damage hoses, terminal facilities, or ship's piping.

Figures taken after completion will be passed to the shore by VHF and a ship/shore difference obtained. On request, full sets of cargo papers will be prepared and delivered to the Master as speedily as possible. However the briefer form of documentation is used at this terminal, and the remainder of the documents will be forwarded by airmail. At the same time the Company will arrange clearance for the vessel.

Loading signal to be displayed is the International Code flag "B" from a conspicuous halyard during the hours of daylight. During the hours of darkness a red light visible all around the horizon at a distance of at least one mile is to be exhibited.

REPAIRS: No facilities of any kind are available at this port.

Under no circumstances are engine repairs or the immobilisation of main engines permitted within the port limits.

REPATRIATION: Not permitted except in grave emergency and then only if the person concerned holds all the necessary valid certificates and documents, e.g. valid Smallpox, Cholera and Yellow Fever Certificates.

WEATHER AND CURRENTS: Wind and swell are mostly from a South-westerly direction. The weather is generally good from November to May, but is unfavourable during the wet season, i.e. May to November. For approximately 75% of the year the current sets in a N.N.W. direction and for the remainder of the year it is reversed, i.e. S.S.E. The strength of the current varies from 0.5 to 1.5 knots, and the currents frequently reverse direction very quickly causing the vessel to yaw (swing) heavily at the berth.

FRESH WATER: Not available.

FUEL: Not available.

MEDICAL: Not available except in an emergency.

STORES: Stores are not available at this Terminal and urgent spares/equipment forwarded by air can take up to three (3) weeks to clear formalities. In view of this it is essential that Gulf be advised of the airway bill number at the earliest opportunity to avoid further delays.

NATIONAL FLAG: Available from the Company.

GENERAL: In view of the exposed location of the berths, the Mooring Master and pipe-line gang will have to remain on board throughout the vessel's stay at the berth and, therefore, it will be necessary for the vessel to arrange food and accommodation for this period. A pipe-line gang will usually consist of four men, but this number may be varied at the discretion of the Company.

It is assumed that the Mooring Master will be accommodated in the Pilot Room; but where such a room does not exist on board, then accommodation equivalent to a minimum standard required for a Senior Officer is to be provided. In the case of meals, due allowance and provision is to be made for the fact that irregular hours of work by day and night may be involved.

TIME: Local time is GMT plus one hour throughout the year.

SHORE LEAVE: In view of the isolated positions of the buoy moorings (approx. 15 and 19 miles from shore) Masters are strongly advised not to grant shore leave. The weather and swell conditions could result in persons being injured either embarking or disembarking from the vessel, and in addition the boat journey will take approx. 2-2.5 hours. Should the weather deteriorate, it could mean delay to the vessel as outward clearance would not be granted until all the crew were on board the vessel. As the terminal does not own any suitable boats, it would be necessary for the vessel to charter one for shore leave purposes.

In view of the foregoing, the terminal does not recommend shore leave being granted.

AUTHORITY: Gulf Oil Company (Nigeria) Limited.

FORCADOS (Offshore Terminal): 05.10 N. 05.10 E. (See Plan)

DOCUMENTS:

Port Health:

4 copies Crew List.
3 copies Vaccination List.
3 copies Maritime Declaration of Health.
5 copies List of Last Ports of Call (6 weeks).
4 copies List of Animals and Birds.
4 copies Passenger List.

Customs:

1 copy Crew List.
1 copy List of Last Ports of Call (6 weeks).
2 copies List of Animals and Birds.
1 copy of Passenger List.
1 copy Stores List.
1 copy Personal Effects List.
2 copies Arms and Ammunition List.
1 copy Clearance Last Port.

Agent:

2 copies Crew List.
2 copies List of Last Ports of Call (6 weeks).
2 copies Passenger List.

Vaccination booklets for all crew members to be produced.

Deratisation Exemption Certificate to be produced.

APPROACHES: An efficient sounding machine and a high definition radar will assist in making the terminal for the first time. A heavy cluster of radar echoes from the Escravos area may be recorded on passing the 100-fathom line. On making the 20-fathom line, it is reported that the coastline from North Point to Moore Point and from South Point to Ajamabri shows on the radar screen with good chart comparison.

Once the vessel's position is ascertained and the course for Forcados adopted, the first and most obvious sighting, at night, will be that of the control tower, which is marked with numerous fixed lights at several levels. The control tower, which also serves as a helicopter platform, is in close proximity to the two SBM's.

PILOTAGE: Berthing Master will board vessel on arrival or at anchorage, and remains on board throughout. Contact Berthing Master on VHF Channel 14. Call sign "Forcados Berthing Master". *N.B.:* Also contact "Forcados Terminal" on Channel 14 immediately on anchoring to ensure that vessels arrival is recorded and that berthing turn will be in correct sequence.

ANCHORAGE: 3 miles West of or 2 miles N.W. of Production Platform in position 5° 10′ 17″ N. 5° 10′ 42″ E.

Vessels must not proceed inshore from these positions without a Pilot. When at anchor a listening watch is to be maintained on Channel 14 and this Channel must not be used for ship-to-ship exchanges.

Note: A 14-mile 48 in. pipe-line extends from the coast at South Point near Forcados to the manifold Platform and hence to the SBMs. Vessels are warned not to anchor in the vicinity of the pipe-line.

RESTRICTIONS: Vessels berth at any state of tide, night or day.

MAX. SIZE: Min. size 45,000 tonnes. Max. size 254,000 tonnes. No restriction on length and beam. Max. draft 65 ft.

PRATIQUE: Health and Customs Officers board at a convenient hour and come from Forcados, 20 miles distant from the buoys. Normally travel by high-speed launch, but may occasionally use helicopter.

RADIO: ETA to be given via Lagos Radio, 72 hours before arrival and re-confirm 48 hours before vessel's ETA at the terminal anchorage.

TUGS: No tugs required and none available.

BERTHING: Effected under guidance of Berthing Master and/or local assistant who both remain on board throughout loading operations. Accommodation for both to be provided. Whilst berthed a mooring rope must be ready on the poop deck so that the mooring launch (line boat) may, in the event of the vessel riding up on the SBM, make fast and tow to realign vessel.

There are two SBMs each fitted with two 15 in. nylon moorings and 1 hose string 840 ft. long with 2×16 in. end hoses. No. 1 SBM is South of platform and No. 2 is West.

Position of hose connections: Amidships port or starboard side depending on seasonal conditions. Vessels should endeavour to present 2×16 in. (400 mm.) (150 ASA) connections on arrival. Ship's crew are required to connect and disconnect the hoses under the advice of the Berthing Master and/or his assistant. A derrick, SWL at least 7 tonnes, must be rigged ready on both sides and plumbed clear of ship's side. Derrick runner must be equipped with suitable hook.

Weight of Hoses: Indication only of approximate weights 16 in. I.D. hose strings in tonnes (including fittings, floats, and pick-up buoys) with all hoses full of crude oil SGO. 850. Assumed lift is 7.6 m. (25 ft.) above deck level, with vessel in light draft condition.

d.w.t.	tonnes
200,000	8.9
100,000	8.1
70,000	7.3
50,000	7.0
35,000	6.9

Loading: Load-on-top system operates at Forcados but slops cannot be accepted ashore. Maximum loading rates 11,000 t.p.h. (1/1/74).

A single grade of crude oil is handled which is known as "Forcados Blend".

Shore Line System: Vessels load through SBM from shore through 48 in. line to SBM. The 48 in. submarine line to the SBM is some 14 miles in length, therefore great care must be exercised during loading when ships valves are manipulated to avoid pressure surges. Pressure recorders are normally fitted at the spool piece between ships manifold and tail end of the hose string to monitor pressure changes generated on board the vessel.

MEDICAL: No facilities for medical attendance but assistance may be given only on an emergency basis.

FUEL: Not available.

FRESH WATER: Not available.

DENSITY: Approximately 1025.

REPATRIATION: No crew changes possible.

SHORE LEAVE: Not permitted.

GENERAL:

Loading: Ships are required to load cargo as rapidly as possible by day and night in accordance with the terms of their charter parties.

This means that ships are expected to load as fast as Shell-BP can supply or they can safely receive. The question of how fast a ship can load is the responsibility of the Master having regard to his Owner's instructions, the charter party and the experience of ships' personnel. However, as further guidance, and in absence of any instructions to the contrary, ships are expected and nominations of vessels are accepted by Shell-BP on the understanding that ships will be able to accept a bulk loading rate per hour of not less than ten per cent of the summer deadweight of the vessel.

At offshore berth the Berthing Master acts as Loading Master during Loading Operations and is provided with "walkie-talkie" radios to ensure adequate ship/shore communication.

Loading Masters visit each vessel, and Masters are requested to co-operate in the completion of the Shell-BP Tanker Port Performance Time Sheet by ship and shore personnel at all Terminals. Only crude oil is handled at Shell-BP terminal, loading temperature and specific gravity of the grade of crude. Forcados Blend is reasonably constant and is approximately: 0.856 at loading temperature.

Immobilization of engines: Not permitted at SBMs. Not advisable at sea anchorages as many obstructions if vessel drags anchor.

Restrictions which may cause delays: Weather. Worst period June–September when heavy swell may be encountered.

Early departure procedure: A modified early departure procedure is in operation at Forcados offshore terminal. Masters are requested to sign all documents in blank, retaining in their possession Master's consignees copies. On completion of loading, the Berthing Master will supply Masters with a copy of the figures required for the completion of the retained documents. Masters are requested to complete these before the departure of the vessel. Customs and agency representatives will normally board vessels during daylight hours. Depending on other commitments of the offshore launch, it may be necessary to request masters to provide temporary accommodation for these officials.

WATCHMEN: Whilst berthed at an SBM, a security watch must be kept on the forecastle head by member(s) of the ship's crew throughout the hours of darkness.

SHIPMASTER'S REPORT: The SBM's are situated about 11 miles offshore. *Moorings:* Starboard derrick topped and doubled up. If accommodation ladder rigged then on port-side. Not necessary for vessels up to 50,000 d.w.t.

Hoses: All sizes of reducers available.

TERMINAL OPERATOR: The Shell-B.P. Development Co. of Nigeria Ltd.

LAGOS (including Apapa): 06.27 N. 03.25 E.

DOCUMENTS: See Burutu.

PILOTAGE: Compulsory. Hoist "G" flag. Agent to give notice of ETA to Harbour Master as early as possible. Contact Pilot by VHF Channel 16. No pilot boat stationed outside.

ANCHORAGES:

	Length	Draft
Pool 1	480 ft.	24 ft.
Pool 2	600 ft.	28 ft.
Pool 3	450 ft.	26 ft.
Pool 4	450 ft.	26 ft.
Badagry Creek	380 ft.	22 ft.

Vessels not permitted to remain at anchor at Pool 1 during hours of darkness due to poor holding ground.

4 vessels, maximum length 380 ft. can anchor at Badagry Creek Anchorage. Max. draft 22 ft.

RESTRICTIONS: Draft only. Vessels of more than 600 ft. overall length are not allowed to be brought into the port. Max. permissible draft is 27 ft.

MAX. SIZE:

	Length	Draft
Marina Buoys	750 ft.	27 ft.
Container Berth	720 ft.	27 ft.
Pool	600 ft.	27 ft.
APQs	600 ft.	27 ft.
PWA	600 ft.	25 ft.
BOP	565 ft.	25 ft.
Ijora	400 ft.	19 ft.

Marina Buoys: Eleven Mooring Berths, length varies from 350 ft. to 750 ft. and draft from 18 ft. to 27 ft.

No. 1 Berth – Can accommodate a ship of max. length 600 ft. – draft 27 ft.

No. 2 Berth – Can accommodate a ship of max. length 450 ft. – draft 26 ft.

No. 3 Berth – Can accommodate a ship of max. length 520 ft. – draft 26 ft.

No. 4 Berth – Can accommodate a ship of max. length 520 ft. – draft 25 ft.

No. 5 Berth – Can accommodate a ship of max. length 475 ft. – draft 24 ft.

No. 6 to 11 Berths – At present can only accommodate vessels not exceeding 350 ft. in length – Drafts varying between 17 ft. to 23 ft. at various berths.

APQ: Max. recommended lengths for vessels occupying berths from Apapa 1 to Apapa 7 is 550 ft. and in the remaining berths vessels up to 600 ft. can be accommodated.

P.W.A.: Vessels of 600 ft. with the max. arrival draft of 25 ft. can be accommodated. Departure draft should not exceed 19 ft. 6 ins.

B.O.P.: Vessels of 565 ft. with the maximum draft of 25 ft. can be accommodated. Departure draft should not exceed 19 ft. 6 ins.

N.O.J. (New Oil Jetty): Vessels of 565 ft. with the max. draft of 25 ft. can be accommodated. Departure draft should not exceed 19 ft. 6 ins. This jetty is used for petroleum products.

Ijora: 2 Berths, East and West.

East – Length of vessel should not exceed 400 ft. with the max. draft of 19 ft.

West – Max. length of the vessel 270 ft. draft 19 ft.

Also see "Berthing".

HEALTH: Port Health Officer boards vessel on arrival. ETAs must be advised by ship or Agent direct to Port Health. Pratique automatic when from Nigerian port. Also see "General".

RADIO: Messages routed through Lagos Radio.

Continuous VHF watch on Channel 16 maintained in Harbour Master's office. Contact Signal Station by VHF Channel 16.

TUGS: No specific joining position, depending on tide and on Pilot's request, otherwise close to berth. Normally ship's line used. 2 tugs available 1,280 h.p. 24 hour service available. Also see "General".

BERTHING: Cargo for Apapa and Lagos should be stowed separately on all liner ships as the Apapa wharves have rail connections to the North, and the customs wharf only receives cargo for Lagos locally.

No specific arrival time is required for berths, except for Petroleum Wharf where tankers need high water. Berthing on ebb tide required for Fish Wharf and Ijora Wharf.

There are 3 berths at the Customs Jetty, 1, 2 and 3. The depths alongside are 22 ft. 6 in.; 21 ft. 6 in.; 19 ft. 6 in. respectively. Each berth can accommodate a vessel of max. 500 ft. in length.

Fish Wharf, length 280 ft., draft 19 ft.

Iddo Pool Buoy No. 1
Iddo Pool Buoy No. 2
Iddo Pool Buoy No. 3
Iddo Pool Buoy No. 4
} Reserved for Naval vessels

Mooring Berths:

Nido Gas Buoy: Can accommodate a gas tanker of max. length 250 ft. draft 16 ft.

Badagary Creek: Mooring Buoys – 2 berths – can accommodate 2 vessels at a time. Max. length of the vessel should not exceed 450 ft. and deepest draft 23 ft.

Commodore Buoys: 3 mooring berths – can accommodate 3 vessels. Max. length of the vessel should not exceed 600 ft. and deepest draft 27 ft.

Bruce Buoys: 4 mooring berths – can accommodate 4 vessels at a time. Max. length of the vessel should not exceed 520 ft. and deepest draft 27 ft.

Lighterage Terminal at Kirikiri: Is available for lighterage operation.

CRANES: 2 floating cranes 1×40 ton capacity, 1×100 ton capacity.

STEVEDORES: Available.

MEDICAL: Agents to be given advance notice of medical attention required as early as possible. Hospital facilities available. International Certificates of smallpox and yellow fever required.
TANKERS: Length 580 ft. Draft 25 ft. (FW).
DENSITY: 1012.
FRESH WATER: Delivery by barges at between 20 to 40 t.p.h. Advance notification needed.
FUEL: Fuel oil available, coal bunkers obtained from Ijora Wharf. A guarantee of sufficient bunker to last the period of stay on a berth will be one of the conditions to be satisfied before a vessel is allocated a berth.
FIRE PRECAUTIONS: Tankers and vessels with explosives: fire-boat always in attendance with fire-control depot ashore working in conjunction with the Harbour Master on VHF Channel 16. Port area tugboats also equipped for fire fighting.
GANGWAY/DECK WATCHMEN: Advisable, available if required.
OPENING/CLOSING HATCHES: Stevedores/crew.
CUSTOMS ALLOWANCES: Tobacco allowance: 200 cigarettes per person, reissue after 8 days. Wine/Spirit: 1 part bottle, reissue to officers after 4 days.
IDENTIFICATION CARDS: Passports or identity cards.
CONSULS: Most countries maintain Embassies/High Commissions or Consuls.
REPAIRS: Major repairs available.
DRY DOCKS: Authority maintains large, well-equipped dockyard, which, while primarily for maintenance of Authority's own fleet, provides facilities to commercial interests. In installation is modern floating dock which has lifting capacity of 4,000 tons. Max. draft 18 ft. Synchro-lift available lifting capacity 100 tons max.

In addition to facilities offered by Authority's dockyard, major shipping agencies in port maintain dockyard installations, including slipways for raking smaller vessels and lighters; can provide first-aid repair for main line vessels.

Bull Nose – No. 1 – can accommodate a vessel of 380 ft. in length and max. draft 16 ft. 6 in.

Bull Nose – No. 2 – can accommodate a vessel of 250 ft. in length and max. draft 16 ft. 6 in.

REPATRIATION: Facilities available for effecting crew changes and arranging any necessary repatriations.
AIRPORT: 8 miles from harbour, served by regular airlines.
TIME: GMT plus 1 hour.
HOLIDAYS: Fixed: New Year's Day (1st January); National Day (1st October); Christmas Day (25th December); Boxing Day (26th December). Variable: Good Friday; Easter Monday; Eid-El-Fitir Festival; Eid-El-Kebir Festival; Maolud Nabiyyi (Mohammed's Birthday). Port closed on Republic Day, Good Friday and Christmas Day.
POLICE/AMBULANCE/FIRE: Police Apapa 45798, Lagos Custom 20030; Ambulance Apapa 41341/227; Fire Apapa 41741, Lagos Custom 20777, General Emergencies 199.
TELEPHONES: No arrangements for telephones on board.
SERVICES: Small services available.
SHORE LEAVE: Crew members allowed ashore after clearance by Port Health and Immigration Authorities.
GENERAL: Notice issued by the Harbour Master in May, 1976:
Will all ships' Agencies note that from the date of this circular letter, Lagos Radio has been instructed to reject any telex messages from any ship addressed to the Harbour Authority unless the itemised particulars are included:

(a) Ship's name.
(b) Ship's call sign.
(c) Ship's Agent's name.
(d) Ship's length overall.
(e) Ship's tonnage loaded.
(f) Ship's draft.
(g) Nature of cargo (i.e. cement, general cargo, etc.).
(h) Last port of call.

Notice issued by the Nigerian Federal Ministry of Health in May, 1976:

Please communicate to all Masters that request for radio pratique either by international sanitary codes or otherwise must state clearly the following:

(a) Last port of call;
(b) number of crew;
(c) vaccination and inoculation of crew;
(d) date and time of arrival;
(e) condition of ship;
(f) number of passengers onboard;
(g) name of Agent.

AUTHORITY: Nigerian Ports Authority.

AGENT: Alraine (Nigeria) Ltd., 26 Creek Road, Apapa, Lagos. P.O. Box 2206. Tel. 47 770. Cables "Freight Lagos". Telex 21244.

PENNINGTON OFFSHORE TERMINAL:

04.15 N. 05.36 E. **(See Plan)**

All vessels required fly Nigerian Ensign on foremast.
OPERATORS: Texaco Overseas (Nigeria) Petroleum Company.
LOCATION: The floating storage vessel, designated as "Special Purpose Vessel (SPV) 367001", is a 367,000 barrel storage hulk fabricated from the forebodies of 2 tank vessels and is approximately 740 ft. in length. The SPV is moored to SPM-A, one of two single point mooring berths:

1. SPM-A is located approximately 20 miles off the mouth of Fishtown River in a position
Lat. 4° 14′ 35.2″ N.
Long. 5° 36′ 53.2″ E.

2. The Export Tanker Buoy (SPM-B) is capable of accommodating vessels up to 250,000 d.w.t. and is located at
Lat. 4° 15′ 0.0″ N.
Long. 5° 36′ 10.5″ E.

on a bearing of North 60° West and a distance of approximately 5,000 ft. from SPM-A. The minimum water depth at SPM-B is approximately 88 ft.
APPROACHES: Incoming tankers should make their terminal approach from a westerly direction to a point not less than 2 miles seaward of the Export Tanker Berth. At this location the Mooring Master will board the vessel.
DOCUMENTS: Following documents required by Customs and Health Officials.

Last Port Clearance.
Register.
7 copies Passenger Manifests.
7 copies Crew Lists.
2 copies Stores Lists.
2 copies Bonded Stores Lists.
2 copies Arms and Ammunition List.
6 copies Livestock List.
1 copy Vaccination List, showing date of last smallpox, cholera and yellow fever inoculations of all Crew members.
2 copies of Master's Declaration to Nigerian Ports Authority.
These forms will be supplied when Authorities board the ship.
1 copy of Maritime Declaration of Health.
12 copies of Notice of Readiness.
Before sailing and immediately upon completion of loading, vessel must provide 12 copies of Ullage Report.

Government officials representing various departments may, at their discretion, board the vessels in the Terminal area.
PILOTAGE: (see "Approaches") The Company Mooring Master, together with Customs Officials will board incoming vessel about 2 miles seaward of the Terminal Export buoy. Vessel's Master will be advised on approach to the berth details in respect of mooring, unmooring, connecting and disconnecting hoses, loading operations and departure from the berth.

Vessels requested to have pilot ladder safely and securely rigged for immediate use, and long enough to reach the Mooring Master's launch. A light line should be ready to take on board the Mooring Master's radio and/or briefcase.

The Mooring Master will remain on board during loading operations and he will be in direct control of all ship communications while in Terminal area.
MAX. SIZE: Max. d.w.t. 250,000 tons.
RADIO: All vessels to be loaded at the Terminal must cable ETA to "Topcon, Lagos", 96 hours and 24 hours prior arrival. The Company in Lagos will then notify Senior Mooring Master on board Special Purpose Vessel.

Ship to "SPV 367001" communication, while vessels are in the export tanker berth will be by portable VHF radio-telephone units, provided by Terminal. The Company Mooring Master will advise ship's Master regarding emergency whistle signals set up for use in event radio-telephone units become inoperative. Use of ship's radio station and/or battery charging is prohibited while loading is in progress.
VHF: As soon as possible prior to arrival, vessels should establish direct communication with the Terminal (SPV 367001) on VHF International Calling Channel 16 (156.8 mHz).
TUGS: *SPM Vessels:* The Terminal will have available 2 line handling vessels and one SPM-Hose maintenance vessel. These 3 vessels are under the control of the Mooring Master and are used to assist the mooring of the Tanker as required. These service vessels are not available to the Tanker for any other work.
READINESS: The Company will make every effort to load vessels upon arrival, or as promptly as berth is available, weather permitting.

"Notice of Readiness" will be accepted as at time of arrival, provided vessel is in all respects ready to load. Arrival time will be considered as at time Mooring Master boards vessel, or time vessel anchors off the terminal, which ever occurs first.

Mooring Master may reject a vessel if in his judgment she is not properly equipped or suitably manned, or if, upon inspection, he deems her to have dirty ballast or tanks unsuitable for cargo. However, Company will not issue any certificate or representation purporting to state that vessel's tanks, pipes and pumps and appurtenances are clean or acceptable for receiving cargo nor will the Company assume any responsibility for "contamination of cargo aboard ship caused by condition of ship's tanks, pipes, pumps or appurtenances".

The vessel shall have in readiness 2 nylon ropes with a minimum diameter of 2 in., each approximately 200 ft. long and each terminated with 2×2.25 in. joining shackles to attach and retrieve the SPM mooring lines.

Vessels must be adequately equipped with blocks, tackle and booms to hoist the floating hose string in a safe, efficient and expeditious manner. Vessels must also have an adequate supply of nuts, bolts, gaskets and wrenches to connect cargo hoses system.
BALLAST: Absolutely no provision is made for dirty ballast. Vessels with dirty ballast will be rejected and all costs therefrom will be to the vessel's account.

It is the Ship Master's responsibility to see that no oil or oily ballast is pumped or spilled overboard. Drip pans must be used at all times and all scuppers must be plugged. The waters in and adjacent to the Terminal must not be polluted, and only clean oil-free ballast and/or bilge water may be discharged at the Terminal.

As soon as practicable after arrival, and prior acceptance for loading, all vessel's tanks will be inspected for evidence of oil in ballast, and during discharge of ballast, similar inspections will continue. If evidence of oil appears at these inspections, the vessel may have to vacate berth. Upon return, vessel will be obliged to tender new "Notice of Readiness".

If, during first inspection or during process of loading it is revealed that vessel's tanks are not oil-tight, she will be rejected, or refused further loading.

In addition to lights usually displayed, vessels discharging ballast or loading cargo during darkness will illuminate area around the ship to satisfaction of Mooring Master, in order that any oil on the surface of sea may readily be detected and appropriate action taken. Vessels unable to illuminate sea satisfactorily may not discharge ballast during darkness. Vessels should provide suitable floodlights for working on deck during night operations.

In the event any vessel should accidently discharge dirty ballast or spill oil in the vicinity of the Terminal, the Company shall have the right to take any action that may be necessary to clean up or remove any contamination or pollution resulting from such discharge of dirty ballast or spillage. In addition, the Company shall have the right to settle any claims of third parties arising from such contamination or pollution. All costs and expenses incurred by the Company to carry out the cleaning up of such contamination or pollution or the settlement of third party claims, shall be the joint and several liability of the Vessel, its Owners and Managers, and the Company shall be entitled to claim reimbursement accordingly in any jurisdiction.

Vessels properly equipped will be encouraged to discharge clean ballast and load simultaneously.

BERTHING: All manoeuvring within loading berth area is to be done only in accordance with advice of Company Mooring Masters, subject to understanding that in all cases and circumstances Master of vessel being manoeuvred shall remain solely responsible for safety and proper manoeuvring. Vessel's Master or a qualified Deck Officer must be on bridge at all times during manoeuvring.

EXPORT TANKER BERTH FACILITIES: The Export Tanker Buoy is a conventional SBM which is 10 m. in diameter and held in position by 6 chains secured to piles sunk in the seabed. Two mooring hawsers and a single floating hose string extends from the buoy.

CONNECTING MOORING LINES: When the Vessel is within reasonable distance of the SPM-B, 2 ship's lines will be carried by a line handling launch to the floating buoy lines and secured. These lines will then be heaved aboard. As the buoy ropes come clear of the water it will be noted that chains are attached to them. These chains are to be secured to the bits in such a manner that the nylon is outside of the extreme length of the ship; i.e. so that the chains will absorb any chafing if the buoy line crosses the bow. There are 2 buoy lines. Power must be available at all times on all winches and windlass while Vessel is at the berth.

LOADING: During loading, the International Code Flag "B" shall be displayed from top-mast signal halyard during daylight hours. During hours of darkness, a red light shall be displayed, visible at a distance of at least 1 mile, and showing unbroken light all around the horizon.

Raising, connecting, disconnecting and lowering of submarine hoses will be performed by vessel's crew under direction and supervision of an appropriate vessel's Officer as advised by the Mooring Master, who will remain on board while the vessel is in moorings.

After vessel securely moored the floating hose will be lifted to rail amidships. The weight of the lift is approximately 5 tons and is lifted with vessel's gear on port side. The Mooring Master advises vessel's personnel in the lifting, connecting, disconnecting and lowering of the hose system. A vessel's Deck Officer must be present, and direct the crew in all hose handling. There must be sufficient crew on deck to perform this work.

The vessel's Master is responsible for own vessel at all times. The max. loading rate is about 15,000 b.p.h. and Company mooring Master will advise in respect to loading pressures and hazards, but will not direct loading except as may be necessary to protect Terminal facilities. Manipulation of vessel's valves is direct responsibility of vessel's personnel.

Prior to commencement of loading, Chief Officer will assure the Mooring Master that sea suction valves are *closed* and he will make note to that effect in Mooring Master's log before cargo loading started. Final ullaging and computation of cargo will be done by an Officer of the vessel who will hand this information to Mooring Master for transmittal to Officer in charge on board "SPV 367001" for use in comparing metered-out cargo.

Caution. – The incoming oil stream is controlled on board the "SPV 367001" and it is extremely dangerous to close a cargo valve against the incoming stream. Such a procedure creates excessive pressure, which may damage hoses, piping or Terminal facilities. Vessels will be held liable for damages resulting from failure to observe this precaution.

Emergency Signal. – When normal ship-to-"SPV 367001" communications fail, the emergency signal to stop the flow of oil will be a continuous blast on the whistle until oil ceases to flow. Steam or air should never be shut off from the whistle during loading. Whenever emergency whistle is used, all loading operations will be shut down until communications can be re-established.

Terminal Stops. – Request for the Terminal to stop the flow of cargo at a predetermined tonnage must be made in writing. Requests must include statements that the Company will not be held responsible for any error and in case of overloading, the excess cargo cannot be pumped back to the "SPV 367001". Some delays are always incurred when such a shore stop request is made.

SAFETY: Vessel's personnel responsible for safety of vessel, and must take all necessary precautions whether or not so advised by Mooring Master. Any safety precautions imposed by Company Mooring Master, and so disregarded by ship's Officers or Crew, will be considered just cause for rejection of vessel and all expenses and liabilities related thereto will be for account of the tanker.

Not less than 1 Deck Officer and 3 seamen shall be available on deck at all times while vessel in moorings.

Power must be available at all times on deck winches and windlass while vessel in moorings.

Presence of unauthorized craft alongside is extremely hazardous and Masters are requested to require all unauthorized craft to clear vessel's side prior to ballast pumping and cargo loading.

Mooring Masters are authorized to shut down loading operations during severe electrical storms, if another vessel or craft of any description comes alongside the loading vessel, and under any other circumstances which imperil loading operations.

MEDICAL: Medical assistance on an emergency basis only.

REPAIRS: No facilities of any kind are available. Pennington Offshore Terminal is considered an open roadstead and under no circumstances may engines be shut down for repairs while a vessel is moored in the Export Tanker Berth. The Vessel must be able to depart from the berth immediately on instructions to do so.

WEATHER/CURRENTS: Wind and swell are mostly from a Southerly direction. The weather is generally good from November to May but is unfavourable during the wet season months of May to November. The currents are irregular and at times strong. The Mooring Master will provide the Master with this information when boarding the vessel.

FRESH WATER: Not available.

FUEL: Not available.

STORES: Not available.

REPATRIATION: Not permitted except in grave emergencies.

SHORE LEAVE: Not permitted.

GENERAL: Cargo inspection services are available from E. W. Saybolt and Co. S.A. who have offices in Lagos. The use of this service will be for account of vessel or Consignee.

AGENCY: The Company does not perform general agency functions. Owners of vessels calling at the Terminal may arrange for their own Agents, although due to the location of the Terminal there are no Agent's offices in the area. For this reason the Company will arrange for the minimum agency service necessary to document and clear vessel and export cargo through Nigerian Customs. Costs of this Agency service will be charged back to appropriate parties.

PORT HARCOURT (incl. Okrika): 04.46 N. 07.01 E.

DOCUMENTS:

9 Crew Lists.
9 Passenger Lists.
6 Arms and Ammunition Lists.
6 Livestock Lists.
7 Ports of Call Lists.
2 Bonded Store Lists.
3 Vaccination Lists.
10 Manifests.
2 Bills of Lading.
2 Crew Declaration (Special Lists).

PILOTAGE: The Pilot Station for Port Harcourt is at Bonny, 15 miles from Fairway Buoy, 28 miles from Port Harcourt. The Harbour Master keeps watch on VHF Channels 16 and 14 and on 2182 from 0700 hrs. to 1800 hrs. As there presently is no radio station at Port Harcourt Masters should cable their Lagos Agent with a 48 hours ETA asking the Lagos Agent to pass the information to Port Harcourt. Pilot boards at Fairway Buoy from pilot-cutter green hull, stone colour superstructure.

Position of Fairway Buoy: 4° 12′ 56″ N., 7° 00′ 28″ E.

It should be noted that Bonny is an Oil Terminal and as such heavy traffic of tankers is continuous. In extreme circumstances vessels may be requested by Harbour Master to pass the channel from Fairway Buoy at Bonny, and anchor at Bonny without a Pilot, in which case latest Notices to Mariners should be studied in order not to damage oil pipe-lines in prohibited anchorage areas.

ANCHORAGES: Position West of Fairway Buoy, depths 8–9 fathoms.

RESTRICTIONS: Night pilotage available for tankers at Bonny only. Vessels for Okrika and Port Harcourt can only navigate during daylight.

MAX. SIZE: Maximum draft is 25 ft. at high water, minimum depth in approaches 18 ft. datum. Max. length 600 ft. no restrictions on beam. Ebb tide reaches a max. of 3 knots off the berths and 2.5 knots in the river, flood tide 2.5 knots off berths and in the river.

HEALTH: Q-flag to be shown on arrival, except if from another Nigerian port, Yellow fever and smallpox inoculations compulsory. In case of suspected disease on board, advance notice to Agent advisory.

TUGS: One tug available, 1,490 h.p.

BERTHING: *Main Quay:* The main Quay is 3,459 ft. long and capable of berthing seven vessels, with drafts from 24 ft. to 26 ft.

The old quays at Port Harcourt have been completely reconditioned to enable them handle bigger ships. Dredging in front of these quays is in progress and when completed ships with drafts of up to 29 ft. will be able to use these berths.

B.O.P. Berth. This berth lies outside the Quay area, and is for the loading of palm oil by means of a direct pipe-line from the installation of Bulk Oil Plants (Nigeria) Limited. It consists of a central "T" jetty with dolphins and is capable of berthing vessels up to 480 ft. in length. It is also used for the discharge of explosives as such cargo is not permitted to be handled across the general cargo Quay.

Oil is supplied by a 6-in. diameter pipe at a maximum rate of 250 t.p.h.

Okrika Oil Refinery: Okrika lies on the Bonny River, some 35 miles from Bonny Fairway Buoy. The approach is by a buoyed channel some 8 miles in length, dredged to a depth of 38 ft. chart datum. The river from Bonny to Okrika has been dredged as necessary and least depths are 29 ft. chart datum. Jetty at the oil refinery suitable for berthing coastal and ocean tankers up to 33,000 tons deadweight. The jetty is "L" shaped with a square dolphin at the end of the arm. Ocean tankers secure on the outside of the jetty making fast to two sets of mooring dolphins each end. The coastal vessels and barges are berthed on the inside of the jetty. Oil is supplied via gantry hoses on either side.

Coal handling facilities: Facilities for loading coal have been completed and a conveyor capable of loading about 60 t.p.h. is working. Max. draft at the coal berth is 24 ft. This berth is situated at the Northern end of the Port, berth No. 8.

STEVEDORES: Gang requirements and hatch distribution should be included in 48-hours ETA cable to Agent. Discharging general cargo 8 tons per gang/hour, cement 15 tons per gang/hour, bagged cargo 20 tons per gang/hour, loading produce 15–20 tons per gang/hour.

MEDICAL: Doctors available 24 hours, but limited supply of medicaments. Yellow fever, cholera and smallpox vaccination required.

DENSITY: Appx. 1015.

FRESH WATER: No restriction, from barge (15 ton/hour). From quay low pressure, max. 8 ton/hour.

FUEL: Most standard lubricants available, fuel available by barge only. Requirements by 48-hours ETA cable.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Normally by crew.

CUSTOMS ALLOWANCES: 200 cigarettes per man per 7 days. 1 wine or 1 bottle spirits per officer per 7 days.

IDENTIFICATION CARDS: Crew to carry passport or seaman's book whilst ashore.

REPAIRS: Only very minor repairs available, no spares.

REPATRIATION: Possible via Lagos.

AIRPORT: 7 miles away, twice daily flights to Lagos, no international flights.

TIME: GMT plus 1 hour, no changes during the year.

HOLIDAYS: New Year (Jan. 1st); Id-El-Kabir (Feb. 16–17th); Good Friday and Easter Monday; National Day (Oct. 1st); Fasting Period (October 31st); Id-El-Fitri (Nov. 29–30th); Christmas Day (Dec. 25th); Boxing Day (Dec. 26th). The Muhamadan holidays are subject to changes. The port does not work on Good Friday, Christmas Day and Republic Day.

POLICE/AMBULANCE/FIRE: All can be contacted by tel. 999.

SHORE LEAVE: Allowed provided crew carry passport or seaman's book.

AUTHORITY: Nigerian Ports Authority.

AGENT: Alraine (Nigeria) Limited, PO Box 622, Port Harcourt, tel. 8059, 8062, 8053. Telex Freight Lagos 21244 attention – Port Harcourt.

QUE IBOE: 04.20 N. 07.59 E. (See Plan)

LOCATION: The Terminal is located on the Eastern side of the estuary of the Que Iboe River in approximate position Latitude 4° 33′ 00″ N., Longitude 7° 59′ 30″ E.

The crude oil storage facilities consist of seven tanks each of 500,000 barrels capacity.

DOCUMENTS:

Crew Lists with passports and Certificates of Vaccinations available for inspection.
Stores List.
Crew Personal Effects List.
Manifest of Cargo.
Arms and Ammunition List.
List of Animals.
List of Ports of call during last 21 days.

If the vessel has a clearance for another port the deviation cable has to be shown to the Customs Officer.

PILOTAGE: Vessels loading at Que Iboe will be boarded by a Company Mooring Master either at the anchorage or where directed.

The Mooring Master will advise the ship's Master in regard to the approaches to the berth; and the mooring, unmooring, connecting, disconnection of hoses, departure from the berth and loading operations.

All vessels must have upon arrival a pilot ladder in good, clean condition safely and securely rigged. A vessel arriving with freeboard of 30 feet or more must use its accommodation ladder in conjunction with the pilot ladder unless a "pilot hoist" or similar arrangement is available.

In the event that a vessel is deemed by the Mooring Master to be improperly or insufficiently equipped with adequate mooring facilities, lines or gear, then he shall so inform the ship's Master. In such an event the vessel will not be brought into the mooring until satisfactory gear or equipment is provided.

ANCHORAGE: Numerous submarine pipe-lines and structures exist in the approaches and close vicinity of the loading berths.

Under no circumstances whatsoever should vessels anchor except in the approved anchorage described below.

The safe Anchorage Area is located two (2) miles Southeast the Berth operation platform (BOP) and clear of the SPM between the parallels of Latitude 4° 10′ North and 4° 13′ North and meridian 8° 03′ East and 8° 07′ East. Vessels bound for the Que Iboe Terminal should proceed with extreme caution from the Southeast to the safe Anchorage Area. If uncertain of the vessel's position because of poor visibility stay Southeast and clear of the safe Anchorage Area until visibility is good.

HEALTH: Pratique may be granted by radio (Lagos Radio). Quarantine officials board vessel at the berth.

MAX. SIZE:

Berth	*Length*	*Beam*	*Draft*
No. 1 (SM)	850 ft.	No Limit	45 ft.
No. 2 (SPM)	No restriction	No Limit	75 ft.

RADIO: Vessels proceeding to load at Que Iboe must radio:

1. MOBIL OIL, Lagos indicating their cargo requirements and ETA seven days prior to arrival. When their passage time is such as to not permit a seven-day ETA then the maximum possible advance notice of arrival and cargo requirements must be given.
2. MOBIL OIL, Lagos, confirming or amending the ETA given in (1) above at seventy-two hours and twenty-four hours prior to arrival.
3. The Nigerian Government Port Health Officer at Lagos at least seventy-two hours before arrival advising the following:
   (a) Vessel's name and call sign.
   (b) ETA Que Iboe
   (c) Approximate cargo tonnage to be loaded
   (d) Number of crew and whether healthy or not
   (e) Whether or not a doctor on board
   (f) Requesting free pratique.

If the request for free pratique is granted the Port Health Officer will so advise th vessel by radio.

In addition, as soon as possible prior to arrival vessels should establish direct communication with the Terminal ("Que Iboe Control") on VHF international calling Channel 16 (156.8 mHz). After initial contact communication will continue on Channel 14 (156.7 mHz).

Vessels not equipped with VHF R/T equipment or whose equipment is not fully functional should advise MOBIL OIL, Lagos, at the time of their ETA messages previously referred to.

The (BOP) Berth Operation Platform is fitted with a racon and transmits the Morse signal "K" (—·—). All vessels equipped with 3 cm radar will be able to pick this up on their radar screen.

TUGS: None. Terminal launches assist in berthing.

BERTHING: The tanker loading facilities consist of two berths: No. 1 Berth: A seven-point spread mooring (SM) located in a position Latitude 4° 20′ 19″ N., Longitude 8° 00′ 11″ E., approximately 12 nautical miles South of the terminal tank farm. Depth of water at the manifold 65 feet.

No. 2 Berth: A single point mooring (SPM) buoy located in a position Latitude 4° 13′ 05″ N., Longitude 8° 02′ 45″ E., approximately 19.4 nautical miles S.E. of the terminal tank farm. Depth of water at the manifold 85 feet.

Vessels loading at Que Iboe will normally berth at the SPM. From time to time and at the discretion of the Mooring Master vessels of up to 80,000 SDWT will be berthed at the Spread Mooring.

All vessels must be adequately provided with bollards or cruciforms and suitable leads to facilitate the hanging off of the hoses during the lifting operation. All vessels loading at Que Iboe must have two bower anchors and a minimum of 10 working shots of chain attached to each anchor.

All vessels must be equipped with adequate on-deck and overside lighting. A spotlight should be rigged on the bridge when berthing during the hours of darkness.

To assist in the vessel's turnaround, tankers should have all booms and cargo gear rigged on the port or starboard side as advised by radio from the Terminal before the ship is boarded by the Mooring Master.

Berthing Requirements: No. 1 Berth. Vessels of less than 80,000 Summer d.w.t. should be equipped with booms, cranes or derricks to safely lift 12 inch and 16 inch I. D. hoses from a 65 ft. water depth. Submarine hose taken aboard on the starboard side.

Vessels must have at least eight (8) good ropes, preferably non-stretch synthetic lines, at least 120 fathoms in length. Three of the eight lines should be prepared at the after end of the main deck forward of the poop in the following manner: one line on each side of the ship and one in the centreline with the ends of the centre rope married to the inboard ends of the port and starboard ropes so that if necessary a double or treble length can be run on either side of the ship without delay. The other five ropes should be located on the poop deck. The use of nylon or other mooring lines having a high stretch factor should not be used in this berth.

Mooring buoys No. 2, 4 and 6 are provided with preventer wires. These preventer wires are to be taken aboard and secured as directed by the Mooring Master.

Anchor buoys should be attached to the bower anchors.

Berthing Requirements: No. 2 Berth. All vessels proceeding to the SPM must secure their anchors with chain stoppers or compressors. Floating hoses taken aboard on the port side.

The moorings have been designed in general accordance with the recommendations of the SPM Forum. The mooring lines consist of two 15 inch braided polypropylene strops each 160 ft. long.

In order to have the mooring lines aboard, the vessel should have ready on the forecastle a rope messenger at least 5.5 inches in circumference and a minimum length of 120 fathoms. The messenger is led through a fairlead, large enough to permit the entry of a 4.25 in. dia. chafing chain, on port side or centre line down to the water clear of the ship's bow. This messenger should have a good lashing attached to the eye.

The Terminal Launch crew then make this fast to a 300 ft.×10 in. plaited polypropylene buoy approach or pick up rope and then the ship is hove steadily towards the buoy until the chafing chain lies across the fairlead. The chafing chain then will be shackled to a heavy wire strop, which has been placed over a suitable set of bitts. The wire strops and shackle are provided by the Terminal and put on board as the ship approaches the buoy.

HOSES: *Tanker on Light Draft: Weights of hose strings for multi-buoy moorings:* Indication only of approximate weights of hose strings in *long tons* (including fittings) with all hoses full of crude oil S.G.0.850. Assumed total lift 25 ft. above deck level.

Water Depth in Berth (feet)

Size of Tanker		70 ft.	60 ft.		70 ft.	60 ft.
	16 in. I.D.			12 in. I.D.		
100,000 d.w.t.	Hoses	8.6	8.4	Hoses	5.1	5.0
70,000 d.w.t.	,,	7.8	7.6	,,	4.6	4.5
50,000 d.w.t.	,,	7.7	7.4	,,	4.5	4.4
35,000 d.w.t.	,,	7.5	7.2	,,	4.4	4.3
18,000 d.w.t.	,,	6.7	6.4	,,	3.9	3.8

Tanker on Light Draft: Weights of Hose strings for SPM: Indication of hose strings approximate weights of hose strings in *long tons* (including fittings and floats) with all hoses full of crude oil S.G. 0.850. Assumed total lift 25 ft. above deck level.

	Inside Diameter of Hoses	
Size of Tanker	16 in.	12 in.
200,000 d.w.t.	8.8	5.2
100,000 d.w.t.	8.0	4.7
70,000 d.w.t.	7.2	4.2
50,000 d.w.t.	7.0	4.1
35,000 d.w.t.	6.8	4.0
18,000 d.w.t.	6.0	3.6

LOADING: The Mooring Master will inspect the vessel's cargo tanks and will sign the dry certificate prior to the commencement of loading.

Hose connection and disconnection must be carried out by the ship's crew under the supervision of a suitable qualified Officer acting on the advice of the Mooring Master.

Ship's loading manifolds should be prepared for two 12 inch hose connections prior to arrival at the Que Iboe Terminal. Sundry equipment should include tools to connect the hoses, nuts, bolts, gaskets and rope strops as none of these items are supplied by the Terminal. All 12 inch hoses have ASA flanges.

The Notice of Readiness will be signed by the Mooring Master on behalf of the Company. The time for giving the Notice of Readiness is the time of the vessel's arrival at the usual anchorage, or the time of boarding of the Mooring Master, whichever is the earlier, Notice of Readiness will not be accepted unless the vessel is ready to load.

Loading rates will vary according to conditions but can be expected to be up to 30,000 bbls per hour at the Spread Mooring and up to 65,000 bbls. per hour at the SPM.

Information as to the anticipated loading rate should be obtained from the Mooring Master who will also advise the expected specific gravity and loading temperature.

The maximum possible notice in regard to slowing the loading rate for "topping off", etc. should be given to the Mooring Master.

Pressure Surges: Because of the long lengths and large diameters of the pipe-lines, ships' loading valves must not be closed against the flow of oil. Vessels provided with mechanically or hydraulically operated valves whose closing time is less than thirty seconds must advise the Mooring Master accordingly. In such circumstances the loading rate may have to be reduced.

BALLAST: There are no facilities for the shore reception of ship's ballast. Vessels are accepted for loading on the express understanding that only clean ballast will be discharged into the sea.

Masters are required to sign oil pollution advice form letters on arrival. If a vessel is observed to be discharging dirty ballast, then it may be liable to prosecution or penalty and all further discharge will cease. The discharge of oil from bilges or other spaces is similarly strictly prohibited.

A vessel must have sufficient ballast for safe manoeuvring into the berth.

FRESH WATER: Not available.

FUEL: Not available.

STORES: Not available.

MEDICAL: Only emergency medical facilities.

TIME: Nigerian local time is GMT plus 1 hour throughout the year.

CUSTOMS ALLOWANCES: 200 cigarettes per man. Beer, no limit. 1 bottle of spirits, officers only.

REPATRIATION: Crew changes not possible.

GENERAL: *Agency:* The Company will handle documentation requirements for vessels loading at the Terminal. It does not carry out general vessel agency functions.

Early Departure Procedure: The Early Departure Procedure will be used at the Que Iboe Terminal.

Courtesy Ensign: All vessels must exhibit the Nigerian National Ensign from the foremast or as appropriate while in the vicinity of the moorings.

"B" Flag: During loading, the International Code Flag "B" must be displayed from a topmast signal halyard during daylight hours. During hours of darkness a red all around light must be displayed where it can best be seen.

Communications at the Berth: The primary system of communication with the Terminal while in berth shall be through the Mooring Master by means of portable VHF units provided by the Company.

Safety Precautions:

(a) The ship's engines must remain ready with full power for immediate use. No repairs of any sort will be permitted in the moorings.

(b) Fire Fighting equipment shall be in instant readiness throughout the vessel and additional extinguishers available at the loading manifold. Fire hoses must be connected at all fire stations and ready for immediate use.

(c) Not less than one deck officer and three seamen shall be available on deck at all times while vessel is in moorings.

(d) Power must be available at all times on all deck winches and on anchor windlass while vessel is in moorings. Vessels moored to SPM will be required to go astern when using turning gear.

(e) All deck scuppers must be plugged tight before connecting the submarine and deck hoses, and remain plugged until all hoses are disconnected.

(f) Adequate deck lighting must be available for night mooring and loadings. A good floodlight will be required to illuminate the area around the submarine and cargo hose connections during cargo loading operatings. During the discharge of ballast and loading of cargo at night, the sea area around the vessel must be adequately lighted.

(g) No transistor radio sets or other electrical appliances may be used on deck unless certified for use in hazardous petroleum areas.

(h) Smoking will not be permitted on deck whilst in the moorings and will only be permitted in places approved by the Mooring Master. All alleyway doors to passageways, leading to deck areas are to be kept closed during cargo transfer operations.

(i) The I. O. T. T. S. G. Check List will be used jointly by vessel's staff and Mooring Master in order to arrive at a mutually agreed safety standard.

AUTHORITY: Mobil Producing Nigeria, Lagos.

SAPELE (incl. Koko): 05.55 N. 05.42 E.

DOCUMENTS:

Crew List.
Port of Call List.
Passenger List.
List of Arms and Ammunition.

These documents required by Following Government Departments: Collector of Customs, Customs Preventive Service, Ports Health Authority, Police Authority/Immigration, Nigerian Produce Marketing Co., Nigerian Ports Authority NPA also require Inward and Outward Masters' Declarations and all other documents such as Manifests and Bill of Lading, etc.

PILOTAGE: Not compulsory, but local river guides available at Escravos on request.

ANCHORAGES: No laid-down areas.

RESTRICTIONS: None under normal conditions.

MAX. SIZE: Average length 400/450 ft., draft 16.5 ft. plus tide for the day, minus Master's underkeel clearance.

HEALTH: Normal International Regulations, but between ports in Nigeria nothing required.

RADIO: ETA and ETD best passed via Lagos Radio to Lagos Agents, who in turn advise local Agents. Port Authority operate VHF Channels 16, 14, 13, 12, 11 and 9.

TUGS: None available.

BERTHING: Berthing/unberthing normally done in daylight hours.

Sapele:

Berths	*Type*	*Berth length*	*Depth*
1	Anchorage and stern to buoy	No limit	21 ft.
2	Buoys fore and aft	550 ft.	22 ft.
3	Buoys fore and aft	800 ft.	21 ft.
4	Buoys fore and aft	675 ft.	20 ft.
5	Anchorage and stern to buoy	No limit	16 ft.
6	Buoys fore and aft	675 ft.	20 ft.
7	Buoys fore and aft	700 ft.	25 ft.
8	Buoys fore and aft	675 ft.	21 ft.
9	Buoys fore and aft	620 ft.	18 ft.
9a	Anchorage and stern to buoy	620 ft.	16 ft.
10	A. T. & P. Wharf	400 ft.	16 ft.
11	A. T. & P. Wharf	475 ft.	15 ft.

N.B.: Berth 9a only used if port is full in emergency.

Koko: One wharf 450 ft., 24 ft.

STEVEDORES: Handled by Shipping Agents.

MEDICAL: Local general hospital.

TANKERS: Only small coastal tankers.

DENSITY: River water almost fresh at all states of tide.

FRESH WATER: None available.

FUEL: None.

GANGWAY/DECK WATCHMEN: Supplied by Shipping Agents.

OPENING/CLOSING HATCHES: Either by crew or stevedores.

TOBACCO/WINE ALLOWANCE: 200 cigarettes per person per week. 1 bottle per officer per week.

CARGO GEAR: No extra requirements.

IDENTIFICATION CARDS: Seamen's identity card.

CONSULS: None.

REPAIRS: No facilities.

DRY DOCKS: None.

REPATRIATION: By road to Lagos and international airways or by road to Benin/Lagos.

AIRPORT: Benin 37 miles, internal only.
TIME: GMT plus 1 hour.
HOLIDAYS: Port closed only Christmas Day, Good Friday and Republic Day.
POLICE/FIRE: Police Sapele 19. No fire service.
TELEPHONES: No facilities exist for placing on board.
SERVICES: None.
SHORE LEAVE: Allowed.
PORT AUTHORITY: Nigerian Ports Authority.
AGENT: Alraine (Nigeria) Ltd. Private Mail Bag 4030, Sapele Tel. 177. Telex: Lagos 21244.
N.B. Correspondence should be addressed to Warri office, see Burutu.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Norway

AGOTNES: 60.25 N. 05.01 E. (See Plan)

DOCUMENTS:
1 General Declaration.
2 Cargo Declarations.
1 Stores List.
1 Health Declaration.
1 Personnel Effects.
2 Manifests.

PILOTAGE: Usual entrances to port at Korsfjord and Fedje.

Provisions for Advance Reports in connection with the ordering of Pilots. Issued by the Director of Pilotage.

1. Vessels approaching from the sea and desiring a Pilot should order the Pilot at 24 hours notice insofar as possible and confirm arrival at pilot station at 2 hours notice.

The advance order can be sent in the following manner:

a. From ships at sea over radio direct to the sea pilot watch (calling frequency 2182 kc/s from 2 minutes past until 10 minutes past each full hour, or over VHF-radio-telephone, calling frequency 156.80 mc/s, Channel 16).

b. From ships at sea over coastal radiostation to pilot station or pilot office.

c. From broker or shipowner over telephone to sea pilot station or to any pilot office which will immediately convey the report to the sea pilot station.

2. Vessels lying in port and desiring Pilot will order the Pilot from the nearest pilot office during its office hours and if possible at 4 hours notice.

3. Vessels approaching from the sea as well as vessels lying in port shall, when making an advance order state the name and destination of the vessel and whether 1 or 2 Pilots are desired.

4. The Pilots will on the whole be despatched to the ships in accordance with the advance orders, and vessels are therefore requested to comply with the foregoing rules as far as possible in order to avoid having to wait for Pilot.

5. The international provisions for summoning Pilots by signal flags or blue lights, etc., are still in force, but should in future be used as a supplement to the radio communications or as the sole communication in emergencies.

ANCHORAGE: About 1,600 ft. North of CCB quay, depths from 29 to 74 m.

MAX. SIZE: Water depths up to 60 ft. at quayside.

HEALTH: No Certificates required. In event of any desease or fever, contact Agents.

RADIO: All messages to Agents via Bergen or Rogaland Radio.

VHF: Bergen Radio on Channel 16.

TUGS: Available upon request. Vessel's lines usually used. No extra charge for tug's line.

BERTHING:
West side, quay of 100 m. long. Depth of water 60 ft.
East side, quay of 105 m. long, Depth of 14 m.
North West side, quay of 120 m. long. Depth of 7.2 m.

CRANES: 1 Mobile crane 280 tons lifting capacity. 1 Mobile crane 40 tons lifting capacity. 2 Mobile cranes 25 tons lifting capacity. Also 45 tons floating crane available upon request.

BULK CARGO FACILITIES: For drilling mud and cement only.

SPECIALISED CARGO HANDLING FACILITIES: Loading/unloading carried out by Mobile cranes and trucks.

BRIDGES: Bridge between Knarrevik and Drotningsvik. Height at mean level 50 m.

STEVEDORES: Provided by Coast Centre Base.

MEDICAL: 4 hospitals available (Bergen).

DENSITY: About 1024.

FRESH WATER: Can be supplied alongside the quay.

FUEL: Gasoil No. 0401 can be supplied alongside the quay.

CONSULS: (in Bergen). Belgian, Brazilian, British, Danish, Finish, French, Greek, Islandic, Dutch, Panama, Peruvian, Portuguese, Spanish, Swiss, Swedish, Turkish, German, Uruguay, Austrian.

REPAIRS: All repairs possible.

DRY DOCKS: Available in Bergen. 3 Dry docks 365 ft. long with 12.5 – 21 ft. depth on blocks.

1 floating dock for vessels up to 10,000 g.r.t. and 2 smaller floating docks. Largest vessel 51,839 g.r.t.

Draft 34 ft. 4 in. Drafts up to 35 ft. can be accommodated.

SURVEYORS: Lloyds, A.B.S. and Norske Veritas.

GANGWAY/DECK WATCHMAN: Not necessary.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCE: 0.75 litres of spirit and 200 cigarettes for each member of the crew.

REPATRIATION: All facilities available for crew changes.

AIRPORT: 35 km. from Bergen Airport served by regular airlines.

TIME: GMT plus 1 hour.

HOLIDAYS: New Years Day (January 1st); Maundy Thursday; Good Friday; Easter Monday; May 1st; May 17th; Ascension Day; Whit Monday.

POLICE/AMBULANCE/FIRE: Bergen 002; Bergen 003; Bergen 001 respectively.

TELEPHONES: No arrangements for connection on board ships. Telephone box on quayside.

SERVICES: Compass adjuster, Radio/Radar service. Also calibration of the Direction Finder, Ships laundries.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.

AGENTS: A.S. Coast Center Base Ltd. & Co. 5363 Agotnes. Tel: (05) 21 66 80. Telex: 42 835 ccb n. Cable: Ceeceebee.

ALESUND: 62.27 N. 06.09 E. (See Plan)

DOCUMENTS:
1 Crew List.
1 Passenger List.
1 Customs Documents.
1 Health Documents.
3 Manifests.
3 Bills of Lading.
1 Ship's Papers.
1 Stores Lists (provisions).

PILOTAGE: From open sea, Pilot is taken on board at Rundo pilot station. Watch 24 hours a day. To be called 3-4 hours before ETA by VHF 16, or radio.

ANCHORAGE: On the North side of the town in Valderhaugfjorden in depths of 20 m. to 60 m.; bottom, sand and mud.

On the South side of the town in Aspovagen in depths of 20 m, to 40 m., bottom mud.

RADIO: Alesund Radio 2182. VHF 16. Harbour Office is manned 24 hours. Tel.21425.

TUGS: Meet vessel normally before entering the harbour, or by order.

BERTHING: At the Southern Harbour there are the following commercial quays:

Storneskaia: East side, length 85 m., depth 13 m. to 7 m. On this side Ro/Ro berth available. South side, length 150 m., depth 13 m, Warehouse cap. 1,600 sq. m.

Prestekaia: South side, length 220 m., depth 13 m. West side, length 43 m., depth 5 m. min. Warehouse cap. 4,100 sq. m.

Skutevika: Sp. quay for fishing vessel, length 300 m., depth 6 m. Only mooring on N.E. side. Quay, length 40 m., depth 7 m.

Sjogata: Mooring quay, length 200 m., depth 9 m. At Northern Harbour there is one commercial quay.

Skansekaia: North side, length 190 m., depth 13 m. South side, length 150 m., depth 5 m. This quay forms protection for a small inner harbour with several smaller quays.

STEVEDORES: Obtained by Agent who requires ETA 12 hours before ships arrival.

CRANES: Mobile crane to lift 18 tons available. Floating to lift max. 100 tons available.

CONTAINERS: Depot for *C.T.I.* containers.

FRESH WATER: Available.

FUEL: Bunkering facilities from all major oil companies. Loading by barge or pipeline at berth.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: This work is normally carried out by crew.

CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes. Wine/Spirit: 1 bottle of spirits.

IDENTIFICATION CARDS: Not required.

REPAIRS: Available. Floating dock 380 ft. by 50 ft. to lift 3,000 tons. Three patent slips for vessels up to 700 tons.

AIRPORT: Alesund airport, Vigra. Passenger flights (three times a day) to and from Oslo. Trondheim, Bergen.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st May; 17th May.

POLICE/AMBULANCE/FIRE: Police 21321; Ambulance 23348; Fire 014.

TELEPHONES: No arrangements for placing telephones on board.

AUTHORITY: Alesund Havnevesen.

ALVIK: 60.26 N. 06.24 E.

Alvik located in inner part of Hardangerfiord. Ferrosilisium works. Vessels from abroad may call Haugesund for inward Customs' clearance.

DOCUMENTS: See "Bergen".

PILOTAGE: Compulsory. Belonging to Bergen Customs' district.

LENGTH OF QUAY: 80 m. 2 cranes, each 7.5 tons.

AUTHORITY: See "Bergen".

AGENTS: Joachim Grieg & Co., Bergen.

ARDALSTANGEN: 61.14 N. 07.42 E.

Ardalstangen: Aluminium works. Located in innermost part of Sognefiord. 61° 14′ 03″ N. 7° 42′ 28″ E.

DOCUMENTS: See "Bergen".

PILOTAGE: Compulsory. Belonging to Bergen Customs' district and unless otherwise arranged beforehand vessels from abroad must call at Bergen for inward clearance.

BERTHING: 1 quay 600 ft., 29 ft. depth alongside; 1 quay 210 ft., 18 ft. depth alongside.

Cranes up to 50 tons capacity. Ice free.

TRAFFIC: about 500 ships loading and discharging.

AUTHORITY: See "Bergen".

AGENT: Joachim Grieg & Co., Bergen. (See "Bergen").

ARENDAL: 58.28 N. 08.46 E. (See Plan)

DOCUMENTS: See "Bergen".

PILOTAGE: The Pilot boat *Merdoy* is stationed at Arendal. Contact may be made on VHF/RT or telephone 21347–23668 or out of office hours via Kristiandsand or Tjome Radio.

ANCHORAGE: Safe anchorage ground is readily available and there are numerous mooring places for vessels not docking alongside the quays.

MAX. SIZE:

	Depth Feet	*Length Metres*
Nye Tollbodkaien	33	230
Batterrikaien	33	110
Hotellbryggen	30	77
Malmkaien	28	30
Stenkaien	26	110
Utstikkerkaien Barbu	24	58
Fryselagerkaien	22	76
Jaktekaien	20	50
Gamle Tollbodkaien	20	45
Kallevigs Brygge	20	43
Langbryggen	15	120
Ferjekaien	26	30

No tide even in exceptional weather conditions, increase in water level never exceeds 3 ft.
TUGS: Two small tugs.
RADAR/VHF: Radar at Pilot station. VHF see "Pilotage".
CRANES: 2×3 ton electric cranes on rails at Nye Tollbodkaien.
MEDICAL: Advance notice required for medical attention.
FRESH WATER: Available all quays.
FUEL: Advance notice required.
GANGWAY/DECK WATCHMEN: Necessary and recommended.
OPENING/CLOSING HATCHES: Crew or stevedores.
CERTIFICATES: Normal International Certificates required.
CUSTOMS ALLOWANCE: 200 cigarettes, 1 bottle spirits.
IDENTIFICATION CARDS: Not required.
CONSULS: Sweden, Denmark, Finland.
REPAIRS: Port has well-equipped workshop to carry out engine repairs as well as hull work above water line.
AIRPORT: Kjevik 60 km.
TIME: GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Police 22030; Fire Station 22255.
TELEPHONES: Can be placed aboard.
AUTHORITY: Harbour Master.

BERGEN: 60.24 N. 05.19 E. (See Plan)

DOCUMENTS:
1 Provision List.
1 List of Bonded Stores.
1 Health Declaration.
2 Manifests.
2 Crew Lists.
2 Passenger Lists.
Certificate of Tonnage.
Dangerous Cargo List.

PILOTAGE: Compulsory. Main entrance to port at Marsteinen Lighthouse (pilot station) 60° 24′ N. 5° 18′ 50″ E. 24 nautical miles from town, but vessels from South may enter at Skudesnes (88 nautical miles) and from North at Fedje pilot station (32 nautical miles). VHF Channel 16. Practically no tide. Port free of ice throughout whole Winter and well sheltered from all winds. Sound signals for Pilot, 3 long and 1 short. Harbour pilotage not compulsory but advisable.
ANCHORAGE: Puddefiord. Good holding grounds. Depth 10 to 50 fathoms of water.
RESTRICTIONS: Vessels can enter day and night.
MAX. SIZE: Max. draft 35 ft. Vessels up to 50,000 tons have been berthed at Dokkeskyaersquay. Oil installation up to 30,000 d.w.t.
HEALTH: See "Documents". If vessel carries quarantine flag on contagious diseases, radio communication should be sent to Agents for instructions, otherwise no special regulation.
RADIO: Communication to Agent should be sent through Rogaland Radio or Bergen Radio.
TUGS: 2 tugs, each 1,000 h.p. available. Ship's lines to be used, contractors Bergen Steamship Co. Tugs normally join vessel at Puddefiord or subject to requirements.
BERTHING: Berthing instructions from Harbour authorities through Agent's office.
CONTAINER FACILITIES: Container terminal at Dokkeskjaerskai area. The quay is 90 m. long with a depth of 9 m. at MW. It is intended for bow/stern loaders and is equipped with a ro/ro bridge with an axle load of 60 tons and 13,000 sq.m. area for storage and container handling.
BRIDGES: A bridge between Knarrevik and Drotningvik is completed. Height of bridge from the water will be 50 m. at mean water level. Bridge position will be 5 miles from harbour in the entrance to port from South.
STEVEDORES: Stevedoring arranged by Agents subject to requirements. 24 hours notice, important obtain in good time accurate ETA. Ordinary working hours at port 0730-1600 hrs. Saturdays until 1300 hrs.
MEDICAL: Masters to advise by radio prior arrival if medical attendance required on board. Hospital facilities available.
TANKERS: Discharge lines usually 6 and 8 in. No slop (residues) discharge facilities. Number of tanker berths 5: Shell, Esso, Fina, Mobil Oil, and BP. Max. drafts 30 ft.
DENSITY: Salt water.
FRESH WATER: From all quays and wharves with exception of some oil berths where water barge necessary.
FUEL: All grades of diesel, fuel and gas oil including lubricating oil available at all wharves in main entrance. Supplies also from barge subject reasonable notice.
FIRE PRECAUTIONS: No special precautions. Special harbour fire-fighting boat. As usual no smoking permitted during discharge operation.
GANGWAY/DECK WATCHMEN: Obtainable subject inquiry for 12 hours watch from 1900 to 0700 hrs.
OPENING/CLOSING HATCHES: Crew allowed to open and close hatches.
SHIP'S CERTIFICATES: All certificates to be on board. Ship's tonnage certificate to be produced to Custom authorities upon arrival.
CUSTOMS ALLOWANCE: Tobacco, 20 cigarettes per day or 20 gramme tobacco per crew member. Wine and/or Spirit, 1 bottle spirit or wine for consumption on board allowed per crew member.
IDENTIFICATION CARDS: Not required.
CONSULS:

Belgian	233 873	Panama	200 011
British	210 990	Peruvian	218 028
Danish	215 000	Portuguese	218 140
Finnish	230 700	Spanish	214 192
French	230 050	Swiss	215 115
Guatemala	214 493	Swedish	219 760
Greek	215 090	Turkey	210 105
Icelandic	219 680	German	219 984
Italian	218 135	Uruguay	213 307
Dutch	256 000	Austrian	210 173

REPAIRS: All repairs possible.
DRY DOCKS: Major: Bergens Mekaniske Verksteder. Minor: Mjellem & Karlsen Verksted A/S, Bergen. 6 patent slips and 1 dry dock, 365 ft. long. Floating dock for vessels up to 20,000 tons d.w.
REPATRIATION: All facilities available.
AIRPORT: Flesland Airport, 12 miles outside Bergen. Bus service from town, daily connections with Europe and U.S.A.
TIME: GMT plus 1 hour.
HOLIDAYS: General holidays: New Year's Day (January 1); Maundy Thursday; Good Friday; Easter Monday; Labour Day (May 1); Ascension Day; National Holiday (Sunday in May); Christmas Eve (December 24); Christmas Day (December 25); Boxing Day (December 26); New Year's Eve (December 31).
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 003 or 210 185; Fire 001.
TELEPHONES: Telephones may be installed on board during ship's stay at Dokkeskjaesquay or Skoltegrunnsquay if required.
SERVICES: Compass adjusting, laundry, ship chandlers for delivery of provisions and bonded stores. Radar servicing for following types: Decca, Nera, RCA, AEI, Raytheon, Kelvin Hughes, Therma Sperry. Service arranged through port agent.
SHORE LEAVE: No restrictions.
DELAYS: Under normal conditions, no special delay should be expected.
AUTHORITY: Bergen Havnevesen.

AGENT: Messrs. Joachim Grieg & Co., Raadstuplass 2-3, PO Box 234-237, N-5001 Bergen. Tel. 2 18 140, after office hours: 2 80 835 and 2 56 302. Telegraphic address "Expeditor". Telex 42 700.

BODO: 67.17 N. 14.24 E.

DOCUMENTS:
2 Store Lists.
2 Crew Lists.
2 Lists Crew's Personal Effects.

PILOTAGE: Sea Pilot North of Fleinvaer Island position 67° 12′, N. 13° 48′ E. White Pilot boat with VHF Channel 16. Harbour Pilot outside breakwater head – 24 hours notice.
ANCHORAGE: Outside breakwater. According instructions from Sea or Harbour Pilot. No draft limitation.
RESTRICTIONS: None – weather permitting.
MAX. SIZE: Max. 18,000 d.w.t. for oil carriers with max. draft 32 ft. Otherwise max. draft 22 ft. along quays for coal, salt and warehouse goods.
RADIO: Bodo Radio/LGP. VHF Harbour office and Bodo Radio.
TUGS: Not available.
BERTHING: Usually on arrival – otherwise harbour Pilot will bring instructions from Agent or Port Authorities.
STEVEDORES: Ordered by Agents – working day and night.
MEDICAL: 24 hours notice of medical attention required. Hospital facilities available.
TANKERS: Shore lines, 6, 8 and 12 in., 2 berths, slop facilities not available, max. draft 32 ft. Fresh water available.
DENSITY: 1025.
FRESH WATER: Available all quays.
FUEL: All kinds bunkers and oil without notice from two installations.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Normally by crew.
CERTIFICATES: Ship's Register Certificates.
CUSTOMS ALLOWANCES: 200 cigarettes or 150 gr. tobacco and half bottle of spirit.
CARGO GEAR: No additional requirements. Ship's gear to be used except for discharging coal, coke and salt where special cranes used.
IDENTIFICATION CARDS: Not required.
CONSULS:

Sweden	20115	Finland	20010
France	21000	Germany	20089
Denmark	21070		

REPAIRS: Minor deck and engine repairs possible.
DRY DOCKS: None.
REPATRIATION: Good facilities.
AIRPORT: 2 km. distant. Regular airlines.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: 1st May and 17th May (national holiday) Cargo work may be arranged.
POLICE/AMBULANCE/FIRE: Police 20020; Ambulance 22360; Fire 22622.
TELEPHONES: No arrangements for placing telephones on board.
GENERAL: Imports oil, coal, coke and salt. Exports fish, herring meal, herring oil.
SERVICES: Compass adjusting, all kinds of nautical instruments. Ships' chandler.
SHORE LEAVE: No restrictions.
AUTHORITY: Bodo Havnevesen.

AGENT: Erling Sannes, Bodo. Tel 20010–21889 or 21457. Telegraphic address: Sannesbo. Telex. 64055–Sanbo. Code New Boe. Agents, Brokers, Shipowners.

BREVIK: 59.03 N. 09.43 E. (See Plan)

PORT LIMITS: Port limits begin in Langesundfjorden, 2 nautical miles S.E. of Brevik.
DOCUMENTS:
- Crew List.
- Tobacco and Spirit List.
- Cargo and Stores List.
- 3 copies of Manifest.
- Declaration of Health List.

PILOTAGE: Langesund Pilot Station – call sign LHXP. 24 hours prior notice and 2 hours before arrival. VHF Channel 16 – radio telephone 2182. Pilot boat located 1 mile S.E. of Langoytangen Lighthouse (pos. 58° 59′ 30″ N., 9° 45′ 30″ E.).
ANCHORAGE: At Helgerofjorden, 2 miles East of Langoytangen Lighthouse. Depths 15–25 fathoms.
RESTRICTIONS: No entry restrictions, except in bad visibility.
MAX. SIZE: Tankers draft 31 ft. 6 in., length 600 ft.; others draft 32 ft. 6in., length 550 ft.; recommended by Pilots.
HEALTH: Pratique obtained when alongside wharf; arranged by customs.
RADIO: Rogaland Radio, call sign LGQ.
TUGS: Tugs not normally used in Brevik. 1 tug, 1200 h.p. used for tankers.
STEVEDORES: 24 hours prior notice required for ordering gangs.
BULK HANDLING: 1 berth handling bulk cargo, situated at Norcem, half a mile North of Brevik. Cargo: Cement and cement-clinker. Length of berth: 200 m. Depth alongside 36 ft.
No other berths handling bulk cargoes.
MEDICAL: No advance notice required for medical attention.
TANKERS: Discharging hoses 8 in. diameter, No slop discharge facilities. 2 tanker berths draft 31 ft. 6 in.
DENSITY: Brackish water, density from 1012 to 1023.
FRESH WATER: Hoses from shore, capacity 10 t.p.h.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Watchmen available but not compulsory.
OPENING/CLOSING HATCHES: Normally carried out by crew members.
CERTIFICATES: Ship's Register, and Derat. Certificate required.
CUSTOMS ALLOWANCES: 200 cigarettes per man. 1 bottle of spirit per man.
IDENTIFICATION CARDS: Not needed.
REPAIRS: All types of repairs possible (deck and engine).
REPATRIATION: Can be arranged.
AIRPORT: Fornebu – Oslo airport – 100 miles, served by regular airlines.
TIME: GMT plus 1 hour. No alterations during the year.
HOLIDAYS: New Year's Day; Day before Good Friday; Good Friday; Easter Monday; May 1st; Ascension Day; May 17th; 25th and 26th December. No work done on these days.
POLICE/AMBULANCE/FIRE: Police 51040; Ambulance 70111; Fire 71171.
TELEPHONES: Can be placed on board at no extra cost.
SHORE LEAVE: Crew members allowed ashore.

AGENT: S. Stiansen, Shipping Agents, Brevik, Norway. Tel. 70040; private 11220. Telex 16388. Telegrams "Stiansen".

BRONNOYSUND: 65.30 N. 12.13 E.

DOCUMENTS: See "Bergen".
PILOTAGE: Pilot ordered through Harbour Office tel. 78. Cable address "Losforman".
ANCHORAGE: Prestoytaren. 65° 29.0′ N. 12° 11.5′ E. Depth 28 ft. to 180 ft.
MAX. SIZE: Largest ship approximately 5,000 g.r.t. Depth at Port Authorities quay 18 ft. to 24 ft. LWOST.
At tanker installations:

A/S Norwegian Esso	16 ft. LWOST
A/S Norske Shell Central fishing port	15 ft. LWOST
A/S Braendselolje, Salhus	16 ft. LWOST
A/S Algea Produkter	14 ft. LWOST
Central fishing port	15 ft. LWOST

RADIO: Rorvik radio station call signal "LGY". Hours of attendance 0800 to 2100 hrs.
TUGS: None.
STEVEDORES: Bronnoysund Discharge and Loading Society tel. 301.
MEDICAL: Nearest hospital Sandnessjoen 67 km.
FRESH WATER: Delivered by hose to all Port Authority Berths.
FUEL: Delivered to all berths, 24 hour service.
GANGWAY/DECK WATCHMEN: Watchmen at gangways and pilot ladders optional. Can be ordered through Bronnoysund Discharge and Loading Society.
OPENING/CLOSING HATCHES: Usually by port workers.
CUSTOMS ALLOWANCES: Master 400 cigarettes or 40 grams tobacco; all other crew 200 cigarettes or 20 grams tobacco. Wine/spirits; Master 2 litres; all other crew 0.75 litre.
IDENTIFICATION CARDS: Crew to possess identification card with passport photo.
CONSULS: None.
REPAIRS: Limited deck and engine repairs. Turner's shop and welder's shop available.
AIRPORT: Regular traffic North and South daily.
TIME: GMT plus 1.
HOLIDAYS: During Sunday and holidays not permitted discharge/load between 1000 to 1300 hrs., but dispensation can be obtained.
POLICE/AMBULANCE/FIRE: Police 45 and 450; Ambulance 28; Fire 19 and 106.
AUTHORITY: Harbour Master.

DRAMMEN: 59.45 N. 10.13 E.

DOCUMENTS:
- Bill of Health.
- 2 Crew Lists.
- 2 Passenger Lists.
- 2 Customs Lists for crew members and passengers.
- Bills of Lading.
- 3 Manifests for every port of discharge.

PILOTAGE: Give 6 hours notice by R/T 2182 kc/s or VHF Channel 16 to "Faerder Pilot". Coast stations "Tjome Radio" LGT or "Farsund Radio" LGZ can also be used. Harbour Pilots ordered through ship's Agents. Harbour pilotage is not compulsory.
ANCHORAGES: Pilot service supplies information regarding anchorages.
RESTRICTIONS: Svelvikstrommen Channel, depth 10 m. equipped with beacons and radar reflectors for safe navigation.
During ice-breaker season, which may last from end-December, to middle-March, ice breaker is in radio contact with port and with ships needing assistance.
MAX. SIZE: Max. draft for main harbour 30 ft., otherwise no restrictions.
HEALTH: International procedure followed to obtain pratique. In case of suspected diseases or fever inform Port Authorities, tel. 81 88 90. When arriving from a Norwegian port pratique automatic.
RADIO: Tjome Radio, call sign "LGT" Farsund Radio, call sign "LGZ". Oslo Radio, call sign "LGO". R/T 2182 kc/s. or VHF Channel 16 can also be used.
Port Authority maintains VHF radio-telephone watch 24 hours. Call sign "Drammenhavne Radio". Not on holidays.
TUGS: Under normal conditions not necessary except for large vessels, but available on request. Normally ship's hawsers or lines used for towing. Tugs ordered through Agent.
RADAR/VHF: VHF Channel 16, 12 and 11 when communicating with Drammen Port Authorities. No port radar service.
BERTHING: *Main Harbour*

Quays	*Depth Alongside (ft.)*	*Length (ft.)*	*Use*
Tollbukaia	21	328	Coastal/local traffic.
Krankaia	21	660	General cargo/paper
Myrakaia	22	478	Coal. Pyrites. Gen. Cargo
Langbrygga	23	837	Paper. General Cargo
Tjomekaia	23	526	Paper
Holmen South	30	1,330	Gen. Cargo. Air conditioned
Roll-on/Roll-off Holmen South	25	*	Cars, Trailers, Containers
Holmen East	24	330	Paper
Roll-on/Roll-off Holmen East	20	200	Cars, Trailers, Containers.
Risgarden Roll-on/Roll-off	30	†	Cars Trailers Containers
Tronstadkaia	30	†	For Tankers
Roll-on/Roll-off Tronstadkaia	30	‡	Fork-lifts Unit Load

*Special arrangement for stern and bow ramps
†Size of vessels decided by max. draft 30 ft.
‡Special arrangements for ramps (small ships)

Container and Ro-Ro Facilities: Three and Ro-Ro quays for containers, vehicles and trailers.
Fruit Storage 21,600 sq. ft. Airconditioned fruit-storage.
Also see "Tankers".
STEVEDORES: Labour must be ordered latest 1530 hours day before arrival. Saturdays before 1230 hrs. Working hours: Monday to Friday from 0700 to 1600 hrs. with breaks from 0900 to 0930 hrs. and 1300 to 1330 hrs.
Saturday from 0700 to 1300 hrs. with break from 0900 to 0930 hrs.
Overtime can be arranged through Agent.
MEDICAL: In case of emergency, notice regarding required medical treatment must be given as soon as possible. First class hospital facilities available. No special inoculation or fever

certificates necessary, except those according to international health regulations.

TANKERS:

Tronstad Berth

Wooden quay 92 m. long, max. draft 32.81 ft. (10 m.). Fresh water available.

Pipeline connections: Gas oil 8 in.; light fuel oils 9 in.; asphalt 8 in.

Holmen South Berth

Concrete quay, max. draft 29.53 ft. (9 m.). Fresh water available.

Pipeline connections: Gas oil 8 in.; light fuel oils 8 in.; paraffin 6 in. heavy fuel oil 4 in.

B.P. Berth, Solumstrand

9 m. wide quay at end of pier, max. draft 16.4 ft. (5 m.).,

Pipeline connections: Light gas oil 6 in.; petroleum 4 in.; white spirit 3 in.; propane 2 in.

Bakketomta Berth, Lierstranda

Concrete quay, 23 m. long, max. draft 16 ft. (4.88.m.).

Pipeline connections: Super petroleum 8 in.; petroleum 8 in. light fuel oil 8 in.; gas oil-paraffin 6 in.; white spirit 4 in.

Esso Berth, Solumstrand

Concrete quay, 23 m. long, max. draft 16 ft. (4.88 m.).

Pipeline connections: Light fuel oil 6 in. and 4 in.; gas oil 6 in.; petroleum 6 in. and 4 in.

DEPTHS: Chart depths vary only slightly owing tidal fluctuations. Exceptional conditions, such as snow melting in Spring, heavy rainfall and prevailing strong Southerly or Northerly winds will cause stronger currents and a variation in water levels.

FRESH WATER: Delivery by hose available anywhere at any time.

FUEL: Tronstad berth: gas oil 200 sec. Holmen S.: fuel 2000 sec., marine diesel 200 sec. Bakketomta Lierstrand: Bunkering by tanklorry possible if necessary. Esso Solumstrand: gas oil visc. 1,2 at 20 degrees cel.; diesel visc. 1,7 at 20 degrees cel. Lubricating greases and oils available.

FIRE PRECAUTIONS: International danger signals and precautions practised. Wires for towing must be ready for immediate use. In case of fire on board or in vicinity, vessel must leave quay and harbour as soon as possible.

GANGWAY/DECK WATCHMEN: Watchmen recommended, through Agent.

OPENING/CLOSING HATCHES: If necessary hatches can be opened or closed by stevedores, but usually by crew.

CERTIFICATES: Usual ship's certificates according to international regulations.

CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes/100 grams of tobacco allowed weekly. Wine or Spirits, 1 bottle wine or spirits usual weekly allowance.

CARGO GEAR: International Safety Regulations followed.

CRANES: 12 electric cranes 3-10 tons, 2 mobile cranes 10-50 tons, 2 electric cranes for discharging of coal, capacity 500 t.p.d. each.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium tel. 831485	Germany tel. 819780
Denmark ,, 833650	Sweden ,, 838670
Finland ,, 832985	

All other consulates situated in Oslo.

REPAIRS: Shipyard facilities for all kinds of deck and engine repairs available.

DRY DOCKS: 2 floating docks, 20,000 and 3000 tons cap. Nearest dry docks in Horten and Oslo. Distance by sea respectively 24 miles and 46 miles.

REPATRIATION: All facilities available.

AIRPORT: Nearest airport Oslo Airport, Fornebu, situated 16 miles by road from Drammen. Regular services to all parts of the world.

TIME: GMT plus 1 hour. Permanent.

HOLIDAYS: On Saturdays work stops at 1230 hrs., but if ships can be finished, loading and discharging is continued to 2230 hrs.

All Sundays; 1st January; Maundy Thursday; Good Friday; Easter Monday; 1st May; Ascension Day (17th May); Whit Monday; Christmas Day; 26th December.

On Easter, Whit, Christmas, and New Year's Eve work stops at 1400 hrs.

POLICE/AMBULANCE/FIRE: Fire-alarm accidents 832020; First-aid station 831585; Hospital 834585; Police 838170; Taxi 835060.

TELEPHONES: Telephones can be connected if ordered.

GENERAL: Notice will be given to local Agents regarding changes or new developments which can affect usual procedure in port.

SERVICES: Ice-breaker assistance available during winter months.

SHORE LEAVE: No restrictions on shore leave when all formalities in order.

DELAYS: Delays may occur, when very heavy traffic cause shortage of labour.

AUTHORITY: Drammen Havnevesen.

EGERSUND: 58.27 N. 06.00 E.

DOCUMENTS: Health Certificate (forms obtainable from Customs when entering harbour). Crew List, Dangerous Cargo List, Ship's Register. Vessels bound for Egersund must be provided with document signed by Master, setting out specification of cargo to be discharged Egersund, also quantities all provisions and stores on board. Document must include name, tonnage, port of registration, last port, next port, and number of crew and passengers on board.

PILOTAGE: Pilot – if necessary – to be ordered latest 3 hours prior arrival pilot station. Order to be given to Pilot office – telephone 91.328 or to ship's Agent, giving ETA, name of vessel, gross tons, where Pilot required, draft in feet, and discharging/loading place. Vessels entering Egersund liable to inward and outward pilotage dues, mileage money according distance piloted; and pilot dues, whether services of Pilot used or not. Pilot station lying on Eigeroy – and Pilot available for Southern and Northern entrance, from pilot boat. Southern entrance mostly used, max. draft 31 ft. In case of using Northern entrance, ship has to pass bridge between Eigeroy and the continent. Max. height 23.5 m. Max. draft 16 ft.

ANCHORAGE: Any place in harbour available for anchorage. Especially used is Hovlandsviken – 36 ft. draft.

MAX. SIZE: Largest vessel which has entered Egersund – 25,000 d.w.t. Max. draft 31 ft. In harbour there are 2,000 ft. of quayage with 18–27 ft. alongside.

RADIO: Rogaland Radio and Farsund Radio.

TUGS: Not available in Egersund.

STEVEDORES: Ordered by Agent – no ETA to stevedores necessary. Time for ordering gangs for next morning must be given by 1300 hrs. day before.

FRESH WATER: Can be delivered at most discharging/loading places.

FUEL: Gas oil and Light Marine Diesel oil available.

GANGWAY/DECK WATCHMEN: Available – but not compulsory.

OPENING/CLOSING HATCHES: Crew allowed open and close.

CERTIFICATES: On first call Registered Tonnage Certificate necessary – thereafter not required unless gross/net tonnage changed.

CUSTOMS ALLOWANCE: (Dependent size – destination, etc.) each crew member is allowed 100 cigarettes, 20 cigars or 100 grams tobacco and one bottle spirits.

CARGO GEAR: No additional requirements. One 150-ton crane, one 30 ton crane and some mobile cranes 5-15 tons available.

IDENTIFICATION CARDS: Not required.

CONSULS: Denmark and Sweden.

REPAIRS: All minor repairs possible. Service station for electronic aids.

HOLIDAYS: Work can usually be arranged on all holidays.

POLICE/AMBULANCE/FIRE: Police 91.600; Fire 91.500; Hospital 91.338/91.940; Ambulance 91.325.

AGENTS: Messrs. Per Haland Jr. A/S, PO Box 115, 4371 Egersund, Norway. A.O. Tel. Per Haland Jr. 90.177; Per I. Leidland 92.783; Arne J Stapnes, 92.307. G.Bo 90217. Telex 33090. Telegraph "PER". Tel. 91.700.

FLORO: 61.31 N. 05.02 E.

DOCUMENTS:

2 Manifests.
Crew List.
Provisions List.
Health Document.
Passenger List.

PILOTAGE: Nearest station Fedje (60° 51′ N., 04° 37′ E.). Distance to Floro harbour about 52 nautical miles. Pilot boat a white-painted cruiser-type marked "LOS" on both sides of bow.

Fixed watch on Fedje island covers both Holmengra and Hellesoy. VHF Channels 8, 12 and 16 on M. wave. Listening first 10 minutes of every hour. ETA 24 hours before arrival. Telegram "Feielos". If bad weather, Pilot to be picked up on Eastern side of Fedje Island.

ANCHORAGE: No anchorages close to pilot station. Floro harbour: space of about 1 sq. km., depths from 15 to 30 fathoms.

RESTRICTIONS: Tide difference about 1.5 m. Max. draft *entering* Floro harbour 36 ft.

MAX. SIZE: Entering Floro harbour: No restrictions in main harbour concerning length and breadth. Max. draft *berthing:* "Fugleskjaerkaia" 16 to 18 ft. in a length of 150 m. "Gunhildvagen" (herring factory) 25 ft. in a length of 120 m.

NB. – "Gunhildvagen" lies outside main harbour, and has narrow entrance. Weather permitting, ships of 100 m. length and breadth 20 m. can pass.

BERTHING: *Vestlandske Kjopelag:* A bulk grain/molasses terminal for vessels up to 2,000 d.w.t. Berth length, 100 m. Depth alongside 7.0 m. The terminal is being expanded so as to accommodate vessels up to 5,000–6,000 d.w.t.

STEVEDORES: ETA before 1600 hrs. for gangs required next morning.

MEDICAL: Hospital close to harbour, and available any time.

TANKERS: Harbour is only used by small tankers, about 500 to 1,000 reg. tons.

FRESH WATER: Only available alongside berth. Delivery 6 t.p.h.

FUEL: Ordinary fuel. Diesel and gas oil delivered by truck. Ships up to about 1,000 reg. tons receive oil-bunkers directly by berthing bunker station.

DEVELOPMENTS: In connection with harbour-works "Fugleskjaerkai", to be built deep-sea pier (draft 30 ft.) with roll-on/roll-off facility length of about 200 m. and an area of about 9,000 sq.m. Completion, mid-1977.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Mostly done by crew.

CREW IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: Most repairs possible.

DRY DOCKS: None. There is a new berth at Ankerlokken Shipyard. Length 100 m. Depth alongside 9–10 m.

AIRPORT: Harbour served by regular air transport (seaplanes twice a day).

TIME: GMT plus 1 hour.

HOLIDAYS: Cargo work can be arranged any time, holidays included.
POLICE/AMBULANCE/FIRE: Police 2101; Ambulance 2521; Fire 2600.
TELEPHONES: Can be arranged on board alongside wharf.
SHORE LEAVE: Permitted.
SERVICES: Servicing for all kinds of ships navigation instruments can be arranged, except adjusting radio bearings.
AUTHORITY: Harbour Master. Floro Havnevesen.
AGENT: K. Jansen, Shipping Agent, Stevedore, Shipbroker. Telephones: (057) 42303 A.O (057) 42222–42277. Cable: Shipping. PO Box 15.

FREDRIKSTAD 59.12 N. 10.57 E.

DOCUMENTS:

Bill of Health.
2 Crew Lists.
2 Passenger Lists.
2 Custom List for Crew members and Passengers.
Bill of Lading.
3 Manifests for each port of discharge.

PILOTAGE: Compulsory. Pilot boarding at Faerder Lighthouse, 59.2 N. 10.32 E. Agents report vessel's ETA to pilot station and vessel to give a couple of hours' notice by R/T 2182; kc/s. or VHF Channel 16 to Faerder Pilot. Coast station Tjome Radio LGT or Farsund Radio LGZ can also be used. Harbour Pilot and tugs, when necessary, will be arranged by Agents to meet at Belgen.
ANCHORAGES: Safe anchorage for larger vessels Belgen, East entrance. For smaller vessels anchorage to be pointed out by Pilot or Harbour Master.
RESTRICTIONS: Max. draft, East entrance 36 ft.; West entrance, 17 ft. Otherwise no restrictions.
HEALTH: See "Documents".

If vessel carries Quarantine Flag for contagious diseases, radio communication should be sent to Agent for instructions, otherwise no special regulations.

RADIO: Communication to Agent through Tjome Radio or Rogaland Radio.
TUGS: Three tugs, 750 h.p. and 1,200 h.p. Stronger tugs can be ordered from Oslo if necessary.
BERTHING: As instructed by Harbour Master through Agent, depending on vessel's draft and size.
East River Berths:
Oera Quay:
Southern part, max. draft 36 ft.
Northern part, max. draft 33 ft.
Denofa Lilleborg Quay:
Max. draft 33 ft., 5 m., off the quay.
Additional facilities:
4 warehouses, each at 2,000 sq.m. with cooling 300 sq.m.
4 ordinary cranes up to 10 tons.
1 mobile harbour crane up to 36 tons.
2 ro/ro terminals with an open area of about 40,000 sq.m.

STEVEDORES: To be arranged by Agent subject to requirements. 24 hours notice important to obtain in good time accurate ETA.

Ordinary working hours 0700 to 1530 hrs.; Saturday until 1230 hrs. Bulk cargoes are usually discharged in shifts until Saturday 2200 hrs., in the extent stevedores available.

MEDICAL: Master to advise by radio prior arrival if medical attendance required on board. Hospital facilities available.
TANKERS: Discharge pipe-lines usually 6 and 8 in. No slop (residues) discharge facilities. Tanker berths are at BP and Denofa/Lilleborg.

Sulphuric Acid is loaded at Oera Quay.

DENSITY: Brackish water, 2.7% salt water.
FRESH WATER: From shore or by barge.
FUEL: All grades available. For larger quantities, delivery arranged by barge.
GANGWAY/DECK WATCHMEN: Obtainable.
OPENING/CLOSING HATCHES: Crew members allowed to open and close hatches.
SHIP'S CERTIFICATES: To be produced to Customs Authorities on arrival.
CUSTOMS ALLOWANCES: *Tobacco:* 20 cigarettes or 20 grs. tobacco per man, per day. *Wines/Spirits:* 1 bottle of spirits or wine for consumption on board per crew member.
IDENTIFICATION CARDS: Not required, except at the quay of Defona/Lilleborg, when Master, upon arrival, will receive a sufficient number of cards for filling-in for each crew member, to be shown when passing the gate.
CONSULS: Danish, French, Finnish, Dutch, Swedish.
REPAIRS: All repairs possible.
DRY/FLOATING DOCKS:

A/s Fredrikstad mek Verksted: Dry dock 945 ft. length, 126 ft. breadth, 25 ft. draft when docking. Floating dock, 900 tons, 181.6 ft. length, 52.6 ft. breadth, 14 ft. draft when docking.

Sarpsborg mek Verksted: Floating dock, 3,000 tons, 380 ft. length, 55 ft. breadth, 18 ft. draft when docking.

REPATRIATION: All facilities available.
AIRPORT: Fornebo, Oslo, 110 km. From Fredrikstad. Frequent connection by train.
TIME: GMT plus one hour.
HOLIDAYS: New Year's Day (1st January); Maundy Thursday; Good Friday; Easter Monday; Labour Day (1st May); Ascension Day (11th May); Constitution Day (17th May); Christmas Eve; Christmas Day; New Year's Eve.
POLICE/AMBULANCE/FIRE: Police, tel. 17700; Doctor, tel. 13333; Hospital, tel. 11080; Ambulance, tel. 13000; Fire, tel. 12345.
TELEPHONES: May be installed on board at the quay of Oera.
SERVICES: Compass adjusting, laundry, ship chandler for delivery of provisions and bond stores.
SHORE LEAVE: No restrictions.
AGENT: K. Andersen & Co A/S, Tordenskioldsgt, 6/8, POB 1601, Fredrikstad. Tel. 15940. Telegraphic address: Andersco. Telex: 16516.

GLOMFJORD: 66.50 N. 13.57 E.

DOCUMENTS:

3 Crew Lists.
Customs List.
Shipping Manifest.
Health Statement.
Bill of Lading.
Ship's Certificate of tonnage.

PILOTAGE: Pilot station, approach from South, is Aasvaer, Lat. 66° 17′ N. Long. 12° 18′ E., VHF/radio telephone, frequency 2182.

Pilot station, approach from North, is Fleinvaer, Lat. 67° 13′ N., Long. 13° 42′ E. Order Pilot over Bodo Radio, tel. Bodo 22115.

ANCHORAGE: No berth for anchoring in Glomfjord but possible anchor at Sandaabukten close to Glomfjord.
MAX. SIZE: Quay length 317 m. and depth 8 m.
HEALTH: Health certificate – only for first port in Norway.
RADIO: Sandnessjoen or Bodo Radio station.
VHF: On quay. Call: Hydro Glomfjord Port station on Channel 16.
TUGS: None.
BERTHING: No specific requirements relating to berthing.
STEVEDORES: In accordance with Charter Party.
MEDICAL: Medical aid in Glomfjord, and hospital in Bodo.
TIDE: Difference between high and low water about 3m.
FRESH WATER: Alongside quay.
FUEL: None.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CERTIFICATES: Usual certificates.
CUSTOMS ALLOWANCES: 200 gr. tobacco or 200 cigarettes per man. 0.75 litre spirits or 0.75 litre wine per man.
CARGO GEAR: Discharging by cranes on quay. Loading by conveyor.
IDENTIFICATION CARDS: Usual passport necessary.
CONSULS/REPAIRS/REPATRIATION: None.
AIRPORT: Airport in Bodo.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: See "Drammen".
POLICE/AMBULANCE/FIRE: Police station 52147 Glomfjord.
TELEPHONES: Arrangements for placing on board.
REGULATIONS: No particular or unusual regulations. Control by passing gate between dock area and surrounding field.
SHIPMASTER'S REPORT: *May 1976*

Anchorage: The nearest anchorage to the berth, which is part of Norsk Hydro's chemical plant is Sandabukta, about 6 miles away. It is safe and sheltered and the Agent will board there. Communication with Glomfjord is by VHF Channel 16 or via the local boatman with whom private arrangements for shore leave are possible.

Clearance: Ship is boarded on arrival at the anchorage by the Glomfjord Customs officer who also acts as Immigration and Port Health.

Weather: This vessel called at Glomfjord in April but weather conditions were not attractive. Frequent snow squalls reduced visibility to zero but were usually short-lived.

Pilotage: There are no harbour Pilots at Glomfjord. If proceeding direct to berth, sea Pilot will put ship alongside. If awaiting berth at Sandabukta anchorage, Pilot leaves there and it is normal for ships to complete the passage unaided. A Pilot can be obtained from Bodo but is not always available. If another ship is arriving at the anchorage, Pilot will transfer.

AUTHORITY: Norsk Hydro a.s. Glomfjord Fabrikker.

HALDEN: 59.08 N. 11.25 E.

DOCUMENTS: See "Bergen".
PILOTAGE: Pilot boat at Faerder light station. Pilot boat at Herfol Losstation -Hvaler. Ordering usually over Radio Land Station. Tjome Radio = LGT (also VHF). Signals according to ordinary international requirements. Exact area for Pilot boat: Faerder light station (Store Faerder); Herfol pilot station; Hvasser pilot station.
ANCHORAGE: At Faerder light station in Oslofiord -Singlefiorden West side.
RESTRICTIONS: No special restrictions but larger vessels have to take necessary care with passing Svinesund. The tide current altering according to high and low water time.
MAX. SIZE: For the harbour inside Svinesund (Main Harbour) length 560 ft., beam 70 ft., draft. 25 ft.
HEALTH: Pratique, ordinary.
TUGS: If wanted; outside Sponviksskansen light with the entrance to Svinesund. Usual, ship's lines.
RADIO: All radio services over Tjome Radio -Land Station (use the ordinary international frequency — (600-705-800 m.).

TANKERS: Max. 20,000 d.w.t. are received.
FRESH WATER: Available; good quality.
FUEL: Available.
FIRE PRECAUTIONS: According to Harbour regulations.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Carried out by crew.
IDENTIFICATION CARDS: Required.
REPAIRS: Only small repairs carried out.
DRY DOCKS: None.
REPATRIATION: No facilities.
AIRPORT: Nearest Tombo (Islo).
TIME: 1 hour behind GMT.
POLICE/AMBULANCE/FIRE: Fire 81212; Police 82250.
TELEPHONES: None available for shipboard use.
SHORE LEAVE: Allowed.

HAMMERFEST: 70.40 N. 23.40 E.

DOCUMENTS: See "Bergen".
PILOTAGE: Entering from sea, a state Pilot is compulsory as one has to pass through prohibited sea area. Pilot should be ordered 4 hours in advance, and boards ship at Tarhalsen (situated at Eastern-most tip of Soroy island). Harbour Pilot boards outside harbour breakwaters.
ANCHORAGE: Anchoring in harbour or as appointed by the state Pilot or harbour Pilot.
MAX. SIZE: Alongside quay ships up to 30,000 g.r.t., with draft max. 30 ft. For anchorage no limitation.
RADIO: Hammerfest Radio, equipped with VHF.
TUGS: None.
STEVEDORES: Normal working hours: Monday–Friday 0700–1630 hrs.
MEDICAL: Hospital facilities available at Hammerfest.
TANKERS: Discharge line 8 in.
DENSITY: Salt water.
FRESH WATER: Capacity 300 t.p.h. at Harbour Board quay, no water barge.
FUEL: All grades, except heavy fuel oil, available.
CUSTOMS ALLOWANCES: See "Stavanger".
IDENTIFICATION CARDS: Not needed.
CONSULS: French, Danish, Finnish, Icelandic, Netherlands and Swedish Vice-Consuls.
REPAIRS: Slipway for smaller ships, up to 200 ft. Only minor repairs and radar repairs available.
DRY DOCKS: None.
REPATRIATION: Daily connection by ship and air.
AIRPORT: Hammerfest Airport. Regular service several times a day.
AUTHORITY: Hammerfest Havnevesen.

HARSTAD: 68.48 N. 16.39 E.

PORT LIMITS: Inside a straight line from Trondenes Church to Stangnes Light.
DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Derat Certificate.
PILOTAGE: If entering via Andenes, 12 hours advance notice of ETA in order to arrange Pilot. If entering via Lodingen, 2 hours notice. VHF Channel 16 both at Lodingen and on pilot-cutter at Andenes.
ANCHORAGE: Inside harbour limits, fairly good anchorages available, Pilot will assist.
RESTRICTIONS: No restrictions, only all foreign ships must have a Coast Pilot on board in inland waters.
MAX. SIZE: Any sizes can anchor in harbour.
HEALTH: In case of suspected disease doctor has to be called by radio before entering. After calling at another Norwegian port and no disease, pratique is not necessary.
RADIO: Routing of ETA cables to Agents at Harstad is best over Harstad Radio. VHF installed at Harbour Office.
TUGS: Two small tugs available.
MEDICAL: No advance notice required. Hospital facilities available. No medical information required if no suspected disease on board.
SPECIALISED CARGO-HANDLING FACILITIES: Two coal bunkering stations; draft about 24 ft.; equipped with cranes running on rails. No other specialised docks.
TANKERS: Two berths. Esso 33 ft. Norol 36 ft.
TIDE: Rise in tide about 6 ft.
FRESH WATER: Available at most quays.
FUEL: All grades available. In the Winter 3–4 hours notice required.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: Usual International certificates.
CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes or equal amount of tobacco. Wine and/or Spirits: Spirit half a bottle per person.
IDENTIFICATION CARDS: Not needed.
CONSULS: Per Kind & Son – Iceland. O. Galschiodt – Finland. Kr. Holst – Denmark.
REPAIRS: All types of repairs possible.
DRY DOCKS: 1 dry dock 110 m. long, 17 m. wide.
REPATRIATION: Facilities available.
AIRPORT: From about July 1973, new airport in operation at Evenes, about 1 hour's drive from Harstad by road.
TIME: GMT plus 1 hour.
HOLIDAYS: Cargo work can be arranged on holidays, except 1st and 17th May, Easter Day and Christmas Day.
POLICE/AMBULANCE/FIRE: Tel. 62010–62000–61122.
TELEPHONES: Available, can be arranged by Agent or Dockyard.
SERVICES: Harbour Office, Tel. 62880 62892. Compass adjusting.
SHORE LEAVE: Allowed.
AUTHORITY: Harstad Havnekontor.

HEROYA: 59.07 N. 09.38 E.

DOCUMENTS:
Clearance documents – forms obtainable from Custom officers on arrival.
Derating Certificate.
Bill of Lading.
Manifest.
2 Crew Lists.
Ship's Register.
PILOTAGE: Ships Agent gives ETA Pilot station 24 hours before arrival and direct to Pilots 2 hours before arrival. Telegraphic address: Pilotstation, Langesund. VHF Channel 16 to be used when contacting Pilots. Pilot boards at Steingrunnen light buoy Langesund bay, 58° 55′ N.; 09° 44′ E. Flag, sound and morse signal: G. Pilotage compulsory for all foreign vessels but dispensation can be obtained for smaller Scandinavian vessels.
ANCHORAGES: All anchoring at Frierfjorden.
RESTRICTIONS: No restriction on night entry except for large vessels when Pilots prefer daylight.
MAX. SIZE: Max. draft 32 ft. 6 in., max. length 600 ft. entering Kjorttingen between Langesund and Brevik.
HEALTH: See "Documents". Norwegian Health Certificate required on clearance inwards.
RADIO: Cable Agents giving ETA, draft and cash required via Tjome Radio/LGT or Farsund Radio/LGZ.
TUG: Tugs join at berthing place. Ship's lines used.
BERTHING: No specific requirements relating to berth.
CARGO HANDLING FACILITIES: On the East side of the river, a berth of 800 ft. length, 20 to 21 ft. alongside. A new quay for vessels up to 10,000 tons, 26 to 27 ft. depth, specially for handling bulk cargoes.

No berth equipped for handling roll-on/roll-off traffic, but berth available for liquid chemical and LPG carriers.

Oil pier Norsk Hydro A/S, vessels up to 20,000 d.w.t.

Main quay Norsk Hydro A/S, length 1,838 ft., draft 26 ft. to 34 ft. 6 in.

Western quay Norsk Hydro A/S, length 1,263 ft., draft 26 ft. to 32 ft. 6 in.

CRANES:
Main quay Norsk Hydro A/S:
4 cranes reaching 10-11 m. outside quay border capacity 6 tons.
2 cranes reaching 18 m. outside quay border capacity 6 tons.
3 elevators for loading of bagged cargo reaching 16 m.
Western quay Norsk Hydro A/S:
2 cranes reaching 18 m. outside quay border capacity 7 tons.
1 crane reaching 15 m. outside quay border capacity 8 tons.
1 crane reaching 9 m. outside quay border capacity 3 tons.
3 elevators for loading of bagged cargo reaching 8 m.
Deep Water Jetty:
2 cranes reaching 16 m. outside quay border capacity 10/12 tons for bulk cargo only.
1 crane capacity 5 tons for handling of stores, etc.
BRIDGES: Brevik bridge max. height 45 m. Porsgrunn bridge only when proceeding to Menstad, Borgestad, Waterloo and Skien, liftbridge with breadth of 30 m. Sound signals for passing bridge inward, 1 long and 2 short. Outward signals, 1 long and one short.
STEVEDORES: Ordered by Shippers/Receivers or Agents.
MEDICAL: All medical assistance to be arranged via Agents.
TANKERS: Discharge lines 4 in., 6 in., 8 in.
DENSITY: Brackish 4–6 in. allowance.
FRESH WATER: Obtainable various quays.
FUEL: All grades available.
FIRE PRECAUTIONS: Tankers discharging, smoking only by officers in saloon, crew in messroom.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Crew normally open and close. Otherwise according Charter Party.
CERTIFICATES: Registered tonnage certificate; Derating certificate. Otherwise normal international certificates.
CUSTOMS ALLOWANCES: 400 cigarettes for the Master and 200 for each crew member. *Wine and/or spirits*, 4 bottles spirit for Master and half bottle for each crew member.
CARGO GEAR: No additional requirements, but using vessel's rain tents.
IDENTIFICATION CARDS: Only necessary at quays belonging to Norsk Hydro. Special identification cards will be delivered to Master on arrival.
CONSULS: Belgium 20083 (Skien), Denmark 50069, Germany 25093 (Skien), Holland 22 742 (Skien), Finland 52620.
REPAIRS: Repairs possible.
DRY DOCK: Draft 14 ft., length 155 m., breadth 20 m., also 4 smaller docks.
REPATRIATION: Facilities exist for effecting crew changes and repatriation.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: New Year's Day, Maundy Day, Good Friday, Easter Eve (half day), Easter Monday, Christmas Eve (half day), Christmas Day, 26th December, New Year's Eve (half day).

POLICE/AMBULANCE/FIRE: Police 51040; Ambulance 51070; Fire 51522. Other numbers: Pilot station 73135; Tug station 50844; Norsk Hydro Central 51120; Porsgrunn Bridge 52492; Custom House 54540; Taxi 54112; Harbour office: 52308.

AGENT: Messrs. Nils P. Hoyer & Son A/S, Storgaten 107, PO Box 204, 3901 Porsgrunn, Norway. Office Tel. 54088. Telex 18010. Telegr. address "Hoyership". After office numbers: 24424 (Skien). 20625 (Skien). 10334.

HORTEN (on West Side Oslo Fjord): 59.24 N. 10.28 E.

DOCUMENTS: Health Certificate, Provision List, etc., all forms obtainable from Customs Officer boarding on arrival. Ship's International Register and 2 copies of Manifest (with or without freight).
PILOTAGE: Compulsory for foreign ships over 50 grt. Pilot station at Hvasser (Sandosund) outer Oslofjord, tel. Hvasser 178 via Tjome Radio, VHF Channel 16 and RT 2182 kc/s. Cutter or motorcruiser at Faeder lighthouse bearing 3 miles North-N.E. White hulls with word LOS in black letters. Pilot usually ordered through Agent. Inner Harbour, Horten, compulsory Harbour Pilot ordered through Agent.
ANCHORAGE: Langgrunn outside Horten. Up to any size vessel.
RESTRICTIONS: No restrictions night entry, but inner harbour at Horten only entered with Harbour Pilot on board.
MAX. SIZE: Ships up to max. length 900 ft. (anchored moorings outside jetty). Deep-water Wharf, length of N.E. side 530 ft. Draft 28 ft.
HEALTH: See "Documents". Advise Agent if suspect any disease or fever.
RADIO: Cable Agent giving ETA via Tjemeradio. Local Harbour Master's Office can be contacted by VHF Channels 14 or 16. Hortens Brygge's "Pilotboat" when in service VHF Channel 16.
TUGS: Tugs if required use ship's line. Tugs ordered through Agent.
BERTHING: Max. draft alongside quay 28 ft.
STEVEDORES: Ordered by Agents.
MEDICAL: No special notice required, but preferred if urgent. Local hospital-Horten Sykehus tel. 43191.
TANKERS: Tank Cleaning Installation for slop discharge. Draft 23/40 ft. at oil jetty.
DENSITY: About 1022.
FRESH WATER: Available at most berths and from lighter.
FUEL: All grades. Direct from Installation and also by lighter. If large quantities, give earliest possible notice.
FIRE PRECAUTIONS: Usual restrictions and No Smoking inside Cleaning Installation gate.
DEVELOPMENTS: Committee at present working with plans for building more berths for ferries and traffic.
GANGWAY/DECK WATCHMEN: Available, not compulsory.
OPENING/CLOSING HATCHES: Usually opened/closed by vessel's crew.
CERTIFICATES: Ship's International Register and usual certificate.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes or 250 grammes tobacco 200 leaves cigarette paper for persons over 15 years only. Wine and/or Spirit, Spirit of max. 60% 1 bottle (0.75 litre) and 1 litre wine (1.25 bottle) -2 litres of wine if no spirits and 2 litres of beer (for persons over 21 years only).
CARGO GEAR: No additional requirements except when extra heavy lifts (20 tons).
IDENTIFICATION CARDS: Not needed.
CONSULS: Only Finnish Consul in Horten tel. 42189, but most important consulates in Tonsberg – 18 kilometre distant. British Vice-Consul, Tonsberg tel. 11605, Dutch Vice-Consulate 13224.
REPAIRS: Any kind can be carried out.
DRY DOCKS: Dry docks for vessels up to about 60,000 d.w.t.. at A/S Horten Verft.
REPATRIATION: Crew changes, etc., can be arranged.
AIRPORT: Nearest international Airport is Oslo Airport (Fornebu), but charter flights may be arranged to and from Sandefjord Airport—any size of plane, and small aircraft at Jarlsberg Airfield. Distance to Sandefjord about 30 kilometre, to Jarlsberg about 18 kilometre.
TIME: GMT plus 1 hour. No alterations during year.
HOLIDAYS: New Year's Day; Thursday before Good Friday; Good Friday; Easter Monday: 1st May; 7th May; (Ascension Day); 17th May; Whit Monday; Christmas Day; 26th December. 24th December is half holiday -work stops at noon or 1300 hrs.
POLICE/AMBULANCE/FIRE: Horten for immediate help phone 000 covering Police, Ambulance and Fire.
TELEPHONES: Can be placed on board at Deepwater Wharf, the Cleaning Installation and the Dockyard (A/S Horten Verft) at comparatively cheap rates.
GENERAL: A/S Horten Verft are licensed Sulzer builders. Important Electronic Industry.
SERVICES: Tank cleaning and facilities for discharge of tank washings. Adjusting of all kinds of ship's instruments.
SHORE LEAVE: Crew members are allowed on shore.
REGULATIONS: Compulsory harbour Pilot when calling at Inner Harbour and yard (A/S Horten Verft).
AUTHORITY: Harbour Master. Horten Havnekontor.
AGENT: Hortens Brygge A/S, PO Box 156, 3191 Horten, Telegraphic Address: "Bryggen". Tel. 41100, 41745 and 42078. Telex 16545. After Office Hours: Berntsen 43917, Kristensen 43719, Hansen 43517, Abrahamsen 43317.

Agents, Chartering, Tramp, and Liner, Insurance Agents, Stevedores, Travel, and Forwarding Agents. "Pilot-boat" and lorries.

HOYANGER: 61.10 N. 06.04 E.

Hoyanger – Aluminium Works – located North of Bergen in outer part of Sognefiord. 61° 10′ 18″ N. 6° 04′ 07″ E.
DOCUMENTS: See "Bergen".
PILOTAGE: Compulsory. Belonging to Bergen Customs district and unless otherwise arranged beforehand vessels from abroad must call Bergen for inward clearance.
LENGTH OF QUAY: 360 ft. Depth alongside: 27 ft. Cranes. Ice free.

AGENT: Joachim Grieg & Co., Bergen. Telegraphic address: "Expeditor". Telex. 42700. Tel. 18140.

HUSNES: 59.52 N. 05.46 E. (See Plan)

DOCUMENTS:
3 Crew Lists.
2 Passenger Lists.
2 Bills of Lading
2 Manifests.
PILOTAGE: No pilotage in port. Sea Pilots in stations at Skudesnes, Kvitsoy (or Kopervik) and Utsira.
ANCHORAGE: 59° 53′ N. 05° 45′ E. in 20 m.
MAX. SIZE: 70,000 tons.
HEALTH: Custom authorities to be advised on entrance.
RADIO: Best radio stations: Rogaland Radio. ETA to Receiver's cable address: "Soeratuminium, Husnes".
TUGS: Normally not necessary. If wanted, can be ordered from Bergen or Haugesund.
BERTHING: 240 m. Depth alongside: South 10 m., North 17 m. 2 cranes, on quay, each 8 tons at 20 m. and 1 pneumatic gear for discharging alumina. Capacity 5,000 tons per 24 hours.
STEVEDORES: Normal working time: Monday–Friday 0700–1530 hrs.
MEDICAL: Hospital at Stord (about 1 hour by ferry and car).
TANKERS: Discharging line 9 in.
FRESH WATER: Available, direct from quay to ship. Charge Nkr 100, plus Nkr 1.0 per ton.
FUEL: None available.
GANGWAY/DECK WATCHMEN: Crew.
OPENING/CLOSING HATCHES: To be carried out by crew.
CARGO GEAR: Per Norwegian safety regulations for loading and discharging.
IDENTIFICATION CARDS: Crew need cards signed by Master.
CONSULS: None.
REPAIRS: Only small workshops.
DRY DOCKS: None.
REPATRIATION: No facilities for obtaining new crew (Haugesund or Bergen).
AIRPORT: Bergen–Flesland. 2-2.5 hours from Husnes to Bergen by hydrofoil, and 0.5 hours by plane.
POLICE/AMBULANCE/FIRE: Alarm telephone number 121 or 65.
TELEPHONES: Agent has one telephone, which can be placed on board. (No. Kvinnherad 5436.)
SERVICES: No services at quay. Tank cleaning at Bergen, compass adjusting at Haugesund.
SHORE LEAVE: Permitted. Crew required proceed direct from quay to gate of plant.
AUTHORITY: *Shippers/Receivers:* Sor-Norge Alumium a/s.
AGENTS: Hagbart Thorsen, Tel. Kvinnherad 5266. Telex 42516.

KIRKENES in Bokfjord: 69.36 N. 30.03 E.

DOCUMENTS:
3 Crew Lists.
Bill of Health.
Bill of Lading.
Ship's Certificates.
PILOTAGE: Pilot to be notified 4 hours in advance, boards vessel at Oksebaasen, and to be contacted over Channel 16 VHF. Pilot vessel carries white flag "H".
ANCHORAGE: As directed by Pilot.
MAX. SIZE: Oil carriers 20,000 d.w.t., draft 33 ft. Iron ore carriers 150,000 d.w.t. draft 54 ft.
HEALTH: If any contagious sickness quarantine to be informed by radio.
RADIO: Vardo Radio.
TUGS: Available 2,200 h.p. Join vessel within harbour basin. Tugs' lines to be used.
BERTHING: Vessel to employ harbour Pilot.
MEDICAL: Agents to receive advance notice of required medical attention. Hospital facilities available.
TANKERS: Diameter of load/discharge lines 8 in. Max. draft 33 ft.
DENSITY: Specific weight of water at 17.5 centrigrades=1.02622 – 1.011 (varies very much with time of year).
FRESH WATER: Available, delivered through pipes from quay.
FUEL: None.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Must be carried out by crew.
CUSTOMS ALLOWANCES: (Tobacco), 100 cigarettes or 100 gram tobacco for each crew member. (Wines/Spirits), 1 opened bottle of hard liquor, 1 opened bottle of wine, Reasonable amount of beer.
CARGO GEAR: 2 cranes, 20 and 75 tons.
IDENTIFICATION CARDS: Not needed.
CONSULS: Sweden, Finland, West Germany.
REPAIRS: No repairs possible.
DRY DOCKS: None.

REPATRIATION: Facilities exist for crew changing, but normally no crew available. Arranging repatriation possible.
AIRPORT: Distance to airport 10 km. Airport served by regular airlines, 2 flights per day.
TIME: GMT plus 1. Permanent.
HOLIDAYS: 1st May, 17th May. Work carried out if permission given by the authorities.
EMERGENCIES: Fire alarm 91942; Ambulance 91701; Police 91151.
TELEPHONES: Ship's telephone connections available.
SERVICES: Compass adjusting.
SHORE LEAVE: Crew members allowed ashore.
AUTHORITY: Aktieselskabet Sydvaranger.

KRAGERO: 58.52 N. 09.25 E.

DOCUMENTS:
Ship's Register.
Passenger List.
Crew List.
1 List of Articles – radios, cigarettes, tobacco, spirits, etc.
If on inspection, articles or quantities not in conformity or in excess, Master responsible, articles removed and heavy fine imposed.
PILOT: Has to be ordered by Agent on given ETA. The Pilot boat will be at the light buoy 1 hour ahead of time given. Listening on Radio 2182 kc/s or VHF Channel 16. Calling "Pilotboat Kragero".
ANCHORAGE: Almost anywhere in the Fjord, watch out for sign of waterpipes and telephone cables.
RESTRICTIONS: Weather permitting, draft up to 26 ft.
RADIO: Tjome Radio station or Farsund Radio Station.
TUGS: Only small tugs in harbour, tugs available from nearby town order to be given 24 hours in advance.
STEVEDORES: To be ordered by Agent. Notice to be given before 1530 hrs. for next morning, or 3 hours before work to start.
MEDICAL: Doctor and hospital facilities available.
FRESH WATER: Available at centre quay.
FUEL: May be available with trucks ordered from nearby town.
OPENING/CLOSING HATCHES: To be carried out by crew.
CUSTOMS ALLOWANCES: 100 cigarettes or 50 cigars. One bottle wine or spirits per man.
CONSULS: France Tel: 81555. Denmark Tel: 81055. Netherlands Tel: 81020.
REPAIRS: Small repairs may be available.
DRY DOCKS: For ships up to 350 dwt.
AIRPORT: Kristiansand 170 Km. away. Oslo 200 Km.
HOLIDAYS: Work can be arranged on most Holidays, except New Year's Day, Easter Day, 1st and 17th May and Christmas Day.
TELEPHONES: Police, 81401. Ambulance, 81436. Fire and First Aid 81200. On most berths telephones are available.
SHORE LEAVE: No restrictions.

AGENT: N.P. Olsen & Son, owner Burton Lying Olsen, Dampskibskaien nr. 40. Telephone 81020 (3 lines) Telegram address "Expedtionen". 18066 Olsen N -Telex.

KRISTIANSAND S.: 58.09 N. 08.00 E.

DOCUMENTS:
3 Cargo Manifests for Customs
Tobacco/Spirits List
Bill of Health (if arriving from outside Scandinavia)
Passenger List for Immigration
No Crew List required
PILOTAGE: Oksoy Pilot Station. Compulsory pilotage for non-Norwegian ships, 2 hours notice minimum, contact on ordinary shipping channel, or VHF call channel 16, Pilot boat marked "LOS" on each bow, international light or sound signals, Pilot boarding between Oksoy and Gronningen Lighthouse, no special anchorage for vessel awaiting a pilot, but pilots available around clock.
ANCHORAGE: Several good and safe anchorages in inner and outer harbour for vessels of any size.
MAX. SIZE: Any size in harbour. Max. 25,000 d.w.t. at quay.
RADIO: Kristiansand Radio. Call sign LGR. Farsund Radio LGZ.
RADAR/VHF: Both at Oksoy Pilot Station.
TUGS: Lekterkompaniet. Signal: L, Tel. 21195. 3 tug-boats 700–180–180 h.p. A/S Sorslep. Tel. 22590. Night: 29521. 2 Tugs 725–325 h.p. 1 mooring boat.
STEVEDORES: ETA to Agent who arranges stevedoring.
MEDICAL: Hospital in Kristiansand. Doctor available around clock.
TANKERS: B.P. Bunker Station. 1 Berth depth 33 ft. Shell Bunker Station Odderoy, 1 Berth depth 31 ft.
FRESH WATER: Available from quays. No water barges.
FUEL: All grades up to 2000 sec. available at short notice.
DEVELOPMENTS: New roll on/roll off berth just finished, and another planned with areas for storing containers/flats etc.
GANGWAY/DECK WATCHMEN: Available if required.
OPENING/CLOSING HATCHES: Normally carried out by crew, but can be done by stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes or equivalent tobacco for each crew member per 10 days and 1 bottle spirits.
CONSULS:

Sweden	Tel. 26160	France	Tel. 26210
Denmark	,, 23097	Netherlands	,, 26990
Finland	,, 29596	Greece	,, 24446
Great Britain	,, 24452	Iceland	,, 21068
Germany	,, 22455	Portugal	,, 29616
Spain	,, 21040		

REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: Largest dry dock; length 689 ft. width, 100 ft. width at entrance, 95.9 ft. Depth 25 ft. for vessels up to 13,000 d.w.t.
REPATRIATION: Can be arranged.
AIRPORT: Situated 17 km. from harbour, served by regular air lines.
TIME: GMT plus 1 hour, permanent.
TELEPHONE: Police, 29500; Ambulance, 26200; Fire, 21010. Possible to place telephone on board at some quays.
AUTHORITY: Board of Harbour Commissioners.

AGENT: Kristiansand Shipping and Terminal Service A/S and Co. Box 251, 4601 Kristiansand. Tel. 26160 (10 lines). Telex: 16563 KST. Cables: "Terminal Kristiansand".

KRISTIANSUND N.: 63.07 N. 07.43 E.

DOCUMENTS:
1 Crew List.
1 Passenger List.
1 Customs Document.
1 Health Document.
1 Ship's Papers.
1 Stores List.
3 copies Manifest.
3 copies Bill of Lading.
PILOTAGE: From open sea. Pilot is taken on board at Grip Lighthouse. Watch 24 hours a day. Vessels approaching from the sea and desiring a pilot should order the Pilot at 24 hours notice as far as possible.
RADIO: From ship at sea via Kristiansund Radio (LFK) or Alesund Radio (LGA) direct to the Sea Pilot. Watch calling frequency 2182 or by VHF radio-telephone, calling Channel 16. Harbour Office is manned day and night, telephone 71483.
ANCHORAGE: Several good and safe anchorages in inner and outer harbour for vessels of any size.
MAX. SIZE: Max. depth alongside quay 40 ft., length of all quays about 900 m.
TUGS: None, but small motor vessels assist when required.
BERTHING:
Storkaia length 330 metres, depth 19-40 ft.
Holmakaia ,, 100 ,, ,, 34 ,, (East side)
,, ,, 80 ,, ,, 24 ,, (South side).
BRIDGES: Sorsund Bridge 140 m. wide, 38 m. high. Nordsund Bridge 50 m. wide, 28 m. high.
STEVEDORES: Obtained by Agents provided ETA given 12 hours before arrival.
FRESH WATER: Delivered from quay or from water boat.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Available but not necessary.
OPENING/CLOSING HATCHES: This work will normally be carried out by crew, but can be done by stevedores.
CUSTOMS ALLOWANCES: For each man – 200 cigarettes, 1 bottle of spirits for ten days.
IDENTIFICATION CARDS: Not required.
CONSULS: Following countries are represented at Kristiansund N.:
Finland
France
Germany (FDR)
Great Britain
Italy
Netherlands
Portugal
Spain
Sweden
Uruguay
REPAIRS: All kinds of repairs may be effected, deck and engine. Patent-slips for vessels up to 250 ft. long, crane-lift up to 40 tons. Ice-free harbour.
REPATRIATION: All facilities available.
AIRPORT: Kristiansund Airport, Kvernberget. Passenger flights 3 times a day to Oslo. 2 flights a day to Trondheim and Bergen. Situated about 4 miles from centre of Kristiansund N. (about 15 minutes by car).
TIME: GMT plus 1 hour.
HOLIDAYS: 1st May and 17th May.
POLICE/FIRE/AMBULANCE: Police, tel. 75000; Ambulance, tel. 72011; Fire, tel. 71000.
TELEPHONES: May be installed during the ship's stay at the quay.
SERVICES: Laundry, ship-chandlers for delivery of provisions and bonded stores, and servicing for all kinds of ship's navigation instruments can be arranged.
SHORE LEAVE: Allowed.
AUTHORITY: Harbour Master, Kristiansund N. Havnevesen.

LARVIK: 59.03 N. 10.02 E. (See Plan)

PORT LIMITS: The offical port limits for the port of Larvik is a line from Stensnes in East to Rodbergodden in West. Notices of Readiness for loading or discharging, however, will be accepted when the vessel is anchored in any of the anchorages in inner Larvik Fjord.
DOCUMENTS:
Maritime Declaration of Health.
Tolliste i.e. tobacco & curio list for total number of crew.
1 "Varefortegnelse med proviantliste", i.e. cargo & provisions list. (2 copies required for bulk cargoes).
"General-varefortegnelse", i.e. list of general cargo – 3 copies required.
3 Ship's Manifest.
3 Bills of Lading.
Custom Off. will accept tobacco & curio lists, also provision lists filled in on foreign forms, if all goods correctly stated.

PILOTAGE:

1. Vessels approaching from the sea and desiring a Pilot shall order the Pilot at 24 hours notice insofar as possible and confirm arrival at pilot station at 2 hours notice:
   (a) by telephone or telegram from ship to the pilot office concerned or sea pilot station over an official coastal radio station.
   (b) by telephone or telegram from broker/shipowner to the pilot office concerned or sea pilot station.
2. For direct connection between ships desiring Pilot and the pilot service, VHF-radio telephone Channel 16 (156.8 mHz) shall be used for calling and reply, and a VHF-radio telephone ship-to-ship Channel or harbour Channel shall be used for conversations.
   Ships not equipped with VHF-radio telephone may use the distress and calling frequency 2182 kHz for calling pilot vessel, but both the ship desiring Pilot and the pilot vessel shall in such cases immediately turn to ship-to-ship frequency. At such connections minimum transmission effect shall be used.
3. Vessels lying in port and desiring Pilot will order the Pilot from the nearest pilot office during its office hours and if possible at 4 hours notice.
4. Vessels approaching from the sea as well as vessels lying in port shall, when making an advance order, state the name and destination of the vessel and whether one or two Pilots are desired.
5. The Pilots will on the whole be despatched to the ships in accordance with the advance orders, and vessels are therefore requested to comply with the foregoing rules as far as possible in order to avoid having to wait for Pilot.
6. The international provisions for summoning Pilots by signal flags or blue lights, etc., are still in force but should in future be used as a supplement to the radio communications or as the sole communication in emergencies.
7. These provisions came into force on the 1st January 1971.

Description of pilot boat: white painted, teak wheelhouse,, 2 masts, "Los" on both sides of bow. Light and sound signals: international signal "G" with flag, sound or light. Exact area where pilot vessel situated when on station: "Rakke" sound and light buoy, 5 cables off. In poor weather Pilot will board vessels off "Ramsholmflu" light and bell buoy. If Pilots not available, pilot vessel will conduct vessels to safe anchorage.

Please note: The following temporary changes regarding the pilot service. From October 1st 1976 and until further notice the pilot station is keeping radio watch all days between hours 0900 to 2000 hrs. only. All vessels requiring Pilot to enter the Port of Larvik should advise their requirements and give their ETA's during said hours.

ANCHORAGE: Safe anchorages at end of fjord, West side. Masters should consult Pilots and/or charts before anchoring. Ample water and good holding ground for all sizes of vessels.

MAX. SIZE: Largest vessel berthed at Larvik Canal Quay, LOA 644 ft. 8 in., breadth 83 ft. 3 in., max. draft 32 ft. 6 in.

HEALTH: Advise Agents of any suspected disease or fever on board by radio or telephone before entering. Vessel will then anchor in anchorage and be boarded by state doctor. When vessel is healthy, Custom Officer will grant pratique.

RADIO: Tjome Radio LGT, Rogaland Radio LGQ.

TUGS: No tugs at Larvik. Tugs to be ordered via ship's Agents from Fredrikstad or Porsgrunn. If tugs required Agents should be given 12 to 24 hours notice. Tugs join vessel in fjord off harbour breakwater. Extra charges for use of tug's lines.

BERTHING:

Revquay West (Vester Revkai): Length 118 m. Depth alongside 9 m. Newest quay for general and miscellaneous cargo. New warehouse, measuring 1600 sq. m. Asphalted area outside measuring 10,000 sq. m. Railway track.

Adjacent to this quay is the roll-on/roll-off berth. Max. length vessels 140 m. Depth alongside 7 m.

Kanalquay (Kanalkaia): Kanalquay North – length 335 m. Depth. 10 m. Kanalquay West – length 120 m. Depth 6 m. Kanalquay South — length 90 m. Depth 5 m.

Facilities available at Kanalquay and Revquay West: Railway tracks, 3 portable electric cranes, capacity 6-15 tons, 3 mobile cranes, capacity 14-30 tons. Portable pneumatic grain discharging plant, capacity 85,000 tons. Warehouses measuring 4,000 sq. m.

Outdoor storage area: 20,000 sq. m.

East Pier (Ostre Brygge): Length 130 m. Depth 8 m. New Ferry quay with roll-on/roll-off facilities. Car park for 560 cars or 52 lorries/trailers 18 m.

West Pier (Vestre Brygge): Depth—east side 6 m. West side 7 m. Ferry quay with roll-on/roll-off facilities on both sides. Good parking. Passenger terminal. Customs.

Private Wharves; Treschow-Fitzoe Pulp Quays—West side: Length 50 m. Depth alongside 5 m. East side: Length 90 m. Depth alongside 6.3 m.

Norsk Soyamelfabrikks kai (Soy Meal Factory Quay). Shipping of Soy Meal. Length 50 m. Depth 3-11 m.

STEVEDORES: Gangs to be ordered before 1600 hrs. and cranes before 1500 hrs. for following day. During office hours 2 hours notice required.

MEDICAL: No advance notice required, unless in urgent medical cases and when ambulance needed. No particular inoculations required.

TANKERS: For larger oil-tankers for asphalt works, 8 in. connections required; for coasting vessels, 6 in. connections used. Fuel oil and diesel oil shipped in coastal vessels require 6 in. connections; kerosene, white spirit and gasoline, 4 in. connections. No slop tanks. 2 berths for tankers, 1 for larger vessels and 1 for coasters. Max. draft in both berths 32 ft. 6 ins.

DENSITY: Salt water, brackish at times.

FRESH WATER: Delivered by hose from wharf.

FUEL: Fuel oil, gas oil, diesel oil, delivery rate by tank lorry 20 t.p.h.

FIRE PRECAUTIONS: Any vessel discharging benzine must have city fireguard on watch. 30 m. clearance required to next vessel. Ships loading explosives require fireguards on watch on board.

GANGWAY/DECK WATCHMEN: Not compulsory, but recommended for larger overseas vessels.

OPENING/CLOSING HATCHES: Usually done by ship's crew.

CERTIFICATES: Vessels must have all usual International Certificates, no special certificates required.

CUSTOMS ALLOWANCES: Every crew member allowed one bottle wine or spirits, and 200 cigarettes out of bond for use in port. This allowance is for 10 days. After this period new tobacco allowance is granted, but no new spirit issue.

CARGO GEAR: No additional requirements.

IDENTIFICATION CARDS: Not required.

CONSULS: Danish, tel. 84040, French Vice-Consulate tel. 82 030, Swedish and Dutch Vice-Consulates tel. 82 090, Finnish Vice-Consulate tel. 81 000.

REPAIRS: Minor deck and engine repairs only.

REPATRIATION: Facilities for effecting crew changes and necessary repatriation by railway, continental ferry and by air.

AIRPORT: Distances from airport: Skien, regular service to Oslo 40 km. Torp, charter planes, 35 km. Fornebu, 130 km., world-wide service. Private airport open for small aircraft at Larvik.

TIME: Local time, GMT plus one hour. Permanent.

HOLIDAYS: New Years Day; Ash Thursday, Good Friday; Easter Monday; May 1st & 17th; Ascension Day; Whit Monday; Christmas Day; Boxing Day.

POLICE/AMBULANCE/FIRE: Tel. Police 82204, Ambulance 81234, Fire 81288.

TELEPHONES: Arrangements exist for placing telephones on board; charges 40 kr. for one week's hire plus cost of phone calls.

AUTHORITY: Port Manager, Havnefogden, Larvik Kommune.

LILLESAND: 58.15 N. 08.23 E.

DOCUMENTS:

Health Certificate.
Crew List.
Cargo List.
Manifest.
Passenger List.
Bill of Measurement.
Derat Certificate.

PILOTAGE: Ships arriving from South and West cable: Okso Pilot station, VHF Channel 16. Pilot to be taken on board at Okso Pilot station or if bad weather, inside Okso.

Ships arriving from East cable: Merdo pilot station, VHF Channel 16. Pilot to be taken on board at Torungen, or if bad weather, inside Merdo. Pilot boat is 45 ft. long and marked "Los".

ANCHORAGE: Tingsakerfjorden – depth 40 m.

MAX. SIZE: See "Berthing".

RADIO: Cable Agent giving ETA via Farsund or Tjome Radio.

TUGS: Normally join at Kristiansand. Tugs lines to be used.

BERTHING: The Kokkenesquay – Kokkeneskaia. Length 80 m. with free water at both ends. Depth 10 m. There is 1 crane with a maximum lifting capacity of 30 tons. Petroleum-coke and sand discharged by crane and grab about 60 t.p.h.

The Langquay – Langbrygga. Length 70 m. with free water at the deepest end, depth 10 m. reducing at inner to 2 m.

The Fosbaekquay – Fosbaekkaia. Messrs. H. Bjorum – Norfloat A/S quay. Length 50 m. with free water at both ends, depth 10 m.

STEVEDORES: Gangs to be ordered before 1600 hrs. for the following day and day before holidays 1320 hrs. During office hours 3 hours' notice required.

FRESH WATER: Delivery by hose from quay.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: May be performed by ship's crew.

CUSTOMS ALLOWANCES: 200 cigarettes or 250 gram of tobacco, 0.75 litre of spirits and 1 litre of wine.

IDENTIFICATION CARDS: Not required.

CONSULS: Denmark telephone 262.

REPAIRS: Some small repairs possible and electrical repairs.

DRY DOCKS: None.

AIRPORT: About 30 km. to airport.

HOLIDAYS: New Year's Eve no work after 1230 hrs.; New Year's Day no work; Maunday Thursday, Good Friday no work; Easter Eve no work after 1230 hrs.; Easter Sunday no work; Easter Monday, May 1st and 17th no work; Ascension Day no work; Whitsun Eve no work after 1230 hrs.; Whit Sunday 1st no work; Whit Sunday 2nd, Christmas Eve no work after 1230 hrs.; Christmas Day no work, and December 26th no work.

POLICE/AMBULANCE/FIRE: Police 170; Ambulance 18; Fire Brigade call the switchboard.

AGENT: Hansen & Narvesen, Lillesand, Norway. Liner and Travel Agent, stevedoring. Tel. 11 and 411. Cables: "Expeditionen". Telex 18981.

MAALOY: 61.55 N. 05.07 E. (See Plan)

DOCUMENTS:

- 2 Crew Lists.
- 2 Passenger Lists.
- 1 Health List.
- 3 Manifests.
- 1 Bill of Lading.
- Goods Lists including Stores, 3 if general cargo and 1 if goods or oil in bulk.

PILOTAGE: Harbour Pilot available, ordered from Harbour Office, tel. 51278. No coastal Pilots in harbour. Coastal Pilots ordered from Bergen through Maaloy Skipsekspedisjon, tel. 51303, and must be requested at least 24 hours before arrival.

ANCHORAGE: Good holding ground in about 17 fathoms of water 300 m. off-shore from middle of harbour.

MAX. SIZE: Entrance from South through main channel 33 ft. and entrance from North about 60 ft. The main quay 420 ft. long and from 24 to 36 ft. deep alongside. No cranes available at the dock.

RADIO: No radio or VHF stations. Nearest radio station, Aalesund Radio and Floro Radio.

TUGS: No tugs operate in Harbour.

CARGO HANDLING: Special berth equipped with a roll-on/roll-off berth in connection with quay 225 ft. long, from 18 to 36 ft. depth alongside.

STEVEDORES: From Maaloy Skipsekspedisjon.

MEDICAL: Nearest hospital Nordfijordeid Sykehus, 1 hour by car.

FRESH WATER: Available at main quay and delivered from a fresh-water line at quay.

FUEL: Bunkers available from Esso, Shell, B.P. and Mobil Oil. Three bunker barges available.

GANGWAY/DECK WATCHMEN: Available in the harbour.

OPENING/CLOSING HATCHES: Done by crew.

CUSTOMS ALLOWANCE: Tobacco: Wine/Spirits: 200 cigarettes or 100 gram tobacco. 1 bottle of spirit and 1 bottle of wine.

CONSULS: No consuls.

REPAIRS: Minor repairs only possible.

AIRPORT: Nearest airport Floro, 1 hour by boat, and Flesland Airport (Bergen) 8 hours night service by sea. Air route Bergen-Maaloy every day except holidays.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January; Easter Sunday; Easter Monday; Thursday and Friday before Easter; 1st May; 17th May; Whit Sunday and Whit Monday; Christmas Day and Boxing Day.

POLICE/AMBULANCE/FIRE: Police tel. 51-175; Fire and Ambulance contact telephone station.

TELEPHONES: Can be placed on board and cost same as on shore.

SERVICES: No tank cleaning services available. Compass adjusting.

SHORE LEAVE: No restrictions about shore leave.

AUTHORITY: Harbour Master.

MANDAL: 58.02 N. 07.29 E.

DOCUMENTS:

- Bill of Measurement.
- General Cargo List (two copies).
- Cargo and Provisions List (ship's stores).
- Derating Certificate.
- Maritime Declaration of Health.
- Tobacco list.

PILOTAGE: Pilot station on Oksoy lighthouse outside Kristiansand. Telephone 32834 via Kristiansand radio.

ANCHORAGE: Mannefjorden. Depth approx. 30 ft. Bankefjorden, shallow entrance with approx. depth 15 ft.

MAX. SIZE: Ship up to approx. 12,000 g.r.t. No tide problems. Oil carriers to installations outside main port area up to 20,000 tons.

HEALTH: Contact Agent for pratique.

RADIO: Farsund Radio or Kristiansand Radio.

TUGS: One small 200 h.p. tug available in harbour. Heavier tugs must be ordered from Kristiansand at 5 hours notice.

BERTHING: Mandal main harbour is Kleven, situated 1 km. East of Mandal town. There is also some kind of a harbour in Mandal River, running through town. River entrance is shallow, 12 ft. In South-easterly strong winds it can be impossible to go up the river. Kleven harbour is a good harbour in all weather conditions. There is 1 × 90 m. quay 30 ft. deep and 1 × 45 m. quay 17 ft. deep.

STEVEDORES: 6 hours notice to Agents to arrange gangs.

MEDICAL: No advance notice required. Hospital facilities available.

DENSITY: 1026.

FRESH WATER: Delivered by local firemen. Rate of delivery 20 t.p.h.

FUEL: At Oil installation inside Harbour limit.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Certificate of Nationality.

CUSTOMS ALLOWANCE: Tobacco: 200 gr. Tobacco or 200 cigarettes. Wine and/or Spirits: 2 litre alcohol for ship's Master, .75 litre for crew.

IDENTIFICATION CARDS: Not needed.

CONSULS: Sweden 62521; Finland 61288; Denmark 61799.

REPAIRS: All types of deck and engine repairs can be carried out.

DRY DOCKS: None.

AIRPORT: Kristiansand Airport at Kjevik. Distance from Mandal 64 km. Airport served by regular airlines.

TIME: GMT plus 1 hour.

HOLIDAYS: The only holidays that one cannot arrange cargo work Christmas Eve (after 1400 hrs.), Christmas Day, Easter Day, 1st May, 17th May (Independence Day). The rest of the year cargo work can be carried out day and night.

POLICE/AMBULANCE/FIRE: Police 61211; Ambulance 61113; Fire 61112.

TELEPHONES: Telephones available at quay.

SERVICES: No services for tank cleaning. Compass adjusting and all kinds of electronic repairs.

SHORE LEAVE: No restrictions.

AUTHORITY: Mandals Havnevesen.

AGENTS: Bessesen A/S, Rutebilstasjonen, Mandal, Bessesen, d62521-62511. After office hours: 62552 Director; 622d68, 61227 quayforeman.

MO-I-RANA: 66.19 N. 14.08 E.

PORT LIMITS: The vessel is considered to be an "arrived vessel" when within the Haukneset port lighthouse – about 2 nautical miles from the port.

DOCUMENTS:

- 1 Cargo List.
- 1 Stores List.
- 1 Sealing Certificate.
- 1 Health Certificate.
- 2 Crew Lists.
- 2 Passenger Lists.

(All Forms obtainable from Customs by clearance on board).

PILOTAGE: Asvaer pilot station 66° 17′ N. – 12° 09′ E. (lighthouse). Order preferably through Agent or direct to station 24 hours before arrival. 2 boats: L/K "Asvaer" and L/K "Asvaer II" both painted white, 2 yellow masts and yellow funnel. "LOS" painted in black on both sides. Radio (frequency 2182) and VHF Channel 16. Pilots embark at Asvaer Lighthouse. Pilots advise alternative place or anchorage if necessary. Pilot compulsory unless vessel ballasting for loading at another port in Norway.

ANCHORAGE: In the fjord at Utskarpen Bay to be advised by sea Pilot. Anchorage in the inner harbour to be advised by the harbour Pilot.

HEALTH: See Documents. No animals allowed on shore.

RADIO: From South; Rogaland Radio/LGQ, LGW, LGB. Within 24 hours off; Rorvik Radio/LGD. From North; Vadso/LGV or Hammerfest/LGI or Tromso/LGE or Bodoe Radios/LGP.

VHF: At harbour office call sign. "Mo port radio" Channel 16. At A/S Norsk Jernverks quay call sign. "Jernverks quay" Channel 16.

TUGS: Available and recommended for vessels above 13,000 d.w.t. 24 hours notice to be given. Ships' lines used.

BERTHING: Harbour Pilot recommended but not compulsory for small Vessels. Details given through Pilot/Harbour Pilot.

Koksverket Pier	37 ft. depth alongside
Town Pier	25 ft. depth alongside
Jernverket Pier (Steel)	26 ft. depth alongside
Andfiskaa Pier	23 ft. depth alongside

CARGO-HANDLING FACILITIES: The harbour has the following facilities for handling cargoes, Norsk Koksverk A/S pier depth 36 ft.; length 427 ft. and 295 ft., North and South side handling following cargoes: ore, coal, coke, tar, bensol, ammonia and oil.

A/S Norsk Jernverk Quay: handling ore, coke, steel products and general cargoes. Length of quay, 823 ft.; depth 25 ft. A/S Bleivassli Gruber Pier, length 115 ft.; depth 23 ft. Has equipment and elevator for handling pyrites – fast loading. The Town Quay (Harbour Board Quay), length 823 ft. and depth 18 to 26 ft., handling general cargoes of all kind, with up to 15-ton lifts.

STEVEDORES: Ordered by Agents preferably in office hours 0900–1600 hrs. Exact time for commencement of work to be arranged with Agent. By delays vessels to pay for waiting hours for workers if delay not reported. If such report after office hours, vessel to pay for 2 hours.

MEDICAL: If in need of doctor/dentist preferably inform Agent from sea if vessel stays only 1 day.

FRESH WATER: Available at all piers from shore installations.

FUEL: All types available.

GANGWAY/DECK WATCHMAN: Available but not compulsory.

OPENING/CLOSING HATCHES: Crew allowed to open/close.

CUSTOMS ALLOWANCES: Per 10 days in Norway per crew member – 200 cigarettes or 200 gr. tobacco and 2 packages cig. paper, and 1 bottle spirits.

CARGO GEAR: Winchmen from shore required acc. to local tariffs.

REPAIRS: Small damages can be repaired.

AIRPORT: 12 km. to local airport "Rana Airport" connection with Bodoe (North) twice per day and Trondheim (South) twice per day.

TIME: GMT plus hour permanent.

HOLIDAYS: New Year's Day; Thursday before Good Friday; Good Friday; Easter Monday; Labour Day; National Day (17th May); Ascension Day; Whit Monday; Christmas Day and Second Christmas Day. No work can be arranged on any of these days.

TELEPHONES: Accidents/hospital: 51233; Ambulance: 51510; Fire: 51222 and Police: 51122.

SHORE LEAVE: No restrictions.

AUTHORITY: Port Manager, Mo Havnevesen.

AGENT: L. A. Meyers Skipsekspedisjon, Chartering, Tramp & Liner Agents, Forwarding Agents, PO Box 216, N-8600, Mo-i Rana. Cables: "Meyership". Telex: 55166. Telephones: 50161/50163.

MOLDE: 62.44 N. 07.10 E.

DOCUMENTS:

Health Certificate.
Crew Lists.
Passenger List.
Dangerous Cargo List.
Ship's Register.

PILOTAGE: Telegraphic address "Alesund Radio". Address of pilot station "Rundo".

ANCHORAGE: A well-protected harbour. Depth from 15 to 20 fathoms. Tide rises about 6 ft.

RADIO: Alesund Radio.

TUGS: None.

BERTHING: Depths alongside quay 25 to 32 ft. LW.

A new port, 2 km. from the town to be opened in 1976. Two quays with roll-on/roll-off ramps. Depth alongside No. 1 – 5 m. and No. 2 – 12 m.

STEVEDORES: Available, ordered by Agents.

FRESH WATER: By shore installation.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Normally by crew.

IDENTIFICATION CARDS: Not required.

REPAIRS: Most repairs possible.

POLICE/AMBULANCE/FIRE: Police 51111; Ambulance 52011; Fire 51100.

AIRPORT: Aaro Airport, 4 km. from town.

AUTHORITY: Molde Havnevesen, Mold.

MONGSTAD: 60.49 N. 05.02 E.

OPERATORS: Oil refinery operated by Rafinor A/S & Co., Mongstad, which company is owned by Norsk Hydro A/S, Norsk Olje A/S and Den Norske Stats Oljeselskap A/S (Statoil).

DOCUMENTS:

3 copies Crew List.
1 copy Crew Effects Declaration.
2 copies Ships Stores Declaration.
1 copy Health Declaration.
1 Passenger List (if any).

IMCO standard forms in most cases required.

On ship's arrival the following documents must be available: Letter of Registry, Outward Clearance from last port of call, Deratting or Deratting Exemption Certificate, and Certificates of Insurance for Civil Liability for Oil Pollution Damage. Non-member registered ships of the International Convention on Civil Liability for Oil Pollution Damage, 1969, must after 30th June, 1976, carry a Certificate issued by Maritime Directorate, PO Box 8123, OSLO-Dep., Oslo, Norway. Before this date Certificates issued by Denmark, Sweden and U.K. covering non-Convention registered ships, will be recognised.

PILOTAGE: Compulsory. Vessels will be berthed/unberthed by pilots from Fedje Pilot station (Position 60° 51′ N., 04° 39′ E.). Contact pilots on VHF Channel 16, 2/3 hours notice required.

ANCHORAGE: North-west of refinery area. However, not well sheltered and holding ground not good. No anchorage for VLCC's.

MAX. SIZE: Draft limitation at Crude Jetty 72 ft.

HEALTH: International procedure followed to obtain pratique. In case of suspected disease or fever on board, the port authorities to be informed in advance.

RADIO: Cable Agent ETA, cash, bunkers, personnel, bonded stores, or other special requirement. For the refinery's guidance also cable flange dimensions on ships' headers, cargo quantities acceptable and order of loading, quantity of clean ballast and estimated time for discharge, size of cargo to be discharged and max. pumping rates, max. acceptable loading rates, quantity of tank washings and estimated time for discharge.

BERTHING:

Berth No. 1 (for crude) – draft limitation 72 ft., length 124 m. – min. depth 125 ft.

Berth No. 2 (products) – draft limitation 38 ft., length 69 m. – min. depth 59 ft.

Berth No. 3 (products/coasters) draft limitation 22 ft., length 36.5 m. – min. depth 25 ft.

Berth No. 4 (petrol coke) draft limitation 21 ft., length 50 m. – min. depth 24 ft.

CARGO HANDLING FACILITIES:

Berth No. 1 – 4 × 16 in. plus 2 × 16 in./10 in. Woodfield autoflowbooms.

Berth No. 2 – 4 × 10 in. plus 2 × 8 in. Autoflowbooms.

Berth No. 3 – 2 × 8 in. plus 2 × 6 in. Autoflowbooms.

TUGS: Two tugs of 2,650 b.h.p., each – bollard pull 36.5 tons situated at the refinery. Additional tugs available from Bergen.

BALLAST: Deballasting facilities available at jetty Nos. 2 and 3. Tankage capacity 27,000 cu. m. All ballast to be discharged ashore.

MEDICAL: Medical attention available. Hospital facilities at Bergen.

DENSITY: Salt water.

FRESH WATER: Available from the jetties. Cost per ton Nkr. 2.00.

FUEL: All grades available.

FIRE PRECAUTIONS: Special safety regulation forms given when berthed.

CONSULS: Consuls available at Bergen from the following countries: Austria; Belgium, Brazil, Denmark, Finland, France, Great Britain, Greece, Iceland, Italy, The Netherlands, Panama, Peru, Portugal, Spain, Sweden, Switzerland, Turkey, Uruguay, West Germany.

REPAIRS: Repair shop facilities available. Repair work must not be commenced without the agreement of the Installation Controller.

SURVEYORS: The following Classification Societies represented by Surveyor at Bergen: American Bureau of Shipping, Bureau Veritas, Det norske Veritas, Germanisher Lloyd, and Lloyd's Register of Shipping.

GANGWAY/DECK WATCHMEN: Available.

CUSTOMS ALLOWANCES: 200 cigarettes or 200 grammes tobacco and 1 bottle spirit or 2 bottles of wine, each man.

REPATRIATION: All facilities. Bus or Taxi transport to international airport.

AIRPORT: Flesland Airport, approx. 86 km. (54 miles) distance from Mongstad. Distance Bergen to Mongstad approx. 45 km.

TIME: Central European time i.e. GMT plus one hour.

POLICE/AMBULANCE/FIRE: Police telephone Knarvik 350504 and 350505. Ambulance and Fire fighting brigade available at the refinery.

TELEPHONES: Arrangements exist to place telephones on board. Otherwise telephones available at the jetties.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: Shore passes delivered on board on arrival.

PORT REGULATIONS: *Moorings:* Mixed moorings in the same direction are not allowed. Wire ropes shall have nylon "tails" not longer than 12 m. Nylon "tails" are available for purchase. Due to occasionally heavy swell in the fiord, particular attention is paid to the moorings.

AUTHORITY: Rafinor A/S & Co.

AGENT: Berle & Petersen A/S, N-5153 Fonnes (Norway), Telex: 42261 mogfs n, Tel.: Fonnes 186 (later this year to be changed to (47 5) 368523).

Head Office: Berle & Petersen A/S, P.O.B. 895, N-5001 Bergen. Telex: 42650 bepet n, Tel.: (47 5) 232010.

MOSJOEN: 65.51 N. 13.11 E.

DOCUMENTS:

Health Certificate.
Crew List.
Passenger List.
Ship's Register.
Cargo List.
Bonded Store List.

PILOTAGE: Pilot station at Asvaer, location 66° 15′ 9″ N. 12° 18′ 03″ E. Telegraphic address: Pilot Station, Asvaer. VHF Channel 16. Telegraph ETA 24 hours prior to arrival. Piloting around clock.

ANCHORAGES: Hellesvik. Location 66° 01′ 30″ N. 12° 54′ 20″ E.

RESTRICTIONS: No restrictions night entry. If draft above 33 ft. enter on high tide and commence discharging immediately.

HEALTH: Free pratique given automatically when "Q" flag not to be flown.

MEDICAL: Master to advise prior to arrival if medical attention required. Hospital facilities available.

RADIO: Rorvik Radio LGD.

TUGS: Stationed at Sandnessjoen. Have to be ordered through Agents 24 hours prior to arrival. Normally used by vessels above 20,000 d.w.t.

BERTHING: Draft above 33 ft. berthed only on high tide and commence discharging immediately. No restrictions on length and breadth.

Crane for bulk cargo (alumina), capacity 300 t.p.h. Mosjoen Aluminiumverk, private berth.

No other special facilities (roll-on/roll-off facilities may be constructed).

STEVEDORES: Ordered through Agents. No ETA to stevedores necessary.

DENSITY: Brackish in port.

FRESH WATER: Supplied from installations at berth.

FUEL: Gas oil, delivered by lorries.

GANGWAY/DECK WATCHMEN: Available, but not compulsory.

OPENING/CLOSING HATCHES: Performed by vessel's crew.

CUSTOMS ALLOWANCE: 1 bottle spirits, 200 cigarettes, 200 gr. tobacco.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: Minor repairs possible.

TIME: GMT plus 1 hour. No alterations during year.

HOLIDAYS: New Year's Day; Good Friday; Maunday Thursday; Easter Monday; Workers' Day (1st May); 17th May; Ascension Day; Whit Monday; Christmas Day; Boxing Day.

POLICE/AMBULANCE/FIRE: Fire 70222; First Aid 70800; Police 71611.

NAMSOS: 64.28 N. 11.30 E.

DOCUMENTS:

Crew list.
2 Passenger lists.
2 Health Certificates.
Manifests.
Ship's papers.

PILOTAGE: Sea pilot stationed at Namsos. Contact through Rorvik Radio. Pilot boat: white painted 46 ft. long. Usual signals. Pilot boards at 64.38′ N. 10.51′ E. Pilot can be ordered by ship's Agent.

ANCHORAGE: Good anchorage inside harbour.

MAX. SIZE: Vessels up to 15,000 d.w.t. have entered harbour. 3 small oil berths with depth 18 ft. L.W.
HEALTH: Normal Norwegian regulations.
RADIO: Rorvik Radio. No radar or VHF service in the harbour.
TUGS: No tugs in Namsos. 1 tug stationed at Bangsund and can be hired.
STEVEDORES: Notify day before arrival to arrange gangs.
TANKERS: 3 tanker berths 18 ft. alongside L.W.
DENSITY: Average density 1020 in Spring, and in Summer 1015.
FRESH WATER: Available by hose. Capacity 10-15 t.p.h.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Stevedores operate hatches.
CERTIFICATES: Usual international certificates.
IDENTIFICATION CARDS: Not needed.
CONSULS: None.
REPAIRS: Small repairs available.
REPATRIATION: Organized by seamen's office.
AIRPORT: 4 km. from town. Regular service twice a day South and North.
TIME: European standard time. GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Police 72151; Ambulance 72500; Fire 72000.
TELEPHONES: Can be placed on board.
SHORE LEAVE: Crew allowed ashore.
DELAYS: None expected.
AUTHORITY: Namsos Havnevesen Boks.

NARVIK: 68.26 N. 17.25 E. (See Plan)

DOCUMENTS:

Health Declaration in Norwegian form (if not available another form is possible).
6 Crew Lists.
1 Provision List.
1 Private Customs List.
Passenger List.

PILOTAGE: Tranoy Pilot station. Position 68.11 N. 15.34 E. Pilots request 24 hours notice. Cable address: Tranoy Pilot station. Before arrival pilot station Pilots should be called on VHF Channel 16.

Distance from Tranoy to Narvik is 46 miles. The Harbour Pilot will board and assist during berthing.

ANCHORAGE: Narvik Harbour. Pilot will advise anchorage.
RESTRICTIONS: No restrictions on night entry.
RADIO: Cable Agents giving ETA, draft and cash required. Radio station: Rogaland Radio/LGB but other stations can be used.
TUGS: Must be employed for tankers. 2 tugs available, capable of assisting vessels up to 250,000 d.w.t.
HEALTH: Free pratique, otherwise see "Documents".
BERTHING: Max. depth alongside 13.5 m. at LWOST, max. draft on sailing 13 m. A deeper sailing draft may be permitted if tide and weather conditions are favourable but the Master will be liable for any damage caused by a vessel with draft over 13 m.

2 boom-type shiploaders are available, on each side of the pier. If 2 vessels are loading simultaneously, 1 on each side of the pier, then only 1 loader may be used by each vessel. The designed capacity of each loader is 4,500 t.p.h. but average capacity of each loader is 2,000/3,000 t.p.h. depending on quality and kind of ore to be loaded.

Maximum outreach from fender line is 15 m. The height from the water to the top of the vessel's coaming must not exceed 13 m. (Pier 3) and 11 m. (Pier 4).

The length of the ore pier is 250 m. on the outside (No. 3) and 220 m. on the inside (No. 4).

The shiploaders are able to travel over a distance of 145 m. so larger vessels (65,000 tons d.w.t.) may have to shift during loading operations. The length of the vessel from the bow (or bulbous bow) to the aftermost loading point must not exceed 202 m.

The limit on beam is 37-38 m. for ore/bulk carriers and 39-40 m. for OBO vessels (approx.)

A stowage plan is to be handed to the Agent and foreman on arrival, stating the quantity in metric tons and loading rotation of the hatches, also the estimated draft on sailing.

Weighing: Electronic conveyor weighing with an average accuracy better than ±0.15%.

Fagerneskaien: Situated in the Southern part of the harbour, may be used by iron ore vessels during repairs, etc. Length of quay 230 m. Depth alongside at LW 15 m.

STEVEDORES: Ordered by Agent. Not necessary to contact stevedores.

Working hours: Ordinary working hours 24 running hours, except Saturday 2200 to Sunday 0600 hrs.

Loading does not take place on the following holidays:

December 24th	1300 hrs. – December 26th	2200 hrs.
December 31st	1300 hrs. – January 1st	2200 hrs.
Maundy Thursday	1400 hrs. – Easter Monday	2200 hrs.
Whitsun Eve	1400 hrs. – Whit-Monday	2200 hrs.
April 30th	2200 hrs. – May 1st	2200 hrs.
May 16th	2200 hrs. – May 17th	2200 hrs.

DENSITY: 1020.
FRESH WATER: Ore berth has supply of fresh water. Otherwise delivery by tugs.
FUEL: Only clean oil (diesel) and lubricating oil available.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: May be handled by ship's crew.
CUSTOMS ALLOWANCES: 200 cigarettes or 250 grams tobacco and 0.75 litre spirit or 2 bottles of wine. Must be declared on Customs list together with radios, tape recorders, binoculars, etc.
IDENTIFICATION CARDS: Not required.
CONSULS: Swedish, Danish, English, West German.
REPAIRS: Only small deck and engine repairs possible.
DRY DOCKS: None.
AIRPORT: Bardujoss 3 hours bus trip from the port. South-bound planes twice a day.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year's Day; May 1st; May 17th; Easter; Christmas Day; December 26th.
POLICE/AMBULANCE/FIRE: Police 41060; Hospital 44044; immediate help 4300 (only at night time); Ambulance 43600; Fire 41122.
LAUNCHES: The Agent will supply a time table and tickets on arrival. If a launch is required, the "B" flag or red light should be displayed from the signal mast.
TELEPHONE: Local and long-distance calls can be ordered via Harstad Radio on VHF (Channel 16).

Vessels alongside the piers may hire a telephone but continuous telephone watch should then be kept on board.

SHORE LEAVE: Allowed.
DEVELOPMENTS: A new quay is now under construction at Narvik for completion early in 1977.

The quay will be 208 m. long and will have a water depth of 27.5 m. which will allow tonnages of about 350,000–400,000 d.w.t. In the first stage only 1 ships loader will be built but room will be left for an additional one. The loading capacity will be 11,000 tons of ore or 7,500 tons of pellets per hour.

Vessels of up to 150,000 tons will be loaded without shifting the vessel. Larger vessels will have to be shifted alongside during loading.

AUTHORITY: Harbour Master, Narvik Havnevesen.
AGENT: E. F. Bjornstad, PO Box 147, Narvik, Norway. Tel. 41100. Cables Bjornstad. Telex 64095. Chartering, Tramp & Line Agents. Travel Agents.

OSLO: 59.54 N. 10.43 E. (See Plan)

DOCUMENTS:

Maritime Declaration of Health.
Sealing Certificate.
2 Crew Lists.
2 Passenger Lists.
2 Lists Crew Personal Effects.
Provisions List.
3 Cargo Manifests.
Certificate of Tonnage.
Dangerous Cargo List.

PILOTAGE: Compulsory. Pilot boards at Faerder Lighthouse, 50 miles from docks. Give 6 hours notice by R/T 2182 kHz or VHF Channel 16 to "Faerder Pilot".
ANCHORAGE: Good sheltered anchorage in Western Harbour Basin, depths up to 20 m.
RESTRICTIONS: Vessels may enter at any time. No tide or current.
MAX. SIZE: Vessels up to 34 ft. draft may berth at Filipstad Quay and Sjursoya Quay.

Tankers: Up to 36 ft. draft at Oslo, or 38 ft. draft at Fagerstrand.

HEALTH: International procedure followed to obtain pratique. In case of suspected disease or fever on board, inform the Harbour Master's office in advance. When arriving from a Norwegian port, pratique is automatic.
RADIO: Communicate through Oslo Radio, call sign LGO. Harbour Master's Office equipped with VHF, Channel 16.
TUGS: Sufficient tugs available for all requirements.
BERTHING: Instructions given from Harbour Master. Masters of ships are requested to send their ETA to the Harbour Master's Office through Oslo Havne radio, VHF Channel 16.

Filipstad Quay: up to 11 m. depth alongside.
Sjursoya Quays: up to 11 m. depth alongside.
Vippetangen: up to 10 m. depth at Pier No. 1.
Pipervika: up to 8 m. depth at Akershus Pier.
Bjorvika: up to 7.30 m. depth at Lang Quay.
Bispevika: up to 11 m. depth at Sorenga Pier.
Gronlia: up to 8.50 m. depth alongside.
Kongshavn Quays: up to 6 m. depth alongside.
Bekkelaget: up to 10.80 m. depth alongside.

BULK CARGO FACILITIES: Container traffic handled at Filipstad, Bekkelaget and Sjursoya North.

Sorenga Pier equipped for palletised cargo handling and containers, ro/ro.

8 new berths for roll-on/roll-off traffic. Cranes for ISO-container and other container handling equipment, quay cranes and mobile cranes of 30 tons capacity.

Sjursoya North: cement, phosphate, grains, Molasses and containers.
Sjursoya South: gasoline and oil, propane and gas.
Bekkelaget North: molasses, general cargo and oil.
Sorenga: coal, coke, sulphur, china clay and leca.
Pier 3: grains and sugar.
Kongshavn: building material, coal and phosphate.

STEVEDORES: Arranged by Agents. Working hours 0700-1600 hrs., Saturdays 0700-1300 hrs.
TANKERS: Also see Slagen.

Oslo: Oil pier at Sjursoya, depth alongside 12 m. A tug required to stand by during discharge.

Fagerstrand: Terminal operated by Norske Braendselolje A/S situated in Oslo fjord, 12 miles S. of Oslo. 1 berth for tankers up to 30 ft. draft.

1 berth for tankers up to 38 ft. draft.

MEDICAL: All facilities available. Masters to advise by radio prior to arrival if medical attendance required on board.
DENSITY: Salt water, 1025.
FRESH WATER Available by pipeline from all quays.
FUEL: All grades available, ex-wharf at many quays. Can be delivered by barge.
FIRE PRECAUTIONS: 2 boats fully equipped with fire-fighting equipment.
DEVELOPMENTS: Extensions of the land areas in the port by approx. 200,000 sq. m. Quay extensions of 1,000 m. Storage halls in hills, 100,000 sq. m. or more, sheds and service buildings.
CUSTOMS ALLOWANCES: 200 cigarettes allowed weekly, 1 bottle spirit weekly, for each man.
CARGO GEAR: International Safety Regulations to be observed.
IDENTIFICATION CARDS: Not required.
CONSULS: Following countries are represented at Oslo:

Austria
Bangladesh
Benin
Bolivia
Canada
Chile
Colombia
Costa Rica
Cyprus
Denmark
Dominican Republic
Ecuador
Ethiopia
Finland
France
Great Britain
Greece
Guatemala
Haiti
Honduras
Indonesia
Ireland
Ivory Coast
Jordan
Korea
Lebanon
Lesotho
Liberia
Lichenstein
Luxembourg
Monaco
Morocco
Nicaragua
Pakistan
Panama
Paraguay
Peru
Philippines
Portugal
Salvador
Soviet Union
South Africa
Spain
Sweden
Thailand
Tunisia
Uruguay
Venezuela

REPAIRS: All types of hull and machinery repairs can be effected.
DRY DOCKS: 1 ship repair yard managing a total of 3 floating docks with lifting capacity of up to 19,000 tons, max. length 665 ft.

1 graving dock; length 564 ft. depth 23 ft.

REPATRIATION: All facilities available without restrictions.
AIRPORT: Fornebu Airport situated 8 km. from city centre. Regular services to Europe and U.S.A.
TIME: Local time, GMT plus 1 hour all year round.
HOLIDAYS: January 1st; Good Thursday; Good Friday; Easter Monday; May 1st; May 17th; Whit Monday; Christmas Day; Boxing Day.

No cargo work normally on Saturday, Sunday and Holidays.

POLICE/FIRE/AMBULANCE: Police, tel.: 33.12.90; Fire, tel.: 42.99.00; Ambulance, tel.: 20.10.90.
TELEPHONES: Can be placed on board vessels at most quays.
SHORE LEAVE: No restrictions.
AUTHORITY: Port Director, Oslo Havnevesen.

RISOR: 58.43 N. 09.14 E.

DOCUMENTS:

3 Crew Lists.
3 Customs Lists.
Ship's Register.
Bill of Lading.

PILOTAGE: VHF Channel 16. 45 ft. long boat "Los" on both sides. Will be instructed by Pilot over VHF.
ANCHORAGE: In 15 fathoms depth.
MAX. SIZE: 10,000 d.w.t., draft 28 ft.
RADIO: Farsund and Tjomoy Radio. VHF Channel 16. No radar.
TUGS: No tugs for berthing.
STEVEDORES: Available 24 hours notice of ETA required.
FRESH WATER: Available by pipe-line at berth.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: May be performed by ship's crew.
CUSTOMS ALLOWANCE: Tobacco: Wine/Spirits: 200 cigarettes per crew member for 10 days. 3 bottles spirit for ship's Master only for 10 days.
IDENTIFICATION CARDS: Not needed.
CONSULS: French and Swedish.
REPAIRS: No shipyard.
AIRPORT: 10 miles; every day service.
TIME: GMT plus 1 hour.
HOLIDAYS: Work can be arranged by 100% overtime.
TELEPHONES: Can be arranged on board.
AUTHORITY: Harbour Master, Risor Havnekontor.

SARPSBORG: 59.17 N. 11.07 E.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
1 Health Certificate.
3 Manifests.
1 Bill/Lading.
2 Tobacco/spirit Lists.

PILOTAGE: Pilot ordered by Faerder Losstasjon or Herfol Losstasjon via Tjome Radio. Harbour office can be contacted by VHF.
ANCHORAGE: Between Struten Light and Stromtangen Light.
MAX. SIZE: 24 ft. draft.
HEALTH: No particular action necessary, but Agent to be informed.
RADIO: Tjome Radio.
TUGS: Small harbour tug available.
STEVEDORES: Ordered through Agent.
MEDICAL: If medical attention necessary Agent must be informed in advance.
FRESH WATER: Only at Alvim Kai, average 15 t.p.h.
FUEL: Fuel obtained only with tank cars.
GANGWAY/DECK WATCHMEN: No gangways from shore. Watchman can be obtained.
OPENING/CLOSING HATCHES: Carried out by crew.
CUSTOMS ALLOWANCES: 100 gr. tobacco or 200 cigarettes per crew member. Wine 1 litre per member or 1 bottle of spirit.
IDENTIFICATION CARDS: Have to be used for Melloes Quai only.
CONSULS: Denmark, Finland, Iceland, Sweden, Greece, all have vice-consulates.
REPAIRS: Deck and engine repairs possible.
DRY DOCKS: One for 3,100 tons d.w.t.
REPATRIATION: No facilities.
AIPORT: Fornebu Airport 110 km. from Sarpsborg. Served by regular airlines.
TIME: GMT plus 1 hour.
HOLIDAYS: 1st January; 1st May; 17th May; 25th/26th December. No work on these days.
POLICE/AMBULANCE/FIRE: Police 52000; Ambulance 52040; Fire 51234.
TELEPHONES: No arrangements exist for placing telephones on board.
SHORE LEAVE: No restriction.
DEVELOPMENTS: A roll-on/roll-off berth is to be built to handle vessels of up to 6,000 tons gross. Depth alongside 28 ft. Vessels will moor alongside the old Alvim pier enabling them to work through the side doors and stern doors.
AUTHORITY: Harbour Master, Sarpsborg Havnevesen.
AGENTS: N. K. Witnes A/S., Box 540, N–1701 Sarpsborg, Norway. Telex 16526. Wship n, tel. 53637, AO 54518, 55995.

SAUDA: 59.40 N. 06.22 E.

DOCUMENTS:

Health Certificate.
Crew List.
Derating Certificate.
Ship's Register.

PILOTAGE: Skudefjorden Pilot Station, tel. 047-58337 (or Pilot boat "Skudefjord" on VHF). Kvitsoy, position 59° 05′ N., 05° 20′ E.
ANCHORAGES: Safe anchorages everywhere in Sauda Harbour area.
RESTRICTIONS: No restrictions night entry – but sea Pilots usually refuse to take in vessels over 10,000 d.w.t. between 1800 hrs. and 0600 hrs. during Winter time, November-January.
SIZE: Draft 30 ft. – but vessels over 30 ft. are allowed to get alongside at owner's own risk. Length no restriction. Breadth, 75 ft.
RADIO: Cable Agents giving ETA, draft and cash requirement via Rogaland Radio. No VHF station at Sauda.
TUGS: Not necessary.
BERTHING: May take place at any time provided quay available.

(1) Import Quay: 250 m. long. 2 unloading towers with a capacity of about 3,500 tons ore per day.

(2) Export Quay: 115 m. long. 2 loading cranes with a capacity of about 1,600 tons ferro alloys per day.

STEVEDORES: Ordered by Agents. Normal working hours 0700–2300 hrs. and on Saturday 0700–1200 hrs.
MEDICAL: Masters to advise by radio prior arrival if medical attendance required aboard. Modern hospital.
DENSITY: Brackish in port area, average salinity 2.39%.
FRESH WATER: Good fresh water available, delivery irrespective of quantity.
FUEL: No fuel available at Sauda -must be ordered from Stavanger.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Crew allowed open and close.
CERTIFICATES: Registered Tonnage Certificate required.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per crew member (Captain double up). Wine/Spirit, 3 bottles for Captain and 1 bottle either spirit or wine for each crew member.
CARGO GEAR: No additional requirement.
IDENTIFICATION CARDS: Admittance cards to be filled in to pass the gate.
CONSULS: No consulate at Sauda. Nearest in Stavanger.
REPAIRS: Minor repairs possible.
DRY DOCKS: No dry dock at Sauda. Nearest in Stavanger and Haugesund.
REPATRIATION: Any repatriation may take place.
AIRPORT: Stavanger and Haugesund.
TIME: GMT. plus 1 hour.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Labour Day (May 1st); National Day (May 17th); Ascension Day; Whit Monday; Christmas Day; Second Christmas Day (December 26th) (no work on these days).
POLICE/AMBULANCE/FIRE: Police 52300; Ambulance 52811; Fire 52200.
TELEPHONE: If wanted, telephone may be placed on board (apparatus No. 52163) free of charge.
REGULATIONS: Strictly prohibited throw wastes or garbage into sea within port area.

DELAYS: All vessels loaded/unloaded in turn -very seldom any congestion in port.

AGENT: Electric Furnace Products Co. Ltd., 4201 Sauda, Norway. Tel. 52561 or 52570. Telegram "Saudecia". Telex 33166 EFPCo N.

SKIEN (incl. Menstad): 59.12 N. 09.38 E.

DOCUMENTS:

Clearance documents, forms obtainable from Custom Officers on arrival.
Deratisation Certificate.
Bill of Lading.
Manifests.
2 Crew lists.
Ship's Register.

PILOTAGE: Ship's Agent gives ETA pilot station 24 hours before arrival and direct to Pilots 2 hours before arrival. Telegraphic address: Pilot station, Langesund. VHF Channel 16 to be used when contacting Pilots. Pilot boards at Steingrunnen light buoy, Langesund bay, 58.55 N. 09.44 E. Flag, sound and morse signal "G". Pilotage compulsory for all foreign vessels but dispensation can be obtained for smaller Scandinavian vessels.

BRIDGES: On passage from sea, vessels pass Porsgrunn where there is a lifting bridge with breadth 30 m. Signals for passing bridge inward: 1 long and 2 short sound signals. Outward signals, 1 long and 1 short sound. There is also a bridge at Brevik: Max. height 45 m.

TUGS: One tug available.

BERTHING: Between Porsgrunn and Skien, Norsk Hydro have loading place, Menstad, for vessels up to 425 ft. length and max. draft 18 ft. 06 in.Between Menstad and Skien Grain Silo for vessels with max. length 425 ft. and max. draft 18 ft. 06 in. At Skien vessel's length must not exceed 335 ft. and max. draft 18 ft. 06 in.

DENSITY: At Menstad and Skien practically fresh water.

STEVEDORES: Ordered by Agents.

FRESH WATER: Obtainable.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

RADIO: Tjome Radio/LGT or Farsund Radio/LGZ.

OPENING/CLOSING HATCHES: By crew or stevedores.

CUSTOMS ALLOWANCES: 400 cigarettes and 4 bottles spirit for the Master. 200 cigarettes and half a bottle spirit for each crew member.

CONSULS: Belgium, Holland, Sweden, Germany, Finland.

REPAIRS: All repairs possible. Dry dock: Lifting capacity: 2,000 tons. Radar/radio services can be arranged through Agents.

MEDICAL: All medical assistance to be arranged via Agents.

TIME: GMT plus 1 hour. Permanent.

HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Eve (half day); Easter Monday; Labour Day (1st May); Ascension Day; National Holiday (17th May); Whit Monday; Christmas Eve (half day); Christmas Day; (26th December), New Year's Eve (half day).

REPATRIATION: Facilities exist for effecting crew changes and repatriation.

RESTRICTIONS: No restrictions on night entry for vessels of above mentioned sizes.

AIRPORT: International at Oslo and Skien airport.

AGENT: Nils P. Hoyer & Son A/S., Skistredet 10, PO Box 60, 3701 Skien, Norway. Office tel. 21020. Telex 11435. Cables "Hoyership". After office hours: Mr N. P. Hoyer 35502.

SLAGEN: 59.20 N. 10.31 E. (See Plan)

Oil refinery pier operated by A/S Norske Esso, Norge.

DOCUMENTS:

Four Crew Lists.
Manifest of Crew Personal Effects.
Stores List.
Cargo Papers.
Bill of Health.
Ship's Register.

PILOTAGE: All foreign ships must have Pilot. Pilot obtainable at Store Ferder, East. Boats are white with name "Los". Deep water available and no special anchorage place if waiting for Pilot. Call Pilot at least 2 hours in advance by VHF Channel 16 or radio telephone.

ANCHORAGE: N.N.W. of pier head. Particulars regarding anchorage will be given by Pilot.

MAX. SIZE: Tankers up to 350 m. length and 66 ft. draft can be berthed.

HEALTH: Clearance is effected on arrival. International procedure followed to obtain pratique. In case suspected disease or fever on board inform port authorities in advance.

RADIO: Cable Agent ETA, cash, bunkers, personnel, bonded stores, or other special requirements. Radio telephone contact should be established with Marine Office on VHF or via Tjome Radio. Call name Marine Office "Slagen Havne Radio" on VHF.

TUGS: Are available up to 3,200 i.h.p. Tankers over 20,000 d.w.t. required to have tug standing by throughout discharging operations. The charge for standby tug is to owner's account.

BERTHING: The East side of the pier (crude side) is used for loading and discharging. The West side (product side) is used for loading products only. Berth No. 1. Shore based gangway for use on VLCC's.

Berth No. 1 and crude berth – max. length 350 m., max. draft 66 ft.
Berth No. 2 max. length 192 m., max. draft 34 ft.
Berth No. 3 for coasters and barges.

HOSES: Crude oil berth: Four 12 in. lines, max. pressure 200 psig.

Berth No. 1:	Two	10 in.lines for	dirty oils
	Two	10 in. ,, ,,	clean products
	Two	6 in. ,, ,,	fuel
	One	4 in. ,, ,,	LPG
	One	3 in. ,, ,,	,,
Berth No. 2:	One	12 in.line for	clean products
	Two	8 in. ,, ,,	,, ,,
	One	10 in.line for	dirty products
	One	6 in ,, ,,	,, ,,

BALLAST: Shore ballast capacity 100,000 bbls. All ballast to be discharged ashore.

POLLUTION: A submersible oil boom has been installed enclosing the oil pier. Normally, the boom rests on the sea-bed, but when needed it will be raised to the surface using compressed air.

The oil boom and its system of anchorage will be damaged by vessels' anchors. In order to ensure that the oil boom is operable at all times, and to avoid expensive repairs, which will be charged to the ship responsible for the damage, great care should be taken in connection with manoeuvres along the Slagen pier, which will require the use of anchors.

The drawing of the pier shows the position of the oil boom and the anchorage system. Except for emergency situations, anchors should not be used within the shaded area.

All manoeuvres to and from berths should be discussed with the Harbour Office (Slagen Harbour Radio, Channel 14). The Harbour Office will give you information regarding current strength and setting.

Approach to Berth 2, and Berth 3 if Berth 2 is not occupied, is facilitated by the fendered sliding front.

MEDICAL: Medical attention and hospital facilities available.

DENSITY: Occasionally brackish.

FRESH WATER: Available from pier.

FUEL: All grades available.

FIRE PRECAUTIONS: Special safety regulation forms given when berthed.

GANGWAY/DECK WATCHMEN: Oil Pollution/Safety Inspector placed on board all vessels over 20,000 d.w.t.

CUSTOMS ALLOWANCE: 200 cigarettes/or 200 grammes tobacco and one bottle spirits for each man.

IDENTIFICATION CARDS: Gate pass delivered to ship when berthed.

CONSULS: Denmark, Finland, France, Great Britain, Netherlands, Spain, and Sweden have representatives in Tonsberg. W. German consul in Sandefjord. All countries represented in Oslo.

REPAIRS: Repair shops facilities ashore. Tankers alongside pier must not effect repairs to main engine which should be in constant readiness.

DRY DOCKS: Available at Sandefjord about 35 miles from Slagen.

REPATRIATION: Changes of crew are available. Transportation by train and plane from Oslo (about 100 km. from Slagen), passenger lines from Oslo. Hotel accommodation available at Tonsberg (10 km. from Slagen).

TIME: GMT plus 1 hour.

HOLIDAYS: New Year's Day; Maunday Thursday; Good Friday; Easter Monday; Labour Day (1st May) 17th May; Ascension Day; Whit Sunday and Whit Monday; Christmas 25th and 26th: Discharging/loading all days.

POLICE/AMBULANCE/FIRE: Police Tonsberg 13355; Ambulance/Fire local at the refinery.

TELEPHONES: Available at berth.

SERVICES: Tanker cleaning services available at Horten, about 15 miles from Slagen.

GENERAL: Ratguards are compulsory. Transportation of alcohol through refinery is prohibited.

SHORE LEAVE: Crew members allowed to go ashore.

AGENT: Sev. Dahl A/S, Storgt 15, PO Box 128, 3101 Tonsberg, Ship and insurance brokers, Lloyd's Agent, Chartering, sale and purchase of tankers and motor ships. Tel. 14027 – 14028 – 14432 – 14194. Telex 11557, "Sdahl" Telegram: "Severin" Tonsberg.

STAVANGER: 58.58 N. 05.44 E. (See Plan)

DOCUMENTS:

Declaration of Health, 1 copy.
List of Goods, including stores, 1 copy.
Crews Lists of Goods liable to duty, 1 copy.
List of Goods, 2 copies for each port of discharge. All Bills of Lading to be entered with marks, numbers, weight and quantity.
General List of Goods, one copy.
A form for entering ports of call where discharging will take place.

PILOTAGE: Vessels approaching from sea and desiring a Pilot should order at least 24 hours notice in so far as possible and confirm arrival at Pilot station at 2 hours notice. Advance order can be sent in following manners:

(a) From ships at sea over radio direct to sea Pilot watch (calling frequency 2182 kc/s, from 2 minutes past until 10 minutes past each full hour, or over VHF radio-telephone calling, frequency 156.80 mc/s; Channel 16).

(b) From ships at sea over coastal radio station to Pilot station or Pilot office.

(c) From broker or shipowner over telephone to sea Pilot station or to any Pilot office which will immediately convey report to sea Pilot station.

Vessels lying in port and desiring Pilot will order Pilot from nearest Pilot office during its office hours and if possible at 4 hours notice.

Vessels approaching from sea as well as vessels lying in port shall when making an advance order state name and destination of vessel and whether 1 or 2 Pilots are desired.

Pilot will be despatched to ships in accordance with advance orders, and vessels are therefore requested to comply with foregoing rules as far as possible in order to avoid having to wait for Pilot.

International provisions for summoning Pilots by signal flags or blue lights, etc., are still in force, but should in future be used as a supplement to radio communications or as sole communication in emergencies.

Pilots are taken on board at:

A. Feistein Lighthouse, 19 miles South of Stavanger, or in bad weather 6 miles North of lighthouse under the lee of Rott.

B. Skudefjorden, 18 miles N.W. of Stavanger. In bad weather under the lee of Karmoy or Kvitsoy, as weather permits.

Pilot boats are stationed at Tananger and Skudesneshavn. No boats are out cruising.

RADAR/VHF: Radar service for inner harbour. At Kvitsoy Pilot station radar service may be obtained over VHF Channel 16.

ANCHORAGE: Found in the Byfjord, 3 nautical miles North of Stavanger. Harbour pilots recommended when anchoring.

MAX. SIZE: Largest depth alongside goods and passenger quays is 30 ft. Depth alongside oil refinery 16.5 m. Max. draft for tankers, 48 ft.

TUGS: Normally not used.

BERTHING: The coasting and the foreign trade is located in the Western harbour, comprising the 2 main quays, namely the Skagen Quay and the Strand Quay. These quays measure 1,600 m. with depths alongside 24 to 30 ft.

The quays are equipped with one 6-ton crane and eight 3-ton cranes. A floating crane with a lifting capacity of 65 tons available.

Grain: Rogaland Felleskjop: Capacity for storing 72,000 tons quay length 190 m., depth alongside 48 ft. Discharging capacity 200 t.p.h. Stavanger Havnesilo: Storing capacity 140,000 tons, quay length 170 m., depth alongside 51 ft. Discharging capacity 500 t.p.h.

Roll-on/roll-off: Traffic is offered by a ferry berth constructed for ships up to 5,000 g.r.t., depth alongside 26 ft.

Offshore oil-exploration bases: Aker-Norsco A/S at Risavik, Tananger North Sea Exploration Services A/S, Dusavik.

STEVEDORES: No particular ETA advices required.

MEDICAL: Agents should get advance notice to secure speedy service. Hospital facilities available.

TANKERS: Discharge at Sola refinery terminal where there are 3 berths, depth alongside up to 16.5 m. It is intended to enlarge these facilities to accommodate 200,000 d.w.t. vessels with restricted draft.

Esso Norske: 3 nautical miles South of central harbour, depth alongside 45 ft.

Norske Shell A/S: 14 nautical miles S.W. of central harbour, depth alongside 38 ft.

Norske Braendselolje A/S: 7 nautical miles South of the central harbour.

Texaco Oil: 1 nautical mile from central harbour, depth alongside 25 ft.

A/S Kulimport: Coal and coke. Length of wharf 116 m., depth alongside 27 ft.

DENSITY: 1025, no change in relation to state of tide.

FRESH WATER: Delivered from quay or from water boat.

FUEL: Normal grades available without advance notice.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Usually carried out by crew.

CUSTOMS ALLOWANCE: Tobacco: 20 cigarettes per day. Wine and/or Spirit: 2 bottles of wine or 1 bottle of brandy.

CONSULS: Germany, C. Middelthon, Tel. 21.040; Denmark, Leifbuch Hansen, Tel. 27.575; U.K. Colin W. Peck, Tel. 23.652; Sweden, Charles R. Bergensen, Tel. 27.500.

REPAIRS: All kinds of repairs available.

DRY DOCKS: One, 545 by 75 by 24 ft. Marine slipway up to 1,500 d.w.t.

AIRPORT: 10 km. from port. Airlines to Continent, U.S.A.

TIMES: GMT plus 1 hour. No alterations during year.

HOLIDAYS: 1st January; Maunday Thursday; Good Friday; Easter Monday; 1st May; 17th May; Whit Monday; Christmas Day and Boxing Day.

POLICE/AMBULANCE/FIRE: Police Tel. 31.520; Ambulance 21.500; Fire 22111.

TELEPHONES: There are arrangements for placing telephones on board.

SHORE LEAVE: No restrictions.

AUTHORITY: Stavanger Havnevesen.

AGENT: C. Middelthon's Dampskibsexpedition, Skansegt. 13–15, POB 27, 4001 Stavanger. Tel. 21040. After office hours: 24936; 32541. Telex: 33034 "Cmdex".

SUNNDALSORA: 62.41 N. 08.36 E.

DOCUMENTS:

Crew List.
Passenger List.
Health Certificate.
Ship's Manifest, and one manifest with list of provisions.

PILOTAGE: Radio-telephone to Pilot station at "Grip" in good time before arrival.

ANCHORAGES: Poor conditions in "Sunndalsfjord".

MAX. SIZE: Up to 25,000 tons deadweight.

HEALTH: No special requirements.

RADIO: Aalesund Radio; Kristiansund Radio.

TUGS: Not available and not required.

BERTHING: Notice should be given to Aardal & Sunndal Verk, tel. 91551, in good time before arrival.

Length of quay 1,007 ft. Depth of water alongside 36 ft.

STEVEDORES: No notice required.

MEDICAL: Doctor and hospital available in case of urgent need.

TANKERS: The usual rules for tankers to be complied with.

FRESH WATER: Available.

FUEL: Mobile Oil and BP supply.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Carried out by crew.

CERTIFICATES: Health certificate. Deratisation certificate.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per crew member/passenger allowed to be held out of Bond. Wine/Spirits, one bottle (0.75 litre) of each kind per person allowed to be held out of Bond.

CARGO GEAR: Ordinary rules apply.

IDENTIFICATION CARDS: Aardal & Sunndal Verk demands identification cards, obtained from Dockmaster.

CONSULS/DRY DOCKS: None.

REPAIRS: No facilities. Nearest Molde or Kristiansund.

REPATRIATION: Office for effecting crew changes and repatriation available.

AIRPORT: Aro (Molde) and Kvernberget (Kristiansund), both at 60 miles distance and with regular air service.

TIME: GMT plus 1 hour. Permanent.

HOLIDAYS: Official holidays 1st May and 17th May. Extremely difficult to get any cargo work done on those days.

POLICE/AMBULANCE/FIRE: Police 91166; Ambulance (doctor) 91479; Fire 91122; Lifeguard 91933.

TELEPHONE: Telephone may be rented from Aardal & Sunndal Verk.

SERVICES: Not available. Nearest Kristiansund.

SHORE LEAVE: Crew members allowed ashore.

REGULATIONS: Forbidden to take photographs within boundaries of Aardal & Sunndal Verk.

DELAYS: Usually no delay if notice of arrival given to Agent in good time.

AUTHORITY: Sunndal Havnevesen.

SVOLVAER: 68.14 N. 14.35 E.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
Custom Documents.
Stores List.
Manifest.
Bill of Lading.
Ship's Papers.
Valid Deratisation Exemption Certificate.
Ships arriving from Finland, Denmark, and Sweden need Customs permit from last port.

PILOTAGE: Vessel approaching Svolvaer may call Bodo Radio, 2182 kc/s. by radio asking for Svolvaer harbour pilot. Telegraph ETA Svolvaer 24 hours before arrival. All communication with harbour pilot boat is via Bodo Radio. No VHF. Exact position for pilot boat is 68° 11′ 30″ N. 14° 36′ 00″ E. In the event of bad weather call Lodingen Pilot station, position 68° 24′ 00″ N. 16° 02′ 00″ E., via Bodo Radio for further information. Different types of pilot boats are used, but usually the pilot boat flies pilot flag. No special requirements for boarding, except usual pilot ladder.

ANCHORAGES: Boundaries for safe anchorage 68° 13′ 36″ N. 14° 37′ 00″ E., 68° 13′ 48″ N. 14° 36′ 12″ E. Depth in area about 25 fathoms.

RESTRICTIONS: Ships of 2,000 tons or more berthing at daylight only.

MAX. SIZE: Max. permissible length 520 ft., draft 30 ft.

HEALTH: Pratique is automatic given by radio. Vessel only required fly yellow flag. In event of any suspected disease or fever on board call Svolvaer Harbour Master by telephone via Bodo Radio (2182 kc/s.).

RADIO: Call Bodo Radio by R/T 2182 kc/s. or VHF-Channel 16. Svolvaer Harbour office VHF-Channel 16.

TUGS: No tugs available.

STEVEDORES: All information regarding gangs, loading and discharging rates can be obtained by calling ship's Agent in Svolvaer via Bodo Radio.

MEDICAL: Hospital facilities available.

TANKERS: There are 2 discharging berths for oil carriers in Svolvaer. Diameter of lines at B.P. berth 6 in. and 8 in., at Shell 8 in. At the Shell berth tankers moor stern to and discharge through stern lines.

DENSITY: Density in port is 1025.

FRESH WATER: Is delivered from piers by hose with a rate of about 20 t.p.h. Water is not available at B.P. berth.

FUEL: All kinds of fuel oil are available.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally done by ship's crew but can also be done by stevedores.

CERTIFICATES: Ship's Register Certificates.

CUSTOMS ALLOWANCE: Tobacco: Quantity for each crew member is 20 cigarettes or 20 gr. tobacco and 20 leaves cigarette papers per day. Wine and/or Spirit: For crew members 1 bottle spirit or wine (0.75 litre) for each passenger 0.25 litre.
IDENTIFICATION CARDS: Not required.
CONSULS: Swedish and Italian consulates. Lloyd's sub agent.
REPAIRS: Nearly all types of engine and deck repairs. Both for internal combustion and turbine engines.
DRY DOCKS: No dry docks in port, only slipways for ships up to 160 ft.
REPATRIATION: Facilities for effecting crew changes are available.
AIRPORT: Four km. from town. Nearest main airport is Bodo.
TIME: Local time is GMT plus 1 hour.
HOLIDAYS: Official holidays stated by Norwegian Government.
POLICE/AMBULANCE/FIRE: Call telegraph station Svolvaer.
TELEPHONES: Phones on pier.
GENERAL: Svolvaer is the main port in Lofoten Island, and a typical fishing harbour. Radar-Decca-Radio and VHF service, and all other electrical services can be executed.
SERVICES: Compass adjusting.
AUTHORITY: Harbour Master Svolvaer.

THAMSHAVN (Thamshamn): 63.20 N. 09.52 E.

DOCUMENTS:
Health Certificate.
Crew List.
Passenger List.
Store list.
Bill of Lading.
3 Manifests.

PILOTAGE: 24 hours prior arrival Grip, Pilots can be ordered by cable to "Loskontoret, Kristiansund N." or by telephoning Kristiansund Pilot Office, tel. 74333 during office hours, and 71481 private. Pilots can also be ordered by radio through Kristiansund Radio or through Agents. Use Channel 16 for VHF., contact to Kristiansund Pilot Office, or pilot boat. Pilot boat equipped with radio telephone 2182, carries red and white flag during day and white and red light during night.
ANCHORAGE: Vessels should anchor 150 m. off piers where depth between 26 and 30 m. Anchoring between piers and buoys is not permitted.
MAX. SIZE: Depth at Import Quay 20 ft. MLW. Ships of 28 ft. draft can load at Pyrites Quay.
RADIO: Vessel should route ETA cables to Agent through Rogaland Radio or Aalesund Radio.
TUGS: No tugs needed or available.
BERTHING: Berthing only between 0700 and 2400 hrs.
CARGO HANDLING: 1 berth is specially equipped for handling of pyrites in bulk. Ships of 28 ft. draft can load at the pyrites quay. Loading by conveyor. There are no berths equipped for containers or roll-on/roll-off traffic, nor berths handling liquid chemicals or LPG carriers.
STEVEDORES: Arranged by Agent. No ETA to stevedores necessary.
MEDICAL: Hospital facilities available.
FRESH WATER: Available, delivered from berth.
FUEL: No fuel supplies available. Nearest port for such supplies is Trondheim.
GANGWAY/DECK WATCHMEN: Not compulsory, and this service is left to the discretion of the Master.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: Ship's Register.
CUSTOMS ALLOWANCES: Each crew member allowed 20 cigarettes on shore. When leaving ship, 200 cigarettes and 1 bottle of wine or 1 bottle of spirit permitted.
IDENTIFICATION CARDS: Not required.
CONSULS: Nearest consul available in Trondheim.
REPAIRS: Only small repairs can be carried out.
DRY DOCKS: None.
AIRPORT: Nearest airport, Vaernes, 62 miles N.E. Served by regular airlines with several flights per day.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: January 1st; Easter Holidays; Ascension Day; Whit Monday; 1st and 17th of May; December 25th and 26th.
POLICE/AMBULANCE/FIRE: All mentioned services obtained through Agent or by contacting local telephone exchange.
TELEPHONES: No facilities for placing telephones on board ships.
SERVICES: Provisions available.
SHORE LEAVE: Permitted.

AGENT: Rederi-A/S Orkla, 7340 Lokken Verk, Norway, tel. (074) 86700 Lokken Verk or Orkanger No. 80400. Telegrams "Transport", Lokken Verk. Telex 55109.

TONSBERG: 59.16 N. 10.25 E.

DOCUMENTS:
Ship's Register.
Crew Lists.
Customs Manifest for each crew member (cigarettes, spirits, etc.).
Store List. Cargo Papers. Health Certificate.

PILOTAGE: Sea pilots obtainable from Ferder pilot station. Pilots normally take vessels to berth; also harbour pilot on the spot.
ANCHORAGES: Good anchorages at Byfjorden and Traela; anchorages for large vessels are found in Narverodbukten and Husoyflaker.
MAX. SIZE: 18 ft. draft for East entrance and 21 ft. draft for West entrance. Up to 30,000 tons in ballast.
RADIO: Cable ETA via Tjome Radio prior arrival.
TUGS: Are available.
BRIDGE: 1 bascule bridge over East entrance. Working days open 0600 to 2200 hrs., holidays 0900 to 1700 hrs. Signal 1 long and 2 short to open bridge. Opening can also be arranged during night time. Horizontal clearance 88 ft., depth 22 ft.
MEDICAL: Medical, dental and hospital facilities available.
DENSITY: Occasionally brackish.
FRESH WATER: Available from hydrants at quays.
FUEL: Delivered by lorry.
GANGWAY/DECK WATCHMEN: Available on request.
CUSTOMS ALLOWANCE: 200 cigarettes or tobacco and 1 bottle spirits, for each man.
CONSULS: Britain, France, Netherlands, Finland, Denmark, Sweden and Spain. All vice-consuls.
REPAIRS: All types of repairs available.
DRY DOCKS: At Kaldnesmek, a shipyard for total length of 515 ft. The shipyard is building ships up to about 50,000 d.w.t.
REPATRIATION: Available by train from Tonsberg, plane and passenger lines from Oslo (about 100 km. from Tonsberg). Fairly good hotel accommodation in Tonsberg.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Labour Day (1st May); 17th May; Ascension Day; Whit Monday, Christmas (25th and 26th December). Mostly no working.
POLICE/AMBULANCE/FIRE: Police 13355; Ambulance 13370; Fire 11656.
TELEPHONE: Lines available on board vessel.
SERVICE: Mostly all services or equipment available from Tonsberg or Oslo. Inform prior arrival.
SHORE LEAVE: Crew members allowed to go ashore.
DELAYS: Ice during January and February, but port kept open by ice breakers.
AUTHORITY: Harbour Master, Tonsberg Havnekontor.

AGENT: Sev. Dahl A/S, Storgt, 15, PO Box 128, 3101 Tonsberg. Ship & Insurance brokers. Lloyd's agent. Chartering, Sale & Purchase of tankers and motorships. Tel. 14027 -14028 -14194. Telex 11557, Backanswer "Sdahl".

TROMSO: 69.39 N. 18.58 E.

DOCUMENTS:
Trade Certificate.
Tonnage Certificate.
Certificate of Nationality.
Number of Crew and Passenger Lists.
Customs and Health Documents.
Manifest and Bills of Lading.

PILOTAGE: Telegraphic address of pilot station is "Tromso Pilot Station". Order latest 12 hours before arrival.
ANCHORAGE: Depth at anchorage is 15-35 m.
RESTRICTIONS: No restrictions on night entry.
RADIO: Tromso Radio VHF Channel 16–26. Harbour Office Channel 16. 20 miles from town.
TUGS: If necessary, join vessel North or South end of harbour.
BERTHING: Ships can berth at quay, depths up to 34 ft., lengths of quay 100–200 m. (New harbour, Breivika), equipped for container handling, truck 20 tons.
BRIDGES: Tromso Bridge, 60 m. wide, 36.5 m. high.
Sandnessundet Bridge, 120 m. wide, 41 m. high, dredged min. depth 10.4 m.
STEVEDORES: Ordered by Agent. No ETA to stevedores necessary.
MEDICAL: Master to advise by Radio prior to arrival if medical attention required aboard. Hospitals in town (University).
TANKERS: There are 4 oil berths:
Norol – 20 ft. depth.
Mobil Oil – 17 ft. depth.
Esso – 31 ft. depth.
Shell – 39 ft. depth.
FRESH WATER: Most berths supplied by pipeline.
FUEL: All grades available.
FIRE PRECAUTIONS: Ordinary restrictions.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Crew allowed to open and close.
CUSTOMS ALLOWANCE: Crew members 200 cigarettes or 20 cigars or 100 grams tobacco, and 1 bottle spirits.
IDENTIFICATION CARDS: Not required. Seaman's book.
CONSULS:

Belgium	81074–82417	Sweden	85090–81336
Denmark	81148–82310	Germany	81088–85665
France	81144–85663	Italy	85040–82604
Great Britain	84050–82395	Netherlands	85040–82604

REPAIRS: All engine and instrument repairs. Shipbuilders' Yard.
DRY DOCKS: 4 slip-ways 80–222 ft. 1 small dock.
AIRPORT: 5 km. from town.
TIME: GMT plus 1 hour.
HOLIDAYS: No work on New Year's Day and Christmas Day.
POLICE/AMBULANCE/FIRE: Police 85080; Ambulance 81100; Fire 81122. Port Pilot Station 81191–82537.
SURVEYORS: Lloyds, N.V.

SHORE LEAVE: Permitted.
REGULATIONS: Harbour Pilot compulsory. Speed in port waters max. 6 knots. Ships size passing Tromso Bridge max. 7,000 tons displacement.
DELAYS: Minor delays only.
SERVICES: Compass adjusting, stores, etc.
AUTHORITY: Port Manager.

TRONDHEIM: 63.25 N. 10.24 E.

DOCUMENTS: See "Bergen".
PILOTAGE: Harbour Pilot: Havne Kontoret, Tel. 28015 or VHF Channel 16.
RESTRICTIONS: The fjord is very deep and easy to enter. The channel is clear and ice-free throughout the year.
MAX. SIZE: Controlled by depth at berth. See below.
HEALTH: Call "Havne Kontoret" by radio for free pratique.
RADIO: Orlandet Radio (also VHF).
TUGS: Arranged by Agent.
BERTHING:

River Harbour	Quays	1–10	Depth alongside up to 26 ft.
Outer Harbour	,,	12–18	,, ,, ,, ,, 18 ,,
Inner Harbour	,,	19–24	,, , ,, ,, 20 ,,
Ilha Pier		26–32	,, ,, ,, ,, 29 ,,
Pier II	,,	A–D	,, ,, ,, ,, 33 ,,
Rosenborg Quay	Length	630 ft.	,, ,, ,, ,, 16.5 ft.
Thaulow Quay	,,	187 ,,	,, ,, ,, ,, 15 ,,
Transit Quay	,,	411 ,,	,, ,, ,, ,, 29 ,,
Coal Crane Pier	,,	700 ,,	,, ,, ,, ,, 23 ,,

BRIDGES: Skansen Bridge, Jernbanebrua, and Brattor Bridge divide Inner Harbour.
STEVEDORES: Available.
MEDICAL: All facilities available.
TANKERS: Berth Depth 9–12 m. Total length of quays 270 m. easy access. Mobil, Esso and Shell installations.
FRESH WATER: By hose from quay.
FUEL: Available.
DEVELOPMENTS: Plans for reconstruction of outer Basin with new bridges also planned.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle spirit, 1 bottle wine allowed each man.
IDENTIFICATION CARDS: Required.
CONSULS:

Belgium	Tel. 30 070	Ireland	Tel. 22 861
Costa Rica	,, 30 000	Italy	,, 21 114
Denmark	,, 20 580	Holland	,, 21 174
Finland	,, 28 626	Portugal	,, 21 140
France	,, 28 526	Great Britain	,, 31 500
Germany	,, 21 767	Spain	,, 20 689
Greece	,, 29 771	Sweden	,, 31 000

REPAIRS: All types of deck and engine repairs are possible.
DRY DOCKS: 1 available with capacity of 3,600 d.w.t. and a floating dock for vessels of 8,000 d.w.t.
REPATRIATION: Can be arranged.
AIRPORT: 35 km. away from port. Regular airlines.
TIME: GMT plus 1 hour.
HOLIDAYS: Christmas (2 days); Easter, (4 days); 17th May; Ascension Day; Whitsun, (2 days).
POLICE/AMBULANCE/FIRE: Police 27500; Ambulance 21-510; Fire 21-505.
SHORE LEAVE: Allowed.
AUTHORITY: Trondheim Havnekontor.
AGENT: Bachke & Company, Dronningensgt. 7, POB 609, 7001 Trondheim, Tel. (075) 20124. After office hours tel. (075) 59657. Telex: 55035. Cables: "Bacos".

VADSO: 70.04 N. 29.45 E. (See Plan)

DOCUMENTS:
- Trade Certificate.
- Tonnage Certificate.
- Certificate of Nationality.
- Number of Crew and Passenger Lists.
- Customs and Health Documents.
- Manifests and Bills of Lading.

PILOTAGE: Vessels approaching from sea and desiring Pilot should order at 24 hours notice and confirm arrival at Pilot Office, Vadso, at 2 hours notice. The advance order can be sent over coastal radio station to Pilot Office, the Harbour Master, Vadso, tel. Vadso 51235 or 51143. Harbour Pilot has to be taken on board in position Lat. 70° 45′ N. Long. 29° 41′ E. VHF Channel 16.
ANCHORAGES: Anchorage for vessels up to 400 tons in basin, with depths varying between 14 and 21 ft. Larger vessels anchor W. of the mole in 16 to 20 m. Outer harbour inside breakwater, inner harbour, further to East. Entrance to inner harbour is by buoyed and lighted channel 1,560 ft. long and 115 ft. wide, this has been extended by the addition of a fishery basin 750 ft. long 800 ft. wide. Outer harbour is 1,000 ft. long, 700 ft. wide, depths 15 to 30 ft.
MAX. SIZE: Max. length of vessel 300 ft. and breadth 45 ft. Draft 16 ft. Ship about 3,000 g.r.t.
HEALTH: Health documents necessary.
RADIO: Call Vardo Coastal Radio Station, through which contact by telephone Agent or Harbour Master or Vadso Harbour on VHF Channel 16.
STEVEDORES: Stevedores arranged. Agent telephone 51395 Vadso.
TANKERS: Only small tankers can discharge. Discharging berth only for 500 g.r.t. tankers, draft 13 ft.
FUEL: Gas and diesel oil. Water available on all quays.
GANGWAY/DECK WATCHMEN: Watchmen necessary. Master can use ship's crew as gangway and deck watchmen. Not necessary to use watchmen from the Watchmen Service.
CUSTOMS ALLOWANCE: Tobacco: Wine/Spirit: For 10 days, each crew 200 cigarettes, or 200 grams tobacco. 0.25 litre spirit, for each crew member.
CONSULS: Finland, tel. 51225 Vadso.
REPAIRS: Only smaller types of deck and engine repairs are possible.
AIRPORT: Vadso Airport 4 km. from port. Widero flights 4 times per day.
TIME: Local time, GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Police 51271 or 51593 Vadso; Ambulance 51845 or 51691 Vadso; Fire 51122 or 51554 Vadso.
AUTHORITY: Vadso Havneseven.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Ocean Island

OCEAN ISLAND: 00.52 S. 169.35 E.

DOCUMENTS:

Clearance from last overseas port.

2 Crew Lists.

4 Passenger Lists.

Bonded Stores List including Narcotics List (in duplicate).

Crew Store List (sometimes called search list or curio list).

4 Manifests.

1 International Health Declaration.

Documents to be completed when ship arrives Ocean Island:

List of unmanifested cargo; Passengers' Baggage Declaration if any, 1 copy per passenger.

PILOTAGE: Pilotage available on request without charge and Masters advised avail themselves this service. Necessary that Masters, through Ocean Island Radio, inform telegraphic address "Phoscom Ocean" of ETA 48 hours before arrival, confirming or altering this 12 hours before arrival. Phoscom reply through Ocean Island Radio on receipt of second message giving time for vessel to close in to 0.5 miles West of loading plants, where Pilot will board. In case of adverse weather or congestion, Masters notified by radio or by VHF Channel 16, 156.8 Mc/s., with range of about 40 miles. Vessels handled inwards in daylight only, and should fly "G" flag when approaching island. A safe and clean Pilot ladder should be provided, and a good lee made for Pilot to embark.

ANCHORAGES: No anchorages available owing to extreme depths of water. Vessels waiting normally drift off and return at daybreak or when instructed to do so.

RESTRICTIONS: Tide and draft have no bearing on entry but normal not to handle vessels into berth in darkness. However, vessels are unmoored at all hours.

MAX. SIZE: Vessels have been handled up to overall length of 575 ft. Beam should not exceed 75 ft., draft limitations 34 ft. 6 in.

HEALTH: Masters of vessels approaching Ocean Island required to send telegram addressed "Quarantine Officer, Ocean Island" within 24 hours of arrival. Telegrams should state name of last port, date, presence of any infectious disease. On receipt quarantine officer will send reply indicating whether or not pratique granted. It is still necessary to fill out International Declaration of Health and hand to Boarding Officer after berthing.

RADIO: Ocean Island Radio station call sign VQK. Daylight range not great but traffic may be passed through C2N Nauru. No radar at Ocean Island. VHF Channel 16, 156.8 Mc/s.

TUGS: No tugs required for berthing.

BERTHING: Such special requirements which relate to berthing are contained in a Letter of Advice to Ship Masters issued by the BPC.

STEVEDORES: As stevedoring is carried out by Phoscom, no separate advice required. Loading rate of bulk phosphate is as high as 1,300 t.p.h.

MEDICAL: Medical treatment can be given on short notice. Limited hospital facilities available, and emergency surgery can be carried out. Smallpox vaccination required, and cholera if vessel from infected area.

TANKERS: Maximum length 600 ft., no draft restrictions. 8 in. discharge line to shore storage tanks.

DENSITY: Normal salt water all states of tides.

FRESH WATER: Island water imported, and water will be supplied only in emergency.

FUEL: Island stocks are imported for use in phosphate industry, and only limited quantities of heavy fuel or diesel oil available in extreme urgency.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Carried out by crew.

CERTIFICATES: Deratisation certificate only.

CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes or half lb. tobacco or 50 cigars for use on board; 25 cigarettes or 1 oz. of tobacco may be taken ashore for own personal consumption. Wine/Spirit, 1 bottle only for use on board; no bottles may be taken ashore.

CARGO GEAR: Cargo gear should be up to standard demanded in Australian ports.

IDENTIFICATION CARDS: Some form of identification, passport, discharge book, or identity card should be carried by crew members.

CONSULS: None.

REPAIRS: Small repairs such as welding, brazing, lathe work, etc., can be carried out, only when essential to allow vessel to proceed on voyage. Main engines cannot be immobilised whilst the vessel moored to any section of buoy system.

DRY DOCKS: None.

REPATRIATION: Repatriation can be arranged. No facilities for crew changes.

AIRPORT: No airport at Ocean Island.

TIME: GMT plus 11.5 hours.

HOLIDAYS: Christmas Day, New Year's Day, and Good Friday normally closed holidays. Other National holidays occur during year but normally work carries on, on these days.

POLICE/AMBULANCE/FIRE: All emergencies handled by Harbour Masters, one of whom remains aboard vessel throughout time vessel attached to mooring system.

TELEPHONES: Telephones are put aboard for use of island staff working vessel.

GENERAL: Shore labour normally boards vessel with Pilot to assist in mooring to buoy system.

SERVICES: No special services available.

SHORE LEAVE: This may be granted at discretion of Master, but should in all cases terminate at 1700 hrs.

REGULATIONS: No vessel may immobilise main engines whilst moored to buoy system. Main engines should be on instant readiness, deck power should be available at all times, and vessel must proceed to sea when instructed to do so by Harbour Master.

DELAYS: Normally no delays expected. Vessels could wait a day, or possibly 2 due to port congestion, but this seldom happens, delays can occur due to adverse weather, duration of which unpredictable.

AUTHORITY: The Harbour Master, appointed by The British Phosphate Commissioners, Ocean Island.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Oman, (Sultanate of)

MINA-AL-FAHAL: 23.39 N. 58.32 E. (See Plan)

DOCUMENTS:

2 copies Medical Attendance Forms required for ship's crews visiting doctor.
1 copy Arrival Report Form (supplied by Berthing Master).
2 copies Maritime Declaration of Health.
3 copies Mail Lists.
4 Crew Lists (if Petroleum Developments (Oman) Ltd. acting as Agents then only 2).
2 Vaccination Lists.

Should anyone be visiting the Doctor then 2 Medical Attendance Forms are requested. All other documents are provided by Berthing Master.

PILOTAGE: The Berthing Master will board incoming tankers in a position with Fahal Island lighthouse bearing 285° from seaward distance 2 miles. Tanker should arrive at this position, make a good port lee, and take way off.

Harbour steaming is deemed to start at this point. The port side derrick should be rigged and crew standing by at the derrick ready to lift the mooring equipment from the launch when the Berthing Master comes on board.

The pilot access should be in good condition, clean and ready on the port side. Tankers of 70,000 tons Summer deadweight and above in ballast or partly loaded condition should have either a pilot hoist or a combination of accommodation ladder and pilot ladder rigged.

ANCHORAGE: If a vessel is required to anchor the information will be passed by VHF. The normal tanker anchorages are:-

A. Fahal Is. Lt. Brg. 015° × 1.0′
B. Fahal Is. Lt. Brg. 045° × 1.3′
C. Fahal Is. Lt. Brg. 075° × 1.0′
D. Fahal Is. Lt. Brg. 115° × 1.0′

The coastal tanker anchorage is:-
Fahal Is. Lt. Brg. 340° × 1.1′

Cargo ship anchorage area:-
A. Fahal Is. Lt. Brg. 340° × 2.0′
B. Fahal Is. Lt. Brg. 345° × 1.6′
C. Fahal Is. Lt. Brg. 000° × 1.7′
D. Fahal Is. Lt. Brg. 015° × 1.8′

Ships proceeding to an anchorage within the Port Area should pass North of Fahal Island and under no circumstances enter the prohibited area unless instructed to or accompanied by a Mina al Fahal Berthing Master.

RESTRICTIONS: Open sea approaches.

MAX. SIZE: No length limitation. Draft up to 96 ft. Tankers up to 550,000 d.w.t. can be accommodated.

HEALTH: When advising ETA, include in message whether any sickness on board.

Port Health Officer boards with Berthing Master, this Officer will carry out any necessary vaccinations. 'Q' flag to be flown until pratique granted.

RADIO: ETA messages should be sent to Petromar Muscat via Muscat Radio (call sign A4M). If no contact can be established with Muscat Radio, the message should be sent through an alternative coast station such as Bahrain Radio.

The message should contain the following information:

(a) ETA in local time and date in plain language to avoid multilation.

(b) Whether there is any sickness on board.

(c) Whether any crew require medical treatment and very briefly the nature of the complaint.

VHF communications should be established as soon as possible calling Fahal Control on Channels 19, 16 or 12. The range is about 80 miles to the Northward but only 20 miles to Eastwards because of screening by mountains. Channels 19 and 16 area basically long range while the working Channel is Channel 12 and is manned 24 hours a day by either Fahal Control or Fahal Pilots. The mooring launches are also equipped with Channels 16 and 12 but mooring operations are carried out using UHF radio sets.

TUGS: None available and not required.

BERTH DESTINATION: 3 single buoy moorings with floating hose strings.

SBM No. I: Crude export and marine fuel oil import and export. This buoy is served by 2 × 30 in. submarine crude lines and 2 × 10 in. submarine fuel lines each 10,300 ft. long.

The floating crude hoses are 2 × 810 ft. long × 20 in. reduced to 16 in. for manifold connection. Same hoses are used for Fuel Oil imports these lines having a displacement connection ashore for emptying the crude content. Bunkering is by a single 12 in. hose 820 ft. long.

This buoy is capable of handling any vessel up to 230,000 d.w.t. tonnes.

SBM No II: For crude and bunker export and is served by 1 × 40 in. submarine crude line and 2 × 10 in. submarine fuel oil lines each 13,980 ft. long. The floating crude hoses are approx. 2 × 1,100 ft. long x 20 in. reduced to 16 in. at manifold connection. Bunkering is by a single 12 in. floating hose. Maximum size ship 550,000 d.w.t. tonnes and max draft of 96 ft.

SBM No. III: Fuel export only served by two 10 in. submarine hoses each 8,003 ft. long. The floating hose is one 8 in. line approx. 700 ft. long. Max. size of ship is 80,000 tonnes loaded or 120,000 tonnes in ballast and max. draft 46 ft.

Loading crude is by gravity and rates vary. If loading from upper tank farm 9,000 t.p.h. but only 5,500 t.p.h. if loading from lower tank farm.

Bunker rate is approx. 450 t.p.h. bunker discharge at SBM-I maximum 3,000 t.p.h. maximum back pressure 150 p.s.i.

BERTHING: Vessels berth head to buoy and are provided with 2 x 4.5 in. mooring snotters picked up from the mooring launch when the pilot boards. Vessels over 230,000 d.w.t. tonnes are provided with two 15 in. × 80 ft. nylon braidline snotters. Connection at SBM-I and III is to two 12 in. plaited nylon lines 150 ft. long; at SBM-II to two 15 in. plaited nylon lines 150 ft. long. A suitable messenger rope should be provided by ship. An Assistant Berthing/Loading Master will advise in all mooring and hose connection operations which are carried out by ships staff.

HOSE CONNECTIONS: Ships port side Derrick must plumb over relevant manifold. This derrick should be ready on arrival at the pilot boarding area to pick up the mooring gear and reducers (if necessary) safety chains etc. for hose connection. Derrick to be in good condition and be rigged for a SWL of a minimum of 10 tons for SBM-I and II and 5 tons for SBM-III.

BALLAST: No facilities for reception of dirty ballast.

Tankers should arrive with clean ballast, lines and pumps and no oil should be released into the sea.

MEDICAL: Medical treatment can be given by Petroleum Development (Oman) Ltd.'s medical staff to crews of ships on Time Charter to Shell International Marine on ships using P.D. (O) Ltd.'s tanker agency facilities. A charge of R.S. 25 is made per round trip for launch hire and transport facilities. Dental treatment available but at least 24 hours notice required.

REPAIRS: It is not permitted to immobilise main engines whilst moored to the SBM's; under no circumstances should the propeller be turned in the ahead direction.

DENSITY: Approximately 1026.

FRESH WATER: Not available.

FUEL: Fuel oil only available. Lubricants, quantity limited, supplied in drums only.

REPATRIATION: Crew changes are possible at Mina-al-Fahal provided the Agent receives 72 hours notice (excluding Fridays and Holidays), (24 hours notice if using Petroleum Development as Agent) giving full particulars of embarking/disembarking crew, such as full name, nationality, place and date of berth, passport/seaman's book number with date and place of issue and expiry date, and also destination for repatriation of disembarking crew members, to enable Agents to obtain necessary permits and arrange air passages.

N.B. If the information required as above is received on a Thursday or a day preceding a holiday, the time mentioned of 72 hours will not be sufficient as no permits can be obtained from the Authorities during holidays.

Note: No crew changes possible at this time (November 1976) as a Government Decree has been issued cancelling crew changes until the present hi-jacking security procedures have been relaxed.

TIME: GMT plus 4 hours all year round.

SHORE LEAVE: Not possible.

GENERAL: *Liquor.* Trading in liquor strictly prohibited and no alcoholic drink should be offered to Arab nationals.

AUTHORITY: Petroleum Development (Oman) Limited.

AGENT: See "Mina Qaboos" (Mutrah).

Petroleum Development (Oman) Ltd. can also act as Agent. Petromar Muscat are on VHF Channel 12.

MINA QABOOS (Mutrah): 23.37 N. 58.34 E. (See Plan)

Muscat has ceased to be a commercial port and instead vessels now call at Port Qaboos.

PORT LIMITS: From the level of high water springs at a point near Ras Kab at Long. 58° 33.2′ East on a line due North to Lat. 23° 41′ North;

Thence due East to Long. 58° 35.6′ East;

Thence due South to Ras Muscat on Jazirat Muscat;

Thence in a generally Southerly direction by the line of high water on the Western side of Jazirat Muscat to Pinnacle Rock;

Thence in a straight line approximately S.W'ly to the Easternmost point of Sirazal Gharbiya;

Thence by the line of high water springs to the point of commencement.

DOCUMENTS:

Required on Arrival:
4 Copies Crew List.
1 Copy Maritime Health Declaration form with ports of call from commencement of voyage.
2 Copies Vaccination List.
6 Copies Passenger List.
3 Copies in transit Passenger List.
3 Copies Hatch List.
5 Hazardous Cargo Lists.
3 Heavy Lift Lists.

To be airmailed in advance:
5 Copies Cargo Stowage Plans.
9 Copies Cargo Manifest.
1 Copy Freight Manifest.

On arrival in the Port, ships' Captains will be required to produce to the Customs Boarding Officer the following documents:

A copy of the Cargo Manifest.

A declaration made by members of the crew stating the dutiable goods in their possession.

A list, signed by the Captain, of the dutiable ship's stores on board.

PILOTAGE: Available from 0700 to 1800 hrs. at present and pilotage is compulsory to all vessels of 150 NRT or over.
MAX. DRAFT: 29 ft. at LW. Also see "Berthing".
TUGS: Three twin screw tugs of average 1,500 h.p.
APPROACH: Mina Qaboos has a very open approach with a deep water anchorage. The hilly coast is radar conspicuous. Lights on Fah Is., Jazirat Muscat and the Breakwater make night navigation fairly simple. There is no appreciable current once inside the bay. Vessels should anchor Westward of line 060° (T) from the breakwater light.
RADIO: Port control can be contacted on VHF Channel 16 or Channel 14 or on R/T via Muscat Radio. Hours of operation 0700 – 1800 hrs. except Friday when hours of operation depends on actual movement in the Port.
BERTHING: There are nine deep berths and two shallow draft berths. Depths at various berths are as follows: 34 ft. at Berth Nos. 1 & 2; 30 ft. at Berth Nos. 3, 4, 5, 6, 7 & 8 and 22 ft. at Berth 11, Berths Nos. 9 & 10 can take up to 14 ft., length of vessel for inner basin not exceeding 500 ft. and for outer basin not exceeding 600 ft. Vessels of up to 650 ft. may be accommodated at the outer basin berths (except No. 3 where length permissible is 500 ft.) by special arangement with the Harbour Master.

The Berths are supported by 9 modern transit sheds, which face on broad uncluttered aprons. Berths No. 3 & 6 which are reserved for rapid discharge of cargoes, front directly onto the open storage yards. Also Berth No. 3 connected with special underground conveyors is for bulk cement Silo Station through which we receive approximately 50,000 tons of Bulk cement.

Construction of New Grain Silos also having underground connection to ships also having storage capacity of 30,000 tons completed 1976.

CRANES: 13 Mobile Cranes 3 tons – 25 tons, 1 Mobile Crane 150 tons, 81 Fork Lift Trucks 4,000 lbs. – 16,000 lbs. Trailers and Tractors are also available.
STEVEDORES: The labour position is fair, except in the date-picking season June to August.

Total of 9 barges are available for landing cargo ex vessels. Landing rates: bagged cargo 4/600 tons per day; general 200 tons per day; timber 100/150 tons per day during fair weather provided no congestion on jetty and if cargo stowed in more than 3 hatches.

Working Hours:

Saturdays/Wednesdays	Day Shift	0700 — 1300	
		1300 — 1500	Lunch Break
		1500 — 1700	
		1700 — 1900	On overtime
	Night shift	2000 — 2300	
		2300 — 2400	Tea break
		2400 — 0600	
Thursdays	Day Shift	0700 — 1400	
	Night shift	2000 — 2300	
		2300 — 2400	Tea break
		2400 — 0600	
Fridays	No Day Shift		
	Night shift	2000 — 2300	
		2300 — 2400	Tea break
		2400 — 0600	

FRESH WATER: No water is available at any berth. There is a general shortage of water in the area. A very small amount of water may be made available by water trucks, by arrangement with the Agents.
FUEL: Heavy fuel is not available at this Port. Diesel oil is available at berths 6, 7, 8, 9, 10 & 11 from Shell Market etc. On other berths diesel may be supplied by road tankers either by Shell or B.P. The Port has no bunkering berth to cater for ships calling for bunkers only.
GANGWAY/DECK WATCHMEN: A Customs watchman will be present on board throughout the stay of the vessel in port, and the vessel must provide him with food and accommodation during the stay. The same is applicable in the case of tally staff.
REPATRIATION: Is now possible if Masters give full particulars of the seamen to be repatriated by telegram at least 72 hours earlier. This also applies to embarking crew members. The 72 hours notice is not enough in the case of a Friday, or any other holiday which falls in between.
CUSTOMS ALLOWANCES: Vessels will no longer be permitted to have free use of their stores (Tobacco goods, Alcohol, etc.) whilst in the confines of the Port.

On arrival in Port, an allowance will be given by the Customs Boarding Officer and the surplus stores will then be placed under Customs Seal.

The allowance will be:
200 cigarettes or 50 cigars or 250 gms. tobacco.
One bottle (1 litre) alcoholic spirit.
One bottle (1 litre) wine.
24 cans beer.
Various used personal effects such as radios, cameras, etc.

Should a vessel remain in Port for more than 4 days, an issue of stores will be given upon request being made to the Customs Authorities.

These Regulations also apply to ships at the Anchorage.

GENERAL:

Ships arriving at Mina Qaboos:

Ships may approach Mina Qaboos without a Pilot as far as the perimeter of the limits of the port. No ship shall proceed through the entrance to or from the port without the permission of the General Manager or the Harbour Master.

All ships, other than expected ships, shall be under the pilotage of a Pilot appointed by the Port Authority when under way within the limits of the port. The ship shall have rigged and ready for use a Pilot ladder of modern pattern, in good repair and provided with reliable manropes. Such Pilot ladder shall be well illuminated between dusk and daybreak. The ship shall have a boat-rope ready rigged from the break of the forecastle to abaft the Pilot ladder.

No ship shall enter or leave Mina Qaboos unless her draft marks are correctly shown and clearly visible.

Every ship shall at all times when entering, navigating in or leaving the port have both anchors ready for immediate use.

Ships proceeding to berth at the port premises shall have no list and shall be trimmed upright.

Before entering Mina Qaboos every ship shall hoist the following flags: The ship's signal letters. The "Q" flag, International Code, unless the Port Health Officer has previously given pratique. The "H" flag, International Code, denoting that a Pilot is onboard. The "I" flag, International Code, if the ship is carrying passengers.

Until pratique has been granted communication between ship and shore shall be made by: Flag hoist, using the International Code of signals, Morse Code, by signal light, or radio-telephone on approved frequencies, which will be promulgated for use for such purpose.

Conduct: The Master or Owner of every ship shall be held directly responsible for the proper conduct and behaviour of the crew of such ship while in the port and for strict observance of the laws of the Sultanate of Oman, particularly those laws concerning the sale, transference or consumption of any narcotic or alcoholic or intoxicating drink of any kind.

Flags: Every merchant ship within Mina Qaboos between the hours of sunrise and sunset shall fly her national flag and the national flag of the Sultanate of Oman.

Repairs: The Master of any ship wishing to carry out major engine repairs or adjustments, which will affect the mobility of the ship whilst in the port shall make written application to the Harbour Master so to do. The Harbour Master shall give his permission or otherwise in writing.

Safety of ships and persons: The Master of every ship anchored or moored in the port or berthed at the port premises shall, unless the Harbour Master concede some relaxation in this port rule, at all times retain on board sufficient crew to work or move the ship.

Ships berthing and unberthing at the port premises: No person shall swim from any ship berthed at the port premises.

No person shall make fast or anchor any country craft or boat of any kind at any quay, wharf, pier or landing place or at any steps provided thereat in the port premises except with the prior permission of the Harbour Master.

Pollution: It shall be unlawful to throw, discharge or deposit, or cause, suffer, or procure to be thrown, discharged or deposited, either from or out of any ship, barge or other floating craft of any kind, or from the shore, wharf, manufacturing establishment or mill of any kind, any refuse matter or other substance of any kind or description whatever into the waters of the harbour; and it shall be unlawful to deposit, or cause, suffer or procure to be deposited, material or any kind in any place, or on the bank of any water, where the same shall be liable to be washed into such water, either ordinary or high tides, or by storms or floods or otherwise, whereby navigation within the corporate limits of the harbour shall or may be impeded or obstructed, provided that nothing herein contained shall extend to, or apply to, or prohibit operations in connection with the improvement of the port of Qaboos or the construction of public works considered necessary and proper by the Port Authority and provided further than nothing herein contained shall extend to, apply to, or prohibit the depositing of any material above mentioned in such navigable waters within such limits as may be defined, and under such conditions as may be prescribed by the proper officer of the Sultanate of Oman.

It shall be unlawful for any person, or corporation to deposit, place, or discharge into the waterways of Port Qaboos, either directly or through private or public sewers, any sanitary sewage, butcher's offal, garbage, dead animals, gaseous liquid or solid matter, oil, gasoline, residium of gas, calcium chloride, trade waste, tar or refuse or any other matter, which is capable of producing floating matter or scum on the surface of the water, sediment in the bottom of the waterways, or the odours and gases of putrefaction.

Vessels discharging ballast, oil from bilges or tanks or solid matter into the waters of Port Qaboos will be reported to the pollution control officer and be subject to a fine of R.O. 500.00 for each offence, imposed by and payable to Port Qaboos. Such fine shall be in addition to any other fines, which may be levied for the same offence by the Sultanate of Oman.

Ships Leaving Mina Qaboos: Port Rules applying to ships arriving at Mina Qaboos apply equally, in so far as they are relevant, to ships leaving the port.

Merchant ships shall fly the "P" flag International Code, for 24 hours before sailing from the port.

The Port Authority may refuse to give the Master of any ship outward clearance, unless and until all charges due in respect of the ship and any penalties, to which the ship or her Master are due, have been paid or secured to the satisfaction of the Port Authority.

The Working of Cargo at Mina Qaboos: Ships may be permitted to discharge or load cargo in the anchorage if a berth is not available at the port premises or if in the opinion of the Port Authority the ship's cargo is more suitable for handling to or from barges or lighters.

The Master or Owner of any ship shall be held responsible for any loss or damage arising from careless or improper slinging of cargo onboard such ship.

Any cargo, cargo-handling equipment or ship's gear, which may be dropped overboard shall at once be reported by the Master or appointed officer to the Port Authority and shall be immediately recovered by the ship's personnel if it is reasonably possible so to do. Failing this, it may be recovered by the Port Authority at the ship's expense. The Port Authority shall not be responsible for any damage to or loss of cargo, equipment or gear so recovered.

The Master of every ship discharging or loading cargo in the port, whether at anchor or berthed alongside shall provide drinking water for all cargo handling labour and all other persons appointed and directed to be on board such ship in connection with the discharge or loading of cargo.

If the labour or transport allocated or engaged for the purpose of landing, loading or transshipping cargo from or to any ship is not fully continuously employed by reason of a fault or action attributable to such ship, the expenses incurred thereby shall be paid by such ship.

In the event of any accumulation of cargo or goods upon the quay or jetty or in a lighter for any cause that may appear reasonable to them, the Port Authority may require the ship discharging such cargo or goods to suspend or reduce the rate of discharge of such cargo or goods.

The Port Authority may refuse to permit cargo to be landed from any ship until suitable shed or open storage space or other accommodation is or becomes available for such cargo.

Delivery of cargo or goods shall not be deemed to have been made to the Port Authority until such cargo or goods have been brought into the port premises and until the Port Authority accepted delivery of such cargo or goods and have issued an official receipt therefor to the Master of the ship discharging such cargo or goods or to the ship's Agent or to any other person duly authorised so to do, conveying such cargo or goods to the port premises.

AUTHORITY: Oman Port Services.

AGENT: Gulf Agency Co. (Oman) W.L.L., CPO Box 3740, Ruwi, Sultanate of Oman. Tel. 701165. Telex 3284 ("Gacship MB.3284"). Cables "Confidence", Muscat. VHF Channel 16. Call sign "Confidence Muscat".

MINA RAYSUT (Salallah): 16.56 N. 54.01 E.

PORT LIMITS: The water limits of the port are bounded by the parallels of 16° 55′ 30″ N. and 16° 56′ 50″ N., and by the meridian 54° 01′ 30″ E. to the Eastward. To the West the limit follows the coastline from its Northern interception with the headland of Ras Raysut.

The land limit to the Port Area follows the line of the outer security fence across the neck of the Ras Raysut headland.

DOCUMENTS: See "Mina Qaboos".

PILOTAGE: Compulsory, except for vessels less than 100 n.r.t., Harbour Authority craft and vessels of the Oman Navy.

ANCHORAGE: See "General".

RADIO: Masters of all vessels having business within the port shall whenever possible give to the Harbour Master 24 hours' notice of the intended time of arrival.

Notice can be given either by cable via the Cable and Wireless Signal Station at Muscat, or by direct radio-telephone call to Raysut Harbour Control. Listening watch is kept on 2182 kc/s. during working hours.

VHF Channel 16 monitored for ship movements and controls available on request – Channels 12, 10 and 6.

Radio frequency 2182 kc/s. – may or may not be in operation depending on radio conditions of the area.

BERTHING: Incoming vessels are assigned berths on a turn basis subject to operational requirements and the Harbour Master's discretion.

The berth is 350 ft. in length and depth alongside 15 ft. (19 ft. at HW). Berthing is determined by vessel size rather than tonnage. Vessels up to 18 ft. draft and a length of 300 ft. will be berthed during High Tide condition. The bottom alongside the berth is sand.

Large vessels discharge into barges.

BARGES: 4×350 ton barges are used by ocean-going vessels in deep water anchorages. Vessels arriving under liner terms receive free barge facility. Vessels arriving under charter terms are negotiated as to charges for barge facility.

STEVEDORES: Normal working hours from Saturday to Wednesday: 0700 hrs. to 1500 hrs., Thursday from 0700 hrs. to 1300 hrs. with no lunch break.

Working hours are subject to change during the month of Ramadan.

Overtime would be charged for hours worked outside the normal working hours. Overtime will be worked at the request of the Agent, and will be worked on Fridays at special request.

FRESH WATER: Not available except on special arrangements through the Agents, to be brought by tankers from Salalah.

REGULATIONS: No vessel shall enter the Port Area unless authorised by the Harbour Master. The Harbour Master may, at his discretion, refuse to allow vessels, with the exception of vessels in distress, to enter the Port, and may order from the Port any vessel with the exception of vessels unfit for sea, which does not have business within the Port, or is in breach of these Regulations.

No vessel shall anchor, or weigh anchor or move within the Port Area except when and where required by the Harbour Master.

No water ballast which is not free from oil or other harmful contaminants, shall be discharged into the waters of the Port Area. In case of the pumping of bilges or pollution by oil or harmful contaminants, into the waters of the Port Area, the vessel will be responsible for any fines imposed by the Harbour Authority and any compensation or other damages.

Should fire break out aboard any vessel the Master should make an immediate signal either by a continuous sounding of long or short blasts on the ship's whistle or siren, or by ringing of a fire bell.

In cases of adverse weather it is the sole responsibility of the Harbour Master to decide whether the sea conditions are suitable for handling cargo with barges in the Anchorage, or whether the day will be declared a "weather non-working day".

Masters shall be responsible for the adequate provision of safety equipment and lights on board whilst cargo is being handled.

Conveyance of alcoholic liquor, other than manifested cargo under Customs supervision, from any vessel to the shore or from one vessel to another is prohibited.

No unauthorised person may enter the Port Area. Visitors to vessels are prohibited except by permission of the Harbour Master.

Ship's personnel and passengers are not permitted ashore except by permission of the Immigration Authorities and the Harbour Master.

FLAGS: Every merchant vessel in port shall fly her national flag, and the national flag of Sultanate of Oman, between sunrise and sunset.

DEVELOPMENTS: Construction programme is presently under way to enlarge the existing facilities to incorporate 4 deep-water berths, max. draft 30 ft., plus all-year round safe discharging conditions for all vessels. The expansion programme is expected to be completed within four years.

Airport under construction at Salalah.

GENERAL: Anchorage positions at the present time will be given to all vessels upon reporting by VHF radio. Anchorage positions are set with 1.5 miles between each ship in a minimum of 10 m. of water. Ships are moved in accordance with their draft.

The Harbour operates on a year round basis, and does not close during monsoon season, except for vessels requiring barge operations at anchorage. For the past two years they have quite successfully operated within the harbour. However, all coasters desiring to use the berths during monsoon, i.e. mid-June to mid-September, must come prepared with adequate lines to facilitate proper securing alongside from hurricane tide. The Port is closed to anchorage vessels from 1st June to mid-September, depending on the sea conditions during monsoon season.

AUTHORITY: Port Raysut.

AGENT: See "Mina Qaboos".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Pakistan

KARACHI: 24.49 N. 66.59 E.

DOCUMENTS: *Required before vessel's arrival:*

2 copies Freight Manifest.
2 sets Bills of Lading.
3 copies Stowage Plan.
2 copies Passenger Manifest.
3 copies Cargo Manifest.
3 copies Hatch Lists.
1 copy Exception Lists.
6 copies Passenger Lists.

With vessel:

2 copies Cargo Manifest.
Last Port Clearance Certificate.
6 copies each Passenger List, disembarking and transit.
2 copies List of favour parcels.

The following special Pakistan forms are brought on board by Agent for completion on arrival:

2 Customs Arrival Reports.
2 Opium and Dangerous Cargo Certificates.
2 Ship's Currency Lists.
6 Deck Cargo Certificates.
1 Company's Arrival Report.
1 Ship's Crew Advance (if required).
1 Expiry date of Ship's Certificate.
1 Same Bottom or Intransit Cargo.
1 Water Indent.
*10 Crew Lists.
3 Stores Lists.
3 Property Lists.
7 Cargo Gear Information Forms.

*If this is ready prior to arrival, please attach to this form.

Metric weights and measures to be used on Particulars of Cargo, Tonnage Certificates, Stevedoring Bills, Manifests and Bills of Lading.

PILOTAGE: Pilotage is compulsory for ship of 200 n.r.t. and upwards. Pilot boards at the Outer Anchorage.

Vessels are piloted day and night, subject to tides, length and draft, to berths lying on the East and West of the fairway, which is 4.27 miles long. Pilotage distance is about 5 to 6 miles.

ANCHORAGE: Outer Anchorage where ships await berth safe except during the S.W. monsoon from mid-May to September. During monsoon no anchorage is recommended. Vessels should anchor a safe distance outside the breakwater within Lighthouse bearings 045 and 025. Depth of water at the anchorage is about 9 fathoms.

RESTRICTIONS: Datum depth is 27 ft. Vessels with a draft in excess of 32 ft. are not permitted to enter Karachi due to varying depths at berths, and silting in the ship channel.

Berthing at any time, except vessels with bridge aft which permitted daylight only.

Sailings permitted during flood tide only. Tankers with LOA over 525 ft. Permitted to sail on flood tide during daylight hours only. Vessels with bridge aft permitted to sail on flood tide during daylight hours only.

MAX. SIZE:

	Length	*Draft*
Bulk carriers and general cargo (dry cargo)	945 ft.	32 ft.
Bulk oil tankers, white oil product	550 ft.	32 ft.
Bulk oil tankers, black oils.	650 ft.	32 ft.

HEALTH: The Port Health Authorities give automatic clearance on receipt of a "clean" standard quarantine message and this will be conveyed by the Pilot. However, ships from Yellow Fever areas must be cleared during daylight hours by the Port Health Officer on arrival alongside. On sailing to ports outside India and Pakistan, a medical inspection takes place on the day before sailing. It is, in theory, necessary for a member of the crew to be present at this inspection, although usually the inspection is only a formality. All vessels required obtain Immigration Clearance on arrival.

All vessels which have touched any port or ports between Port Sudan and Durban, on the East Coast of Africa, including these ports, are considered "suspected" vessels on account of Yellow Fever and Jigger and may not have communication with the shore till cleared at berth by the Port Health Officer, who attends only between sunrise and sunset, except in special circumstances. The incubation period for Yellow Fever under the rules is given as 9 days, but vessels arriving later than 9 days are still not free from quarantine because there is no incubation period for Jigger.

RADIO: Port Authorities equipped with VHF radio-telephone, calling Channel 16, working Channel 12. Control Station call sign "Manora Pilot Control".

Vessels should establish radio contact with control station as soon as they are within VHF range.

Use of Channel 12 is restricted to the following: Ships while entering harbour are to maintain watch on Channel 12 as soon as Pilot boards. Ships in harbour scheduled to sail are to keep a listening watch half an hour before sailing till their clearance from the port.

"Intercommunication with the ships, other than Pilot Control, at outer anchorage or ships in harbour on Channel No. 12 and 16 is strictly prohibited. The Manora Pilot Control Station is equipped with multi-channel VHF Radio Telephone sets which are operating on International Maritime Channels 8, 9, 11, 12 and 16 subject to above restrictions."

TUGS: There are five diesel tugs all owned by Port Trust. Four tugs have bollard pull varying from 10 to 18 tons and one tug has 27 tons bollard pull.

Towage inside the harbour is rendered by Port Trust on signal from Pilot. Towage is not provided outside the breakwater except in very special circumstances at the discretion of the Deputy Conservator, subject to weather permitting and availability of tugs on special terms and conditions.

BERTHING: There are 17 berths at East Wharves, total quayage 8,622 ft. Berth Nos. 1 to 17 are on a concrete quay wall of the latest type. All berths are rail-served. Berth lengths vary from 470 ft. to 550 ft. Available depths vary from 26 ft. to 31 ft. There are 8 berths at West Wharf and their length varies from 550 ft. to 700 ft. Depths available vary from 29 ft. to 31 ft.

There are three Bulk Oil Piers having length of 425 ft., 644 ft. and 750 ft. which can accommodate tankers of overall length between 525 ft. and 650 ft.

Moorings: Three moorings of 700 ft. each and one Lash Mooring of 1,000 ft. have been laid and are commissioned for accommodating the vessels of sizes between 600 ft. and 850 ft. respectively.

STEVEDORES: Working Hours: Monday through Thursday and Saturday, day shift: 0730–1130 and 1230–1630 hrs. On Fridays day shift: 0730–1230 and 1400–1630 hrs. Mondays through Saturday, night shift: 1900–2300 and 2300 to 0330 hrs. next day.

Overtime periods: 0330–0630, 1130–1230, 1630–1830 hrs.

TANKERS: Mineral oils discharged at the Bulk Oil Pier, 3 berths, and at West Wharf berth 20. Heavy grades may be discharged at the steamer wharves but dangerous petroleum only at the Oil Pier.

Vegetable oils are handled at both the terminals mentioned above, and at East Wharf berth 9.

Slop reception facilities: Not available.

Also see "Berthing".

FRESH WATER: Fresh water is available at East and West Wharves and at Oil Piers. The ships at Moorings are supplied fresh water by barges.

FUEL: In addition to coal, 3 grades of petroleum are available – furnace oil, light diesel oil and high speed diesel oil. Furnace oil can be supplied by pipe-line at all berths. Light diesel only at berths 1 to 4. At other berths supply is made by tank wagons and lorries. Large quantities can be supplied by pipe-line at the Bulk Oil Pier only.

REPAIRS: Repairs can be carried out at the anchorage except in the monsoon season. 2 ship repair jetties are available in the port. In addition, Karachi Shipyard and Engineering Works Ltd. provide all kinds of repair and ship-building facilities.

DEVELOPMENTS:

i One Oil Terminal for 75,000 d.w.t. tankers is under construction.
ii New Railway Yard for serving West Wharf berths is under construction.
iii A new road bridge serving 17 East Wharves Berths is under construction in replacement of the existing century-old Napier Mole Bridge connecting Keamari with the City.
iv New high throughput storage facilities have been added to the Port in 1976 comprising of 16,000 tons Transit Sheds at Berth No. 23, and 8,000 tons Transit Sheds at Berth No. 3.

HOLIDAYS: Eid-ul-Azha; Muharram; Defence of Pakistan Day (23rd March); Eid e Miland un Nabi; Independence Day (14th August) Defence of Pakistan Day (6th September); Jamat-ul-Wida; Eid-ul-Fitr; Anniversary of Death of Quaid-e-Azam; Christmas Day (25th December).

TIME: GMT plus 5 hours all year round.

AIRPORT: Karachi Airport, 7 miles from city. International connections to all parts of the world.

SHORE LEAVE: Shore passes are granted by Immigration Authorities when they first go on board and must be returned on departure of the vessel. These passes permit entry/exit to the docks until 11 p.m. This latter regulation is not strictly enforced.

Indian crew are not allowed ashore except in emergency. An Immigration policeman will remain on board in port where Indian crew are carried. This policeman will ask for some sort of accommodation. This need only be given if it does not cause inconvenience to the ship.

GENERAL: The Karachi Port Authorities advise that in order to avoid delays to ships requiring abreast berths for working cargo, it has been decided not to berth more than 1 vessel for receiving supplies of fresh water and bunkers. Ships due to call at Karachi are therefore *recommended to arrive with sufficient fresh water and bunkers to last for two or three weeks from the date of arrival at the outer anchorage.*

AUTHORITY: Karachi Port Trust.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Panama

ALMIRANTE (Chiriqui): 09.17 N. 82.23 W.

DOCUMENTS:
Clearance from Last Port.
Health Declaration.
1 Vaccination List.
10 Crew Lists.
6 Passengers Lists (or negative).
6 Ship's Provisions Lists.
6 Cargo Manifests (or Manifest of Ballast).
(Crew Personal Effects declaration is not required.)

PILOTAGE: Pilots are stationed at Boca del Toro town. There are three Pilots, working on daylight only. Pilotage service is compulsory, and arranged by the Agent. Three long blasts to call the Pilot on arrival. Pilot ladder on port side. The small pilot launch meets vessels off Cape Toro. This launch is white wooden hull, with a "P" on her bows. Speed limitations from Cape Toro to Mangrove Pt. due to depth. Pilot will remain on board until vessel leaves.

ANCHORAGE: It is recommended with Cape Toro bearing from 150 to 180 degrees and eight cables off.

RESTRICTIONS: Draft up to 22 ft. Minimum depths between buoys "A" and "B", 28 to 29 ft. Normal head swell about 5 ft.

Shipmaster's Report: The water depths on passing Bocas del Toro are greater than 30 ft., as long as you follow the charted course lines.

Proceeding at a reduced speed consisting of "dead slow" and "stop", with enough manoeuvrability, to minimise the vessel's pitching, you can enter or leave the Bocas del Toro with a draft of 26 ft. without any difficulties.

On entering and leaving, I was forced by cargo circumstances to berth with a 26 ft. deepest draft, and never had less than 10 ft. below my vessel's keel (deepest section), in low water.

HEALTH: Pratique given by doctor who boards on arrival, in case suspected disease on board, radio Agent in advance, advising details.

RADIO: Cables to and from Agent, via stations operated by Tropical Radio Telegraph Co., preferably Ojus Radio/WAX or WNU. VHF — not available.

TUGS: Not available.

BERTHING: One bananá pier, 650 ft. with four elevators. One general cargo pier, 350 ft. Starboard side alongside. Maximum draft alongside these piers 32 ft. but draft limited to 26 ft. at the entrance (Boco del Toro).

STEVEDORES: Agent has responsibility of making all arrangements for loading and unloading, stevedores working around the clock.

FRESH WATER: Fresh water is limited. It is restricted from December to April. Loading rate from the quay 2 t.p.h.

FUEL: Not available.

REPAIRS: No repairs can be carried out.

FRESH PROVISIONS: It is almost impossible to get them.

TIME: GMT minus 5 hours.

CONSULS: The following countries are represented: Costa Rica, El Salvador, Honduras and Nicaragua.

MEDICAL: All facilities available.

CUSTOMS ALLOWANCES: No restrictions as long as nothing is removed from the vessel.

TELEPHONES: Not available.

OPENING/CLOSING HATCHES: Performed by ship's crew or stevedores if required.

GANGWAY/DECK WATCHMEN: Available from shore if required.

DENSITY: Above 1005.

SHORE LEAVE: Allowed, no restrictions.

POLICE/AMBULANCE/FIRE: Telephone on the quay, connected to the exchange.

REPATRIATION: Can be arranged without difficulty.

AIRPORT: Domestic flights airport about 20 km. distance.

AUTHORITY: Capitania del Puerto.

BALBOA: Canal Zone, 08.58 N. 79.34 W. (See Plan)

(N.B. For items not listed below, see "Panama Canal".)

RESTRICTIONS: Port open throughout 24 hours.

MAX. SIZE: Harbour limitations generally unrestricted as to length and beam. Depth about 40 ft. low water. Vessels in excess of 38 ft. 6 in. draft not handled during period 2.5 hours before and 2 hours after low water.

Tankers working cargo restricted to 700 ft. length and 36 ft. salt water draft.

TUGS: Available and assigned for berthing by Pilot. Tug's lines used at no extra charge.

BERTHING: No specific requirements as to arrival times. Nine berths available.

(Pleasure yachts under 65 ft. length, may be permitted to dock at Panama Canal Yacht Club or Balboa Yacht Club after clearance by boarding officer and after Master has received permission from Port Captain, Customs authorities and Yacht Club Officials concerned. Chief Customs Inspector shall have authority to grant or deny such permission at his discretion.)

Rodman Naval Station: Piers can accommodate vessels of 700 ft. length and up to 39 ft. draft for oil discharge, bunkers or stores.

Panama Canal Co. Dock

Dock	Usable length	Maximum S.W. draft
4	492 ft.	30 ft.
6	742 ft.	36 ft.
7	1,058 ft.	34 ft.
8	470 ft.	26 ft.
14	775 ft.	36 ft.
15	1,146 ft.	40 ft.
16	742 ft.	38 ft.
18 –A	500 ft.	39 ft.
18 –B	500 ft.	35 ft.
18 –C, D	1,000 ft.	40 ft.

STEVEDORES: Endeavour arrange arrival to avoid cost of "stand by" as Agent arranges gangs for 0700 hrs. or 1700 hrs. commencement.

TANKERS: One berth for vessels up to 40 ft. draft.

FRESH WATER: Available.

FUEL: Bunker "C", diesel, light fuel and light diesel available at Government wharves from commercial companies. Rate of delivery 2,000 bbls. per hour.

Vessel's personnel are to connect and disconnect all fuel lines aboard the vessel. The vessel is also to supply necessary fittings to match U.S. standard 4 in. and 6 in. 150-pound flanges.

REPAIRS: Emergency repairs possible.

DRY DOCK: Length 1044 ft., generally reserved for Canal Company vessels, but arrangements may be made for emergency dry-docking.

POLICE/AMBULANCE/FIRE: Emergency tel. 110; routine Police business 2-1277.

TELEPHONES: May be placed aboard through arrangement with Port Captain.

SHORE LEAVE: Generally permitted.

CUSTOMS: Customs and Immigration Inspection Service available Monday to Saturday from 0700 to 1700 hrs. Charges for such service after hours and on Sundays and holidays set forth in Panama Canal Tariff. Number of inspectors required will be determined by Chief Customs and Immigration Inspector of port.

DELAYS: Delays in berthing, load or discharge or bunkering are minimal and infrequent. Eight hours is considered excessive.

AUTHORITY: Panama Canal Company.

AGENT: C. Fernie & Co., Inc. PO Box 212. Cable Address: "Fernie-Balboa". Also VHF. Telephone Nos.: Balboa 5657-5371. After office hours telephone numbers: Panama 21-2629, Panama 22-1037.

All correspondence should be addressed to Cristobal, Canal Zone.

COLON: 09.21 N. 79.54 E.

DOCUMENTS, and all general information, refer to "Panama Canal".

MAX. SIZE: Colon Harbour restricted to vessels with draft of 31 ft. or less. Draft 30 ft. if vessel's LOA exceeds 650 ft.

FUEL: Delivered by barge from Refineria Panama.

CRISTOBAL: Canal Zone, 09.21 N. 79.54 W.

(N.B. For items not listed below, see "Panama Canal".)

PORT LIMITS: Ship's arrival time is normally determined by their passage between the breakwater lights. Those that anchor outside the breakwater by arrangement with the Port Captain are timed as arrived when they drop anchor.

PILOTAGE (Also see "Panama Canal"): Pilotage into Cristobal not compulsory, although services of Pilot outside breakwater are available on request.

Vessels arriving outside Cristobal Breakwater who have requested an outside Pilot are required to *heave to and make a good lee.*

A pilot ladder rigged with appropriate spreaders and well illuminated at night to be provided by vessel. Accommodation ladders not acceptable for embarking Pilots outside breakwater.

Marine Director's Notice to Shipping Agents No. 8–74:

1. A vessel shall, weather permitting, have both an accommodation ladder and a pilot ladder rigged and ready for use upon arrival in Canal Zone Waters.
2. The pilot ladder shall conform to Regulation 17, Chapter V of the International Convention for the Safety of Life at Sea 1960 (SOLAS) and to all additional recommendations of the International Maritime Consultative Organisation (IMCO).
3. The accommodation ladder may be turned in and secured after the Pilot has boarded the vessel in the anchorage, provided the freeboard does not exceed 9 m. (30 ft.). If the freeboard exceeds 9 m., the accommodation ladder may not be turned in until the last Panama Canal employee boards prior to arrival at the locks.
4. A pilot hoist may be used provided the design and construction of the hoist and ancillary equipment are of such a standard as

to ensure an effective and safe means of embarkation and disembarkation. The pilot hoist should only be used when:

(a) A conventional pilot ladder is rigged and ready for immediate use but triced up well clear of the hoist;

(b) A lifeline attached to a safety stop and a lifebuoy fitted with a self-igniting light are ready for immediate use.

ANCHORAGE: Vessels will ordinarily proceed to anchorage area according to length and draft unless otherwise directed. Arriving vessels expected anchor as far to South and inward from main channel in their anchorage area as is consistent with safety. Vessels anchoring in non-designated areas may be required to move.

Anchorage Area "A". For all ships with a deep salt-water draft of not less than 34 ft. and not in excess of 39 ft. Minimum charted depth is 40 ft.

This area starting at Lat. 9° 23′ 21″ N., Long. 79° 55′ 21″ W.,
thence to Lat. 9° 22′ 48″ N., Long. 79° 56′ 15″ W.,
thence to Lat. 9° 22′ 14″ N., Long. 79° 56′ 15″ W.,
thence to Lat. 9° 21′ 56″ N., Long. 79° 55′ 48″ W.,
thence to Lat. 9° 21′ 25″ N., Long. 79° 55′ 48″ W.,
thence to Lat. 9° 21′ 25″ N., Long. 79° 55′ 21″ W.,

thence due North to starting-point. However, restricted area North and East of Buoy 2, as charted, must be observed. Explosive sector charted in this area to be avoided whenever possible.

Anchorage Area "B". For all ships with salt-water draft under 32 ft. Minimum depth is 29 ft. Explosive sector restricted to vessels carrying explosives or specially designated vessels. All ships of such length as to under no circumstances swing into Anchorage Area "A".

This area starting at Lat. 9° 22′ 48″ N., Long. 79° 56′ 15″ W.,
thence to Lat. 9° 22′ 32″ N., Long. 79° 56′ 41″ W.,
thence to Lat. 9° 21′ 42″ N., Long. 79° 56′ 41″ W.,
thence to Lat. 9° 21′ 52″ N., Long. 79° 56′ 00″ W.,
thence to Lat. 9° 21′ 25″ N., Long. 79° 56′ 00″ W.,
thence to Lat. 9° 21′ 25″ N., Long. 79° 55′ 48″ W.,
thence to Lat. 9° 21′ 56″ N., Long. 79° 55′ 48″ W.,
thence to Lat. 9° 22′ 14″ N., Long. 79° 56′ 15″ W.,

thence due North to starting-point.

Anchorage Area "C". Required pilotage waters for inbound vessels.

This area starting at Lat. 9° 21′ 25″ N., Long. 79° 55′ 21″ W.,
thence to Lat. 9° 21′ 25″ N., Long. 79° 56′ 00″ W.,
thence to Lat. 9° 20′ 48″ N., Long. 79° 55′ 57″ W.,
thence to Lat. 9° 20′ 27″ N., Long. 79° 55′ 21″ W.,

thence due North to starting-point. Restricted area East and South of Buoy 2, as charted, must be observed.

Anchorage Area "D". For all ships of over 350 ft. in length and a deep salt-water draft of less than 35 ft. except where minimum charted depth is 32 ft.

This area starting at Lat. 9° 23′ 19″ N., Long. 79° 55′ 15″ W.,
thence to Lat. 9° 22′ 55″ N., Long. 79° 54′ 21″ W.,
thence to Lat. 9° 22′ 22″ N., Long. 79° 54′ 21″ W.,
thence to Lat. 9° 22′ 02″ N., Long. 79° 54′ 55″ W.,
thence to Lat. 9° 22′ 02″ N., Long. 79° 55′ 15″ W.,

thence due North to starting-point.

Anchorage Area "E". For all ships less than 350 ft. and small craft. Minimum charted depth of water is 24 ft.

This area starting at Lat. 9° 22′ 55″ N., Long. 79° 54′21″ W.,
thence to Lat. 9° 22′ 27″ N., Long. 79° 53′ 54″ W.,
thence to Lat. 9° 22′ 22″ N., Long. 79° 53′ 54″ W.,
thence to Lat. 9° 22′ 22″ N., Long. 79° 54′ 21″ W.,

thence due North to starting-point.

Anchorage Area "F". For small craft and yachts. Pilotage for this area will be decided by Cristobal Port Captain, based on merit of each individual case. Under no circumstances may a vessel proceed to this area prior to being cleared by Boarding Officials. (Bounded by Channel Buoy "3" by a direct line through Buoys "A," "B," "C," "L4," "L2" and return to Buoy "3".)

Outer anchorage area. Established North-West of Cristobal breakwater have the following co-ordinates: Commencing at Lat. 09° 23′ 14″ N. Long. 79° 55′ 21″ W. (West breakwater light); thence to 09° 24′ 40″ N. 79° 56′ 00″ W. (buoy "A", whistle sea buoy); thence to 09° 24′ 40″ N. 79° 57′ 00″ W.; thence to 09° 23′ 14″ N. 79° 57′ 00″ W.; thence due East to starting point.

During periods of harbour congestion, large, deep-draft vessels and/or any vessel so directed may anchor outside the breakwater in the approved area. Such vessels must advise Cristobal Signal Station, by VHF Channel 12, the time of passing sea buoy, in order to establish order of transit. Masters will be given a definite time to enter the breakwater, where the vessel will be met by transit Pilot(s) and boarding officials.

Vessels must strictly adhere to the breakwater entry times as given, in order that transit schedule can be maintained.

Prohibited Anchorage. Eastern side of channel, Canal Zone waters South of Lat. 9° 22′02″ N. to Mole Buoy in order to give clear access to Colon Harbour. Also, no vessel or craft may proceed South of Latitude 9° 21′ 25″ N. prior to being cleared by Boarding Officials. No vessel may anchor with any part of the vessel in the main channel or closer than 300 yards to either East or West breakwater lights.

In cases due to harbour congestion, any vessel may be directed to anchor to Westward outside breakwater entrance and given an order as to the time it is to pass through the breakwater entrance.

RESTRICTIONS: Port open throughout 24 hours.

MAX. SIZE: Harbour limitations generally unrestricted as to length and beam. Draft 40 ft.

RADIO: The Port Captain may be contacted via VHF Channel 12. Commercial telephone calls and messages to Agents may be made via Panama Radio, VHF Channel 16.

TUGS: Available and assigned for berthing by Pilot. Tug's lines used at no extra charge.

BERTHING: No specific requirements as to arrival times. Fifteen cargo and bunkering berths.

STEVEDORES: Endeavour arrange arrival to avoid cost of "stand by" as Agent arranges gangs for 07.00 hrs. or 17.00 hrs. commencement.

TANKERS: Four berths available.

FRESH WATER: Available from piers.

FUEL: Bunker "C", diesel, light fuel and light diesel available at Government wharves from commercial companies. Rate of delivery 2,000 bbls. per hour.

The Southern part of Anchorage C, Cristobal Harbour, has been designated a limited bunkering area for vessels whose draft is too great to use the East breakwater bunkering area.

A large mooring buoy has been placed there. Vessels will anchor and use the buoy as a stern mooring.

Pilotage is compulsory out and into this area for vessels and bunkering barges.

Also see "Balboa".

REPAIRS: Emergency repairs possible.

DRY DOCK: Length 386 ft., breadth 60 ft., depth over blocks 20 ft. 6 in. MLW.

POLICE/AMBULANCE/FIRE: Emergency number 110. Routine Police business 3–2111.

TELEPHONES: May be placed aboard through arrangement with Agent.

SHORE LEAVE: Generally permitted.

CUSTOMS: Customs and Immigration Inspection Service available Monday to Saturday from 0700 hrs. to 1700 hrs. Charges for such service after hours and on Sundays and holidays set forth in Panama Canal Tariff. Number of inspectors required will be determined by Chief Customs and Immigration Inspector of port.

DELAYS: Delays in berthing, load or discharge or bunkering are minimal and infrequent. 8 hours is considered excessive.

AUTHORITY: Panama Canal Company.

AGENT: C. Fernie & Co., Inc. PO Box 5042, Cable address: "Fernie–Cristobal". Telephone Nos.: Cristobal 1772 – 1295 – 2914 – 2128. Telex Nos.: ITT–3482020, TR–9211 "Fernie Pa". Also VHF. After office hours telephone numbers. Cristobal 2468, Cristobal 2568.

PANAMA CANAL (entering **Cristobal** or **Balboa**) (See Plan)

BOARDING INSPECTOR: Arriving vessels will be boarded upon arrival inside the breakwater at the Atlantic entrance or off the seaward end of the dredged channel at the Pacific entrance by a Canal boarding inspector in accordance with procedures and boarding hours established for the boarding of vessels at the respective ports by the Canal authorities.

Vessels shall be entered at Canal Zone port of arrival by boarding inspector and it is not necessary for Masters to come ashore for that purpose. A transitting vessel entered at Balboa is required to clear from Cristobal, and vice versa.

Anchoring to await boarding inspector: When a vessel is not boarded immediately on arrival, it shall anchor in the appropriate, designated anchorage area and await the boarding officer. See "Anchorages".

VESSEL'S IDENTIFICATION: Every vessel shall hoist its signal letters when approaching and entering a terminal port, and those arriving at night shall promptly signal their names by flashing light to the signal station. This communication of the vessel's name by signal letters or flashing light is mandatory even though the vessel communicates by voice radio. (Also see "Radio").

OIL POLLUTION: Every vessel subject to the Federal Maritime Commission's oil pollution financial responsibility requirements, must maintain on board and make available to Panama Canal Company boarding inspectors the original or copy of its certificate. Any vessel that does not have the necessary certificate on board will not be permitted to transit the Panama Canal.

If pollution occurs the Master's appearance in court may be required with possible heavy fine and attendant delays.

ORDER OF TRANSIT: Canal authorities may dispatch vessels through Canal in any order and at any time they may see fit. Priority of arrival at a terminal does not give any vessel the right to pass through the Canal ahead of another that may arrive later, although order of arrival will be a consideration in determining order of passage.

N.B. A vessel in excess of 150 ft. in length that is not equipped with properly operating rudder-angle and engine-revolution indicators, so located as to be readily visible to a Pilot on the bridge, will be subject to delay in transitting to the extent the Canal authorities deem necessary or appropriate in order to minimize, in the light of the type and volume of Canal traffic and of other factors relating to the safety of Canal operations, the increased hazards of navigation resulting from failure of the vessel to be so equipped. (In practice this regulation requires that the indicators should be located on wings of bridge as well as inside wheelhouse for vessels over 80 ft. beam).

DOCUMENTS: All documents listed below shall be ready for immediate delivery to boarding inspector when he boards vessel upon each arrival of vessel in Canal Zone.

Documents required	*From ships which transit Canal but do not take on or discharge passengers or cargo at Canal Zone ports (number of sets)*	*From ships taking on or discharging passengers or cargo at Canal Zone ports (number of sets)*
(1) Ship's information and quarantine declaration (Panama Canal Form 4398)	1	1
(2) Clearance from last port	*1	*1
(3) All certificates of a sanitary nature	*1	*1
(4) Passenger list: Passengers transitting only (on Panama Canal Form 20)	**2	**2
(5) Passenger list: Passengers for discharge (on Panama Canal Form 18–9)	0	**4
(6) Crew list (on Panama Canal Form 1509–10)	2	2
(7) Store list	†1	†1
(8) Cargo declaration (Panama Canal Form 4363)	1	‡1
(9) Manifest of local cargo	0	4
(10) Panama Canal tonnage certificate	1	††1
(11) National register	1	1
(12) General arrangement, capacity, tank and engine room plans	‡1	††1
(13) Report of structural alterations and of changes in use of tanks or other spaces since last transit	1	††1
(14) Declaration by all vessels except ships of war of all arms and munitions of war aboard. Explosives are declared separately	**2	**2
(15) Declaration as to vessel's port(s) of departure, destination, and ports of call, within the last three months, with the corresponding actual or approximate dates	1	1

*For examination and possible retention.

**Not required unless such persons or cargo are carried.

†Required if ship during transit is laid up for repairs, regardless of whether passengers or cargo are taken on or discharged.

††Not required unless ship transits Canal.

‡For taking up and subsequent return through Agent or otherwise.

Documents required at ports. In case a vessel takes on or discharges passengers or cargo at only 1 Canal Zone port and does not transit Canal, documents indicated in column 2 are required. In case a ship docks or takes on or discharges passengers or cargo at both Cristobal and Balboa, or at a port other than port of entry, all documents in column 2 are required at first port and, in addition, 4 copies of document (9) required at second port.

Crew List. For purposes of additional identification of crew members, all copies of crew list shall include for each seaman the serial number of his certificate of identification, continuous discharge book, passport or other satisfactory identifying documentation. In addition, the given name and middle initial, as well as family name, shall be shown for all seamen.

Passenger list. All copies of passenger lists shall be accurate and legible and shall be delivered to boarding inspector. The list shall show passengers in alphabetical order. Passengers who are to be discharged at Canal Zone ports shall be listed separately from other passengers aboard who are only to transit Canal. In event any passenger listed for discharge fails to disembark, or any passenger listed for transit disembarks, notice shall be given promptly by Master through his ship's Agent to Port Captain and a supplementary passenger list (same number of copies as is required for an original list of disembarking passengers) showing required information concerning such passengers shall be furnished promptly to Chief Customs Inspector prior to clearing Canal Zone waters.

(It is understood that "Advance Documents" are no longer required by Authorities. However, Agents request copies of Crew and Passenger Lists in advance, which should, if possible, be airmailed from last Port).

PILOTAGE: Pilot is mandatory entering either from Balboa or Cristobal and is supplied without special request. Should vessel desire Pilot to meet it outside Atlantic Breakwater, it should remain there and make signal to that effect. Vessels shall furnish a safe, clean, well-lighted Pilot ladder, and will be required to make a lee in rough weather. Vessel normally boarded inside breakwater at a point North of the Mole Beacon at the Atlantic Entrance, and in Merchant Vessel Anchorage to seaward of Buoys 1 and 2 at Pacific Entrance.

Shelter for Pilots: Purpose of platform is to provide a shelter from sun and rain for Pilots working near bow of vessel and to provide adequate visibility around the locks to reduce danger of damage.

Platforms are required on:

(a) All vessels that are 100 ft. or more in extreme beam with bridge aft; and

(b) All vessels that are 95 ft. to 99.9 ft. extreme beam with bridge 600 ft. or more from the bow measured at the outside of the wheelhouse at the centreline.

Platform to be erected at position which is farthest forward at extreme beam and not more than 6 in. inboard from the vertical plane of shell plating. 1 on each side of the vessel. Awning made of suitable material. Deck of wood or other suitable material with non-skid surface.

Vessels equipped with previously approved design may continue to use platforms of that design until they require replacement.

Further inquiries on this subject should be directed to Port Captain Balboa/Cristobal.

The vessels mentioned above require 4 Pilots, 2 forward and 2 aft, when transitting the locks of the canal.

STEERING LIGHT: All vessels with the bridge more than 250 ft. from the stem must have a steering light at or near the stem. The light may be any colour except white, green or amber, must not be visible forward of the beam, and must be of such an intensity and so fixed as to be clearly visible from the navigation bridge.

ANCHORAGES: No vessel shall anchor within navigable waters of Canal Zone in other than a designated anchorage.

1. *Merchant Vessel Anchorages.* (a) *Atlantic entrance merchant vessel anchorage.* An area to the West of the Canal channel bounded as follows: Starting at a point "A", located in position 9° 21′ 25″ N., 79° 55′ 31″ W., and marked by gas buoy No. 2, thence 900 yd. 270° true to a point "B" located in position 9° 21′ 25″ N., 79° 55′ 58″ W., thence to lighted buoy "1", thence to lighted buoy "H", thence due North to a point "C" located in position 9° 22′ 07″ N., 79° 56′ 41″ W., thence 2,800 yd 59° true to a point "D" located in position 9° 22′ 50″ N., 79° 55′ 29″ W., and thence to the starting-point. The line extending due West from the Cristobal Mole through lighted beacon No. 1 and lighted buoy No. 2 (9° 21′ 25″ North) marks the Southern limit of the anchorage area. No vessel shall pass this line without having been passed by the boarding officer and without having a Canal Pilot on board.

(b) Gatun Lake anchorage basin. An area immediately East of the Canal channel line, bounded by a line extending to a point 450 yd., 120° true from the East wing-wall at the South end of Gatun Locks, thence 690 yd., 148° true to flashing white lighted buoy "A" thence 700 yards, 070° true to flashing white lighted buoy "1" thence 1,130 yards, 148° true to quick flashing white lighted buoy "3" thence 2,800 yards, 224° true through fixed white lighted buoy "5" and black can buoy "7" to the Canal channel line at flashing white lighted buoy "9"; the channel prism being the Westerly boundary line of the anchorage area.

(c) *Pacific entrance merchant vessel anchorage.* An area bounded as follows: beginning at a point in position 8° 51′ 50″ N., 79° 30′ 00″ W., marked by a lighted whistle buoy which is painted with alternating black and white vertical stripes and which shows short-long flashing white light every 8 seconds, i.e. light 0.4 seconds, eclipse 0.4 seconds, light 1.6 seconds, eclipse 5.6 seconds; thence due East to Long. 79° 28′ 00″ W.; thence due North to Lat. 8° 54′ 31″ N., thence due West toward Flamenco Island Light to a point 8° 54′ 31″ N., 79° 30′ 46″ W.; thence S.W. touching the N.W. corner of San Jose Rock to position 8° 53′ 27″ N., 79° 31′ 23″ W., marked by canal-entrance lighted buoy No. 2, thence S.E. to the point of beginning.

2. *Anchorage areas for ships loaded with hazardous cargoes.* (a) *Atlantic end.* Area included in rectangle 1,000 yd. wide immediately South of West breakwater, starting at a point on West breakwater 1,000 yd. from West Breakwater Light and thence extending Westward 2,000 yd. along breakwater.

Cristobal: Grade "A" Explosives Anchorage (over 5 tons) and all LNG and LPG Tankers loaded or not Gas free.

Area bounded by:

Lat.	09° 24′ 40″ N.	Long.	79° 57′ 00″ W.
Lat.	09° 24′ 40″ N.	Long.	79° 56′ 29″ W
Lat.	09° 23′ 53″ N.	Long.	79° 56′ 29″ W.
Lat.	09° 23′ 53″ N.	Long.	79° 57′ 00″ W.

(b) *Pacific end.* Area South of Naos Island bounded on the East by a line drawn South (True) from entrance gas buoy No. 1; on the South by a line drawn East (True) from Tortolita Island, and on the North and West by the curve of 30 ft. depth.

Vessels carrying explosive cargoes shall anchor in the explosive anchorage areas, on arrival at the Canal Zone, and there await instructions.

MAX. SIZE: N.B. The following paragraphs serve as an approximate guide to permitted size of vessel in transitting Canal, but Owners and Operators should always seek official clarification and ruling from: The Marine Director's Office, Panama Canal Company, Box 5012, Balboa, Canal Zone.

1. *General*

(a) Based on experience to date, the Panama Canal Company has determined that 106.0 ft. is the widest extreme beam commercial vessel acceptable for regular transit. Wider vessels, not exceeding an extreme beam of 107.0 ft., may be permitted to transit on a delivery basis only. The max. length is limited to 900 ft. except that container or passenger vessels will be accepted up to a max. length of 950 ft.

(b) Vessels of 100 ft. beam and over, whose handling characteristics are such as to endanger herself, Panama Canal appurtenances and/or a third party, may have such further limitations of draft and trim placed on her as Canal Authorities deem necessary to ensure reasonable safety.

(c) Draft of non self-propelled barges 550 ft. or more in length, and/or 100 ft. or more in beam, may be limited when in the opinion of Canal Authorities such limit is necessary to ensure reasonable safety.

(d) Because of the increasing need for despatching large vessels and tows as early as possible in the morning, consistent with safe practice, it is important that information provided in advance of initial transit of the vessel include capacity plans, general arrangement plans, engine-room plans and, whenever possible, photostatic copies of national register, load-line certificates and Panama Canal tonnage certificates. This advance information will minimise the time spent aboard the vessel by admeasurers before commencement of the initial transit.

2. *Initial Transit Draft*

This max. draft will be further limited as necessitated by the draft limits established by bilge radius, the max. TFW draft allowed for the Panama Canal as promulgated periodically by the Marine Director because of Gatun Lake Level, or by limitations deemed necessary because of restrictions in the waterway.

3. *Maximum transit draft.* Maximum draft for succeeding transits will be maximum allowable Panama Canal fresh water draft for particular vessel, based on all relevant factors. After initial transit, Owners, Operators or Agents will request authorised maximum draft from the Marine Director's Office. This request will be returned with approved maximum Panama Canal fresh water draft stamped thereon.

4. *Transit drafts for sister-ships.* Identical sisters are not limited to initial transit draft established in paragraph 2. Transits of such vessels will be permitted at maximum Panama Canal fresh water draft authorised an identical sister, lake level permitting.

5. *Procedure to obtain initial transit draft allowances.* Shipowners, Operators or Agents who desire arrange initial transits in excess of 34 ft. Panama Canal fresh water draft must correspond with the Marine Director's Office, Panama Canal Company, Box 5012, Balboa, Canal Zone, not later than two weeks prior to loading vessel in order receive designated initial Panama Canal fresh water transit draft.

6. *Release from liability.* Masters of vessels will be required to execute a form, undertaking to release Panama Canal Company from liability in case of accident and to indemnify Company for damages sustained in following instances (because of additional draft allowances granted to transitting vessel, these releases are required, generally, on a one-time basis):

(a) When transitting vessel is equipped with permanent fenders to breast her off the lock-wall batters, until trial transits have proven permanent fenders satisfactory;

(b) When vessel permitted transit at draft greater than her allowed Panama Canal fresh water draft or her mean authorised TFW load line. Vessels over draft will be subject to denial of transit or delay to extent Panama Canal authorities deem necessary in light of traffic conditions and safety of Canal operations;

(c) When a vessel transits at less than the minimum drafts specified below:

Over 425′ up to 475′	8′ fwd. 14′ aft
Over 475′ up to 525′	18′ fwd. 20′ aft
Over 525′ up to 580′	20′ fwd. 22′ aft
Over 580′ up to 625′	22′ fwd. 24′ aft
Over 625′	24′ fwd. 26′ aft

HEALTH: Application for radio pratique is available to all vessels arriving in Canal Zone waters. Radio pratique is a quarantine clearance by radio, based upon information from the vessel prior to its arrival at Balboa or Cristobal and past experience with the vessel and its personnel. A limited number of vessels will be sampled for compliance with the required standards of health and sanitation on board. The sampling will generally be done on a random basis and will provide a measure of the success of the programme.

It should be emphasised that radio pratique applies only to the quarantine section of the required forms and documents for the Panama Canal. All vessels must still complete the required boarding forms, and in most cases, be prepared to receive the Panama Canal Boarding Inspector on arrival in Canal waters. Such forms as crew and passenger lists, ship's information forms, and the cargo declaration must always be completed for presentation to the Panama Canal officials.

Attached is a listing of the items to be reported prior to arrival in the Canal Zone. The information is similar to that now required of vessels requesting radio pratique in U.S. ports. In addition, there are some special circumstances in the Canal Zone that make additional information necessary.

The manner of reporting the information required should be clear and orderly as specified in 35 CFR, section 123.4, listing information required in advance. The request for radio pratique should originate from the Master and can be submitted directly by radio or through the vessel's local Agent. The local Agent should submit his request with all the required information to the Quarantine Office at the port of arrival of the vessel. The local Agent will be notified when radio pratique is granted or refused and the Agent will communicate this information to the ship.

It is hoped that vessels will take advantage of radio pratique when arriving for transit or docking at the Canal Zone ports of Balboa and Cristobal, and that in as many instances as possible it may be able to grant this time saving privilege.

Radio Pratique Programme

1. *General*

(a) The granting of radio pratique is a Health Bureau responsibility designated to the Division of Public Health. (35 CFR 61.264)

(b) In order to process the details of this programme more expeditiously, communication may be held between the quarantine offices and the ship's Canal Zone Steamship Agent representing the vessel hereinafter called local Agent.

(c) All vessels coming to the Panama Canal may request radio pratique by means of the ETA radio message or through the ship's local Agent.

(d) Requests for radio pratique may be submitted to the quarantine office at the port of arrival at least 24 hours and not more than 48 hours before vessel is scheduled to arrive.

2. *Specific Requirement for Each Voyage*

(a) The vessel will be maintained free from rats and vermin.

(b) The Derating Certificate or Derating Exemption Certificate must be valid (i.e. date of issue not more than 180 days prior to date of arrival at the Panama Canal).

(c) Vessels arriving within 15 days from the ports designated in the Aedes Aegypti Indices Bulletins must be disinfected with the aerosol described in the Aedes Aegypti Indices Bulletin No. 8, 1970.

(d) The restrictions imposed in 61.281 through 61.302, "Importation of Certain Things", Title 35 CFR, must be strictly adhered to and followed.

3. *Action taken by the Quarantine Officer in Charge**

(a) Radio pratique *may* be granted by the quarantine office upon request from the vessel or through the ship's local Agent representing the vessel provided it is documented by ship's radio.

(1) If the information requested in the Appendix hereto is complete; *and,*

(2) If the quarantine officer in charge* is of the opinion that the vessel is reasonably free from any condition either from a health or sanitation standpoint that might introduce illness into the Canal Zone.

(b) Radio pratique may be denied by the quarantine officer in charge:

(1) If the requested information is incomplete; or,

(2) if the quarantine officer in charge* feels that medical or sanitary reasons prevail requiring careful inspection upon arrival of the vessel.

*Or designated representative.

4. *For Sampling and Surveillance of Compliance Purposes*

After the information supplied by the Shipmaster has been reviewed the quarantine officer in charge* will advise the ship's local Agent concerned whether radio pratique has been granted or denied and if any restrictions or limitations have been imposed. He will also inform the Marine Traffic Controller, and the Immigration and Customs office whether radio pratique has been granted or denied.

*Or designated representative.

5. *Action taken by Ship's Local Agent*

(a) The ship's local Agent may submit requests for radio pratique to the quarantine office if the vessel has not done so by radio. The information required is listed in the Appendix hereto. Such requests should be submitted, properly documented by ship's radio, not later than 24 hours before the vessel is scheduled to arrive nor earlier than 48 hours before the expected arrival of the vessel.

(b) The ship's local Agent will advise the vessel which he represents whether radio pratique has been granted or denied; and any restrictions or limitation imposed.

6. *Action taken by Panama Canal Company Boarding Inspectors*

On vessels that have been granted radio pratique, the Panama Canal Company Boarding Inspector will:

(a) Ascertain that the Ship's Master has completed the Ship's Information and Quarantine Declaration (Form 4398) *except* the "quarantine data" portion at the bottom of the form; and,

(b) Otherwise process the vessel (e.g. for Immigration, Customs, Admeasurement, and any other non-quarantine requirements) without any further questioning on quarantine matters. This processing may be either in the bay or at the dockside at the discretion of the Admeasurer Watch Supervisor. By agreement with the Chief Immigration Service, passengers that are disembarking from vessels may be processed by the Immigration Service at the docks.

(c) Vessels that are denied radio pratique or have failed to request radio pratique, will be cleared through Quarantine by the Panama Canal Company Boarding Inspector in the prescribed routine manner.

7. *Action taken by Shipmasters*

(a) Shipmasters should request radio pratique directly by radio or through the Agent representing them in the Panama Canal Zone and supply the information requested in the Appendix hereto.

(b) Shipmasters should take cognizance of the requirements listed in paragraph 2, "Specific requirement for each voyage", above.

(1) If granted radio pratique, they may enter the anchorage area or a Canal Zone port flying the quarantine flag; they must however comply with any restrictions or limitations imposed by the Quarantine Officer in Charge.

(2) Unless the boarding of docking vessels is scheduled to take place at the pier, vessels *must* await boarding by a representative of the Panama Canal authority.

(3) If denied radio pratique, vessels must be cleared for Quarantine in the prescribed routine manner; that is enter the Canal Zone waters or a Canal Zone port flying the Quarantine Flag and must await processing by the Panama Canal Company Boarding Inspector.

(4) It is important that the Shipmasters remember that in all instances all forms regularly required are to be completed prior to arrival for presentation to the Boarding Inspector.

Appendix

Information required by Quarantine Officer in Charge from Shipmaster requesting radio pratique through ship Agency representing him at the Panama Canal.

Full name of vessel.

Country of registry.

International radio call letters.

Estimated date of arrival and port.

Whether docking at Balboa or Cristobal and reason therefor.

List of ports of call within past *15* days prior arrival.

Report any illness or communicable diseases on board.

Report any death occurring on board since departure from last port and cause, if known or suspected.

Report the number of smallpox vaccinations required.

Report the number of passengers to be disembarked and port of disembarking (e.g. Cristobal or Balboa).

Report the date of the Derating Certificate or Derating Exemption Certificate.

Record the number, kind, and origin of all animals aboard and if any are scheduled for disembarking.

Report the origin or source of the meat in the ship's stores.

Only vessels in the following categories need still be subject to "on board" public health clearance upon arrival at Canal Zone ports:

A. Vessels which, during the 15 days prior to arrival in the Canal Zone ports, have or have had on board passenger or crews with any of the following conditions or symptoms of illness:

1. Temperature of 100° F (38° C) or greater *(a)* which persisted for 2 days or more: or *(b)* which was accompanied or followed by any one or all of the following: rash, jaundice, glandular swelling; *or*
2. *Prolonged diarrhoea* (lasting 1 full day or more).

B. Occurrence of death on board for any reason.

C. Vessels which have been in a country infected with smallpox during the 15 days prior to arrival in the Canal Zone.

D. Vessels which have been in a country infected with plague in the 60 days prior to arrival in the Canal Zone.

RADIO: Balboa Naval Radio NBA.

1. *Signal Stations.* (a) Visual-signal stations established for communication on arrival Canal approaches by International Code and/or flashing light, at seaward end of Pier 6 Cristobal, and on Flamenco Island at Pacific entrance.

(b) Flamenco Island also contactable on VHF Channel 12 frequency 156.6 Mc/s., and R/T 2182, 2638 and 2846 kc/s. – call letters WHC.

(c) Vessels of 85 ft. beam and above awaiting transit at Balboa anchorage should keep VHF radio watch on Channel 12 for transit orders.

(d) Arriving ships may communicate with Port Captain's Office, Cristobal through Cristobal Signal Station Radio communication is maintained on international maritime VHF Channel 12 (156.6 Mc/s.) through "Cristobal Radio".

2. *Advance information required by radio from vessels approaching Canal.* Vessels approaching Canal should communicate by radio to the Port Captain, through Balboa Radio Station, call letters NBA, at least 48 hours in advance of arrival in Canal Zone, the information required below. If radio communication can be established earlier than 48 hours in advance of arrival, required information should be furnished at time such communication is first practicable.

(a) All items of information listed below, unless previously communicated through Agents or otherwise to Canal authorities, shall be transmitted to Port Captain using phonetic alphabet letters to identify items, as follows:

ALFA – The Panama Canal Identification Number of the vessel.

BRAVO – Estimated date and time of arrival, port of arrival and request for Canal transit if desired.

CHARLIE – Estimated draft upon arrival, in feet and inches (fore and aft).

DELTA – Any changes in the vessel's name, country of registry, structure, or use of tanks that have occurred since the vessel last called in Canal Zone waters.

ECHO – Will the vessel dock at Balboa or Cristobal? What is the reason for docking? If it is for cargo operations, fuel or water, give the tonnage involved in each case. Is there any other reason the vessel will not be ready to transit upon arrival? What is the reason?

FOXTROT – The nature and tonnage of any deck cargo.

GOLF – If the vessel is a tanker, state names and grades of cargo carried. State names and grades of the cargo last carried in each empty tank which is not gas free.

HOTEL – If the vessel is carrying explosives as cargo, state the grade of each explosive and the amount, in tons of each grade.

INDIA – Quarantine and immigration information:

(1) Is radio pratique desired?

(2) State the ports at which the vessel has called within 15 days preceding its arrival at the Canal Zone.

(3) State all cases of communicable disease aboard and the nature of the disease or diseases, if known.

(4) The number of deaths which have occurred since departure from the last port and the cause of each death, if known.

(5) The number of smallpox vaccinations required.

(6) The number of passengers disembarking and their port of disembarkation.

(7) The number of ports of origin of any stowaway and a brief description of the identity papers of each stowaway.

(8) The number, kind and country of origin of any animals aboard. Are any animals to be landed?

(9) The country of origin of all meat, whether carried as cargo or as ship's stores.

(10) Has the vessel called at a port in any country, infected with foot-and-mouth disease or rinderpest during its present voyage? Countries considered to be infected are:

(a) All countries East of the 30th Meridian West longitude and West of the International Date Line except Australia, Channel Islands, Fiji, Greenland, Iceland, Japan, New Zealand, Northern Ireland, Norway, Republic of Ireland.

(b) All countries of South America;

(c) Curacao (the Leeward Islands of the Netherlands Antilles);

(d) Cuba;

(e) Martinique;

(f) Guadaloupe.

(11) Specify whether the vessel has a valid Derating Certificate or a Derating Exemption Certificate issued 180 days prior to arrival.

The following additional information shall be transmitted via radio to the Port Captain from all vessels as applicable:

(1) Vessels approaching from the Pacific shall report actual time of passing Cape Mala, or the latitude of Cape Mala, and the vessel's speed.

(2) Vessels approaching from the Atlantic shall report 12 hours prior to arrival at Cristobal any change of 1 hour or more in the expected time of arrival.

(3) Any other matters of importance and interest.

Timely receipt of the above information will facilitate the transit or docking of arriving vessels. Failure to comply with these reporting requirements may subject a vessel to delay since vessels which do comply will receive priority of service and handling over those which do not.

DENSITY: On several occasions vessels arriving for transit have been found to be over authorised draft after entering Gatun Lake. Overdrafts in these instances have been caused, it is believed, by assuming fresh water densities different from what actually exists in Canal.

Using distilled water as 1.000 at 3.98°C, water densities have been determined to be as follows:

	Density	
Location	*Gm./cc.* 85°F	*Lbs./ft^3* 85°F
(a) Gatun Lake*	0.9954	62.21
(b) Miraflores Lake†	0.9971	62.32
(c) Balboa Anchorage‡	1.0219	63.87
(d) Cristobal‡	1.0212	63.76

*Fresh water.

†Brackish water.

‡Salt water.

BOILER WATER: May be taken without charge from Gatun Lake subject Pilot's permission and draft.

FRESH WATER: Available Balboa or Cristobal cost about 48 cents per 100 cu. ft.

CERTIFICATES: See "Documents". *(a)* If a valid Derating Certificate or Derating Exemption Certificate is not produced with respect to any arriving vessel the quarantine officer shall:

(1) If he is satisfied that vessel is free of rodents or is kept in such a condition that number of rodents on board is negligible, issue a Derating Exemption Certificate; or

(2) If he is satisfied that a Derating Exemption Certificate should not be issued with respect to such vessel, require derating of vessel.

(b) When, pursuant to paragraph *(a)* (2) of this section, derating has been completed to satisfaction of quarantine officer, he shall issue a Derating Certificate.

CUSTOMS: *Hours:* The regular hours for the Customs inspection of baggage of landing passengers and for the Customs supervision of landing passengers are from 0700 to 1700 hrs. daily, excluding Sundays, and holidays. Such Customs services may be furnished during other hours, or on Sundays and holidays, only upon the request of the Master or authorised Agent.

2. *Marine Protests.* Marine notes of protest may be made and extended by Masters of American vessels before Customs officers without charge.

3. *Allowances.* Tobacco, Wine and/or Spirits at Master's discretion sufficient for immediate consumption. Alcohol not permitted to be taken ashore.

CONSULS:

Great Britain: British Consulate, Colon Office 38–7–7060;

Norway: Royal Norwegian Consulate General: Consul General for Panama, R. P., Terence O. Ford, Office: 28–25–2347. Residence: 28–24–1884.

Norwegian Consul, Cristobal, G. R. Morland, Fenton Bldg. 3–2819.

Norwegian Consul for Pacific Side, Canal Zone, Arne Hauge, Office 2–1965.

Republic of South Africa: Consul for the Republic of South Africa, Henry I. Darlington, Office: 28–23–0834. Residence: 28–23–6779.

Sweden: Royal Swedish Consulate General, Edificio Melinda, Via Argentina, Panama 28–23–9694.

Denmark: Royal Danish Consulate General, Consul General for Panama and Canal Zone, W. Ishoy, Office: 28–25–0524. Residence: 28–24–1537.

Royal Danish Consulate for Colon and Canal Zone, George R. Downing, Office: 38–7–1870. Residence: 3–2361.

Finland: Finnish Vice-Consul, Cristobal/Colon, Donald Francey, Fenton Bldg. 3–1781.

REPATRIATION: Crew members, of vessels other than vessels of United States registry or enrolment signed on before a shipping commissioner, may be discharged in Canal Zone only with consent of the Immigration Service. Before such consent may be given, the Chief Immigration Inspector at port concerned shall be furnished a memorandum in triplicate showing name, age, nationality, and rating of the crew members proposed to be discharge.

When crew members are signed on a vessel, other than crew members signed on a vessel of United States registry or enrolment by a shipping commissioner in the Canal Zone, a memorandum in triplicate showing name, age, nationality, and rating of crew members signed on shall be furnished to Chief Immigration Inspector at the port concerned.

Arriving crew members and particularly visiting Superintendents should if possible possess Panamanian visas.

AIRPORT: Tocumen International Airport located outside Panama City, 18 miles from Balboa; 48 miles from Cristobal, served by all major scheduled international airlines operating in Southern hemisphere.

HOLIDAYS: Sunday, January 1; February 22, Good Friday; May 30; July 4; First Monday in September; November 3; November 11; Thanksgiving Day; December 25; and such other days as may, pursuant to law, be declared to be holidays.

TIME: EST. No alterations to clocks necessary throughout the year.

LOCKS: Gatun Locks (Atlantic side) raise and lower vessels 85 ft., Miraflores (nearest to Pacific) 54 ft. and Pedro Miguel (Pacific side) 31 ft.

AUTHORITY: Marine Director, Panama Canal Company.

AGENT: See "Cristobal"

PUERTO LAS MINAS (Payardi): 09.24 N. 79.50 W.

DOCUMENTS:

5 Crew lists – visaed by Panamanian Consul.
5 Passenger lists – visaed.
5 Stores lists – visaed.
1 Panamanian Consular clearance.

Vessels arriving without a consular dispatch will be charged with twice the cost of these documents on arrival.

PILOTAGE: Refinery Pilot boards at the seabuoy in approximate position 09° 25′ 40″ N. 79° 49′ 42″ W.

ANCHORAGE: Vessels waiting for the pilot should anchor in the vicinity Eastward of the seabuoy.

APPROACHES: Las Minas Bay is situated approximately 6 miles East of Cristobal. The approach channel is 1 mile long and 1,000 feet wide with a max. draft allowed for entering of 39 ft. Leading lights covering approach channel on bearing 171° from seaward.

The inner harbour channel is 1 mile long and 300 ft. wide and has max. allowable draft for entering of 39 ft. up to the tanker berths. Leading lights covering the inner channel are on a bearing of 148° 45″ from seaward.

MAX. SIZE: Length 750 ft. LOA. Max. draft 39 ft. when destined for a tanker berth. For the general cargo dock the max. length permissible is 500 ft. LOA with a max. draft of 25 ft.

RADIO: See Panama Canal.

BERTHING: 2 tanker berths with a max. permissible draft of 39 ft. 1 general cargo berth with a max. permissible draft of 25 ft. This berth may accommodate vessels up to 500 ft. LOA. 1 barge dock with a max. permissible draft of 25 ft. and a max. permissible length of 250 ft. LOA.

FRESH WATER: Can be supplied ex pipe-line on all berths.

FUEL: Bunkering at the tanker berths is restricted solely to tankers loading or discharging. Vessels under 250 ft. LOA, can be bunkered at the barge dock. Vessels at the general cargo dock can be bunkered ex pipe-line.

Blended fuel oils in general are supplied ex barge.

Vessels calling for bunkers only are refuelled by barge (weather permitting) at the anchorage in the vicinity Eastward of seabuoy No. 1. From the storage tanks of Refineria Panama, S.A. fuels are loaded on barges and transported to Colon, Cristobal, Balboa and Taboga for delivery to vessels by barge.

The Refinery produces all types of marine fuels, Bunker "C", Marine Diesel, Light Marine Diesel, etc.

When a vessel is stemmed for bunkers by barge and this turns out to be impossible on account of adverse weather conditions or because of technical difficulties, she may get her bunkers supplied at one of the piers in Cristobal or Balboa.

AUTHORITY: Refineria Panama, S.A.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Papua New Guinea

GENERAL:

APPLICABLE TO ALL PORTS IN PAPUA NEW GUINEA
(See also details under individual ports) **(See Plan)**

DOCUMENTS: International conditions i.e. at the first port of call in Papua New Guinea the following inward Customs documents are required to be handed to Customs Department within 24 hours of ship's arrival.

- 3 Copies Inward Passenger List.
- 7 Copies Inwards Customs Manifest.
- 3 Copies List of Crew.
- 3 Copies Articles in private possession of officers and crew Form 5.
- 3 Copies Stores List.
- 2 Copies Immigration Restriction Ordinance List (Form 6) being complete list of passengers disembarking and in transit.

If other than first port of call:

- 3 Copies Inward Passenger List.
- 7 Copies Inwards Customs Manifest.
- Outward Customs Clearance from last port of call.

RESTRICTIONS: Night berthing is not recommended, but is possible at the discretion of the Port Authority.

HEALTH:

(a) Vessels Arriving Directly from Australia. Pratique is given by radio to vessels which voyage directly from Australia to a Papua New Guinea port, Master of vessel notifies Quarantine Officer at the port of entry to which he is proceeding of ETA, the number of passengers and crew and whether there is any sickness aboard. This notification from Master is sent not longer than 24 hours and not less than 12 hours of ETA. If there is no sickness aboard a reply is sent stating that pratique is granted, and when a vessel arrives the actual pratique form is delivered to Master of vessel or to Collector of Customs to hand to Master. Full pratique is given.

(b) Vessels Arriving from a Foreign Port. All vessels which arrive from a foreign port must anchor in the designated position and await arrival of a Quarantine Officer who boards the vessel by himself – no other person (except a Pilot) is to be allowed on board vessel until pratique has been granted. If a Pilot is on board he must remain on board until pratique is granted.

Smallpox: All passengers and crew are required to be in possession of a valid International Certificate of Vaccination against smallpox on arrival in the country.

Cholera: All passengers and crew are required to be inoculated against cholera if the vessel is expected to arrive at a port in the country within 7 days of leaving an area where cholera is either endemic or is present.

Note: The presence on board of a qualified doctor will normally assist in the granting of pratique.

RADIO: 2 radio stations are available.

(a) Port Moresby Radio – Call sign P2M operating between the hours of 2100 – 1000 hrs. GMT.

(b) Rabaul Radio – Call sign P2R operating 24 hours per day.

These stations are generally used for all contact with agents or Government Departments, etc.

VHF: VHF services are available in three (3) ports only.

(a) Port Moresby on Channel 16 – Call sign "Fairfax Harbour" for the Pilot and "Moresby Harbour Control" for the Port Office.

(b) Lae on Channel 16 – Call sign "Lae Harbour Control".

(c) Anewa Bay on Channels 6, 12 and 15 – Call sign "Anewa Bay Pilots".

Normal working hours are 0745 till 1606 hrs. local time, except for Anewa Bay where hours are 0700 till 2300 hrs. local time

RADAR: No port radar services exist in Papua New Guinea.

TUGS: Berthing. Tugs are available in Port Moresby and Anewa Bay. A small tug is also available in Lae but is low powered.

CRANES: There are no wharf mounted cranes in Papua New Guinea, however, mobile cranes are available in most main ports capable of lifting up to 20 tonne containers. Shippers are advised though to check this before shipping and with heavier loads prior advice and approval must be sought from the relevant Port Authority.

BULK CARGO FACILITIES: Except for Anewa Bay (copper concentrate) and the Jant Wharf at Madang (Woodchip), no bulk cargo facilities exist in Papua New Guinea. (Details of the above are given in the appropriate port summaries.

CONSULS: The following Consulate and Commission services are available.

American Consulate General, P.O. Box 3492, Port Moresby. Phone 242726
Australian Consulate General, P.O. Box 1180, Lae. Phone 423000
Australian High Commission, P.O. Box 9129, Hohola. Phone 259333
British High Commission, P.O. Box 739, Port Moresby. Phone 243331
Commonwealth Secretariat, P.O. Box 914, Port Moresby. Phone 243825
Fiji Honorary Consulate, P.O. Box 6144, Boroko. Phone 254185
German Honorary Consulate, P.O. Box 1549, Boroko. Phone 256311
Indonesian Embassy, P.O. Box 7165, Boroko. Phone 253116
Italian Consulate, P.O. Box 276, Lae. Phone 422593
Embassy of Japan, P.O. Box 3040, Port Moresby. Phone 242855
Netherlands Honorary Consulate, P.O. Box 1626, Boroko. Phone 255149
New Zealand Commission, P.O. Box 1144, Boroko. Phone 242031
Phillipines Consulate, P.O. Box 172, Port Moresby. Phone 242703
Sweden Honorary Consulate, P.O. Box 1228, Boroko. Phone 255411

MEDICAL: Medical attention is available in most Papua New Guinea Ports, however as much advance notice as possible should be given by contacting the nearest radio station.

DRY DOCK: No dry dock or major repair facilities exist in Papua New Guinea.

GANGWAY WATCHMEN: Not usually necessary.

HATCHES: Opening/closing usually carried out by crew.

CUSTOMS ALLOWANCES: Entry regulations permit 200 cigarettes or 1lb of tobacco, and 40 oz of wines or spirits.

Crew members may hold 200 cigarettes and 1 carton of beer (or 1 bottle of spirits) out of bond per week.

CARGO GEAR: Wharf equipment supplied by stevedores, load/discharge by ship's gear.

REPATRIATION: Possible, but not recommended.

TIME: Local time in all port is 10 hours ahead of GMT.

HOLIDAYS: The only days on which cargo cannot officially be worked are Good Friday and Christmas Day.

TELEPHONES: Not available at present for ship to shore connection.

SHORE LEAVE: Crew members are allowed ashore.

IDENTIFICATION CARDS: Generally a seamans book is held at the main entrance to the port. Individual passes are not normally required for crew.

BERTH RESERVATIONS: A berth reservation system applies for all overseas vessels at all Papua New Guinea Harbours Board ports.

At Anewa Bay cargo vessels must vacate berth for concentrate carriers.

AITAPE: 03.08 S. 142.21 E. (See Plan)

(See General section on Papua New Guinea ports).

PILOTAGE: Not available.

TUGS: Not available.

BERTHING: Position of wharf 03° 08.51′ S., 142° 21.24′ E. Length of berthing head 18.3 m. (60 ft.). Width 6.2 m. (20.3 ft.). Height of deck above L.A.T. 2.5 m. (8.3 ft.). Minimum depth of water at L.A.T. at wharf head 4.3 m. (14 ft.) – subject to seasonal change. Maximum tidal range 1.4 m. (4.6 ft.)

STEVEDORES: *Working hours:* 0700 – 1200 hrs., 1300 – 1800 hrs.

FRESH WATER: Not available to ships.

FUEL: Not available.

CUSTOMS ALLOWANCE: 200 cigarettes or 250 grams tobacco. 1 litre of spirits or 1 litre of wine or 6 beers (total 4.5 litres) for each 7 days.

AUTHORITY: Port Manager.

ALOTAU: 10.19 S. 150.27 E. (See Plan)

(See General Section on Papua New Guinea Ports)

PORT LIMIT: Seaward Boundary: From a position in 10° 20′ S. 150° 26′ E. bounded on the West by a straight line due North to the coastline. From the same point bounded on the South by a straight line due East to a position in 10° 20′ S. 150° 28′ E. thence bounded on the East by a straight line due North to the coastline.

PILOTAGE: Pilotage is not compulsory. There are no pilots stationed at Alotau but a pilot will attend from Port Moresby given 48 hours notice of the ship's estimated time of arrival.

Pilot boarding ground: Within 300 m. radius of a position with the light structure on the extreme West point of Sanderson Bay bearing 030° (T) distant 1,850 m.

ETA to be sent not less than 12 hours prior to arrival via Port Moresby Radio (P2M) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival again via Port Moresby Radio (P2M).

ANCHORAGE: There are no recommended anchorage areas for large vessels in the vicinity of Alotau.

BERTHING: Overseas wharf is 93 m. long, height of deck above L.A.T. 2.4 m., minimum depth of water at face at L.A.T. 10.0 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear (except under special arrangement).

STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.

TANKERS: Discharge facilities are not available.

FUEL: Not available.

FRESH WATER: Available in limited quantities and restricted periods of the year. Prior application to be made to the Port Manager.

REPAIRS: No facilities available.

AIRPORT: Gurney Airport approximately 20 km. from Alotau is served regularly but not daily.

POLICE/AMBULANCE/FIRE: Police: Alotau 555. Hospital: (No separate Ambulance) Alotau 525. Fire: Service shortly to be in operation.

DELAYS: Delays at Alotau are most unlikely.

DEVELOPMENTS: Alotau is a new port and no further developments are likely in the foreseeable future, except a coastal barge ramp.

GENERAL: Covered Storage Area for Overseas Cargo – 1,874 sq.m. Open Storage Area – 7,640 sq.m.

AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Alotau.

ANEWA BAY: 06.11 S. 155.32 E.

(See General Section on Papua New Guinea Ports)

PORT LIMIT: Seaward Boundary: A line joining the Southern end of Takenupei Island and Karikiberia Shoal.

PILOTAGE: The pilot boarding ground is North of a line joining Takenupei Island and Karikiberia Shoal.

ANCHORAGE: Anchorages are available at Port Authorities advice.

BERTHING: Wharf is 77 m. long. The maximum draft permitted alongside is 12 m. and a d.w.t. of 40,000 tonnes.

Vessels may berth either port or starboard side to although normally the latter. Load/discharge is by ship's own gear (except under special arrangement).

STEVEDORES: The Port Authority operate their own stevedoring functions.

TANKERS: A bulk oil discharging gantry is sited at the Western end of the overseas wharf. Mooring dolphins are located 59 m. and 107 m. Eastward and 59 m. Westward of the wharf.

FUEL: Bunker facilities are not available.

FRESH WATER: Available up to a limit of 250 tonnes delivered at a rate of 25 t.p.h.

REPAIRS: No facilities available.

AIRPORT: Aropa airport is 32 km. distant and is served daily by Air Nuigini.

POLICE/AMBULANCE/FIRE: Police: 951222. Ambulance: 956166. Fire: 951333.

DELAYS: Delays are only likely if an ore carrier should make port and the consequent priority system is applied.

DEVELOPMENTS: Enlargement of general cargo facilities are planned by the Port Authority.

GENERAL: Covered Storage: 5,130 sq.m.

SHIPMASTER'S REPORT: July 1975

Documents:

Crew List. (2 Copies of Papua & New Guinea forms to be filled in on arrival at pilot station).

Ship's Stores List. (2 copies of P.N.G. forms to be filled in on arrival at pilot station).

Crew Declaration Form: – (2 copies of P.N.G. Form 5 – Articles in Private Possession of Officers & Crew to be filled in on arrival at pilot station).

Vaccination Certificates of all crew members for sighting.

Pilotage: Two Pilots, employees of the Bougainville Copper Company Ltd., are available 24 hours a day. Pilot boards in position 06° 07′ S. 155° 35′ 18″ E. Pilot vessel is a small tug called the "Loloho", which has a dark blue hull and white superstructure. Pilots listen on VHF Channels 6 and 16. ETA's will have been passed to the Pilots by the ship's Agents, as per charter party, but pilot boat should be advised by VHF when vessel is two hours and one hour respectively from Pilot station. Channel 6 is monitored by Pilots Monday–Friday, 1730–0215 hrs. and when vessels are expected. Pilotage is compulsory.

Max. Size: Restriction mainly on draft. Least water on berth is 40 ft. Although the problem has not as yet arisen, max. length is also restricted to about 700 ft.

Pratique: Immigration officer boards as vessel berths. International Code of Signals "Q" flag should be exhibited on arrival off port. Same officer deals with customs clearance.

Radio: ETA's to Pilots are best routed through Rabaul Radio, call sign P2R, who will pass the message direct to the Pilot office. Honiara Radio may also be used for messages to the ship's Agents.

Tugs: Only one tug, the "Loloho", is available. This is a very small tug which "assists" vessels when berthing and unberthing. No lines used. Tug of little use to larger vessels.

Berthing: Only one berth in the port, with a least depth of 40 ft. alongside. The berth is used for the loading of copper concentrates and the discharge of general cargo and containers. Vessels intending to load copper concentrates should ensure that their hatch covers are not more than 36 ft. above the water line on arrival, to enable the loader to be positioned over her holds. In some cases ballast hatches may have to be left filled until after loading has commenced. The berth is approached at an angle of 45° and a mooring boat will take one head rope ashore first. The back spring should be sent ashore by heaving line as soon as possible. All vessels berth starboard side to the quay. The berth itself is 250 ft. long. Dolphins stand 175 ft. Westward and 135 and 310 ft. Eastward of the ends of the wharf. The ore loader is not a movable fixture, and vessels are required to shift up and down the wharf to facilitate loading concentrates at the requisite hatches. When leaving the wharf the vessel is sprung off, using one head rope and the backspring.

Stevedores: Normal cargo hours for vessels loading are 0600 – 2300 hrs. but in cases where required cargo will be worked 24 hours a day. Stevedores are employees of the Bougainville Copper Company. Approx. loading rate for concentrates 750/1,000 t.p.h. Stevedores will render all possible assistance in shifting ship. For vessels discharging, mobile cranes capable of lifting up to 140 tonnes are available. Shore gangway is normally used.

Medical: There are good hospital facilities in both Anewa Bay itself and also in nearby Kieta. Advanced notice of required medical attention not normally necessary.

Tankers: Tankers are also discharged at Anewa Bay's only wharf. As with other vessels, draft is restricted to 40 ft., and length to about 700 ft.

Density: Varies between 1022 and 1025 according to season and amount of rainfall recently experienced.

Fresh Water: Available on the wharf except during periods of drought. Supplied by 3 in. hose at approximately 60 t.p.h. Can only be supplied at main wharf (not at Dolphins) and it is therefore sometimes necessary when loading concentrates to wait until after hatches are being loaded before hose can be put aboard.

Fuel: Not available.

Consuls: None.

Repairs: No facilities.

Dry Docks: None close by.

Surveyors: None.

Hatches: Steel hatch covers to be opened and closed by crew.

Customs Allowances: 200 cigarettes and one bottle spirits per person.

Repatriation: Regular flights from Kieta Airport (24 kms. distant) to Port Moresby, where possible to link up with international flights. Repatriation can therefore easily be arranged from this port.

Time: GMT plus 10 hours.

Shore Leave: All crew members are allowed ashore. No shore passes required.

Delays: No delays normally experienced, but possible up to 24 hours max.

General: Berth very exposed to S.E'ly winds. Moderate ground swell experienced on berth at times. Considerable rain experienced throughout the year, mainly during the night and early morning.

AUTHORITY: Bougainville Copper Ltd., Panguna, Bougainville. Port Superintendent/Harbour Master, Arawa, Bougainville.

KAVIENG: 02.35 S. 150.48 E. (See Plan)

(See General Section on Papua New Guinea Ports)

PORT LIMIT: Seaward Boundary.

Large vessels should approach from the Nusa Channel where the port limits are as follows:

From the beacon on Cape Siwusat by a straight line 220°(T) to the extreme North point of Usien Island thence by a straight line due West to position in 2° 37.87′ S., 150° 44.57′ E., thence by a straight line due North to the Western extremity of Edmago Island. From the Eastern extremity of Edmago Island the line of the port limit crosses the Eickstedt Passage in the direction 253° (T) to the Southern extremity of Nago Island.

PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Rabaul given 48 hours notice of the ship's estimated time of arrival.

Pilot Boarding Ground: Within 300 m. radius of a position with the Eastern extremity of Edmago Island bearing due North 900 m.

ETA to be sent not less than 12 hours prior to arrival via Rabaul Radio (P2R) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival again via Rabaul Radio (P2R).

ANCHORAGE: Anchorage may be obtained in sand depth 20 m. in a position East Reef Light structure bearing 042° (T) distant 890 m.

BERTHING: Overseas wharf is 93.8 m. long, height of deck above L.A.T. 2.7 m., minimum depth of water at face at L.A.T. 7 m.

Vessels may berth port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear.

STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.

TANKERS: Bunker facilities available for diesel at wharf from Caltex and Shell

FRESH WATER: Available in limited quantities, prior application to be made with the Port Manager.

REPAIRS: No facilities available.

AIRPORT: Kavieng airport is some 5 km. from the wharf and is served by daily Air Nuigini flights.

POLICE/AMBULANCE/FIRE: Police: 941222. Ambulance: 941234. Fire: 941222.

DELAYS: Delays at Kavieng are most unlikely.

DEVELOPMENTS: Development of Kavieng port is not envisaged at present.

GENERAL: Covered Storage Area: 750 sq.m. Open Storage Area: 3,000 sq.m.

AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Kavieng.

KIETA: 06.13 S. 155.38 E. (See Plan)

(See General Section on Papua New Guinea Ports).

PORT LIMIT: Seaward Boundary

By a straight line bearing 328° (T) from a point in 6° 10′ S., 155° 42.3′ E., on the seaward edge of Gero Reef to a point in 6° 07.1′ S., 155° 40.4′ E., thence due West to a point at the Northern most extremity of Banaru Reef.

PILOTAGE: Compulsory – Daylight hours only.

Pilot boarding ground: Within 400 m. radius of a position in 6° 07.6′ S., 155° 40.3′ E.

ETA pilot boarding ground not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R). Confirm or amend ETA not more than 5 hours but not less than 4 hours prior to arrival again via Port Moresby or Rabaul. No VHF facility.

ANCHORAGE: There are no recommended anchorages for large vessels in Kieta harbour.

BERTHING: Overseas wharf 122 m. long (as from mid 1977), height of deck above L.A.T. 3.0 m., minimum depth of water at face at L.A.T. 7.5 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

STEVEDORES: 72 hours notice preferred, but a minimum of 24 required.

TANKERS: Tanker discharge is carried out at Anewa Bay.
FRESH WATER: Not usually available, however application can be made to the Port Authority in an emergency.
AIRPORT: Aropa airport is some 19 km. from the port and is served daily by Air Nuigini.
POLICE/AMBULANCE/FIRE: Police: 951222. Ambulance: 956166. Fire: 951333.
DELAYS: Delays can occur occasionally at Kieta but of fairly short duration rarely exceeding 48 hours.
DEVELOPMENTS: A recent extension to the overseas wharf completes the main development programme for the next few years.
GENERAL: Covered Storage: 2,230 sq.m. Open Storage: 1,720 sq.m.
AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Kieta.

KIMBE: 05.33 S. 150.09 E. (See Plan)

(See General Section on Papua New Guinea Ports)
PORT LIMIT: Seaward Boundary.
A line from Gigo Point due North for 1,695 m., thence in a straight line due East for 6,821 m., thence in a straight line due South for 2,438 m. to the Eastern extremity of Telagavu Point.
PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Rabaul given 48 hours notice of the ship's estimated time of arrival. Pilot boarding ground: Within 400 m. radius of a position 5° 31.5′ S., 150° 12′ E.
ETA to be sent not less than 12 hours prior to arrival via Rabaul Radio (P2R) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival again via Rabaul Radio (P2R). No VHF facility.
ANCHORAGE: There are no recommended anchorage areas for large vessels in the vicinity of Kimbe.
BERTHING: Overseas wharf is 60.9 m. long, height of deck above L.A.T. 3.1 m., min. depth of water at face at L.A.T. 10.7 m.
Vessels may berth either port or starboard side to at the discretion of the Port Authority.
Load/Discharge is by ship's own gear (except under special arrangement).
STEVEDORES: 72 hours notice preferred, but a min. of 24 required.
TANKERS: Discharge facilities only, for oil products. Palm oil loading over main wharf.
FRESH WATER: Is available at a rate of 27 t.p.h., but may be restricted at times during the year.
AIRPORT: Hoskins airport is approx. 30 km. distant and is served by Air Nuigini several times a week.
POLICE/AMBULANCE/FIRE: Police: 935022. Ambulance and Fire: No services available.
DEVELOPMENTS: No further development is planned for the port in the near future.
GENERAL: Covered Storage: 745 sq. m. Open Storage: 6040 sq.m.
AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Kimbe.

LAE: 06.48 S. 147.11 E. (See Plan)

(See General Section on Papua New Guinea Ports)
PORT LIMIT: From a position Lat. 6° 44′ 12″ S., Long. 146° 59′ 52″ E. 175° T. for 2.2 cables, thence 270° T. for 9.3 cables, thence 017° T. to the shore. Time of arrival at Sugarloaf Anchorage, if berth is not immediately available, is accepted as time of arrival in port.
The Port Limits are due for revision.
PILOTAGE: Pilotage is compulsory – 24 hours a day.
Pilot Boarding Ground: within 400 m. radius of a position with the S.E. corner of the main wharf bearing 295° (T) distant 1850 m.
ETA at Pilot boarding ground not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R). Confirm or amend ETA not more than 5 hours and not less than 4 hours prior to arrival (VHF Channel 16 – call Lae Port Control then to Channel 12 or 6 for working Channels.)
ANCHORAGE: Safe anchorage is available about 3 miles from Main Wharf in the Huon Gulf Area, called Sugarloaf Anchorage, at approximately 1.5 miles offshore between beacons:
Northern Beacon: Lat. 6° 47′ 10″ S., Long. 146° 57′ 20″ E.
Southern Beacon: Lat. 6° 48′ 20″ S., Long. 146° 57′ 06″ E.
Holding ground is good and 11 fathoms is found just South of the line with Northern Beacon bearing West True 1.5 miles distant. The depth varies within a fathom or two in seasons on account of the soft bottom.
Medium sized vessels up to 100 m. LOA may find Safe Anchorage 1.5 cables from N.W. end of the Overseas Wharf in position 6° 44′ 03″ S., 156° 48′ 8″ E. Depth of water 9.14 m.
RESTRICTIONS: Except for LPG and tankers, vessels berth and sail any time of the day or night, depending on availability of berths and number of vessels waiting for a berth.
RADIO: Radio contact is made through Port Moresby Radio or Rabaul Radio on 6280 kc/s.
TUGS: A 12.2 m. tug, 2×6.4 m. steel work boats are available for running lines to wharf and shore bollards.
BERTHING: Overseas wharf is 430 m. long, height of deck above L.A.T. 2.7 m., min. depth of water at face at L.A.T. 11.0 m. Max. draft 9.7 m.
Vessels may berth either port or starboard side to at the discretion of the Port Authority. Provided anchorage in Milfordhaven Bay is clear, ample swinging room is available off the N.W. end of the Wharf.
Load/discharge is by ships own gear (except under special arrangement).
STEVEDORES: 72 hours notice preferred, but a min. of 24 required. Working hours 0600–2400 hrs.
Advise number of gangs required, hatch tonnages and information of any particular heavy lifts or awkward cargo.
MEDICAL: Maximum possible notice should be given so that full arrangements can be made with regard to hospitalisation, etc. Full hospital facilities are available approximately 2.5 miles from the wharf.
TANKERS: Discharge and bunkering facilities are available for all ship requirements (See Developments).
FUEL: Available.
FRESH WATER: Sometimes restricted but generally available at the rate of 30 t.p.h.
REPAIRS: Only minor repairs can be carried out.
SURVEYORS: Lloyds Agent: Shipping Manager, Burns Philp (N.G.) Ltd., P.O. Box 79, Lae.
AIRPORT: Lae airport is at present only 3 km. from the main wharf, however the opening of a new airport at Nadzab will be approx. 30 km. distant. Serviced daily by Air Nuigini flights.
POLICE/AMBULANCE/FIRE: Police: 422222. Ambulance: 421211. Fire: 424333.
Fire alarms are connected to the Gatehouse which has a direct telephone link to the Police station for emergency purposes.
DELAYS: Lae is the largest and busiest of the country's ports (except for Anewa Bay) and at times delays for up to 48 hours can be expected.
DEVELOPMENTS: A new tanker discharge and bunkering facility is to be constructed at the East end of the main wharf.
Future development is based on the concept of a tidal basin to the West of the existing facility.
GENERAL: Covered Storage: 13622 sq. m. Open Storage: 37000 sq. m.
AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Lae.

LORENGAU: 02.01 S. 147.16 E. (See Plan)

(See General Section on Papua New Guinea Ports)
PORT LIMIT: Seaward Boundary.
From the Eastern extremity of Hauwei Island by a straight line due North for 2,050 m., thence by a straight line due East for 2,920 m., thence by a straight line due South for 2,000 m. to the Old Light House on Ndrilo Island.
PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Madang given 48 hours notice of the ship's intention to call at Lorengau.
Pilot Boarding Ground: Within 400 m. radius of a position with Ndrilo Island Old Light House bearing 127° (T) distant 1,850 m.
ETA to be sent not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R) and to be confirmed at not more than 5 hours and not less than 4 hours prior to arrival. No VHF facility.
ANCHORAGE: Anchorage may be obtained in soft mud in depths of about 30 m. anywhere in Seeadler Harbour but an anchorage in position Bear Point 210° (T) 2,600 m. is recommended.
BERTHING: Nabu wharf at Lorengau is 15.2 m. long with a berthing dolphin 25.9 m. from the Northern end of the wharf. The height of the deck above I.S.L.W. is 2.9 m., minimum depth of water at face at I.S.L.W. 5.1 m.
Nabu wharf is not suitable for large ships but overseas vessels occasionally use the wharf at Lombrum Navy Base in position 2° 02.1′ S., 147° 22.6′ E., which now lies within the declared port of Lorengau.
Berthing at Nabu wharf may be delayed during the N..W. season, December–March.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 required.
TANKERS: Discharge facilities are available at Nabu wharf.
FRESH WATER: Limited supplies available, prior application to be made to the Port Authority.
AIRPORT: Momote airport is some 45 kms. from Lorengau and is served by Air Nuigini but not daily.
POLICE/AMBULANCE/FIRE: Police: Lorengau 22. Ambulance and Fire: No services available.
DELAYS: Delays at Lorengau are most unlikely.
DEVELOPMENTS: No development for the port is envisaged in the near future except for the erection of a transit shed.
GENERAL: Covered Storage: 780 sq. m. Open Storage: Very little.
AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Lorengau.

MADANG: 05.12 S. 145.49 E. (See Plan)

(See General Section on Papua New Guinea Ports)
PORT LIMIT: Seaward Boundary.
By a straight line due East from the Easternmost extremity of Kramket Island to position 5° 11.9′ S., 145° 51.5′ E., thence due South to position 5° 13.5′ S., 145° 51.5′ E., thence by straight line due West to a point on the Easternmost extremity of the Kalibobo (Schering) Peninsula known as Cape Kusseron.
PILOTAGE: Compulsory – Inwards during daylight hours only. Outwards during the hours 0600–2400 hrs.

Pilot Boarding Ground: Within 400 m. radius of a position with the Coastwatchers lighthouse bearing 260° (T) distant 1,800 m.

ETA pilot boarding ground not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R). Confirm or amend ETA not more than 5 hours but not less than 4 hours prior to arrival again via Port Moresby or Rabaul. No VHF facility.

ANCHORAGE: Anchorage area is inside the Dallman Passage in the area to the North of the main channel bounded by Beliau Island to the West and Kramket Island to the East. Depth of water, 40 m. Good holding ground in soft mud. Ships should not proceed to anchorage area without Pilot's advice.

BERTHING: Overseas wharf 137.1 m. long, height of deck above I.S.L.W. 3.1 m., minimum depth of water at face at I.S.L.W. 10.1 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear (except under special arrangement).

A separate facility to serve woodchip vessels (and Caltex tankers) only is situated within Binnen Harbour West of the main wharf facilities.

STEVEDORES: 72 hours notice preferred, but a minimum of 24 required.

TANKERS: Discharge at main wharf for both Shell and Mobil. Caltex discharge by floating pipe-line while moored at the Jant woodchip facility.

FUEL: Bunkering for overseas vessels not available.

FRESH WATER: Only very limited supply available dependent on season, prior arrangement must be made to Port Authority.

REPAIRS: A coastal slipway at Madang but only minor deck repairs could be carried out to overseas vessels.

SURVEYORS: Lloyds agents, The Manager, Burns Philp (N.G.) Ltd., P.O. Box 605, Madang.

AIRPORT: Madang airport is 6 km. from the port and is served daily by Air Nuigini.

POLICE/AMBULANCE/FIRE: Police: 822222. Ambulance: 822022. Fire: 822777.

DELAYS: Although there is only one overseas berth at the main wharf, Madang delays are not common and are of short duration when they do occur.

DEVELOPMENTS: A new coastal facility has been completed, and when traffic justifies expenditure an extension of the overseas wharf Eastward will be undertaken.

GENERAL: Covered Storage: 25,000 sq.m. Open storage: 5,575 sq.m.

AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Madang.

ORO BAY: 08.54 S. 148.29 E. (See Plan)

(See General Section on Papua New Guinea Ports)

PORT LIMIT: Seaward Boundary.

From the extreme North point of the mainland on the South side of the entrance to Port Harvey by a straight line due North for 2,935 m. thence by a straight line due West for 2,760 m. to the coastline.

PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Port Moresby or Lae given 48 hours notice of the ship's intention to call at Oro Bay.

Pilot Boarding Ground: Within 300 m. radius of a position with the North corner of Oro Bay wharf bearing 225° (T) distant 1,850 m.

ETA to be sent not less than 12 hours prior to arrival via Port Moresby Radio (P2M) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival. No VHF facility.

ANCHORAGE: In sand and mud at 15 m. depth may be obtained on the leading marks 239° (T) distant 400 m. from the North corner of the wharf.

BERTHING: Wharf is 60.3 m. long, height of deck above I.S.L.W. 2.5 m., min. depth of water at face at I.S.L.W. 11.4 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear (except under special arrangement).

Berthing may be delayed during the N.W. season, December – March.

STEVEDORES: 72 hours notice preferred, but a min. of 24 required.

TANKERS: No discharge facilities exist at present.

FUEL: Not available.

FRESH WATER: Not available.

AIRPORT: Popondetta airport is 40 km. from the port and is served by Air Nuigini,but not daily.

POLICE/AMBULANCE/FIRE: Police: 297122. Ambulance: No service available. Fire: 297122.

DELAYS: Delays at Oro Bay are most unlikely.

DEVELOPMENTS: The area around Popondetta is being developed as major palm oil plantations and this could eventually lead to expansion of the port.

GENERAL: Covered Storage: 739 sq.m. Open Storage: 4645 sq.m.

AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Popondetta.

PORT MORESBY: 09.28 S. 147.08 E. (See Plan)

(See General Section on Papua New Guinea Ports)

PORT LIMIT: Seaward Boundary.

A straight line bearing 300° (T) from a point at the South Western extremity of Nateara Reef to a point at the Southernmost extremity of Sinari Reef.

PILOTAGE: Pilotage is compulsory – 24 hours a day.

Pilot boarding ground: Within 300 m. radius of a position Basilisk Beacon bearing 065° (T) distant 1,500 m. *OR* in bad weather the pilot boarding ground will be withdrawn inside the Basilisk Passage to a position Basilisk Beacon 220° (T) 950 m.

ETA at Pilot boarding ground not less than 12 hours prior to arrival via Port Moresby Radio (call sign P2M).

Confirm or amend ETA not more than 5 hours and not less than 4 hours prior to arrival (VHF Channel 16 – call Moresby Pilot thence switch to Channel 12 for working Channel).

ANCHORAGE: Vessels may, subject to permission being granted by the Pilotage Authority, proceed inwards without a Pilot to an anchorage area in the outer harbour centred in position North Point Manubada Island 090° (T) 1275 m.

Depth of water 27 m. Good holding ground in soft mud and sand.

BERTHING: Overseas berth is 213.3 m., height of deck above. L.A.T. 4.4 m., min. depth of water at face at L.A.T. 7.6 m. on outer face, 4.6 m. on the inner North Eastern arm, 3.8 m. on the inner South Western arm.

The wharf is a "T" head structure and vessels may berth either side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear.

STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.

TANKERS: Tankers may discharge at Oil Company buoys N.W of the wharf area, max. draft 13 m. The discharge is through submarine pipe-lines.

FUEL: Bunkering facilities for overseas vessels is by road tanker only.

FRESH WATER: Available at the rate of 20 t.p.h.

REPAIRS: A small slipway for coastal vessels only is situated adjacent to the main wharf.

AIRPORT: Jacksons Airport, Papua New Guinea's only international airport is 13 km. from the wharf and is served by flights to and from Australia daily, to Manila weekly as well as daily flights to all main internal centres.

POLICE/AMBULANCE/FIRE: Police: 252222, 255555, 242000. Ambulance: 256822. Fire: 242255, 255188, 253400.

DELAYS: The main wharf can only just cope with two overseas vessels and consequently in peak periods delays can be expected up to 48 hours.

DEVELOPMENTS: A new deep sea berth backed by land fill reclamation is planned for the area North of the present facility.

GENERAL: Covered Storage: 4710 sq.m. Open Storage Area: 11,150 sq.m.

AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Port Moresby.

AGENTS: Burns Philp (N.G.) Ltd., P.O. Box 75, Port Moresby. Telex NE 22116. Cables: "Burphil Port Moresby".

Agents at all Papua New Guinea Ports.

RABAUL: 04.12 S. 152.10 E. (See Plan)

(See General Section on Papua New Guinea Ports)

PORT LIMIT: Seaward Boundary.

By a straight line due South from a point on the Easternmost extremity of Matupi Island for 4,375 m. to a position in Lat. 4° 16.8′ S., Long. 152° 11.8′ E., thence by a straight line due West to a point on the S.E. extremity of the land known as Vulcan.

PILOTAGE: Compulsory – 24 hours a day.

Pilot Boarding Ground: Within 400 m. radius of a position with Matupi Island light house bearing 360° (T) distant 1,830 m.

ETA at pilot boarding ground not less than 12 hours prior to arrival via Rabaul Radio (P2R). Confirm or amend ETA not more than 5 hours and not less than 4 hours prior to arrival (Rabaul Radio – (P2R)). No VHF facility.

ANCHORAGE: There are no recommended anchorage areas for large ships, but anchorage in approx. 30 m. of water may be obtained in good holding ground in a position lower leading light bearing 015° (T) distant 1,110 m.

BERTHING: There are two overseas berths. Bay Road wharf is 152.4 m. long, height above M.L.W. 2.8 m., min. depth of water at L.A.T. 7.9 m.

Vessels may berth either port or starboard side to at either wharf at the discretion of the Port Authority.

Load/discharge is by ship's own gear (Except under special arrangement).

STEVEDORES: 72 hours notice preferred, but a min. of 24 hours required.

TANKERS: Discharge facilities are available for overseas vessels at the Blanche Street Wharf.

FUEL: Available by road tanker and alongside Blanche Street Wharf.

FRESH WATER: Available at a rate of 25 t.p.h., supply sometimes restricted. Prior arrangement to be made with the Port Authority.

REPAIRS: Only light deck repair facilities available.

SURVEYORS: Lloyds Agent, Burns Philp (N.G.) Ltd., P.O. Box 87, Rabaul.

AIRPORT: Rabaul airport is 4 km. from the port and is served daily by Air Nuigini.

POLICE/AMBULANCE/FIRE: Police: 922222. Ambulance: 922162. Fire: 921411.

DELAYS: Delays at Rabaul are unlikely.

DEVELOPMENT: The only development planned at Rabaul for the next few years are new coastal facilities.

GENERAL: Covered Storage: 9,640 sq.m. Open Storage: 18,600 sq. m.
AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Rabaul.

SAMARAI: 10.36 S. 150.39 E. (See Plan)

(See General Section on Papua New Guinea Ports)
PORT LIMITS: Seaward boundary.

From a point on the Northernmost point of Samarai Island due North for 800 m. thence due West for 1,300 m. thence due South for 1,000 m. thence due East for 1,000 m. to a point on the N.W. coast of Samarai Island.
PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Port Moresby given 48 hours notice of the ship's intention to call at Samarai.

Pilot boarding ground: within 300 m. radius of a position with the North corner of Samarai main wharf bearing 180° (T) distant 1,850 m.

ETA to be sent not less than 12 hours prior to arrival via Port Moresby Radio (P2M) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival. No VHF facility.
ANCHORAGE: There are no recommended anchorage areas for large vessels in the vicinity of Samarai.
BERTHING: Overseas wharf is 93.2 m. long, height of deck above LWOST 2.7 m., minimum depth of water at face at LWOST 7.8 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.
TANKERS: Discharge only at main wharf.
FUEL: Diesel available by pipe-line.
FRESH WATER: Very limited quantities available at times, prior arrangements to be made with Port Authority.
AIRPORT: There is no airport at Samarai. The nearest airport is at Gurney, outside Alotau.
POLICE/AMBULANCE/FIRE: Police: Samarai 225. Ambulance (Hospital) Samarai 222. Fire: No service available.
DELAYS: Delays at Samarai are most unlikely.
DEVELOPMENTS: A new coastal facility is being designed for Samarai and after construction the port will be closed to overseas vessels.
GENERAL: Covered Storage: 390 sq.m. Open Storage: 140 sq.m.
AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Samarai.

VANIMO: 02.41 S. 141.18 W. (See Plan)

(See General Section on Papua New Guinea Ports).
PILOTAGE: Not available.
TUGS: One tug 150 b.h.p.
BERTHING: Position of wharf: 02° 41.09′ S, 141° 17.84′ E. Length, 18.7 m. (61.5 ft.); width 6.1 m. (20 ft.). Minimum depth alongside at L.A.T. 4.9 m. (16 ft.).
FRESH WATER: Not available to ships.
FUEL: Distillate available by road tanker.

WEWAK: 03.34 S. 143.38 E. (See Plan)

(See General Section on Papua New Guinea Ports)
PORT LIMIT: Seaward Boundary.

From Wewak Point by a straight line due North for 2,900 m. thence by a straight line due East for 3,725 m. thence by a straight line due South for 4,780 m. to a point 800 m. due East of Cape Boram, thence to Cape Boram.
PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Madang given 48 hours notice of the ship's intention to call at Wewak. A Pilot will shortly be stationed at Wewak.

Pilot Boarding Ground: Within 800 m. radius of a position in 3° 32′ S., 143° 39.5′ E.

ETA to be sent not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival. No VHF facility.
ANCHORAGE: There are no recommended anchorage areas for large vessels in the vicinity of Wewak.
BERTHING: Overseas wharf is 73.1 m. long, height of face above Chart Datum is 3.5 m., min. depth of face at Chart Datum is 6.7 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear.

Berthing may be delayed during the N.W. season December – March.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.
TANKERS: No discharge facility exists.
FUEL: No facilities.
FRESH WATER: Not available.
AIRPORT: Wewak airport is 5 km. from the port and is served daily by Air Nuigini.
POLICE/AMBULANCE/FIRE: Police: 862222. Ambulance: 865188. Fire: 865055.
DELAYS: Delays at Wewak are unlikely but if they do occur are of short duration.
DEVELOPMENTS: The only planned development is to widen the pile causeways leading to the main wharf.
GENERAL: Covered Storage: 1,500 sq.m. Open Storage: 2,320 sq.m.
AUTHORITY: Papua New Guinea Harbours Board, Port Moresby. Port Manager, Wewak.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Peru

ATICO: 16.14 S. 73.43 W.

Atico is an open roadstead and unprotected. The main activity is the loading of fishmeal.

PILOTAGE: Not available.

ANCHORAGE: Vessels anchor in the open roads.

TUGS: 1 available.

LIGHTERS: 3 available, 100 tons each.

CRANES: None.

STEVEDORES: See "Pimentel" for working hours and overtime rates.

There are 2 gangs available.

MEDICAL: Available at Mallendo.

FRESH WATER: Not available.

FUEL: Not available.

GENERAL: *Swell Period:* Heavy swell in the Winter months, June–September.

AGENTS: See "Callao".

CALLAO: 12.03 S. 77.10 W. (See Plan)

DOCUMENTS:

Airmail copies must be presented to Port Authorities 72 hours before arrival of vessel as otherwise vessel will be fined. No docking is allowed until Cargo Manifests and Cargo Plan are presented.

Vessel copies to be delivered on Clearing vessel inbound on arrival when Health, Customs and other Authorities board.

	Airmail	*Vessel*
Cargo Manifests, including additionals. Must be faithful copies of Bills of Lading descriptions	5	*7
Same Manifests, but freighted	5	2
Cargo Manifests covering cargo shortshipped but manifested on previous vessels calling at Callao	5	*7
(If Hectograph Masters are airmailed, we can print the required number of Manifests)		
Transit Cargo Manifests	–	3
Freighted copy of each Bill of Lading	–	4
List of Containers with their numbers	2	2
Content List, each Container, properly identified with marks, numbers and Bills of Lading numbers	2	2
Dangerous Cargo Lists showing complete description of goods, Flash Point, IMCO Classification, Type of Label, marks, numbers and Bills of Lading numbers	3	3
Transit Dangerous Cargo Lists	3	3
Mail Manifests	5	5
Passenger Lists	1	*10
Transit Passenger Lists	–	*10
Tally Books	–	16
Stowage Plan	3	–
Consolidated Stowage Plan, prepared or checked on board	–	3
Visaed Tonnage Certificate or General Declaration from First Port receiving cargo for Peru and every port of call thereafter	–	1
Health Clearance, last port of call	–	1
Vaccination List	–	*1
General Declaration	–	*7
Crew List	–	*10
Crew Personal Effects Declaration	–	*3
Store List	–	*4
Sealed Consular Documents addressed to Customs, Envelope	–	1

*Must be made out on LAFTA Forms.

PILOTAGE: Pilots must be requested by Agent and board ships outside of port at anchorage. Various pilot launches painted white, black and red. Pilots will only board after free pratique granted by Port Captain and doctor.

ANCHORAGE: Very large area West of entrance buoys, North of Naval anchorage.

RESTRICTIONS: Vessels of up to 32 ft. draft may enter at any time. Vessels of more than 32 ft. draft must enter at high water. Pilots available 24 hours.

MAX. SIZE: Length and breadth practically unlimited, draft 32 ft. plus height of tide making allowance for keel clearance.

HEALTH: Cable Agent requesting free pratique. Agent must be notified in advance if disease suspected on board.

RADIO: "Habla Naves", OAA, 500, 8605, 6430, 1300, 468 Kc/s.

Arrival Advice: 24 hours Notice of Arrival should be sent to the Captain of the Port and the Agent.

TUGS: Port Authority Tugs join vessel once inside mole, 1 or 2 as required, using vessel's lines, later passed to pier. 4 tugs available 2 at 175 h.p. 1 at 500 h.p. and 1 at 800 h.p.

BERTHING: There are 9 piers with a total of 22 berths, 20 for large vessels, and 2 for coasters.

Pier No.	*Number of Berths*	*Cargo*
1	2	General cargo
2	2	General cargo
3	2	General cargo
4	2	General cargo
5	3	Minerals and grain and general cargo
7	2	Petroleum products
9	4	Fish Meal, general cargo, vegetable oil
10	2	Coasters only
11	3	Wheat, vegetable oil, general cargo

All piers except the petrol pier are connected to railway system for unloading and loading to railway wagons.

Within port limits there are 2 anchorages normally used for discharge of livestock, scrap and occasionally for general cargo.

Piers equipped with conveyor belt for loading minerals and fish meal.

For discharge of grain there are 2 pneumatic suction pipes and silos with capacity of 23,000 tons. There is a silo capacity 35,000 tons under construction.

The rate of discharge of the pneumatic discharging bridges is 100/150 t.p.h. each. The port plans to have 3 more bridges.

There are 4 storage tanks for vegetable oil, total capacity 500 tons.

STEVEDORES: No particular advice necessary but Agent must receive Stowage Plan beforehand to advise Port Authority of planned operation.

Working Hours: 0700–1200, 1300–1600, 1700–2400 hrs.

Lighters: 10 with 50 tons capacity and 2 private with 60 and 70 tons capacity.

CRANES: 18 with 4–5 ton capacity, 4 with 10 tons and 1 with 27 tons capacity. The Peruvian Navy have a floating crane with lifting capacity of 80 tons.

MEDICAL: Advance information as to sick crew members not required but helpful. Ample first class facilities in Lima area. Smallpox vaccination cards required.

TANKERS: *Petroleum Pier: Pier No. 7:* Max. depth 35 ft., however, depth in approaches to berth is 33 ft. at HW and 31 ft. at LW, max. length about 200 m.

Discharge Pipe-lines:

(1) Pipe-line of 14 in. for clean (white) products, kerosene, diesel 1 and 2, turbo A, benzol and eventually gasoline.
(2) 16 in. for discharge of gasoline, inclusive aviation gasoline and solvents.
(3) 12 in. for LPG.
(4) 22 in. for dirty products, petroleum 4, 5, 6 and asphalt.
(5) 6 in. for chemical products, xylol, toluol, acrylonitril, etc.

These lines can be used simultaneously at the berth places A and B, but also depending on store facilities on shore or delivery into trucks.

Discharging pressure of the lines: 100 lb. per sq. in. for the lines with 12, 14, 16 and 22 in. On the pipe-line of 6 inches it is possible to reach a pressure of 250 lb. per sq. in., for discharge of LPG.

Connections: There are connections from 4 to 10 in. for all kind of flanges.

Water: Supply of water is possible, 40 t.p.h.

Discharge of ballast or slops inside mole prohibited. Tankers loading Fishoil must arrive free of ballast.

DENSITY: Sea water.

FRESH WATER: All berths equipped with fresh water supply at a rate of 30 t.p.h.

FUEL: The following are available from Petroleos del Peru, Bunker "C" 3,500 seconds, Petroperu No. 5 (intermediate 4) 400 seconds, Diesel 2 (marine diesel) 100 seconds.

FIRE PRECAUTIONS: Use of Port Authority Fire Equipment mandatory during discharge of petroleum products with charge for service.

GANGWAY/DECK WATCHMEN: Recommendable.

CERTIFICATES: All may be required but normally only Deratisation. If Ratguards are not used on all lines, vessel liable to fines.

CUSTOMS ALLOWANCE: Any amount over normal consumption usually cause difficulties including searching.

CARGO GEAR: No additional requirements.

IDENTIFICATION CARDS: Supplied by Agent and stamped by Immigration Authority required for all crew members.

CONSULS:

Argentina
Austria
Belgium
Bolivia
Brazil
Canada
Chile
China
Colombia
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Great Britian
Greece
Guatemala
Haiti
Holland
Honduras
India
Israel
Italy
Japan
Jordan
Lebanon
Mexico
Nicaragua
Norway
Panama
Paraguay
Poland
Portugal
Spain
Sweden
Switzerland
U.A.R.
Uruguay
U.S.A.
Venezuela
Yugoslavia

REPAIRS: Normal Deck and Engine repair facilities.

DRY DOCKS: The naval dry dock has the following facilities:

(*a*) Dry dock – length 632 ft., width 82 ft., depth 21 ft.
(*b*) Floating dock 107 – length 408 ft., width 48 ft., depth 20 ft.
(*c*) Floating dock 106 – length 288 ft., width 46 ft., depth 14 ft.

SURVEYORS: H. M. Beausire and Co. S.A. are Lloyd's Agents.

REPATRIATION: All foreign crew members who do not have Peruvian Visas which only obtainable abroad, must be repatriated by quickest means (Air) by Agent, paying all detention expenses. Peruvian and foreign crew members available.

AIRPORT: Lima/Callao within city limits has regular direct international service to North and South America, Europe and Far East.

HOLIDAYS: Only 1st May when work is not available.

AUTHORITY: Port Captain, Terminal Maritimo de Callao.

AGENT: La Hanseatica S.A. – General Agents, Ship Agents, Brokers, Stevedoring. Jr. A. Miro Quesada 260 – OF. 406, PO Box 3049, Lima, Peru. Tel. 287850. Telex 25279–20029–20464. Cables "Hapaglloyd" and "Hanseat".

CHANCAY: 11.34 S. 77.16 W. (See Plan)

Chancay is an unprotected open roadstead about 31 miles North of Callao. The main activities are the loading of fishmeal and discharging of fertilisers.

PILOTAGE: Compulsory. The Port Captain currently acts in this capacity.

ANCHORAGE: There is a good anchorage, in 5 and 8 fathoms of water, on a sand and mud bottom, located in the outer area of the bay, which is 1 mile long by 0.5 miles wide.

RADIO: *Arrival Advice:* 24 hours Notice of Arrival should be sent to the Captain of the Port and the Agent.

TUGS: 2 Tugs of 56 h.p.

LIGHTERS: 12 lighters with a capacity of 40 tons each.

CRANES: 4 with maximum capacity of 14 tons.

STEVEDORES: The same system applies here as throughout the Republic, the tariff only altering according to the number of workers employed.

3 shifts and 2 more if necessary.

MEDICAL: Medical consultations possible.

FRESH WATER: Not available.

FUEL: Not available.

AUTHORITY: Port Captain.

AGENT: See "Callao".

CHIMBOTE: 09.05 S. 78.35 W. (See Plan)

Chimbote is a berth port with possibilities to load and discharge from and into lighters if berths are not available. Main activity: Loading of fishmeal and minerals; discharging of iron, steel, and general cargo.

DOCUMENTS:

For Entry

2 Entry Declarations (Form No.1).
1 Departure License of the last foreign port en route.
1 Maritime Health Declaration (Form No. 2).
2 Passenger Lists with entry baggage (Form No. 3).
1 Consular Roll of the last foreign port en route.
1 Consular Passenger List of the last foreign port.

Customs Administration

1 Original Cargo Manifest(s) with the Consular stamp. (Form No.4).
The envelope(s) from the Consul, enclosing copies of the Consular invoices, bill of lading and cargo manifest for the port with the Consular stamp.
1 Cargo Manifest (Form No.4).
1 Cargo Manifest of cargo, but with further destination for another national or foreign port (Form No. 4).
1 Cargo Manifest in transit.
1 Gross or Net Tonnage Certificate, with Consular visa.
1 Unaccompanied Baggage List (Form No. 5).

Customs

1 Entry Declaration (Form No. 1).
1 Cargo Manifest(s) for port without Consular visa (Form No. 4).
1 Manifest of Cargo for port, but with further destination for another national or foreign port, without Consular visa (Form No. 4).
2 Passenger Lists with entry baggage (Form No.3).
2 Not Accompany Baggage Lists (Form No. 5).
1 Crew Personal Effect List.
1 Store List, food and spirits.
1 Mail List.

Port Administration

1 Entry Declaration (Form No.1).
1 Passenger List with entry baggage (Form No. 3).
1 Not Accompany Baggage List (Form No. 5).
3 Cargo Manifests for the port, without the Consular visa (Form No.4).
3 Manifests of Cargo for port, but with further destination for another national or foreign port, without Consular visa (Form No. 4).
3 Sets of Bills of Lading.

Refer to "San Juan" for further information on Consular endorsement.

PILOTAGE: Compulsory. Official Pilot boards vessels at entrance to bay and leads ship to appropriate anchorage according to draft. Private Pilot to moor to the quays of the "Corporacion Peruana del Santa" and to "Sogesa". Vessels enter the inner roadstead, through Southern side of each channel. Depart through Northern side of channel.

ANCHORAGE: Good anchorages in bay according to draft. Anchorages are of mud and sand. Best place to anchor ship of medium draft is inner side of Paso del Norte, 6 fathoms deep, near port and safe. Another good anchorage for ship of medium draft is with Island bearing 170° and Rosas Blancas bearing 275°, 6 fathoms deep.

HEALTH: Masters apply according to International Regulations through Agents to Maritime Health Department in the first Peruvian port of call for free pratique by radio, in which case it will not be necessary for Sanitary Doctor to board on arrival. Pratique only essential at first port of call unless requested by Captain, in case of suspected illness on board.

RADIO: "Hablanaves" Station del Callao a Talara.

Arrival Advice: 24 hours Notice of Arrival should be sent to the Captain of the Port and the Agent.

TUGS: 6 private, 3 of 80 h.p., 1 of 60 h.p. and 1 of 165 h.p. and 1 of 180 h.p. The Port Authority has two tugs, 1 of 400 h.p. and 1 of 200 h.p.

BERTHING: 3 Piers available.

No. 1 Pier: Length 180 m., width 15.10 m., depth alongside 28 ft.

No. 2 Pier: Used only for the loading and discharge of lighters (fishmeal). Length 54 m., width 18.40 m.

No. 3 Pier: Operated by Siderperu. Length 264 m., width 25.6 m., depth alongside 30 ft. There are two bridges for discharging coke and minerals by clamp. (Total capacity 300 t.p.h.)

LIGHTERS: 12 for dry cargo: 2 at 150 tons and 10 at 50 tons. 10 tanklighters with a total capacity of 1,300 tons.

CRANES: 10 cranes: 4 at 3 tons, 3 at 13 tons, 2 at 15 tons and 1 at 35 tons.

STEVEDORES: Agent arranges stevedores. Normally done when ship has arrived.

See "Pimentel" for working hours and overtime rates. 30 gangs of 9 men each available also 6 carpenters.

MEDICAL: Agent arranges emergency attention. Hospital and private clinic available.

TANKERS: Three zones for load/discharge of fish-oil and lubricants. Ship loads fish-oil by barges being anchored. Discharge of fuel when ship anchored to buoys by means of submarine lines.

FRESH WATER: Two barges to supply fresh water to ships, one of 40 metric tons and other one of 25 metric tons. Fresh water available at Pier No. 3.

FUEL: Available by tanker lorries if special arrangements are made.

DEVELOPMENTS New quays to be built.

GANGWAY/DECK WATCHMEN: The services of watchmen are necessary.

OPENING/CLOSING HATCHES: This job is carried out by stevedores.

CUSTOMS ALLOWANCE: Tobacco: 10 packets per person per week. Wine and/or Spirits: With approval of Customs, within normal consumption.

CARGO GEAR: Vessel's derricks used, the quay has fixed crane for 50 metric tons and three mobile cranes for 15 tons.

IDENTIFICATION CARDS: Needed for both crew and passengers.

CONSULS: Only the Vice-Consul of Spain and Panama.

REPAIRS: Only minor repairs are possible.

REPATRIATION: Facilities for crew changes and arranging any necessary repatriation.

AIRPORT: Port has landing place for planes, but it is only for national use, not for international flights.

TIME: GMT minus 5 hours, all year round.

HOLIDAYS: Cargo work can be arranged on holidays with an extra 100% charge over basic pay. The only exception is 1st of May, on which cargo work cannot be arranged.

TELEPHONES: No arrangements for placing telephones on board. They are about 50 m. from ship.

SHORE LEAVE: Crew members allowed ashore.

REGULATIONS: Not allowed to use wireless when ship is in port. Nor allowed to put any boat on the water without permission of Capitania del Puerto. Not allowed to throw any waste or litter into bay. Not allowed to make unnecessary sound signals.

GENERAL: *Swell Period:* February/March and June/October.

AUTHORITY: Capitan de Puerto – Direccion Capitania de Puerto Chimbote.

AGENT: See "Callao".

CONCHAN: 12.10 S. 77.00 W.

Tanker Buoy berth about 30 miles South of Callao.

DOCUMENTS: Tankers calling at Conchan must first call at Callao anchorage to be received and cleared by Authorities. Not necessary to call at Callao after discharge as clearance is simultaneous with reception. Pilot boards vessel at Callao anchorage and either remains on board or returns to take vessel out, as required by Master.

BERTHING: Vessels moor to buoys. One submarine line of 16 in. reducing to 12 in. at vessel's connection, running 1,000 m. from shore opposite Conchan refinery.

LAUNCH: Launch service between Conchan and Callao during vessel's stay in port.

GENERAL: Two Customs police and two refinery employees board at Callao and remain on vessel during discharge.

AGENT: See "Callao".

ETEN: 06.54 S. 79.48 W.

Eten is about 348 miles North of Callao. The port is an unprotected open road. All cargo operations are undertaken by lighters. The main activities are the export of sugar and import of fertiliser and general cargo.
PILOTAGE: Not available.
ANCHORAGE: Vessel anchor about 0.5 mile off the Mole Head in 7–8 fathoms, near the anchorage place of the lighters.
RADIO: *Arrival Notice:* 24 hours Notice of Arrival should be sent to the Captain of the Port and the Agent.
TUGS: 4 tugs of 80 h.p. each.
LIGHTERS: 13 lighters with a total capacity of 635 tons.
CRANES: 3 steam cranes, 2 × 2 tons and 1 × 15 tons. 1 diesel crane of 3 tons capacity.
STEVEDORES: See "Pimentel".
FRESH WATER: Not available.
MEDICAL: There is a hospital at Chiclayo 15 km. from the port.
CONSULS: Vice-consul of the Netherlands.
GENERAL: *Swell periods;* Eten being an unprotected open road port it frequently occurs that the port has to be closed due to heavy swell. The swell comes up suddenly and is not subject to any specific period, but it occurs more frequently during June/September and the Easter week.
AGENT: See "Callao".

GENERAL SAN MARTIN: 13.50 S. 76.16 W.
PISCO: 13.43 S. 76.14 W.

PILOTAGE: Compulsory.
RADIO: *Arrival Advice:* 24 hours Notice of Arrival should be sent to the Captain of the Port and the Agent.
TUGS: 16 tugs available. 10–800 h.p.
BERTHING: 1 quay with 4 berths each 175 m. in length. Max. draft 32 ft.
LIGHTERS: 28 wooden lighters for general cargo, total capacity 1,800 tons. 5 steel lighters (not immediately available), total capacity 600 tons. 3 lighters for liquid cargoes, total capacity 500 tons.
CRANES: 1 × 15 tons and 1 × 30 tons lifting capacity.
STEVEDORES: *Working Hours:* 0800–1200 hrs., 1300–1700 hrs., 1800–2400 hrs., 0100–0700 hrs.

109 stevedores available.
MEDICAL: There is a hospital available.
TANKERS: *Submarine Pipe-line:* The pipe-line belongs to "COPSA". Position 13° 36′ 20″ S., 76° 15′ 54″ W. Length of pipe-line 700 m., diameter 8 in. Pilotage is compulsory. Depth of water 7.5 fathoms. Pumping rate 70-75 t.p.h.
FRESH WATER: Available.
FUEL: Not available.
AGENT: See "Callao".

HUACHO: 11.08 S. 77.37 W.

Huacho is an unprotected open roadstead about 69 miles North of Callao. The main activity is the loading of fishmeal and minerals and discharging of fertilisers.
PILOTAGE: Not available.
ANCHORAGE: Vessels anchor in open roads.
RADIO: *Arrival Advice:* 24 hours Notice of Arrival should be sent to the Captain of the Port and the Agent.
TUGS: 4 tugs available, 1 each at 50, 60, 72 and 180 h.p.
LIGHTERS: 29 lighters, total capacity 1,450 tons.
CRANES: 3 cranes at 7 tons each.
STEVEDORES: See "Pimentel" for working hours and overtime rates.

4 gangs of 9 men each available.
MEDICAL: Assistance available.
FRESH WATER: Not available.
FUEL: Not available.
GENERAL: *Swell Period:* Frequently during the Winter months.
AGENT: See "Callao".

HUARMEY: 10.05 S. 78.09 W.

Huarmey is an unprotected open roadstead for the loading of fishmeal.
PILOTAGE: Not available.
ANCHORAGE: Vessels anchor in the open roads.
RADIO: *Arrival Notice:* 24 hours Notice of Arrival should be sent to the Captain of the Port and Agent.
TUGS: 4 tugs available, 2 × 145 h.p. and 1 each at 120 h.p. and 165 h.p.
LIGHTERS: 18 at 50 tons each.
CRANES: 1 of 2 tons capacity and 1 mobile crane.
STEVEDORES: See "Pimentel" for working hours and overtime rates.

3 gangs of 9 men each available.
MEDICAL: Assistance available.
FRESH WATER: Not available.
FUEL: Not available.
GENERAL: *Swell Period:* June to August.
AGENT: See "Callao".

ILO: 17.39 S. 71.22 W. (See Plan)

DOCUMENTS:

6 Entry Declarations.
4 Passenger Lists (disembarking).
4 Passenger Lists (in transit).
3 Personal Effects Lists.
3 Stores Lists.
1 Maritime Health Declaration.
3 Sets Cargo Manifest.
10 Cargo Manifest.

Refer to "San Juan" for further information on Consular endorsement.
PILOTAGE: No pilot station; there is a Pilot in the Capitania del Puerto, who should be notified in advance by Agents. Two hours notice of ETA required. Pilot boards at anchorage 800 m. from extension of the SPCC quay.
ANCHORAGES: 400 m. to the North of the end of the SPCC quay, in 15 fathoms depth.
MAX. SIZE: See "Berthing".
HEALTH: Pratique given by captain of port. In cases of suspected illness a doctor should be requested in advance. When the ship arrives from another Peruvian port free pratique is automatic.
RADIO: Cables connect with National Communications network. ETA sent to Port Authority and to Agencies.
TUGS: No large tugs; some small tugs operated by Agencies.
BERTHING: Berthing anytime. There are two piers, one belonging to Southern Peru Copper Corp. and one to ENAPU.

SPCC: Two vessels are able to berth alongside. Length of pier 520 ft., width 60 ft. Depth alongside varies from 35 ft. to 50 ft.

ENAPU: Length of pier 300 m., width 20 m. Depth alongside varies from 18 ft. to 60 ft. Vessels able to berth both sides. South side depth 18 ft. at inner end, 54 ft. at outer end. North side depth 24 ft. inner end, 60 ft. outer end.
STEVEDORES: Stevedores come under the Capitania del Puerto and are ordered by Agents. *Loading Rates:* Copper sheets loaded 65 metric t.p.h. Fish-flour loaded at 100 metric t.p.h. in an 8-hour shift.

Working Hours: 0700-1200, 1300-1600, 1700-2400, 0100-0700 hrs., ten gangs available of nine men each.
MEDICAL: Medical assistance ordered by Agents. Hospital "El Centro de la Salud", and the Saint Geronimo Hospital.
TANKERS: *At Ilo:* Discharge line diameter 10 in., 2 lines, connection to the ship's manifold 8 in., connection and flexible line, working pressure 100 lb. A buoy mooring berth.

Depth of water 40 ft. pumping rate 80-90 t.p.h. Vessels of Petroperu have preference.

Punta Tablones: Discharge line diameter 12 in., connection to the ship manifold 8 in. Flexible connection line, working pressure 100 lb. or 400 barrels per hour. A buoy mooring berth.

Max. length 750 ft. Depth of water 40 ft.
DENSITY: Salt water.
FRESH WATER: Available.
FUEL: None available.
DEVELOPMENTS: Terminal quay of 900 ft. long is now being built.
GANGWAY/DECK WATCHMEN: Watchmen provided by Agents when necessary.
OPENING/CLOSING HATCHES: Strictly forbidden for the crew; must be done by stevedores.
CERTIFICATES: When the ship comes from foreign port it is compulsory to produce Certificate of Gross Tonnage.
CUSTOMS ALLOWANCE: Tobacco: 10 packets per person. Wine and/or Spirits: Sufficient for meal times. Normal crew consumption only.
IDENTIFICATION CARDS: Agents arrange for cards to be signed by Port Authority for each crew member.
CONSULS: None.
REPAIRS: Some minor repairs.
REPATRIATION: There are facilities for effecting crew changes and arranging any necessary repatriation. Those who are going to be repatriated must have a permit from the Port Authority to be allowed ashore.
AIRPORT: Ilo Airport, 8 kms. Scheduled flights twice a week on Tuesdays and Saturdays and regular airport in Tacna at 1.5 hours by taxi, scheduled flights twice daily to Lima.
TIME: GMT minus 5 hours. No alterations during the year.
HOLIDAYS: 1st January (New Year); Maundy Thursday and Good Friday (change every year); 1st May (Labour Day); 29th June (Saint Peter and Saint Paul); 28th and 29th July (Motherland Days); 30th August (Saint Rosa of Lima); 1st November (All Saint Day); 8th December (Our Lady); 25th December (Christmas).

Holidays which are not in the Calendar but are considered Holidays with reference to payments to the workers: 6th January (King's Day); 19th March (Saint Joseph); Corpus Christi (it varies every year); The evening of the 24th June (India man day); 30th July (Motherland Day); 15th August (Feast of the Assumption); 24th September (Las Mercedes); 12th October (Race Day); 27th November (Tarapaca Battle); 9th December (Ayacucho Battle).
POLICE/AMBULANCE/FIRE: Southern Copper Corporation operate fire service. Police, Tel. No. 3; Ambulance, tel. No. 3.
TELEPHONES: No arrangements for placing telephones on board.
SHORE LEAVE: Crew members allowed ashore and identify themselves with cards signed by Capitania del Puerto given through ship's Agents.
GENERAL: Tank cleaning and well cleaning must be done 5 miles leeward of port. Not allowed to unload explosive cargo.
DELAYS: Only delays when quay is occupied by two ships. In the load/unload operations the port can attend to 4 ships

simultaneously and 4 more when new quay (that is now being built) is finished.
AUTHORITY: Capitan del Puerto, who is a Navy Officer.

AGENT: See "Callao".

LA PAMPILLA: 11.55 S. 77.09 W.

Tanker Buoy Berth about 30 miles North of Callao.
DOCUMENTS, ETC.: As for Callao.
PILOTAGE: Tankers calling at La Pampilla must first call Callao anchorage to be received and cleared by Authorities. Not necessary to call Callao after discharge as clearance simultaneous with reception. Pilot boards vessel at Callao anchorage and either remains on board or returns by launch to take vessel out, as required by Master.
BERTHING: Vessels moor to buoys. 1 submarine line of 18 in. reduced to 10 in. at vessel's connection running 1,500 m. from shore opposite La Pampilla refinery.
LAUNCH: Launch service between La Pampilla and Callao during vessel's stay in berth.
GENERAL: 2 Customs police and 2 refinery employees board at Callao and remain in vessel during discharge.

AGENT: See "Callao".

MATARANI: 16.59 S. 72.07 W. (See Plan)

Matarani is a berth port. Main activity: loading of minerals, wool, coffee, skins, tin-ingots, discharging general cargo. Matarani is an important transhipment port for cargo to and from Bolivia.
PILOTAGE: Compulsory.
RADIO: *Arrival Advice:* 24 hours Notice of Arrival should be sent to the Captain of the Port and the Agent.
TUGS: 4 tugs available, 2 at 75 h.p., 1 at 690 h.p. and 1 at 800 h.p.
BERTHING: 1 quay with 3 berths. Length 450 m., width 20.15 m. Vessels of 570 ft. length can berth. Depth alongside 30 ft.
CRANES: 7 cranes. 2 at 7 tons, 3 at 10 tons, 1 at 15 tons and 1 at 20 tons lifting capacity.
MEDICAL: A hospital is available.
STEVEDORES: *Working Hours:* 0800–1200, 1300–1700, 1700–2400, 0000–0600 hrs.

9 gangs available of 15 men each.
FRESH WATER: Available.
FUEL: Not available.
GENERAL: *Swell Period:* From June to August.

AGENT: See "Callao".

PACASMAYO: 07.24 S. 79.33 W.

DOCUMENTS:

3 copies Voyage Log Extract.
2 originals and 5 copies of Entry/Exit Declaration, endorsed by Consul.
8 copies of Passenger Lists for the Port.
8 copies of Transit Passenger List.
4 copies of Store List.
4 copies of Personal Belongings Manifest.
13 copies of Cargo Manifest.
1 Maritime Health Declaration.
2 Crew Lists.
1 Vaccination List.
When this is the first Peruvian port, Gross Tonnage Certificates.
When having cargo for the port, Statement of Cargo, endorsed by Consul.
When Pacasmayo is the first or last port called, Lists or Manifests of cargo in transit (2 copies each).

Refer to "San Juan" for further information on Consular endorsement.
PILOTAGE: The port has no Pilots because it is an open bay. Vessels have free pratique after boarding by port officials.
ANCHORAGE: The most usual anchorage area is in position 7° 23′ 50″ S. 79° 35′ 10″ W. Bottom from 3.25 to 4.5 fathoms deep.
APPROACHES: Reference points are the lighthouse of Cruz Punta Pacasmayo with a range of 12 miles, and during the day the cylindrical tower of cement factory with a height of 50 m. situated in the S.E. of the bay. On the head of the quay there is also a small iron tower of 9 m. height with a permanent red light of 2 miles visibility. The quay is very old and only flat boats can moor.
MAX. SIZE: Wide anchorage without problems concerning length or breadth. Recommended draught 4 fathoms, but it is possible to find 6, 8 or 10 fathoms towards the West. Current from South to North at an average of 6 knots.
HEALTH: Sanitary control is carried out by the health doctor who comes on board with port officials. Normally, captains notify any suspected illness or any other information by telegraph.
RADIO: There is only 1 radio station. It operates in the premises of the Agency Juan Dalmau, call sign OC155 and frequency 40.400 kc/s.
TUGS: They only operate to bring or take out flat bottomed barges once the vessel is moored.
BERTHING: Vessels anchor in open bay.
LIGHTERS: 9 lighters with a total capacity of 400 tons.
CRANES: 1 × 2 tons, 1 × 3 tons and 1 × 4 tons. Max. length of cases 7 m. Max. weight 6 tons.
STEVEDORES: Agents order the number of gangs required. These gangs work at a tariff hour/ton and the amount is controlled by the Port Captain. The number of gangs (9 men each) depends on loading/discharging speed required and on the number of holds and winches available, For overtime rates see "Pimentel".
MEDICAL: Can be provided by Centro Preventivo del Area de Salud or by Hospital Regional de Chepen, 35 km. from port (150 beds).
DENSITY: Salt water.
FRESH WATER: Not available.
FUEL: Not available.
DEVELOPMENTS: When the mines of Micchiquillay (copper) start working, the embarking capacity of the port has to be 100,000 tons per month, consequently it is planned to build a quay for minerals or otherwise a floating island 6 miles from the port for embarking in gross raw materials by pipe-lines.
OPENING/CLOSING HATCHES: These operations are carried out by the stevedores.
SHIP CERTIFICATES: Deratisation or Fumigation Certificate; Vaccination Certificate for Crew and Passengers; Tonnage Certificate when coming from abroad.
CUSTOMS ALLOWANCES: Only tobacco, wines, spirits required for normal consumption, which must be included in vessel's stores list.
CARGO GEAR: Ships gear used.
IDENTIFICATION CARDS: Not required unless leaving the vessel.
CONSULS: There are no Consuls in the port.
REPAIRS: There is a small workshop in the port for minor repairs such as soldering, etc. There is no foundry.
DRY DOCKS: Nearest at Callao.
REPATRIATION: Members of crew of passengers can be repatriated subject to Port Authorities permission and passport control.
AIRPORT: There is a small emergency airport 2 km. from the port where biplanes can land.
TIME: GMT minus 5 hours. During the 3 months of Summer clocks advance 1 hour.
HOLIDAYS: Holidays have been restricted. The national official holidays are: 27th and 28th July (National Independence Days); 1st January (New Year); 25th December (Religious Fete); Maundy Thursday and Good Friday; variable days and 1st May (Workers' Day).
POLICE/AMBULANCE/FIRE: Police 2126; Ambulance 2225; Fire 2081.
TELEPHONES: It is not possible to instal telephones on board. Communication by walkie-talkie radio.
GENERAL: Fresh and dry provisions can be supplied, such as meat, poultry, vegetables and fruits.
SERVICES: There is no tank-cleaning equipment and the discharge of tank washing and any other kind of garbage is forbidden, for the bay is a bathing area.
SHORE LEAVE: Allowed.
DELAYS: The vessel is moored on arrival. Delays can occur due to heavy sea or rain in case of cement loading.
AUTHORITY: Captain of the Port.

AGENT: See "Callao"

PAITA: 05.05 S. 81.07 W. (See Plan)

DOCUMENTS:

5 copies Peruvian "Declaracion de Entrada".
13 Crew Lists.
5 Cargo Manifests, from each port where cargo loaded, or negative.
5 copies of each Bill of Lading.
3 Personal Effects Lists.
13 Stores Lists.
1 Tonnage Certificate from first and last port.
1 International Maritime Health Certificate.
13 Passenger Lists, disembarking, or negative.
13 Passenger Lists, in transit, or negative.
1 Clearance from last port.
1 Sealed envelope from Peruvian Consulate addressed to Customs.

(Documents should be visaed by Peruvian Consulate.)
PILOTAGE: Compulsory. There are two Pilots, on 24 hour service. Arranged by Agent. The boat is an old disembarking launch, hoisting blue flag with a white "P" Pilot will board after free pratique has been granted by Port Captain and Health authorities.
ANCHORAGE: Recommended 5.04 S. 81.07 W.
RESTRICTIONS: Draft restricted to 31 ft. at low water.
MAX. SIZE: Length and breadth practically unlimited.
HEALTH: Agent will notify Health Authorities about the vessel's arrival.
RADIO: Recommended Balboa Radio.

Arrival Notice: 24 hours Notice of Arrival should be sent to the Captain of the Port and Agent.
TUGS: 1 tug of 180 h.p. and one motor barge of 68 h.p. available.
BERTHING: One finger pier, length 365 m. width 36 ft. Four berths available, depths are as follows:

No. 1A (North-west Berth)	34.1 ft.
1B (North-east Berth)	34.4 ft.
1C (South-west Berth)	23.8 ft.
1D (South-east Berth)	22.9 ft.

A safety margin of 3 ft. should be observed. It is advisable to request (from Pilot) berths "B" or "D", if empty, due to the prevailing winds. The berths have good fenders.

STEVEDORES: Arranged by Agent at 24 hours notice.

Working Hours: 0800-1200, 1300-1700, 1700-2400 and 0000-0700 hrs.

Night Work: Possible, as long as it is ordered in plenty of time. 10 gangs of 9 men each available per shift.

MEDICAL: There is a local hospital with all facilities.

DENSITY: 1030.

FRESH WATER: Not available.

FUEL: Not available.

FIRE PRECAUTIONS: Port Authority fire equipment stationed at the end of the pier.

STORES: Fresh provisions available.

GANGWAY/DECK WATCHMEN: Available on request.

CERTIFICATES: Not requested.

CUSTOMS ALLOWANCE: Two cartons and one bottle per person.

CARGO GEAR: No additional requirements.

IDENTIFICATION CARDS: Not required.

CONSULS: Ecuador.

REPAIRS: No facilities.

REPATRIATION: Allowed on request to the Port Captain.

GENERAL: Painting and chipping ship's side restricted. Very strict concerning rat-guards, throwing of garbage, etc.

AIRPORT: Piura, airport 55 km. with domestic flights to Lima International Airport.

HOLIDAYS: 1st May only.

AUTHORITY: Captain del Puerto.

AGENT: See "Callao".

PIMENTEL: 06.50 S. 79.58 W.

Pimentel is an unprotected open road port, loading/discharging only from/into lighters. Clearance is possible day and night, including Sunday and holidays, but of course with overtime additionals. Main activity: Sugar export, import of fertilisers and general cargo.

PILOTAGE: Not available.

ANCHORAGE: Vessels usually anchor about 1.5 miles off the Mole Head in 7-8 fathoms, near to the anchorage place of lighters.

RADIO: *Arrival Notice:* 24 hours Notice of Arrival should be sent to the Captain of the Port and the Agent.

TUGS: 2 at 82 h.p., 2 at 120 h.p. and 2 at 134 h.p.

LIGHTERS: 15 lighters with a total capacity of 1,170 tons.

CRANES: On the mole there are 3 diesel cranes each 3 ton capacity, 3 steam cranes with 4, 6 and 15 ton capacity. Max. dimensions of Cargo 27 ft. (length)×15 ft. (wide)×21 ft. (height).

STEVEDORES: *Working Hours:* 0700–1100 and 1300–1700 hrs. Overtime (plus 100%) 1100–1300 and 1700–2400 hrs. Overtime (plus 200%) 0000–0700 hrs.

On Sundays and holidays an additional 100% to the above-mentioned tariffs.

MEDICAL: There is a hospital at Chiclayo 15 km. from the port.

TANKERS: *Submarine Pipe-line:* Diameter 8 in. max. draft 18 ft. 1 pipe-line for clean products and 1 for dirty products.

FRESH WATER: Not available.

FUEL: Not available.

CONSULS: Vice-consul of the Netherlands.

SURVEYOR: Mr. Manuel S. Reyes H., sub-agent of Lloyd's of London.

GENERAL: *Swell Periods:* Pimentel being an unprotected open road port it frequently occurs that the port has to be closed due to heavy swell. The swell comes up suddenly and is not subject to any specific period, but it occurs more frequently during June-September and the Easter week.

AGENT: See "Callao".

PUERTO CHICAMA: 07.50 S. 79.22 W.

Puerto Chicama is about 295 miles North of Callao. Fishmeal is loaded from lighters in an open roadstead.

PILOTAGE: Not available.

ANCHORAGE: Vessels anchor about one mile from the Mole.

RADIO: *Arrival Advice:* Advise general Agents in Lima who will telephone Port Agents.

TUGS: 3 tugs available, 1 of 65 tons and 2 of 80 tons each.

LIGHTERS: 20 lighters with a total capacity of 900 tons.

CRANES: 4 cranes, 2 of 2 tons, 1 cf 4 tons and 1 of 6 tons.

STEVEDORES: Working hours are from 0700-2400 hrs. These hours may be exceeded to complete loading. Five gangs of 9 men are available.

FRESH WATER: Not available.

FUEL: Not available.

GENERAL: *Swell Period:* During the months of June, July and August.

AGENT: See "Callao".

SALAVERRY: 8.14 S. 78.57 W. (See Plan)

DOCUMENTS: See "Callao".

PILOTAGE: Compulsory.

RESTRICTIONS: Harbour entrance is sand and liable to silting. Advisable to check draft requirements in advance, as depths are subject to latest dredging.

MAX. SIZE: Approx. 25,000 d.w.t. with up to 29 ft. draft.

HEALTH: Cable Agent requesting free pratique. Agent must be notified in advance if disease suspected on board.

RADIO: *Arrival Advice:* 24 hours Notice of Arrival should be sent to the Captain of the Port and the Agent.

TUGS: 4 tugs available, 1 each at 720 h.p., 160 h.p., 85 h.p and 40 h.p.

BERTHING: *No. 1 Pier:* Length 220 m. Vessels able to berth both sides. Max. draft 29 ft.

No. 2 Pier: Length 230 m. Vessels able to berth both sides. Max. draft 29 ft. This pier is specially for the loading of sugar in bulk, 2 loading bridges available, loading rate 200 t.p.h. each.

STEVEDORES: *Working hours:* 0700–2300. Sugar and molasses in bulk loaded 24 hours a day. 10 gangs available of 9 men each.

CRANES: 2 × 18 tons capacity.

MEDICAL: At Trujillo, 15 km. from the port.

TANKERS: *Submarine Pipe-line:* Diameter of 10 in., depth 26 ft.

FRESH WATER: Available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Recommended.

CUSTOMS ALLOWANCE: Any amount held over normal consumption may result in Customs search being imposed.

IDENTIFICATION CARDS: Supplied by Agent and stamped by Immigration. Required for all crew members.

HOLIDAYS: Only 1st May when work is not available.

CONSULS: Nearest at Callao/Lima.

GENERAL: *Swell Period:* June to September.

AGENT: See "Callao".

SAN JUAN: 15.21 S. 75.11 W. (See Plan)
SAN NICOLAS: 15.14 S. 75.14 W. (See Plan)

DOCUMENTS:

Clearance	1
General Declaration (Form ALALC/OEA 1)	5 for arrival 5 for departure
Cargo Manifest. Only when authorities require it. (Form ALALV/OEA 2)	4 for arrival
Crew List (Form ALALC/OEA 3)	5 for arrival 5 for departure
Store List/Bazaar List (Form ALALC/OEA 5)	5 for arrival
Personal Effects Declaration	3 for arrival
Maritime Declaration of Health	2 for arrival
*Passenger List (Form ALALC/OEA 4)	6

*This document is not to be presented when vessel is not carrying passengers or cargo.

Note 1. If no Peruvian Consul exists at port of departure or within 50 km/s. radius, then the documents which require Consular visa should be signed by a Consul of a friendly nation stating that there is no Peruvian Consul. If no Consul of any nation exists at the port of departure, the documents above mentioned must bear a certificate signed by an official of the port stating that no Consul of any nation exists at the port of departure or within 50 kms. radius.

Note 2. In the case of a vessel merely transitting the Panama Canal, no new Peruvian Consular clearance is required. The Consular despatch from port of departure will be accepted provided it is correct and no changes have taken place. If, however, vessel stops for any business during the Canal passage, embarking or disembarking passengers, crew changes, loading or discharging cargo or the conduct of any business which causes a change in the Peruvian Consular documents, New Consular Dispatch must be obtained. Panama or Balboa, which ever applies, becomes the port of departure for Peru.

The following documents should be available for inspection:

Ship's Papers.

Valid Fumigation or Exemption Certificate.

Crew's Identity Documents.

International Vaccination Certificates of all persons aboard.

List with following data: date and port of issue of ship's register, date and port of issue of Health Certificate, date of vessel's building and yard, list of ports of call with dates during previous 4 months.

PILOTAGE: Pilotage is compulsory for berthing. No vessel may proceed to pier until permission to berth has been granted. No vessel is permitted to berth alongside Marcona Mining Company's pier without an authorised Docking Pilot on board. While loading, during periods of heavy swells and surge a Marcona Pilot will be on board permanently. Masters are requested to make arrangements and facilities available.

Upon arrival in port, vessels must anchor and wait for reception. Official time of arrival is the time of anchoring. The starboard accommodation ladder must be rigged for Port Officials and Marcona representatives. Ships approaching San Nicolas must fly their national and quarantine flags. Vessels proceeding to San Nicolas to load iron ore will radio Marcona Mining Company, Lima, Peru, cable address Marminco Lima, their ETA 5 days – 48 hours and again at 24 hours prior to arrival; when vessels have direct contact with station "OAS", a prestowage hatch list must be radioed to Agent, giving tonnage per hatch and loading sequence. The coast radio station "OAS" located in San Juan Bay should be contacted as soon as vessel is within range. Berthing instructions and other messages from Agent at San Nicolas will be transmitted via this station. Radio contact must be made 48 hours prior to arrival, specially on week-ends and holidays.

BREAKWATER: A 2,653 ft. long breakwater has been built in order to reduce the effects of the swell alongside the pier. The breakwater is at the West side of the pier 875 yards of distance on the South end, and does not run parallel to the pier, but at N. 36° 35′ 28″ E. angle. The North end of the breakwater is 1,430 ft. from the North end of the dolphin, but the perpendicular distance from the pier to the closest point of the breakwater is only 1,090 ft.

At the North end of the breakwater there is a lighthouse with the following characteristics: 1 green flash every 4 seconds, visibility 5 miles.

There are also 3 buoys indicating the end of the toe of the breakwater, and whose characteristics are as follows: 1 white flash every 4 seconds, visibility 3 miles.

ANCHORAGE: The anchorage recommended for vessels waiting for berth is in inner portion of the bay, East of meridian through San Nicolas point in depths of 15 to 20 fathoms. When anchoring, it is essential to leave sufficient sea room, about 0.75 miles for ships to manoeuvre in and about the berth.

Wreck of M/S *Templar* lies in position: Lat. 15° 13′ 53″ S., Long. 75° 09′ 48″ W. The obstruction lies in approximately 150 ft. of water. Clearance above the obstruction is 60 ft. Do not anchor in the vicinity of the wreck.

RADIO: Coast Radio Station "OAS" is located in port of San Juan and serves both San Juan and San Nicolas. This station listens on 500 kc/s. 1200/1400 GMT, 4345 kHz 0130–0200 GMT, 6,510 kHz 0045–0100 GMT, 8,680 kHz 0000/0045 – 0100/0115 – 1200/1230 – 1600/1630 – 2000/2100 GMT, 16,968 kHz 0115/0130 – 1330/1400 – 1630/1655. It handles traffic on 410, 425, 444, 448, 454, 468, and 480 kc/s. Antenna output is 300 w.

There is a transmitter with the following frequencies schedule:

4,365 kHz – GMT 0045; 0100; 1000; 0200.
8,680 kHz – GMT 0000/0045; 1200/1230; 1600/1630; 2000/2100
16,978 kHz – GMT 1330/1400; 1630/1700; 2100/2200 listening on 4, 8 and 16 M/rz.

TUGS: 2 tugs available at 500 h.p.

BERTHING: *Pier and Mooring Facilities:* The pier is located at the South side of the bay and is built on a North-South direction. It is constructed of pre-stressed concrete and steel pipe-lines with deck 1,000 ft. long and 50 ft. wide. The deck is 11 ft. 3 in. above mean low water.

At the pier head, a mooring dolphin has been constructed to make fast the stern lines of any vessel bigger than 900 ft. overall length, the diameter 50 ft. Distance from Northern end of pier to Northern end of dolphin 198 ft.

There is a wooden retractile fender around the dolphin of 7.5 ft. wide. There are 3 big bollards, 2 pelican hooks and an electric winch to make fast the stern lines. There is also a connecting bridge from the pier to the dolphin, which is 148 ft. long.

There is a fendering system on both sides of the pier consisting of wood pilings and a continuous rail of laminated lumber and rubber cylinders which keep vessels 5 ft. from the concrete pier. On the West side of the pier (ore-loading side) there are 28 mooring cleats, 12 bollards and 3 double mooring bitts. At the centre of the pier-head there is 1 bollard. On the East side of the pier there are 23 cleats, 2 bollards and 1 double mooring bitt. The loading berth on the West side of the pier has been deepened.

The original depth in the berth was 42 ft. at the shore end and 59 ft. at the seaward end. The new depth is 62 ft. all alongside the pier and up to 300 ft. Westward from the pier fender, except in the place known as anchor pocket which is located between the pier-head and the dolphin. The anchor pocket is 70 ft. deep, 250 ft. long and 300 ft. wide. When docking the 2 anchors are let go in that pocket where enough water exists to prevent any collision of the ship with her own anchors.

The East side of the pier still has the original depth.

The bottom alongside is mud and sand. The ore ship loader has a pier straddle clearance height of 14 ft. and width of 12 ft. thus restricting the size of cargo parcels placed on the pier when the gantry is positioned inshore.

Berthing and Mooring: Vessels calling at San Nicolas for the discharging of general cargo must berth on the East side of the pier with the starboard side of the ship to the pier. Such vessels use their own regular mooring lines. Only ore in slurry form is loaded at this side through 20 in. pipe-lines.

Ore vessels berth at the West side of the pier with the port side of the ship to the pier. In addition to the vessel's own regular mooring lines, heavy surge lines are compulsory for all vessels loading iron ore. Wires are not permitted as moorings to the pier except when attached to tension winches.

VERY IMPORTANT: While vessels are alongside the pier, engines must be ready for immediate use. Sufficient crew must be on deck at all times to tend mooring lines and heave in the slack as loading progresses. Failure to do so may result in a discontinuance of loading and the vessel being moved out from the berth.

Loading and Unloading: Loading is generally carried out at the rate of about 4,000 l.t.p.h. Vessels arriving with 50 tons of cargo or less may have a choice of barge rental while at anchor in the bay or have pier discharge subject to loading operation or other cargo vessels discharging at the pier.

San Juan Bay: 1 pier length 760 ft., width 50 ft., depth 36 ft.

Loading: Prior to commencement of loading the Master or Chief Officer will deliver to the port Agent a pre-stowage plan with the following information:

Total cargo required, calculated tonnage per hatch, sequence of loading, fuel on board, water and stores on board in long tons, and calculated draft and trim upon completion of loading.

Loading is generally carried out at the rate of about 4,000 l.t.p.h.

Tonnage on board at any stage of the loading is available from the Loading Master, the Pilot on board, or at the scale house at the upper end of the pier. In order to avoid last minute delays, it is very important that a constant check be made of vessel's draft, ballast left to discharge and cargo on board during the entire loading. Any change in tonnage of cargo required must be reported to the Port Agent or Loading Master not later than when there is approximately 2,000 long tons remaining for completion of loading, and always in writing.

It is convenient to check drafts, ballast and tonnage of cargo on board each time the loading gantry shifts from one hatch to the next. While loading is actually in progress in a hatch, no loading interruptions are permitted except in case of emergency. At the termination of each pouring, a slip stating cargo loaded and draft readings, will be delivered to the chief officer.

In calculating the tonnage required to fully stow a hold, it should be remembered that cargo is spout trimmed only. No trimmers are available at San Nicolas.

Vessels will depart from the pier immediately upon completion of loading. The Pilot will take the vessel out from the berth. If the Master wants to anchor in San Nicolas Bay prior to proceeding to sea, he must advise the Pilot who will in turn advise suitable anchorage. The Master will advise the Pilot of the estimated time of departure in order that this may be reported to the Port Captain.

Delays of port operations, as well as delays of other vessels waiting to berth, caused by a vessel which for any reason is not prepared and able to move from the pier when so ordered, are chargeable to the vessel which causes the delay.

Clearance papers, bills of lading, statement of facts and all necessary papers for clearance of the vessel will be delivered shortly after completion of loading. This can be accomplished while the vessel is being moved from the berth, or at anchor, but never alongside the pier when other vessels are waiting for loading turn.

Slurry: For the new Marcona flow system a 20 in. diameter pipe-line has been installed and vessels adapted for slurry transportation can load either at the East or West side of the pier, depending on size and draft of the vessel. Hourly loading rate has not been determined so far but is expected to make over 2,000 l.t.p.h.

CRANES: 2 at 25 tons and 2 at 50 tons.

MEDICAL: All medical attention may be arranged.

STEVEDORES: *Working Hours:* 0800–1200, 1300–1700, 1800–2400, 0100–0700 hrs.

TANKERS: On the West and East side piers there are 3 raisers to which 3×8 in. diameter hoses can be connected to a main pipe-line of 16 in. diameter for the discharging of bunkers C. Flanges are U.S. Standard (ASA). Location on the pier is for midship connection on vessels. Maximum pressure permissible is 125 lb. p.s.i. and maximum temperature 150° F. The length of the 16-in. pipe-line from the manifold on the pier to the storage tanks is 4,480 ft. There are 2 storage tanks of 167,000 bbls. each and 1 storage of 252,000 bbls. Total capacity 386,000 bbls. The height of the tanks above MLW is 142 ft. to the bottom and 190 ft. to the top of the tanks. The intakes to the tanks are at the top.

Diesel oil discharged on the East side of the pier, using one hose to an 8-in. diameter pipe-line. Flanges are U.S. Standard (ASA) with 8 bolt holes. The length of the 8 in. pipe-line from the hose connection to the storage tanks is 3,706 ft. Maximum permissible pressure is 125 lb. p.s.i. There are 2 diesel oil storage tanks of 7,340 bbls. each (total capacity 14,680 bbls.).

The height of the tanks above MLW sea level is 145 ft. to the bottom of the tanks and 177 ft. to the top of the tanks. Intakes to the tanks are at the top. There is no booster pump on the pipe-line.

There is a crew on the pier to sling the hoses; the vessel's crew is required to operate the winch, boom, hoist the hoses on board, and connect same to vessel's manifold.

BALLAST: Special attention is called to ballast requirements of vessels which do not need ballast in order to enter under the loading boom. Such vessels are required to carry sufficient ballast for safe handling during berthing. It is permissible to discharge clean ballast at the pier.

FRESH WATER: None available.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Recommended by crewmen to prevent stowaways.

OPENING/CLOSING HATCHES: Stevedores/crew.

CARGO GEAR: Ore-loading boom extends 60 ft. from face of pier fender, and can be retracted from this position to a minimum length of 29 ft. Gantry with loading boom is mobile. Range of its mobility is 900 ft. starting at a point 76 ft. from the head of the pier. Shifting of vessels during loading is therefore not required. Height from water to underside of boom is 41 ft. Vessels must be ballasted so that height of any coaming or any other objects in the vicinity of the hatch where loading is to start will not exceed 39 ft. above waterline.

IDENTIFICATION CARDS: Required.

CONSULS: At Lima.

REPAIRS: Except in extreme emergency, repairs cannot be effected at this port.

TELEPHONES: None available.

REPATRIATION: In cases where crew changes are to take place in San Nicolas, at least 7 days advanced cable notice is required to obtain the necessary Immigration authorities permission. The advanced cable must set forth name, nationality and passport number.

HOLIDAYS: See "Ilo".

GENERAL: Official hours for port officials are from 0700 to 1100 and 1300 to 1800 hrs. Upon request, port officials will board vessels at any time day or night, Sundays and holidays included. Overtime for such service is for account of vessels.

Emergency Signals: A number of short blasts on the whistle indicates an emergency. The whistle will not be used except for emergency in accordance with Peruvian regulations.

SHORE LEAVE: Shore leave may be granted at the Master's discretion. All crew members must be issued ship's passes before proceeding ashore. These must be shown to the Immigration authorities when required. Peruvian laws and Immigration Regulations must be strictly adhered to in order to avoid unnecessary difficulties. Crew members are not permitted to travel 100 km. outside of San Nicolas. – San Juan port areas without written authorisation or pass from the Master approved by Immigration authorities.

REGULATIONS: Cargo holds must be properly cleaned. In this respect special care must be taken where vessels prior to their arrival at San Nicolas have carried the following cargoes: Gypsum, Phosphate, Pyrite, Coal, Sulphur, Silica, Aluminium, Sand, Gravel, or Quartz, or any other ore containing Arsenic, Phosphorus, Sulphur, Silica, Aluminium, or Copper. Prior to commencement of loading, cargo holds will be inspected by a representative of the Shippers. It is recommended that the Master or a ship's officer accompany the cargo hold inspector during the inspection.

AGENT: Agentes Navieros San Nicolas, S.A. P.O. Box 1229 Lima. Cables: "Agnav Sannicolas".

SUPE: 10.50 S. 77.44 W.

Supe is about 84 miles North of Callao. Cargo operations are undertaken in an open unprotected roadstead. The main activities at the port are the loading of fishmeal and discharging of fertilisers, cellulose and chemical products.

PILOTAGE: Not available.

ANCHORAGE: Vessels anchor in the open roads.

RADIO: *Arrival Advice:* 24 hours Notice of Arrival should be sent to the Captain of the Port and the Agent.

TUGS: 8 tugs available, 1 of 65 h.p., 2 of 85 h.p., 4 of 134 h.p., and 1 of 165 h.p.

LIGHTERS: 32 (14 of wood and 18 of steel) for dry cargo only. The capacity of the lighters varies from 50 to 100 tons. Total capacity being 2,100 tons.

CRANES: 4 mobile cranes of 5 tons each.

STEVEDORES: See "Pimentel" for working hours and overtime rates.

5 gangs of 9 men available.

MEDICAL: There is a hospital at Barranca.

TANKERS: *Submarine Pipe-line:* One line 10 in. diameter for dirty products and one line 8 in. diameter for clean products. Depth of water 48 ft. At Paramonga there is a 10 in. line, depth 36 ft.

FRESH WATER: Not available.

FUEL: Not available.

GENERAL: *Swell Period:* June/August.

AGENT: See "Callao".

TALARA: 04.35 S. 81.17 W.

DOCUMENTS, and all general information, refer to "Callao".

PILOTAGE: Compulsory. In the vicinity of Talara there are several off-shore oil drilling platforms and near the entrance to the port there is a shallow of 24 ft.

ANCHORAGE:

Summer	04° 34′ 09″ S.	81° 17′ 36″ W.	9.25 Fathoms
Winter	04° 34′ 12″ S.	81° 17′ 29″ W.	10 Fathoms
3rd Place	04° 34′ 03″ S.	81° 17′ 42″ W.	6-10 Fathoms

RADIO: Arrival Notice should be sent at least 24 hours before arrival to Captain of the Port and Agent via the government radio station OAH. Station on 500kc/s. from 0800 to 2400 hrs.

TUGS: Three lighter tugs of 200 h.p., 1×160 h.p., 1×180 h.p. and 1 harbour tug of 600 h.p.

BERTHING: At Talara there are two berths for loading fuel and water; one is a regular quay, the other a petroleum berth in which vessels lie, moored to dolphins alongside hose platform.

Quay length 385 ft., depth alongside 18 ft. to 34 ft.

Petroleum berth, length 585 ft., depth alongside 34 ft.

Talara is mainly a bunkering port as it is the main port for the Northern Peru Oilfields. The little general cargo discharged is done at the quay; bunkering being done at the quay and at the dolphin berths.

Larger vessels load/discharge into lighters at anchorage. Five lighters are available, total capacity 1,160 tons.

CRANES: One crane of 5 tons, one mobile crane of 10 tons. For heavy lifts a floating crane with 40-ton capacity may be hired from Belco Petroleum Co.

TANKERS: See "Berthing".

Submarine Pipe-lines: 12-in. diameter. Vessels with a max. draft of 36 ft. can moor to the pipe-line.

STEVEDORES: It is possible to work 24 hours a day with interruptions at meal hours. Three gangs of 16 men each available. Overtime only charged for Sundays and holidays at 50%.

FRESH WATER: Available alongside berths.

FUEL: Available alongside berths. Bunker "C" 3,500 seconds, Petroperu No. 5 (Intermediate 4) 400 seconds, Diesel 2 (marine diesel).

MEDICAL: A private clinic is available.

CONSULS: Panama and Nicaragua.

GENERAL: Smoking is prohibited on deck, at the piers and near the refinery installation.

AGENT: See "Callao".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Philippines

GENERAL:

DOCUMENTS: *To be submitted in all Government & Private ports:*
1 copy of Quarantine Pratique.
6 copies of the Inward Cargo Manifest for all cargoes to be discharged in the Port.
2 copies of Cargo Storage Plan or Hatch List.
3 copies of Store List.
3 copies of Passenger List.
4 copies of the Crew List.
4 copies of the Crew Declaration List.
3 copies of Bonded Store List.
3 copies of Firearms and Ammunition Inventories.
3 copies of List of Drugs and Narcotics.

Original copies of all through cargo manifest destined to other ports to be deposited with the Customs Inspector on board and to be returned to the Master prior to the departure of the vessel.

Clearance from the last port.

AUTHORITY: The Ports of Cagayan de Oro, General Santos (Dadiangas) and San Fernando are now under the Philippine Ports Authority and eventually all ports in the Philippines wil be under the PPA.

SHORE LEAVE: Nationals of countries with whom the Philippines maintains diplomatic relations are allowed ashore after securing a pass from the Immigration Officer in the Port. This includes nationals of the U.S.S.R. and the Peoples Republic of China with whom the Philippines has already established diplomatic relations.

CERTIFICATES: Those required are.
Certificate of Registration.
Certificate to Operate.
Certificate of Officers and Engineers (Licenses).
Officers and Crew-Seaman's book.

CUSTOMS ALLOWANCE: 200 cigarettes for each crew member, and one bottle of liquor for each crew member.

IDENTIFICATION CARDS: Essential.

REPATRIATION: Effecting crew changes and arranging necessary repatriation are carried out by the Immigration Office in the port with the assistance of the ship Agent and the Foreign Embassy concerned.

TIME: Local Civil Time is 8 hours ahead of GMT. This time reckoning is constant throughout the year.

HOLIDAYS: New Year's Day (1st January); Bataan Day (9th April); Holy Thursday (variable); Good Friday (variable); Labour Day (1st May); Independence Day (12th Juno); Republic Day (4th July); All Saints' Day (1st November); National Heroes Day (30th November); Christmas Day (25th December); Rizal Day (30th December). When any holiday falls on a Sunday, the following day (Monday) is by law considered a public legal holiday. As a general rule, employees of the government in the Philippines do not work on Saturdays. Cargo work on board vessels on these holidays can be arranged.

GENERAL: Customs Inspector and two guards accommodated on board during vessels stay.

AUTHORITY: Bureau of Customs.

ANTIMONAN: 14.00 N. 121.55 E. (See Plan)

SHIPMASTER'S REPORT: October 1976.

Berth in position 14° 00′ 30″ N., 121° 55′ 30″ E. Vessel required to be ballasted to one third deadweight. Tidal range 6 ft. Nature of bottom at berth, mud and sand. Density 1025. Anchorage 0.5 mile S.E. of jetty.

Terminal Information: Ship's hoses used to rail only. Length of shoreline, 3,000 ft. diameter 8 in. Products handled at the berth, coconut oil and pellets of copra.

Port Information: Pilotage compulsory. Notice of 24 hrs. and 12 hrs. required. Pilot boards from a small catamaran flying the pilot flag. Boarding position 2 miles S.W. of the port. Vessel is able to enter or leave at any stage of the tide. Vessel cannot enter after dark and it is not advisable to leave after dark as some of the piles on the sea bed near the jetty are broken. Also there are no navigation lights in the bay and many vessels are fishing. Max. LOA 650 ft. Max. beam 100 ft. Max. draft 44 ft. No tugs available. Radio station used, Manila, though messages delayed in receipt at Antimonan.

Facilities available. Fresh water in small quantities for cash. Fresh provisions, groceries and meats in small amounts, doctor and hospital.

No repair facilities, laundry, fuel or slop facilities.

Improvements: The face of the jetty is being piled and breasting dolphins created. Completion expected by mid 1977.

At the present time a barge is inserted between the ship and jetty as the piling is broken.

BATAAN, Limay: 14.30 N. 120.38 E.

See "General" before first port.

PILOTAGE: Pilotage is compulsory, pilots assigned by the Manila Pilots Association. Pilot boards vessel just off the berth.

ANCHORAGE: There is a good anchorage with depth of 9.1 m.-11.3 m.

RESTRICTIONS: Approaches are open deep water. Vessels may berth and unberth at any hour and any stage of the tide. Keel clearance of 10 ft. required.

MAX. SIZE: LOA 1,000 ft. Max. draft 50 ft.

RADIO: Manila Radio. At the berth, shore communication with vocaline JRC 475 transceivers on 465 Mc/s.

HEALTH: Port health officials board with the Pilot. Radio request for free pratique can be made prior arrival.

TUGS: Available.

BERTHING: *Crude berth:* Conventional buoy mooring, tankers moor to eight buoys, in depth of 60 ft. Hoses may be connected on either side. 4×12-inch hoses for crude oil discharge.

Products Pier: Inner berth depth 13 ft. Outer berth depth 32 ft. Can accommodate vessel up to 530 ft. length. No slop discharge facilities available.

Private Piers

	Length *(m.)*	Width *(m.)*	Depth *(m.)*
Bataan Refining Corp.	343.20	15.90	9.90 to 30.00
Planters Products	317.99	n.a.	14.60
LPG Pier	24.60	3.00	5.40

DENSITY: 1025.

MEDICAL: Doctor and hospital facilities available. Advance notice required of any medical attention needed.

FRESH WATER: Not available at berth. Can be supplied by barge.

FUEL: Bunkers, fuel and diesel, obtainable from berth, advance notice required.

REPAIRS: No facilities available.

BATANGAS, Luzon (including Tabangao): 13.45 N. 121.03 E.

See "General" before first port.

PILOTAGE: Pilotage for docking and undocking at government wharves and privately owned wharves in the Port of Batangas is compulsory for all vessels engaged in foreign trade. The vessel is met by the harbour Pilot approximately 2 miles South of the wharf. Pilotage for entering the Batangas Harbour and anchoring in the quarantine anchorage is optional but pilotage for shifting therefrom or changing in the stream is compulsory for vessel engaged in foreign trade.

ANCHORAGES: Bureau of Customs Administrative Order No. 191, dated January 13, 1955, defines the limits of Batangas Harbour for navigational and mooring purposes as follows:

> ". . . a navigational and mooring area a depth of 1 mile measured from Hagony River (near West boundary of refinery compound) Eastward along the coast by 0.75 mile seaward running perpendicularly from both points..."
>
> Within this navigational and mooring area a depth of 12 to 14 fathoms with good holding ground will be found at less than 400 yards from the beach. The bottom close to the beach is mainly sand and gravel. In the event of a strong S.W. monsoon, vessels may resort to the protection afforded by the mountains of Maricaban Island by anchoring on the Northern side of the Island along Maricaban Straight.

MAX. SIZE: Caltex Refinery: LOA 755 ft., draft 41 ft. Jetty designed for 45,000 d.w.t.

Tabangao Shell Refinery: LOA 900 ft., draft 48 ft.

HEALTH: Ships will clear for quarantine on arrival at the Batangas Harbour. Quarantine officers will normally board the vessel 2 miles South of the oil wharf.

TUGS: Tug service is not furnished by the two oil refineries. The use of a tug for berthing and unberthing is required. Although a tug is normally available at Batangas it may be necessary to dispatch a tug from Manila. Accordingly, it is important for Masters of vessels to provide at least 48 hours advance notice of ETA to ensure the availability of the tug boat.

BERTHING: Berthing may be done any time during the day or at night and Masters should exercise their own judgement in this respect. Vessels moor either port or starboard side to, depending on prevailing conditions.

	Length *(m.)*	Width *(m.)*	Depth *(m.)*
Pier I (concrete)	135	15	11
Pier II ,,	48	12	6
Pier III ,,	84	15	10

STEVEDORES: All vessels proceeding to Batangas should radio either Caltex or Shell, whichever is their destination, their estimated time arrival at Batangas as early as possible, but not less than 96 hours before arrival, amending this ETA subsequently if it varies more than two hours from the original estimate in order to arrange towing gangs with the Luzon Stevedoring Corporation. Stevedoring is usually handled by Luzon Stevedoring Corporation.

MEDICAL: Both refineries have a small hospital for handling emergency cases. Should any ship's personnel need prolonged hospitalisation, arrangement will have to be made to transfer the patient to Manila or to the Provincial Hospital of Batangas where suitable medical attention is available. Dental treatment can be obtained from local dentists in the town of Batangas.

TANKERS: *Shell Refinery, Tabangao.* Jetty 1; two hoses of 10 in. diameter. Jetty 2; four arms of 12 in. diameter. Slops acceptable at 500 t.p.h. up to limit of 3,000 tons.

Two wharves with the following dimensions:

(a)		(b)	
Length	336 m. Concrete	Length	700 m. Concrete
Width	9 m.	Width	9 m.
Depth	15 m.	Depth	15 m.

Crude oil is delivered by tankers of up to about 75,000 d.w.t.

Caltex Refinery: 2 wharves with the following dimensions:

(a)		(b)	
Length 84 m.	Concrete	Length 11 m.	Concrete
Width 13 m.		Width 9 m.	
Depth 14 m.		Depth 8 m.	

Crude oil is delivered by 200,000 to 300,000 d.w.t. supertankers.

DENSITY: 1.0261.

FRESH WATER: Fresh water is available to vessels loading, unloading or bunkering at Batangas Port. It is delivered to the vessel through hose connections. The water satisfies the physical and chemical requirements for drinking water.

FUEL: Bunkers are available from the two refineries. Prior advice should be given through the ship's Agent.

FIRE PRECAUTIONS: At both refineries smoking or open fires are prohibited on the wharves or on vessels alongside or within 100 yards of either wharf. Furthermore, each vessel's personnel is responsible for the safety of its own ship at all times.

DEVELOPMENT: Wharf under construction 15 m. × 48 m.

GANGWAY/DECK WATCHMEN: Not needed. The security guards on the gates of the two refineries serve the purpose.

OPENING/CLOSING HATCHES: This work is normally carried out by crew members of the vessel at the 2 refineries; off-loading hoses will be connected and disconnected on board by the vessel personnel under the direct supervision of a ship's officer with the assistance and advice of wharf personnel.

CUSTOMS ALLOWANCE: Sufficient amount for crew's consumption while in port.

CARGO GEAR: During berthing and unberthing, it is required that ship's engines, tackle and all other gear must be in operative condition and in a state of readiness for use at a moment's notice, as required.

After clearing with the Customs' representative, off-loading hoses will be connected and disconnected on board by the vessel personnel under the direct supervision of a ship's officer with the assistance and advice of wharf personnel. Wharf equipment will normally be used for handling hoses although vessel's gear may at times be required and must be made available for this purpose. A ship's officer must approve the hose connections on board before off-loading commences.

IDENTIFICATION CARDS: Not required in the Port of Batangas.

CONSULS: Consulates are stationed in Manila.

REPATRIATION: To expedite disembarkation and in order that proper arrangements can be made in case of repatriation, the Master should radio this matter to Caltex or Shell refineries or his Agents within 48 hours before arrival. The message should give the names of the crew to be repatriated and their destination.

AIRPORT: At Manila.

TIME: GMT plus 8 hours.

HOLIDAYS: New Year's Day (January 1st); Holy Thursday; Good Friday; Labour Day (May 1st); Independence Day (June 12th); P.I.U.S. Friendship Day (July 4th); Bonifacio Day (November 30th); Special holidays declared by the President of the Philippines are also included. If any other legal holiday falls on Sunday the following day is observed as a holiday. Cargo work can be arranged on any or all holidays with the vessel's agent.

POLICE/AMBULANCE/FIRE: Police, tel. 125-J; Ambulance, tel. 7-J; Fire Department, tel. 261.

TELEPHONES: At present placing telephones on board foreign vessels is not available; however, telephone service is available on the jetty of both refineries.

GENERAL: Discharge of ballast: No dirty ballast may be dumped into the territorial waters of the Republic of the Philippines. The refineries have provisions for off-loading a limited amount of oil water ballast. Rat Guards: Rat Guards shall be placed on all mooring lines to the wharf.

AUTHORITY: Collector of Customs.

BISLIG, Mindanao: 08.14 N. 126.22 E.

See "General" before first port.

PILOTAGE: Vessel should send direct advice to the Pilot or through its Agents 48 hours prior or at the very least 24 hours before ETA by commercial telegraphy.

There is no VHF operated by the Pilot.

Pilot boat is painted black (hull) and white (bridge and mast). International Code Signals used to call Pilot.

Pilot station is located at Lat. 8° 11.4′ N., Long. 126° 21.2′ E.

Pilot boat will be located (if by prior advice/arrangement by Master requiring specific service of meeting vessel outside of entrance and conducting vessel through channel to inner harbour) at Lat. 8° 16.85′ N., Long. 126° 26.50′ E. or 340°, 2.35 miles off Sanco Pt. Lighthouse.

Pilot will always board a vessel (outside of entrance) via the Pilot's or Jacob's ladder on the leeward side of the vessel.

ANCHORAGE: While waiting for a Pilot, the recommended anchorage (at entrance) is at Lat. 8° 16.1′ N., Long. 126° 26.1′ E. on or about this position and/or within an area of 0.5 miles radius from this point.

Quarantine anchorage or inner harbour is based on the point Lat. 8° 12.9′ N., Long. 126° 22.0′ E. to within 0.25 miles radius from this point as centre, otherwise 1 mile North of BBLCI Pier's end.

Working anchorage at stream. When vessel is through with all the port formalities, she has to go to a working area for loading/unloading operations, thus:

BBLCI. Vessels will anchor at least within a 0.5 mile radius from the tip of BBLCI pier.

PICOP. Is especially preferred during N.W. monsoon at least within a 0.5 mile radius from the foot/base of PICOP breakwater.

Bislig Bay. In general is bounded by a line from *(a)* Sanco Pt. to *(b)* Mawes I. to the N.W., thence to *(c)* the town of Bislig to the S.W., thence to *(d)* the village of Mangagoy to the S.W., and back to *(a)* Sanco Pt.

MAX. SIZE: 30 ft. at PICOP Pier.

HEALTH: Any vessel can be given free pratique if upon inspection everybody is healthy, vessel is clean and all certificates of vaccination are complete. However, if there is a suspicious quarantineable disease, a probationary pratique should be issued and after 6 days, if it was found out that there was no quarantineable disease at all, free pratique will be issued.

RADIO: RCPI, Clavecella and CRC.

TUGS: Tugs normally meet vessel with Pilot at the 5 miles limit and assist Pilot in docking, using ship's lines. 5 available. 4 at 225 h.p., 1 at 112 h.p.

BERTHING: Berthing is on a first-come first served basis. During the N.E. monsoon berthing is in daylight only for precautionary measures.

BBLCI and PICOP maintain 2 piers and 1 marginal pier.

BBLCI: Pier Position 8° 11′ 51″ N., 126° 21′ 55″ W. This is an all concrete pier 800 ft. long and 30 ft. wide with berthing space of 550 ft. on each side. Max. draft 28 ft. at seaward end, 22 ft. at shore end. Both sides are protected by dolphins constructed of pile fenders and large tyres as absorbers. Largest vessel to berth at pier at present is 18,500 tons gross. Lumber, veneer, plywood and logs are loaded at this pier.

BBLCI Marginal Pier. For vessels of less than 1,000 tons gross and 10 ft. draft.

PICOP Piers:

	Length (m.)	*Width (m.)*	*Depth (m.)*
Pier I (concrete)	244	8.0	8.8
Pier II	130	17.7	9.1

There are several patches of reefs projecting N.W. of the channel from Sanco Point to the fairway leading to the PICOP Piers. The port therefore should be entered only during daylight.

January, February and March, the season of the N.E. monsoon, makes it difficult for approaching and securing ship because of strong winds and heavy seas.

CARGO HANDLING FACILITIES: Both companies have ample equipment. Fork lifts, lighters, mobile cranes max. lift 50 ton (BBLCI), and 75 ton (PICOP), sideloaders, trucks and trailers.

STEVEDORES: ETA should be advised 2 days before ship's arrival stating workable hatches and gang requirement for berthing and gang arrangement.

20 gangs available, shifts change at 0600 and 1800 hrs. when port is full. If only few ships in port change at 0600, 1500 and 2300 hrs.

MEDICAL: It is necessary for the Agent to receive advance notice if there is serious medical attendance and hospitalisation. However, less serious medical attendance does not need notification. Port of Bislig has hospital facilities with complete smallpox, cholera, El Tor and typhoid vaccine available.

DENSITY: About 1.025 with tendency to become heavier during dry season and on flood tide.

FRESH WATER: Available at East end of BBCLI Pier. The connection is 2 in., situated 100 ft. from the approach, discharge rate 20 g.p.m.

FUEL: Small quantities available. BBLCI maintain 3 tanks for Caltex.

1. Bunker oil tank	30,000 bbls.
2. Diesel oil tank	11,300 bbls.
3. Gasoline tank	5,100 bbls.

Tank trucks available to deliver oil and gasoline.

DEVELOPMENTS: More berthing facilities are on the programme for the next 3 to 5 years when the pulp and paper mill is in operation. Installation of more log-processing plants to increase shipments.

GANGWAY/DECK WATCHMEN: P1.00 per hour for at least 3 men.

OPENING/CLOSING HATCHES: Rigging of booms is done by ship's crew, while opening and closing of hatches is carried out by stevedores.

CUSTOMS ALLOWANCE: 200 cigarettes and 1 bottle liquor for each man.

IDENTIFICATION CARDS: Needed.

REPAIRS: May be made to ship's gear and equipment by arrangement with BBLCI. The company have an engine repair shop, machine shop and foundry.

AIRPORT: 5 kms. distant; daily flights.

TIME: Local Standard Time is 8 hours ahead of GMT.

HOLIDAYS: On Christmas Day; New Year's Day and Good Friday. Cargo work may be arranged.

GENERAL: Engineering supplies available from BBCLI and PICOP. Dunnage available through BBCLI. Provisions available through chandler or market 1 km. from BBCLI Pier.

AUTHORITY: Collector of Customs.

CEBU, Cebu Island: 10.18 N. 123.53 E.

See "General" before first port.

PORT LIMITS: The seaward boundaries of the Port of Cebu within which a vessel is considered to be an "arrived vessel". North Entrance: between Pier No. 2 and Caltex Bunkering Station. South Entrance: between Shell Island and Kawit Island.

PILOTAGE: Advance notice 24 hours before arrival, giving draft, ETA Pilot station, whether coming via North or South Entrance. Pilotage compulsory. Pilot boarding South Entrance at Lauis Ledge of Black Buoy No. 1; Pilot boarding North Entrance between Bagacay and Bontolinao lights.

ANCHORAGE: Well protected with good holding ground. Controlling depth at South side is 10.0 m. and 8.0 m. on North side.

ENTRY RESTRICTIONS: No restriction on night entry. If draft above, North 26 ft. and South 30 ft. vessel cannot go alongside.

MAX. SIZE: Length 550 ft.; draft Shell Island 30 ft., Caltex 25 ft., General Milling Corp. 28 ft., and Mobil 28 ft.

HEALTH: Pratique obtained after Quarantine personnel have boarded, mustered crew and passengers, and examined ship's health documents. Pratique automatic if vessel coming from another Philippine port.

RADIO: Globe Mackay & Radio Corp. *Call letters DZM.*

Working frequencies: 4328 kc/s., 6492 kc/s., 8656 kc/s., 1298 kc/s.

Listening frequencies: 425 kc/s. and 500 kc/s.; 6265.5–6258.5 kc/s.; 8354–8374 kc/s.; 12531–12561 kc/s.

Call letters: DZG.

Working frequencies: 483 kc/s., 4308 kc/s., 6462 kc/s., 8616 kc/s., 1292 kc/s., 17232 kc/s.

Listening frequencies: 425 kc/s., 432 kc/s. and 500 kc/s.; 6265.5–6280.5 kc/s.; 8354–8374 kc/s.; 12531–12461 kc/s.; 16708–16748 kc/s.

Master may contact Cebu Stevedoring Company through Channel 1 (156.7 Mc/s.) and Channel 2 (157.8 Mc/s.) VHF.

TUGS: Tugs: 300 h.p. and 600 h.p. Tugs will assist berthing. Ship's lines always used.

BERTHING: Anytime except when current strong at a certain time on North side of Piers 1 and 2.

General Milling Corporation wharf, Port of Mactan, Cebu has a pneumatic suction pump for bulk cargoes like wheat and soyabean meal.

Suction rate (wheat), about 85 t.p.h.

Suction rate (soyabean), about 40 t.p.h.

All oil depot in Cebu (Shell, Caltex, Mobil, Esso and Filoil) has facilities in handling liquid chemicals or LPG carriers.

Government Piers:

	Length (m.)	*Width (m.)*	*Depth (m.)*
Pier I (concrete)	155	32.8	7.6
Pier II (concrete)	155	32.8	7.6
Pier III (concrete)	155	32.8	7.6

Wharf:

Government – 1,395 m. long, concrete.

CDC – 2,079 m. long, concrete.

BRIDGES: The Opon-Mandaue bridge crossing the North channel is completed and open to traffic. According to Cebu Pilots Association, clearance is 76 ft. at high water and 80 ft. at low water.

STEVEDORES: Ordered by Agents, no ETA to stevedores necessary from Master.

MEDICAL: No advance notice to Agents needed. Hospital facilities available anytime.

TANKERS: See "Max. Size".

FRESH WATER: Most berths supply by shore installation, otherwise by barge or trucks.

FUEL: All grades available.

FIRE PRECAUTIONS: Tankers discharging: smoking only allowed in saloon (officers), crew in the messroom.

DEVELOPMENTS: Reclamation project at the North side of Cebu.

GANGWAY/DECK WATCHMEN: Services of watchmen necessary subject/Master's recommendation.

OPENING/CLOSING HATCHES: Stevedores, with aid of ship's crew.

CUSTOMS ALLOWANCE: (Tobacco) 1 carton a week for each crew member. (Wine and/or Spirits) 1 bottle a week for each crew member.

IDENTIFICATION CARDS: Required by Immigration Authorities.

CONSULS: Norwegian 9–77–20; Chinese 7–45–85; American 7–31–51.

REPAIRS: Minor repairs possible.

DRY DOCK: Cebu Shipyard – max. 1,000 d.w.t. only.

REPATRIATION: Facilities available

AIRPORT: Distance 7 miles from port and regularly served by all domestic airlines.

TIME: Local time based on the 120 East meridian. GMT plus 8 hours.

HOLIDAYS: Cargo can be arranged during holidays, which are the following: New Year (January 1st); Maundy Thursday; Good Friday; Bataan Day (April 9th); Labour Day (May 1st); Independence Day (June 12th); Republic Day (July 4th); Bonifacio Day (November 30th); Christmas Day (December 25th); Rizal Day (December 30th).

DELAYS: Berthing on North side of piers depends upon tide and current. South side of piers, vessel can dock any time.

AUTHORITY: Dept. of Finance, Bureau of Customs.

AGENT: Smith, Bell & Co. (Phil.) Inc., Corner M.C. Briones and P. Burgos Sts., Cebu City. Tel. 7–52–98, after office hour 72630, 9–70–14. Lloyds Agents. Cables: "Bell Cebu".

CLAVERIA, Luzon: 18.37 N. 121.02 E.

See "General" before first port.

PILOTAGE: There are no telegraphic addresses of Pilot stations although Pilots could be contacted in the Port of Manila with at least 3 days advance notice.

ANCHORAGE: Very deep and wide, safe enough to accommodate 6 ships at a time.

RESTRICTION: No restriction whatsoever is imposed upon entry day or night time.

MAX. SIZE: Maximum length permissible is around 300 m.

HEALTH: Pratique is granted as soon as the ship's Master has presented all his crew for vaccination in case same has expired and/or verification of its crew's health record and the submission of the Maritime Declaration of Health of the ship duly signed by the Master.

RADIO: Cables could be routed through RCA or DZN Manila for ship's Agents.

TUGS: Only required for lighters. Upon anchorage tugs could be called by blowing the ship's whistle twice.

BERTHING: Private facility owned by Taggat Industries.

STEVEDORES: No particular ETA advice in order to arrange gangs.

MEDICAL: Not necessary for ship's Agents to receive advance notice of required medical attendance. Doctors available.

FRESH WATER: No fresh water available for ships in this port.

FUEL: Not available in this port.

DEVELOPMENT: The construction of a breakwater.

GANGWAY/DECK WATCHMEN: It is recommended that ships that call at this port employ watchmen.

OPENING/CLOSING HATCHES: Is carried out jointly by ship's crew and stevedores.

CUSTOMS ALLOWANCE: 200 cigarettes for each man a week, and 1 bottle wine/spirits.

IDENTIFICATION CARDS: Not needed in this port.

CONSULS: No Consuls could be contacted in this port, although they could be contacted in the City of Manila.

REPAIRS: Major repairs not advisable in this port.

REPATRIATION: Changing of crew can be carried out by ship's Agent in Manila, Cebu or in any other big ports in the Philippines.

AIRPORT: No government airport in this port, although there is 1 private but no regular flights.

TIME: GMT plus 8 hours.

GENERAL: See "Manila" for general information.

AUTHORITY: Collector of Customs, Aparri, Cagayan.

DADIANGAS (General Santos City): 06.06 N. 125.09 E.

DOCUMENTS:

4 Crew Lists.

3 Stores Lists.

3 Crew Personal Manifests.

Last Clearance.

Ship's Register, etc.

Immigration:

1 Visaed Philippine Crew List (and 1 copy).

Port Health:

Deratisation or Exemption Certificate.

International Health Form.

1 List of Vaccination Certificates – must be valid.

1 Crew List.

Department of Agriculture:

Certificate stating vessel free from Kaphra beetle.

PILOTAGE: Pilotage compulsory. Pilot boards about 0.5 miles from the berth. Uses a white painted launch as a rule. If berth occupied, Pilot takes vessel to anchorage off the town.

ANCHORAGE: Very deep water. Vessel lowers 7 or 8 shackles on the port anchor as vessel approaches shoreline. Anchor then takes hold on reef. This is about 200 ft. from shore, when vessel has swung stern-to.

RADIO: Messages regarding ETA, etc. are sent through Manila Agent.

TUGS: Not available.

BERTHING:

Government Marginal Wharf:

Length 215 m. concrete.

Width 9 m.

Depth 23 m.

Private Piers:

	Length (m.)	*Width (m.)*	*Depth (m.)*
Dole Philippines	145	18	11.5
General Milling Corp.	38	9	12.6

REPATRIATION: Possible, but very difficult via Manila.

AIRPORT: Wharf is approximately 7 km. from airport with Monday, Wednesday, Friday and Sunday flights to Manila.

MEDICAL: Small hospital in town.

STEVEDORES: 1 company only. Ship's gear used and a loading rate of about 1,500 tons per day. Exports are: fresh fruit, canned pineapple and concentrated pineapple juice.

CUSTOMS ALLOWANCE: 200 cigarettes and 1 bottle of spirits per man.

SHORE LEAVE: Allowed.

FUEL: None available.

DEVELOPMENTS: Rehabilitation of the existing wharf and extension of 300 m. including reclamation area is now underway and to be completed by the middle of 1977.

GENERAL: 1 Customs Inspector and 2 guards to be given accommodation and meals. When a vessel is expected, the Agent usually contacts VHF Channel 16 from a vessel alongside.

AUTHORITY: Philippine Ports Authority, General Santos City.

AGENT: See "Manila".

DAVAO: 07.04 N. 125.38 E.

See "General" before first port.

PILOTAGE: Pilotage at Davao port is compulsory. When vessel is due to call at Davao port, the Master should cable Agents of the vessel's ETA at least 24 hours before arrival. Licensed Pilots are available 24 hours a day. The Master may, likewise, cable the Pilot's Station addressed "Davao Pilots" either through Globe-Mackay or RCA frequencies. There are two pilot boats servicing the port of Davao and they fly the usual "red and white" Pilot Flag, visible in daytime.

ANCHORAGES: Davao port harbour limits embraces all that portion of Davao Gulf bounded by an imaginary line drawn from Dumalag Point running East (true) to the Western shoreline of Samal Island; Thence by shoreline of Samal Island to Bassa Point; thence by an imaginary line running straight to the mouth of Lasang River, and thence by shoreline of the mainland (Mindanao Island) to Dumalag Point, the place of commencement. Vessels normally drop anchor approximately one mile off the pier area. (Note: Davao Pilots conduct vessels to safest anchorage, away from traffic obstructions.)

RESTRICTIONS: Vessels entering port should be prepared to present required documents upon boarding of the Customs Boarding Party. No unauthorised persons must be allowed to go onboard before the customary entrance formalities are effected by the Government authorities, i.e. Quarantine Officers, Customs Boarding Party, Immigration Officers and other Government representatives.

MAX. SIZE: For entrance formality purposes, Davao port can accommodate vessels with a length of 700 ft. with a maximum draft of 40 ft. However, if the vessel should proceed alongside the wharf, the maximum length allowable will be approximately 500 ft. with a draft of 20 ft. to avoid touching the bottom at low tide, which is approximately 23 ft. Oil docks can accommodate oil carriers with a maximum length of 500 ft. and a maximum draft of 25 ft. at low tide to avoid touching the bottom.

HEALTH: Vessels entering port should display International flag "Q" at fore. Masters are advised to make ready the health book of each officer and crew for submission to the Medical Quarantine Officer when he boards the vessel. In the event of any suspected disease or fever onboard, International Code flags "E Z Q" should be displayed conspicuously, and in the event of death, Customs and Quarantine calls, or International Code flags "E N L" should be displayed.

Pratique is automatic after a vessel has called at another port of entry in the same country.

RADIO: Radio messages can be routed through any big stations like RCA or Globe-Mackay. Masters are advised, however, not to send messages when vessel is within a 3-mile radius of the port as defined in the regulations.

TUGS: The only tugs available are those belonging to the stevedoring company, and in most cases are not used in assisting vessels when coming in for berth. The Pilot's boat usually assists in handling ship's lines when docking at the wharf. There is a two-line service at the wharf receiving ships' lines and letting-go lines.

BERTHING: Berthing facilities of Davao port are limited. The present wharf accommodates two overseas vessels and two coastal vessels at the same time. Berthing arrangements are by "first to arrive – first to berth", and vessels are required to work 24 hrs. a day during weather-working days to give way to other vessels awaiting berth. In most instances the wharf is congested and vessels should advise their ETA at least 48 hours in advance.

Sasa Wharf (Government owned). Length 515 m. Depth 9.7 m. Width 18.2 m.

STEVEDORES: There are several stevedoring firms operating. The biggest, Luzon Stevedoring Corporation, is most reliable with adequate facilities in handling incoming and outgoing cargoes. Upon receipt of vessel's ETA, the Agents arrange the stevedore gangs required by the vessel and other requirements for discharging or loading operations.

MEDICAL: In any cases when vessels entering port requires immediate medical attention of her crew members, the Agents must be advised by cable and the Medical Quarantine Officer shall immediately arrange hospitalisation if necessary. Inoculations are performed by the Medical Quarantine Officers. There are first-class hospitals available with adequate facilities.

TANKERS: Only medium-sized tankers can dock at local oildocks, namely, Shell, Caltex and Esso. The lines are 3 and 4 in. Each oildock can accommodate one tanker at a time, and maximum permitted draft is 25 ft.

FRESH WATER: Davao port has no water connections at the wharf, and fresh water supply to the vessels is done by tank-trucks with average delivery of 15 t.p.h.

FUEL: Fuelling of vessels is done alongside, Shell or Caltex oil-docks with average viscosities 750 SSU 100°F. Vessels scheduled for fuelling should make 24 hours notice at least.

FIRE PRECAUTIONS: No fire boats are available in the port. Vessels docked alongside wharf are assisted by the Davao Fire Department and other ships docked alongside, in case of fire onboard.

DEVELOPMENTS: Development programme for the lengthening of the existing wharf by an additional 405 m. Completion expected early 1977.

GANGWAY/DECK WATCHMEN: There are numerous watchmen agencies operating in Davao port. Local shipping agents recommend only one agency at a time, and the rates are hourly for deck watchmen on patrol.

OPENING/CLOSING HATCHES: This is normally done by the stevedores.

CUSTOMS ALLOWANCE: Number of items allowed for the crew while the vessel is in port depends on how long the vessel stays in port and this should be arranged with the Customs Boarding Officer.

CARGO GEAR: Stevedoring company provides cargo gear and vessel may supply additional gear upon request of the stevedores' boss.

IDENTIFICATION CARDS: Not required.

CONSULS: Countries with consulates are Republic of China (Taiwan), Indonesia, U.S.A. (represented by the USIS).

REPAIRS: Only minor repairs are possible for deck and engines, and also refrigeration and electrical repairs.

REPATRIATION: There is an office of the Immigration Bureau which arranges repatriation and change of crew.

AIRPORT: Wharf is approximately one mile from airport with daily flights by Philippines Airlines.

HOLIDAYS: There are a number of official holidays (same as in Manila) being observed. Stevedores do not work on 1st May, Labour Day, and work half-day during Christmas Day, New Year's Day and Good Friday.

POLICE/FIRE/AMBULANCE: Contact should be made through the Customs Office which is at the wharf-side. There is a police outpost near the wharf.

TELEPHONES: No telephone connection to vessels at present.

GENERAL: Shipmasters should advise their crew not to bring along with them valuables when on shore leave. No visitors are allowed onboard without prior permission by the Customs Inspector onboard.

SERVICES: Special services available, e.g. tank cleaning and discharge of tank washings done by Luzon Stevedoring Company.

REGULATIONS: Local ship Agents will brief Shipmasters of the existing port regulations and also Customs Inspectors onboard will advise Shipmasters of these regulations when their assistance is sought.

AUTHORITY: Collector of Customs.

AGENTS: Smith, Bell & Co. (Philippines) Inc., PO Box 146, Davao City, Philippines. Cable address: "Smithbell Davao". Telephone numbers: 7-23-86, 7-36-42, 7-51-02.

HONDAGUA, Luzon Island: 13.56 N. 122.14 E.

SHIPMASTER'S REPORT 1974.

APPROACHES: B.A. Charts 3806 and 3475, neither of which are of very much use. There are no navigational marks by night, but the water is deep and we made a comfortable approach by Radar.

PILOTAGE: Minimum 12 hours notice required. Pilot boards at Siain, a village 10 miles West of Hondagua on the North coast of the mainland. Pilot boat is a small dug-out canoe fitted with outriggers and an outboard motor, and by day exhibits the pilot flag, and at night a single white light similar to a normal fishing canoe. Pilot shouts to attract attention when close to the vessel at night.

DOCUMENTS: Officials embark at Siain but not before 0630 hrs. due to curfew. Accommodation ladder required. All documents required as for first port of entry, excepting quarantine which is not performed twice.

10 Ships Store Lists.
8 Crew Personal Effects lists.
12 Crew Lists.
3 Health Declarations.
2 Visaed Crew Lists.
2 Plant Quarantine Lists.
2 Animal Lists.

Officials disembark again at Siain with the exception of the 3 Customs Officers, who remain on board and who require meals and accommodation.

BERTHING: One berth only, for grain discharge and for coastal tankers supplying fuel to the Mill. Berth lies East/West with approx. depth at L.W. East Dolphin 28 ft., Elevator about 34 ft. 6 in., and West Dolphin about 39 ft. The berth is thought not to be suitable for vessels exceeding 500 ft. L.O.A. The dolphins are of timber-pole construction, and the elevator is concrete. Arrival and departure from the berth is during daylight only. Mooring arrangement is 2 headropes to buoy, 2 breastropes to shore, spring-wire to bollard on elevator, 4 sternlines to concrete dolphin, and 1 spring-wire to bollard on elevator. An old landing-barge is used as a mooring boat, but this has only one engine on the port side and is not very manoeuvrable. A motorised dug-out canoe also assists, but is not powerful enough to pull a line very far. The elevator has two discharging suckers, but these are fixed and the vessel has to be shifted hatch to hatch. Combined capacity about 80 tons per hour which could be improved, but foundations of conveyor-belt system damaged by earthquakes.

TUGS: Not available.

FRESH WATER: Available at berth but not of very good quality. Ship's hoses required.

AIRPORT: None. There is a train service to Manila, about a six-hour journey.

CURFEW: Area is under Martial Law. Curfew from 2300 to 0600 hrs.

ILIGAN. Mindanao. 08.14 N. 124.14 E. (See Plan)

SHIPMASTER'S REPORT 1974

APPROACHES: B.A. Chart 3426. This is of not very much use as an approach chart as the scale is too small. However, the water is deep and therefore it does not matter too much. On this voyage we made an approach in darkness and solely on Radar. The only navigational light, a fixed red, being very hard to distinguish.

PILOTAGE: The Pilot boards about 1 mile N.W. of the piers. Pilot boat is a river-type launch about 50 ft. in length with a grey hull and a white funnel.

ANCHORAGE: 2 cables from old-harbour piers. 7 shackles in 50 fathoms.

RADIO: No VHF facilities.

OFFICIALS: Iligan is a Port of Entry. Officials board at the anchorage. Accommodation ladder required. Usual procedures take about 1 to 1 hour 30 minutes.

DOCUMENTS:

20 Ship's Stores Lists.
14 Crew Personal Declarations.
3 Vaccination, and inoculation dates.
3 Ports of Call and dates for previous 3 months.

Immigration: Before leaving last foreign port for the Philippines, obtain 4 official Crew List Forms from the Philippine Consul. Complete these forms and have them visaed by the Consul who will retain 2, and return 2 to the ship. Passes are required for crew members going ashore.

CUSTOMS ALLOWANCE: 1 bottle and 200 cigarettes per person. 3 Customs officers live on board all the time, and require accommodation and meals.

TUGS: Up to 4 tugs available if required, but it is advisable to give notice of requirements well in advance, since these tugs may be engaged in towing barges elsewhere around the island.

BERTHING: *Quinalang Cove.* 1 grain discharge berth. Depth at berth 40 ft. and ample room for a vessel of 600 ft. L.O.A. Discharge is by sucker direct to the Silo. There are 2 suckers with a combined average discharge rate of 100 t.p.h., but suckers are located in fixed positions requiring the vessel to be shifted hatch to hatch. Berth is well-fendered, with a shore gangway. Stevedores supply a good hatch-tent for working in the rain. 1 bulk-copra loading berth, 600 ft. in length and draft said to be 32 ft. 1 bulk-cement loading berth, reported to be capable of accommodating vessels of 25,000 g.r.t.

Camp Overton. Located South of Iligan, there is reported to be a steel-loading berth to accommodate vessels of 750 ft. length, and 36 ft. draft.

FRESH WATER: Available at most berths.

SHORE LEAVE: Crew members should take special care when proceeding ashore, and should not carry cameras or wear wristwatches etc. It is advisable to return aboard before darkness.

AIRPORT: About 20 miles distant. Daily flights to Cebu and Manila.

STORES: Fresh fruit available, also good supply of seafood.

REPAIRS: Only very minor repairs can be undertaken.

TIME: GMT plus 8 hours.

SHIPMASTER'S REPORT: September 1976.

Coconut Oil Berth: Located at "Quinalong Cove" Lat. 08.17 N. 124.15 E. Least depth of water in channel from sea to berth – 40 fathoms. Mean tidal range 5 ft. Density 1025. Nature of bottom at berth – mud. Vessels can berth in daylight only, unberthing anytime.

Anchorage: 3 cables S.W. of City Pier. Depth at L.W. 70 fathoms, cable should be "walked out".

Vessels hoses used, length of shoreline 300 m., size 12 in. No shore booster pumps used. Products handled, coconut oil and coconut products.

Pilotage: Compulsory. Pilot requires 24 hours notice and boards 1 mile N.W. of City Pier.

Max. size of vessel that can enter the port of Iligan is 100,000 d.w.t. and draft 45 ft. Keel clearance required, about 2 ft.

5 small and medium size tugs available.

Nearest consuls are in Manila.

Facilities available: Fresh water, 5 t.p.h. Fresh provisions. Laundry. No slop tanks, surveyor, repair facilities, fuel.

Documents required by shore authorities:

2 Visaed Crew Lists (Philippine) from previous port. If diverted at sea, a copy of the diversionary cable required.
6 Ordinary Crew Lists
6 Personnel Effects Lists
6 Store Manifests
6 Parcel Lists
6 Arms Lists
6 Mail Lists
6 Narcotics Lists
6 Animal Lists
6 Plant Lists
6 Cargo Manifests
6 Transit Manifests
6 List of Ports
6 Currency Lists

There is a cabin search by 4 Customs Officers, accompanied by 2 Ship's Officers. They collected an undeclared radio and two cameras. They did not impose any fine, as they said they had been courteously treated, and this was the vessel's first visit.

3 Customs Officers remain aboard, and have to be fed.

ILOILO, Panay: 10.41 N. 122.35 E.

See "General" before first port.

PORT LIMITS: Iloilo Harbour is defined as that portion of Iloilo Strait within the following boundaries: an imaginary line extending from the Northern bank of Dumangas River, Island of Panay, across Iloilo Strait to Navalas Point on the Northern coast of Guimaras Island; thence along the N.W. and West shore of Guimaras Island to Lusaran Point thence along an imaginary line extending from Lusaran Point to the South bank at the mouth of Siuaragan River in the municipality of San Joaquin, Province of Iloilo, Island of Panay, to the North bank of Dumangas River.

PILOTAGE: All foreign-going vessels required advise ETA 24 hours before arrival. Telegraphic address Iloilo Pilots. Pilot station: South entrance at Sinapsan Point; North entrance at Navalas Point. Pilot boat painted white with name "Pilot" on top, carries flag "H". Sound signals for calling Pilot, 2 long blasts and 1 short.

Northern entrance: Pilot boards vessels at Northern entrance to Iloilo Strait 2 miles East of Navalas Point. Maximum draft 24 ft. Entry and departure in daytime only.

Southern entrance: Pilots board vessel 1 mile West of Sinapsan Point. Vessels can be brought in and out of the harbour at any time, maximum draft 30 ft. Vessels with more than 30 ft. draft must wait for high tide.

RESTRICTIONS: Iloilo Strait, separating Panay and Guimaras Islands, has a width of about 0.9 mile at its narrowest part. This important thoroughfare leads to the port of Iloilo. Its shorelines are very irregular, and the navigable channels are narrowed by Iguana bank and Siete Pecados Islands on the Northern entrance and by Oton bank on the Southern entrance. Ocean vessels use only the South entrance when entering Iloilo Strait. Incoming vessels are met and boarded by Iloilo Pilot at Sinapsapan Point. Pilotage is compulsory. Oton bank is of soft muddy sand, about 0.1 mile W.S.W. of the Southern extremity of the flat on which Iloilo City stands and extends about 8 miles in a W.S.W direction. It is composed of shifting sand and said to be extending Westward; vessels should not attempt to cross it. There is a narrow channel between it and the Panay shore, used by coast-wise vessels, but the main channel into Iloilo is between the bank and Guimaras Island. It is the sand bar along this channel that limits the draft of ocean vessels, entering or leaving Iloilo Strait, to a maximum of 33 ft. on a 5.0 ft. tide.

ANCHORAGE: Anchorage is protected between Dapdap Point and Bondulan Point. Controlling depth is 27.4 m. to 34.7 m.; bottom is sandy.

MAX. SIZE: No restrictions on length and breadth. Vessels over 30 ft. draft dependent on height of tide.

HEALTH: All overseas vessels calling first port of entry are subject to quarantine until free pratique granted. Quarantine doctor boards on arrival and issues Bill of Health subject to Master's Health Declaration and clearance from last port. Agents must be advised by radio in advance if suspected disease or fever on board. Pratique automatic for vessels coming from another port in the Philippines.

RADIO: RCPI, PT&T, Telefast and Telecom (Gov't).

TUGS: Berthing assistance by tugs available if requested. Ship's lines used. Pilot boats normally assist berthing.

BERTHING: Limited berthing space at pier berths, accommodation for 2 vessels only. Advance information required for vessels loading bulk sugar or molasses, since only 1 vessel may berth at a time.

Guimaras Island: Molasses installation, the molasses loading pier, owned and operated by the Luzon Stevedoring Co., is easily picked out and distinguished by the 3 steel tanks and 1 concrete tank situated on a hill just above the pier and should not be confused with the Jordan municipal pier laying just South of it. The pier is T-shaped, being 25 ft. at the face with a row of 4 pile clusters in line with the face, with a total span of about 300 ft. and with ample mooring facilities. It is recommended that berthing be done at flood tide, with the assistance of a Pilot obtainable at Iloilo. Unberthing can be done at any time. The 3 steel and 1 concrete tanks have an aggregate capacity to store 52,400 tons of molasses. 3 of these 4 tanks are provided with pneumercator scales. The molasses outloading berth is located about 800 ft. North of the bulk sugar outloading berth and its outloading capacity is about 5,500 tons of molasses per day. Tankers with as much as 12,000 tons d.w.t. capacity have been handled here.

Bulk sugar installation. The berth has an average depth of water alongside of 40 ft., the shallowest portion being 33 ft. at the Southernmost part of the breakwater extending down to the inloading berth. Maximum length of vessel so far accommodated is 633 ft. (without utilising hatches 1 and 7). The outloading capacity for bulk sugar is from 7,000 to 8,000 tons per day, while the capacity to inload from barges into its 3 warehouses is about 4,000 tons per day. The 3 warehouses have a total capacity of 60,000 tons. Outloading of bulk sugar to ocean vessels is effected by means of conveyor system running from the warehouses to the outloading tower which has 2 retractable boom bridges fitted with ship trimmers. Height of boom bridge down to its base is 31 ft. with the water level during high tide being 1 ft. below this base. Carrier vessels coming alongside to load therefore should not exceed the height of 32 ft. from waterline to hatch coaming in order to allow boom bridge of the outloading tower clearance over the hatch opening.

STEVEDORES: Advise Agent before arrival details of cargo and number of gangs required.

MEDICAL: Agent should be advised 24 hours in advance of any medical requirements. Hospital facilities available. All crew require valid vaccination certificates.

FRESH WATER: Delivered by barge, minimum charge for 40 metric tons. Available from Guimaras Shore Installation, minimum charge for 40 metric tons.

FUEL: Bunker "C" available, subject to 3 days advance notice.

GANGWAY/DECK WATCHMEN: Services of shore watchmen recommended.

OPENING/CLOSING HATCHES: Normally done by stevedores

except for McGregor or other automatic hatch covers which are operated by the crew.
CUSTOMS ALLOWANCE: 200 cigarettes in an open carton allowed each man. No allowance for wine or spirits.
CARGO GEAR: Details of any heavy lifts should be advised to avoid delay.
IDENTIFICATION CARDS: Required for shore leave. Seamen's Books or passports usually deposited with Immigration.
CONSULS: Great Britain, telephone 5086. All other Consuls at Manila.
REPAIRS: Minor repairs can be effected. Dry docks for local barges and launches only.
REPATRIATION: Can be arranged subject to Immigration approval.
AIRPORT: Situated about 4 miles from the port with regular local services.
TIME: GMT plus 8 hours all year round.
HOLIDAYS: 1st January, Holy Thursday, Good Friday, 9th April, 1st May, 12th June, 4th July, 25th December, 30th December. Cargo work may be arranged on these days.
POLICE/FIRE/AMBULANCE: Police, tel. 55–21; Fire, tel. 30–11; Ambulance, tel. 26–12 or 25–61.
TELEPHONES: No facilities for placing telephones on board.
AUTHORITY: Collector of Customs.

AGENTS: Smith Bell & Co. (Philippines) Inc., tel. 28–51. Telegraphic Address: Bell Iloilo.

JOLO: (Jolo Island) 06.03 N. 121.00 E.

See "General" before first port.
PILOTAGE: Telegraphic advice to pilot station required 48 hours in advance. Pilot boards in quarantine anchorage.
ANCHORAGES: 4 miles N.W. of Piers I and II.
RESTRICTIONS: Entry permitted only before sunset and after sunrise. Vessel should wait 4 miles off Piers for quarantine or Pilot service.
MAX. SIZE: Up to 8,000 tons d.w.t.
HEALTH: Wait for quarantine doctor at quarantine anchorage. To obtain pratique, the ship's Master must advise the ship's Agent vessel's ETA in advance. The ship Agent must in turn advise the quarantine officer of the arrival of the vessel 2 to 3 hours before the vessel sails into port. When the vessel arrives at the quarantine anchorage, the quarantine officer boards and inspects the same and if the vessel is found to be free from all quarantinable diseases, pratique is granted.

Automatic pratique is granted only to naval vessels.

Pratique is no longer necessary when the vessel entering the port has called at another port in the Philippines immediately before.
RADIO: Radio Corporation of America or Mackay Radio.
TUGS: None available.
BERTHING: As may be directed by Wharfinger.
STEVEDORES: ETA advices required in order to arrange gangs.
MEDICAL: It is always necessary for ship Masters to notify their Agents of required medical attention at least two to three hours before arrival. Hospital facilities are available. Vaccination/Fever Certificates required, especially those against cholera, smallpox and yellow fever.
DENSITY: 1025.
FRESH WATER: Available, direct line to ship from all berths.
FUEL: Available. Delivery direct line to ship from pier.
GANGWAY/DECK WATCHMEN: Services of watchmen necessary.
OPENING/CLOSING HATCHES: This work is normally carried out by stevedores.
CUSTOMS ALLOWANCE: 200 cigarettes for each crew member, and one bottle of liquor for each crew member.
IDENTIFICATION CARDS: Essential.
REPATRIATION: Effecting crew changes and arranging necessary repatriation are carried out by the Immigration Office in the port with the assistance of the ship Agent and the Foreign Embassy concerned.
CONSULS: None.
REPAIRS: No facilities.
AIRPORT: Plane flight twice a day to Manila for international connections.
TIME: Local Civil Time is 8 hours ahead of GMT. This time reckoning is constant throughout the year.
HOLIDAYS: New Year's Day (1st January); Bataan Day (9th April); Holy Thursday (variable); Good Friday (variable); Labour Day (1st May); Independence Day (12th June); Republic Day (4th July); All Saints' Day (1st November); National Heroes Day (30th November); Christmas Day (25th December); Rizal Day (30th December). When any holiday falls on a Sunday, the following day (Monday) is by law considered a legal public holiday. As a general rule, employees of the government in the Philippines do not work on Saturdays. Cargo work on board vessels on these holidays can be arranged.

Muslim holidays do not fall on fixed dates.
POLICE/AMBULANCE/FIRE: Telephone numbers can be supplied by Agent.
TELEPHONES: Cannot be connected on board vessels.
DELAYS: Availability of berthing space.
AUTHORITY: Collector of Customs, Jolo, Sulu.

JOSE PANGANIBAN, Luzon: 14.18 N. 122.40 E.

See "General" before first port.
PILOTAGE: Compulsory for entrance and for clearance. ETA must be forwarded to the Agency in Manila; the last telegram from the Master w/ETA will be transmitted by radio to Pilots at Jose Panganiban (mentioning Larap if the vessel goes direct to Larap, J.P., and also to the loader in Daet. (Daet is the Capital of North Camarines.) In case of change of time, the hour of expected arrival may be forwarded directly to the Harbour Pilot. Master to pilot his vessel 1.5 miles South of Tanao Island lighthouse and steer 180° at moderate speed to meet Pilot.
ANCHORAGE: Protected from all sides except the S.W.: controlling depth is from 5 to 7 fathoms and has a mud bottom.
RESTRICTIONS: Entrance can be at any time day or night, but during Northern monsoon advance notice should be given to consider the use of a motor-boat instead of small-motored *Banea;* in case of meeting outside harbour limits the request should be made to Pilot by the Master of vessel entering.
MAX. SIZE: Max. draft not to exceed 30 ft.
HEALTH: To obtain pratique, the ship Master must advise Agent vessel's ETA in advance. The foregoing advice is very important because the ship Agent must in turn advise the quarantine officer of the arrival of the vessel 2 to 3 hours before the vessel sails into port. When the vessel arrives at the quarantine anchorage, the quarantine officer boards and inspects the same, and if the vessel is found to be free from all quarantinable diseases, pratique is granted. Automatic pratique is granted only to naval vessels. Pratique is no longer necessary when the vessel entering the port has called at another port in the Philippines.
RADIO: RCPI (Radio Communications of the Philippines, Inc.).
TUGS: A motor-boat is used by the PIM (Phil. Iron Mines) in Larap for vessels to load for them in that bay, but it is not needed for Panganiban Bay.
BERTHING:

	Length (m.)	*Width (m.)*	*Depth (m.)*
Government Wharf	187 (concrete)	11.50	5.0
Private Wharf (Phil. Iron Mines)	15.85 (wooden & concrete)	11.58	9.76

MEDICAL: Good hospital facilities in Larap and in Daet. There is also rural Medical Officer in this locality.
FRESH WATER: Insufficient fresh water on the pier to supply ships.
GANGWAY/DECK WATCHMEN: There is watchmen service in this port; number of watchmen at ship's convenience.
OPENING/CLOSING HATCHES: An additional charge for this job is imposed if carried out by stevedores. The crew can, however, do the job.
CUSTOMS ALLOWANCE: 200 cigarettes for each member of the crew.
IDENTIFICATION CARDS: Only those which have to be shown to Immigration Officer with booklet are necessary. Immigration Officer will board vessel after the doctor's clearance.
REPATRIATION: Effecting crew changes and arranging necessary repatriation are carried out by the Immigration Office in the port with the assistance of the ship Agent and the Foreign Embassy concerned.
AIRPORT: In Larap and in Daet. Daily trips to Manila.
TIME: Local Civil Time is 8 hours ahead of GMT. This time reckoning is constant throughout the year.
HOLIDAYS: New Year's Day (1st January); Bataan Day (9th April); Holy Thursday (variable); Good Friday (variable); Labour Day (1st May); Independence Day (12th June); Republic Day (4th July); All Saints' Day (1st November); National Heroes Day (30th November); Christmas Day (25th December); Rizal Day (30th December).
AUTHORITY: The Collector of Customs.

LEGASPI: 13.10 N. 123.45 E.

See "General" before first port.
PILOTAGE: Send advance notice telegram to Harbour Pilot, Legaspi City, 48 hours before arrival. ETA should be tendered 48 hours and 24 hours in advance. No VHF available. Pilot boat has letter "P" painted white above water line. International Code signals used.

Pilot area is within the 3-mile limit from the harbour, whereby no extra charges will be solicited. However, if vessel requires services outside the harbour limits, extra pay is solicited. During inclement weather, Masters of vessels should notify their arrival in order to be met within or outside the 3-mile limit.

During bad weather a Jacob's ladder is more appropriate until vessel is at anchorage, thence accommodation ladder will be utilised for the purpose of Quarantine and Customs Officers.

No specific areas of anchorage in waiting for a Pilot; Master must use his discretion to drop anchor within the 3-mile limit with seven shackles in the water until Pilot arrives.
ANCHORAGE: After sunset and before no vessel is cleared by Customs.

Anchorage area is open to vessels of any draft. It does not offer good holding ground since the bottom is irregular, consisting of volcanic sand, rocks and mud.

Depth is from 4 to 31 m.
MAX. SIZE: Length 600 ft. draft 32 ft. During spring and neap tides current is strong. At Pilot's discretion when to dock and undock.
HEALTH: All crew members and officers should possess valid

vaccination certificates. In the event of suspected disease or fever on board, Quarantine Officers should be notified at port of call.

Pratique could be served by boarding Quarantine Officers. Pratique is not needed if vessel already called at port of entry within the jurisdiction of the Philippines.

RADIO: Following stations are normally used:

RCPI
FILTEL
TELEFAST
CLAVECILLA
CRC

TUGS: No tugs available. Motor launch is used to attend to mooring and unmooring.

BERTHING: At AiC Berth and Legaspi Berth. Mooring daytime only. Vessels moor stern to quay (Mediterranean mooring).

	Length (m.)	*Width (m.)*	*Depth (m.)*
Gov't. Marginal Wharf	360 Concrete	30	4.9
Legaspi Oil Co.*	106 Timber	48	12

*Equipped with a conveyor belt for copra coke shipments and pipe connection for oil bulk.

STEVEDORES: Stevedores are members of Union Oberara of Legaspi, Fraternal Obrara and Espinosa Estervering.

Bulk cargoes are handled and charged per ton. Hired shore personnel are paid per minimum wage rate daily as described by the Bureau of Labour Law.

TANKERS: Max. draft 30 ft. Diameter of Load Discharge Line, 4 in.

MEDICAL: Hospital available.

DENSITY: Salt water density 1036.

FRESH WATER: Fresh water is available by tank-truck, containing 6 tons.

FUEL: Fuel available at any time.

GANGWAY/DECK WATCHMEN: Services of watchmen are available at the Master's discretion.

OPENING/CLOSING HATCHES: In the absence of sailors to open/close hatches, shore union personnel are available with a rate based on Union Rate Tariff.

CUSTOMS ALLOWANCE: 1 carton of cigarettes for each crew member. 1 bottle of wine and/or spirits for each officer.

IDENTIFICATION CARDS: Required, also Seaman's Book.

REPATRIATION: Allowed upon approval by Commissioner of Immigration at Manila.

AIRPORT: There is an airport about 2 km. away. 1 flight per day or 7 flights per week.

TIME: Standard time. GMT plus 8 hours.

HOLIDAYS: 1st January (New Year's Day); 9th April (Bataan Day); Maundy Thursday; Good Friday; 1st May (Labour Day); 12th June (Independence Day); 4th July (Fil-American Friendship Day); 30th November (Bonifacio Day); 25th December (Christmas Day); 30th December (Rizal Day).

Cargo work can be arranged on these days with additional overtime charges covered by the Bureau of Labour Law.

POLICE/AMBULANCE/FIRE: There are telephones connected to the 3 mentioned services but they have no numbers. Only controlled by operator available for any call simultaneously.

GENERAL: Notice of vessel's should be sent 48 hours before the vessel's arrival.

AUTHORITY: Collector of Customs.

AGENTS: Smith, Bell & Co. (Philippines) Inc., Legaspi City.

MANILA, Luzon: 14.35 N. 121.58 E. (See Plan)

See "General" before first port.

PILOTAGE: The Pilot will board vessels in the quarantine anchorage at the completion of the quarantine inspection if vessels are proceeding to 1 of the 26 anchorages within the breakwater or to one of the piers.

Pilotage for anchoring or leaving anchorage within the breakwater is compulsory, as well as when docking and undocking at any of the piers.

ANCHORAGE: The position and bounds of the quarantine anchorage may be determined as follows: From the Manila Outer Harbour light buoy No. 1, approximate position, Lat. 14° 33′ 09″ N., Long. 120° 54′ 00″ E., thence on a range of 76° 24′ true, Custom House City Hall Towers 4,000 yds to approximate position Lat. 14° 34′ 50″ N., Long. 120° 56′ 00″ E., thence 180° true 119 yds. to approximate position Lat. 14° 34′ 14″ N., Long. 120° 50′ 00″ E., thence 242° 30′ true, 4,440 yds. to the Manila Outer Harbour lighted buoy No. 1 at point of commencement.

When approaching the quarantine anchorage during daytime, the ship should fly her registered signal letters. When the vessel arrives during night at the quarantine anchorage, vessel's call letters should be hoisted at daylight as well as the "Q" flag. If vessel is carrying mail also the "Y" flag should be hoisted until delivery is effected.

RESTRICTIONS: Vessels entering Manila Bay through the North channel shall pass midway between La Monja Island and Guardia Shoal and shall proceed directly through the middle of the channel between Corregidor Island and the mainland, steering 070° until 1 mile distance from the shore is cleared. The same route shall be followed by vessels when leaving Manila Bay through the North channel.

Vessels entering Manila Bay through the South channel should not approach any shore closer than 1 mile and shall keep South of the restricted area, South of La Monja, Corregidor and Caballo Islands, which is embraced within the North sector of the following 2 bearings: 296° from El Fraile Island and 236° from Caballo Island lighthouse; furthermore on the Southern side of the channel, they shall not approach the line joining El Fraile and the N.W. point of Limbones Island closer than 1 mile. The same restrictions apply to vessels leaving Manila Bay through the South channel.

There are no uncharted obstructions between the entrance to Manila Bay and the quarantine anchorage and the vessels should have no difficulty proceeding over this route. Frequent difficulty is experienced in picking up Sangley point light because of its low visibility and the background of shore lights.

MAX. SIZE: Pier 9, length 250 m., draft 20 ft. Pier 13, length 400 m., draft 32 ft. Pier 15, length 380 m., draft 35 ft. Tankers: Up to 40 ft. draft at Rosario Sea Berth.

RADIO: Weather information and Notices to Mariners are broadcast daily from the following local radio stations:

DZA	2,598 kc	0830;	1030;	1200 hrs.
		1830	2030 hrs.	
DZRH	650 kc	0520	0525	1620 to 1625 hrs.
DZAQ	620 kc	between	0500 to 0530 hrs.	
DZBB	580 kc	,,	0500 to 0530 hrs.	
DZBC	1,000 kc 9,550 kc	,,	0500 to 0530 hrs.	
	710 kc		0500 to 0530 hrs.	
DZFM	6,170 kc	,,	1000 to 1030 hrs.	
	11,840 kc		1600 to 1610 hrs.	
DZPI	800 kc 9,500 kc	,,	1700 to 1730 hrs.	
DZRC	950 kc	,,	1630 to 1635 hrs.	

Station DUS of the Coast and Geodetic Survey may be contacted for urgent nautical information at 0820 and 1350 hrs weekdays and 0820 and 1220 hrs. on Saturdays. DUS transmits on 8690 kc (CW) and receives on 8412 kc (CW).

TUGS: Available.

BERTHING: Vessels having 100 tons or more of general cargo for discharge (except those granted ship-side delivery permits) must berth at piers for such discharge. Ship-side delivery permits are issued by the Bureau of Customs on certain merchandise considered as bulk cargo.

	Length		*Width*	*Depth*
Pier 3	387.05 m.	concrete	103.32 m.	8.00 m. min. 10.00 max.
Pier 5	360.00 m.	,,	103.40 m.	,,
Pier 9	361.63 m.	,,	101.19 m.	,,
Pier 13	433.78 m.	,,	82.64 m.	,,
Pier 15	366.10 m.	,,	103.40 m.	,,

Pier 3 is exclusively used for handling containerized cargo.
Pier 5 and premises, for general cargo.
Pier 9 and premises, for general cargo and passenger. The passenger terminal is at this pier.
Pier 13 and premises, for general cargo, containerized cargo and for a roll-on/roll-off cargo ship berth.
Pier 15 and premises, for general cargo, passenger ships and naval vessels.

STEVEDORES: Stevedoring is handled by Luzon Stevedoring Co. and the Delgado Stevedoring Co., supply ample labour, lighters and tugs. Cargo averages about 10 t.p.h. and for the following bulk cargo: Copra, in bulk, 10/12 tons per gang hour. Copra cake and meal, 15/20 tons per gang hour. Desiccated coconut, 250–300 bags per hour. Hemp, 80/100 bales per gang hour. Sugar, 25 tons per gang hour. For the discharging of coal or gypsum, the rate is about 25 tons per hour.

TANKERS: Filoil refinery sea berth: Is located at the entrance to Manila Bay position: Lat. 14° 26′ 30″, Long. 126° 46′ 40″. This position is 2.5 miles off the shore of Rosario, Province of Cavite.

The mooring area is marked by 6 mooring buoys. A ship's guide buoy marks the point where the ship's starboard anchor will be dropped upon entry into the berth. 4 other buoys inside the berth at midport mark the end of the submarine pipe-line, centre of ship's manifold and the hose ends respectively. The bearing of the centre of the berth is N. 65° E. The depth is 50 ft. at high tide and 45 ft. at low tide approximately.

The weather is quite good during the dry season, but is unfavourable during monsoon season (May to November). Wind and swells are mostly from a S.W. direction and usually prevalent during monsoon season.

It is emphasied that vessels moored at the berth must be in good condition to clear the berth immediately in case of an emergency. Ship's engines and gear must be ready with full power for immediate use. Ship's personnel should be at their stations at all times during mooring, unmooring and cargo unloading operations.

Radio: Filoil Makati office may be contacted by dialling telephone Nos. 87-40-61 and 87-40-71. The Rosario refinery may be contacted by dialling telephone Nos. 47-95-51 and 47-95-53.

Communication from the sea berth with the refinery, Filoil's launch and Filoil representative on board is through VHF radio. If VHF radio fails, the Filoil launch will be despatched to bring the message either way.

Filoil representative on board maintains a radio watch and constant communication with the shore for general purposes and emergencies.

Luzon Stevedoring Company tugboats also maintain a constant radio communication with their representative at the shore. In case of emergency, messages can be relayed via these tugs.

Ship's Agent: All vessels carrying crude or other cargoes for discharge at Filoil refinery sea berth must appoint their local ship's Agent who will provide them with the necessary ship husbandry services.

Notice of Arrival: They must report their estimated time of arrival to Filoil Refinery Corporation, cable address' "Filoil", Manila, Philippines, 3 days after leaving port of loading and 72 hours before arrival at Manila.

Pilot and Boarding Parties: Pilots are arranged for by the ship's Agent. Generally, Pilots board the tanker at the Manila anchorage to assist the Master to moor in the berth and leaves at the sea berth after berthing.

Filoil representative boards the tanker 1 mile before the sea berth, but if it is the first voyage, he boards the tanker together with the Port and Government authorities at Manila anchorage.

Tugs: Tugboat service is arranged for by ship's Agent. Tugs generally come from Manila. Give at least 48 hours notice when ordering tugs.

Quarantine, Customs and Immigration: Manila is the port of entry for the Rosario sea berth. Therefore, entry and clearance must be arranged by the Ship's Agent at Manila. Boarding officers board the vessel in the Quarantine anchorage prior to arrival within the mooring area. Pertinent government officials should be given sufficient time,usually not less than 24 hours Monday to Friday, and 48 hours Saturday and Sunday. Generally, entry and clearance can be arranged by the Agent who should advise Customs well in advance of the vessel arrival.

Ballast, Bilge and Garbage Disposal: There are no ballast facilities at the refinery. Masters are advised that in Manila Bay, the Harbour-Pollution regulations are rigidly enforced. Therefore no bilge water, oil contaminated water, garbage or similar refuse which may pollute the sea water in any way, is to be discharged overboard while the vessel is within Manila Bay and approaches thereto. The staff at Rosario are required to report any violation of this Philippine Merchant Marine regulation.

Launch Service: Regular launch service for crew transportation is not available and has to be arranged through ship's Agent. The Luzon stevedoring launch is used to run lines, assist in picking up cargo hoses, etc. Filoil's owned or hired launch is for the exclusive use of Filoil representative and personnel boarding the vessel; however, transportation may be arranged through Filoil representative in cases of emergency.

Medical: Medical attention can be arranged by the ship's Agent. There is a clinic at the refinery. The nearest hospital is 0.5 miles from the refinery.

Heading for the Sea Berth: As soon as government clearance (pratique) is granted, vessel lifts anchor and heads for Rosario sea berth, a distance of about 16 land miles from Manila anchorage.

Vessel Mooring Gears and Facilities: The vessel's bow is secured in the moorings by the use of both bower anchors. Therefore, ship must have both bower anchors ready for immediate use, each with a minimum of 150 fathoms of chain. Anchors, chains and anchor windlass must be in good condition and capable of heaving ship ahead with the chain or letting 1 chain go out on the run while heaving in on the other. Mooring buoy No. 6 can be used instead of port anchor if 3 mooring lines are hooked up.

Vessels must be equipped with 10 in. manila or better mooring lines of not less than 8 in. circumference and not less than 90 fathoms in length of each line. 2 lines are required for each of 6 mooring buoys, 5 of which are aft to secure the ship's stern position. Therefore, 5 lines are to be available on the fantail for mooring to buoys Nos. 1, 2, 3, 4 and 5.

Vessels having wire moorings secured on warping winches with surge valve and brake are acceptable. Warping winches must be adequate to handle mooring line under heavy strain. Efficient stopper lines must be readily available to "stop" mooring lines for transfer from winch to bitts without loss of tension.

All chocks other than roller (if free) shall be fitted with chafing gear to protect lines before berthing operation commences, endeavouring to install chafing gear after the ship has been moored has proven impracticable. Old fire hoses or substitute is suggested.

If in the opinion of the Pilot, the vessel's mooring facilities lines and/or gear are inadequate, he will inform the Master and Filoil representative, and in such event the vessel will not be allowed to enter the moorings until such conditions are deemed satisfactory.

Docking procedure: To moor, the vessel approaches the mooring heading due South. When in proper position, the starboard anchor is dropped and the chain allowed to run until vessel crosses the mooring area to a point where the port anchor is let go or when the mooring lines are dropped to buoy No. 6. Then the engines are backed and the vessel with the assistance of the tug, manoeuvred into the mooring area where after lines are run to the 5 mooring buoys and then the anchor chains are brought tight simultaneously with the securing of the stern to the mooring buoys. The vessel is then heading due West parallel with the tide current flow.

When secured in the berth, vessel should not be closer than 10 m. from the end of the s ubmarine pipe-line. Bower anchor chains should have spread of not less than 30 degrees on either side of the ship's imaginary fore and aft line extended forward. Stern buoy moorings should be set as taut as possible and anchors form an approximate angle of 300° with water line.

Submarine Hose Lifting Gear and Manifold Connection: The derrick on the port side in way of the hose connection must be rigged to lift not less than 5 tons. The topping Lift shall be available to raise or lower the boom as required and the winch and whip shall be of a quality and nature to lift the hose exactly and evenly. The hose and fittings are considered to weigh 3 tons. The hose connecting gang and its supervisor are form Luzon Stevedoring Company and are under contract to Filoil. They will use the ship's machinery to raise the 2×10 in. hoses from the bottom and secure same to the ship's side. They will also disconnect the hoses and lower same to the bottom of the sea after completion of discharging of cargo. The ship's manifold must have 10 in. flanges for connection to 10 in. submarine hoses.

Safety Rules and Regulations:

Mooring lines must be in good condition and kept tight at all times.

Sparking smoke stacks must not be permitted. If for any reason a stack catches fire or emits live sparks, cargo operations must be stopped immediately on this and adjoining vessels.

Throw nothing overboard from deck or portholes while at sea berth.

During cargo and/or ballast operations, vessels shall show red flag by day and red light by night. No smoking amidships during cargo and/or ballast operations.

No chipping, repairs, welding or hot work is allowed on any vessel while at sea berth unless special permission is given and a safety permit obtained. The ship must always be ready to sail out at a moments notice.

Pumping crude oils must be stopped during electrical storms or if lightning appears in close vicinity.

In case of fire, shut down all pumping and sound alarm. Disconnect hoses so as to be ready to shift from berth. All vessels at berth must have main engines ready for use. Water, foamite and steam are never to be used on electrical fires. Use dry chemical or Pyrene. Use foamite, water fog, steam CO_2 or dry chemical on oil fires.

Avoid spilling oil on deck. If any oil is spilled, it must be cleaned immediately. Gasoline or naphtha is not to be used for cleaning.

Only Underwriter's laboratory approved flashlights permissible use in methane and air misures by the U.S. Coast Guard are to be used for loading, discharging, ballasting and/or repair work on vessels.

Ullage screens are to be kept in place during cargo and/or ballast operations.

Tugboats are not to be allowed alongside while discharging cargo or ballast.

No extension cord or portable cables which are connected to an electric power source shall be used on deck in way of cargo or fuel tanks unless vessel is certified gas-free.

Fire hose shall be laid out and suitable fire extinguishers available. Failure to comply with any of the above rules will result in the vessel being shut down. Sufficient copies are to be presented to the Master so that they may be posted in various places about the vessel. It is the Master's responsibility to see that these rules and regulations are enforced.

Discharge of Cargo; After hoses are connected, the Filoil representative will, after communication with the refinery, advise commencement of pumping. In the beginning the rate is to be slow and the Filoil representative will advise when pumping rate is to be increased to maximum. Discharge of cargo may be stopped due to adverse weather conditions. In which event, the hoses are disconnected and the submarine hose lowered to the sea bottom. Cargo discharge will be resumed when the adverse weather moderates.

Crude oil discharge through 2×10 in. hoses 255 ft. long through a 10 in check valve and 10 in. gate valve then into the 24 in. pipe-line which is 2.5 miles in length. The height of the shore tanks (foundation) above sea level if 15.5 ft. Pressure at the ship's side must not be less than 60 lb. Maximum pressure allowed is 120 lb. at the ship's side.

Stripping – Tank Draining: To keep a discharge time to a minimum, tanks should be stripped into one of the ship's tanks and the final stripping shall be from only one tank.

Board and Lodging Accommodation: Sufficient accommodation and meals are requested to be available and prepared for the Filoil's representative in the officers' quarters. He will remain with the vessel until casting off or until relieved to be of assistance to the crew.

FRESH WATER: Available, either at berth or by barge.

FUEL: Fuel oil can be obtained from the Esso, Mobil, Getty, Fil-Oil, Caltex and Shell Oil Companies. Delivery by barge is made either at one of the anchorages within the breakwater or at the piers. Where possible, prior notice of 72 hours should be given the oil companies. Maximum rate of loading is 100 tons of bunker fuel and 125 tons of diesel fuel per hour.

MEDICAL: Complete hospital facilities are available in Manila.

REPAIRS: The Mariveles shipyard operated by the National Shipyard and Steel Corporation located at Mariveles Harbour have facilities for the dry docking and repairs of vessels up to 10,000 g.r.t. and of length and draft up to 500 ft. and 25 ft. respectively.

SERVICES: The Atlantic Gulf and Pacific Co. is equipped to undertake cleaning of tanks for receipt of coconut and vegetable oils. Where the tanks have contained coconut or vegetable oils previously, the time required for cleaning is from 18 to 30 hours; where tanks have previously held wood oils or fuel oils, the time required to prepare them is from 48 to 60 hours.

Vessel requiring the services of a launch at any time of the night should use the following signal to which the harbour transport launches will answer: Searchlight, signal lamp or open blinker light pointed straight up slightly inclined shoreward and left on until launch arrives alongside.

DEVELOPMENTS: A stern-loading ramp for roll-on/roll-off vessels on Pier 9 and the installation of a gantry crane on Pier 3 with a capacity of 35 tons. At the Manila International Port, the first phase is to be completed by early 1977.

AUTHORITY: Head of Port Operations Service, Bureau of Customs.

AGENT: Smith, Bell & Co. Inc., POB 311, 5th Floor, Domestic Building, Bonifacio Drive, Port Area, Manila.
Tel: 49-21-11. Telex: RCA 722566. Cables: Shipping Manila.

MASAO: 09.06 N. 125.22 E.

See "General" before first port.
PILOTAGE: Pilotage is compulsory and appropriate notice should be sent to the Masao Pilots' Association at least 24 hours before the arrival of the vessel.
ANCHORAGE: The anchorage is wide and deep enough to accommodate as many as 20 vessels at one time. Depth, 10 to 35 fathoms.
RADIO: Any commercial radio systems would be sufficient, such as Globe, or Mackay or RCA.
TUGS: At Magallanes Bay, where majority of foreign vessels discharge, tugs are not needed, as anchorage is done along the stream. But at Nasipit, the pilot launch will handle the lines for mooring.
BERTHING: Vessels work cargo to lighters in Magellanes Bay. At Nasipit: Copra loading.
STEVEDORES: No particular ETA advices necessary; exporters will handle the advice of their stevedores.
MEDICAL: Necessary for Agents to receive advance notices for medical attention required; hospitals to handle major medical cases. The provincial hospital is in Butuan City which is about 12 miles away.
FRESH WATER: This is available at Nasipit, but notice should be given to the Agent who in turn will serve notice to Messrs. Nasipit Lumber Co. Water is delivered by truck.
GANGWAY/DECK WATCHMEN: Available and recommended.
OPENING/CLOSING HATCHES: This is normally carried out by members of the crew, but at Nasipit, in the case of American vessels, this is done by the stevedores, chargeable to the exporters.
CUSTOMS ALLOWANCE: 200 cigarettes and a bottle of wine for each crew member would be allowed during the duration of the vessel's stay in port. Request for additional needs could be arranged by the Master through the Customs Inspector on board.
IDENTIFICATION CARDS: Necessary.
CONSULS: None. Nearest at Cebu, and Manila.
REPAIRS: All types of repairs on deck require the permission of the Collector of Customs.
REPATRIATION: Can be arranged.
AIRPORT: Distance to the airport is about 4 km. and flights are daily to Manila. Philippine Airlines, Filipinas Orient Airways have their regular flights for Manila, Cebu, Cagayan de Oro, and Davao.
HOLIDAYS: Cargo can be worked on any day except New Year, Independence Day, 12th June, and Holy Week.
AUTHORITY: The Collector of Customs.

PUERTO PRINCESA: 09.44 N. 118.43 E. (See Plan)

See "General" before first port.
Puerto Princesa, a large irregular inlet between Bancaobancaon Point and Panagtaran Point, is 2 miles wide at the entrance, extending about 6 miles in a Northwesterly direction. Coral reefs about 0.5 mile wide making out on the entrance points narrow down the navigable width of the channel to about 1 mile, depths of 34 fathoms (62.2 m.), shoaling to 9 fathoms (16.5 m.) in the vicinity of the pier. The major portion of the Northwestern and Western part of the bay is mostly shoal. The shoreline is generally fringed with mangroves and fronted by mud flats. The surrounding land consists of extensive wooded plain, backed by a high mountain chain. Several small rivers navigable by launches and small boats empty into the bay. The inner part of the harbour is a good typhoon anchorage.
PORT LIMITS: About 1 mile South of the pier. This is the entrance to the inner harbour of Puerto Princesa.
PILOTAGE: Pilots can be contacted by radio message through the shipping Agent not less than 24 hours of ETA indicating among others the following information:

1. Name of vessel
2. Name of shipping lines
3. Country vessel is registered
4. Type of vessel
5. Overall length
6. Draft
7. GRT
8. Volume of cargo to be discharged and storage required
9. Nature of cargo
10. Passengers disembarking, transit and embarking if any.

When Pilot is aboard the pilot boat, an international flag "P" will be seen flying at her foremast.
ANCHORAGE: Vessels not going alongside the T-shaped pier may anchor Southwestward of Princesa Point in 12 to 16 fathoms (21.9 to 29.2 m.), mud bottom. A better protected anchorage may be had in 9 to 10 fathoms (16.5 to 18.3 m.) about 400 yards Northward of the end of the pier.
RESTRICTIONS: At night, in approaching Puerto Princesa from offshore, the lights in the vicinity of Canigaran, Northward of the entrance, may cause some confusion to strangers as they are visible long before the Puerto Princesa Light can be seen. The port light which is fixed red, visible 7 miles over an area of 041°, only becomes visible close in and just off the mouth of the harbour. At daytime a course Southward of the range Thumb Peak-Tidepole Point clears the reef on the North side of the entrance. Mount Beaufort on range with Tidepole Point clears the reef on the South side.
MAX. SIZE: Vessels not going to dock alongside the pier may anchor at 9 to 10 fathoms or 12 to 16 fathoms. For vessels going to dock alongside the T-shaped pier, permissible length and draft are the following: Length – 126 ft. (39.4 m.) draft – 27 ft. (8.2 m.)
HEALTH: Quarantine doctors are assigned in the Port to board the vessel and check any suspected disease or fever.
RADIO: Vessels at sea usually send their radio messages through the Association of International Shipping Lines in Manila to their Agents.
VHF: Not available.
RADAR: No radar station in the port.
TUGS: Tug service can be availed of by communicating with the local shipping Agent.
BERTHING: The town has a T-shaped concrete pier with a berthing face of 126 ft. (38.4 m.) Depths are 27 ft. (8.2 m.) alongside and 31 ft. (9.4 m.) about 6 yards off the face. The Northern and Southern ends of the "T" have depths of 11 ft. (3.3 m.) and 15 ft. (4.5 m.) respectively. The inshore arms of the T has depths of 11 ft. (3.3 m.) at each berth. Sailboats and other shallow vessels berth on each side of the concrete approach. The wooden piles, are 8 ft. (2.4 m.) and very close together, are about 120 yards N.E. of the offshore end of the pier. Vessels coming alongside should exercise caution to avoid these piles. Typhoon signals are exhibited from a pole at the foot of the pier.
CRANES: No cranes available.
STEVEDORES: Advise Agent on volume of cargo to be discharged, storage required and nature of cargo.
TANKERS: May drop anchor at anchorage area.
FRESH WATER: Water supply on a limited quantity.
FUEL: Diesel oil, gasoline and kerosene may be purchased in drums and tins.
FIRE PRECAUTION: No smoking is allowed when vessels are refuelling within a radius of 100 m.
CONSULS: Consuls from foreign countries in Manila.
REPAIRS: No repair facilities.
DRY DOCKS: Good for small boats only.
SURVEYORS: Lloyds and other classification societies in Manila.
GANGWAY/DECK WATCHMAN: Watchman can be hired from local Security Agencies of the Port.
HATCHES: Opening/closing of hatches is usually done by stevedores.
CUSTOMS ALLOWANCES: Quantity permitted for each crew member to be held out of bond are the following: Cigarettes – 5 packs. Liquor – 1 bottle.
CARGO GEAR: Loading/unloading is effected by ship's gear.
REPATRIATION: No facilities.
AIRPORT: The airport is about 2 miles from the pier with a schedule of two flights from Manila and back daily.
HOLIDAYS: The following are the Philippine National Holidays: January 1 – (New Year's day), Maundy Thursday, Good Friday, April 9 – (Bataan Day), May 1 – (Labour Day), June 12 – (Independence Day), July 4 – (Fil-Am Friendship Day), November 30 – (National Heroes Day), December 25 – (Christmas Day). Cargo handling operations may be arranged on these days at overtime rates.
POLICE/AMBULANCE/FIRE: Puerto Princesa town has all these facilities. There is a provincial hospital in Puerto Princesa. Private practising physicians and drugstores are available.
TELEPHONES: The town is connected to Manila by postal and radio communication but no telephone shore connection facilities for vessels docked at the pier is available.
SERVICES: No special services available.
SHORE LEAVE: Crew members are allowed ashore provided they always carry with them their Seaman's book or Passport.
IDENTIFICATION CARDS: Seaman's Book is sufficient for crews to identify them when ashore.
DELAYS: Due to lack of some Port facilities, delay in berthing, loading, discharging and bunkering is sometimes experienced.
DEVELOPMENTS: A proposed extension of 30 m. on the Northern end of the pier and 47.57 m. on the Southern end. Reclamation at the Southern foot of the causeway.
AUTHORITY: The Collector of Customs.

SAN FERNANDO, Luzon: 16.37 N. 120.18 E.

See "General" before first port.
PILOTAGE: Send telegraphic message (through the ship Agent) addressed to Port Pilot, San Fernando, La Union, Philippines, at least 24 hours before expected time of arrival. This is the only means by which the Pilot can be contacted.

The moment the Pilot receives the 24-hour advance notice of ETA he is under constant watch for the vessel to appear outside the harbour. When vessel appears, he meets the same in an ordinary outboard motor-boat, which is painted white and bearing International Flag "H".

The vessel, when calling the Pilot, flies the International Flag "G" or sounds a signal of 2 long and 1 short blasts.

The Pilot boards within 3 miles of the lower beacon. In case of bad weather or when pilot boat cannot be seen, the vessel can proceed to the quarantine anchorage as there is no specific anchorage for vessels awaiting a Pilot. The Pilot does not go out during stormy weather. He requires a rope ladder for boarding or disembarking when the sea is rough.
ANCHORAGES: The Port of San Fernando is one of the deepest in the Philippines, and the quarantine anchorage as well as the anchorage for vessels waiting to dock at the piers can accommodate vessels up to 30,000 d.w.t. Controlling depth 12 fathoms, holding ground good.
MAX. SIZE: The maximum permissible tonnage of a vessel which can be ordinarily accommodated at the piers is 10,000 tons

irrespective of the length, breadth, draft, and kind of the vessel. The state of tide does not affect the dimensions of the vessels. However, vessels with a tonnage of more than 10,000 tons up to 30,000 tons need the aid of tug-boats so that they can be manoeuvred into the pier area.

HEALTH: To obtain pratique the ship Master must advise the ship Agent vessel's ETA in advance. The foregoing advice is very important because the ship Agent must in turn advise the quarantine officer of the arrival of the vessel 2 to 3 hours before the vessel sails into port. When the vessel arrives at the quarantine anchorage, the quarantine officer boards and inspects the same, and if the vessel is found to be free from all quarantinable diseases, pratique is granted. Automatic pratique is granted only to naval vessels. Pratique is not necessary when the vessel entering the port has called at another port in the Philippines immediately before proceeding to San Fernando.

TUGS: It is the ship Agent of the vessel who furnishes tugs. Whenever needed, the tug-boat normally joins the vessel near the pier while the vessel is docking and at the pier when the vessel is undocking.

BERTHING: all berths are alongside piers.

STEVEDORES: ETA advices are useful but gangs can be easily arranged even at short notice. The average load rate per gang (12 men) per hour is 20 tons, while the average discharge rate is 25 tons.

MEDICAL: It is always necessary for ship Masters to notify their Agents of required medical attention at least 2 to 3 hours before arrival. Hospital facilities are available. There are 3 hospitals in the town of San Fernando. Vaccination/Fever Certificates are required, especially those against cholera, smallpox, and yellow fever.

TANKERS: There are no berths available for the exclusive use of tankers. Existing facilities for unloading oil have been installed alongside the piers by private oil companies for their own use.

FRESH WATER: Supply of fresh water is available at the government pier by pumping from shore-side to vessel at the rate of 15 t.p.h.

FUEL: All grades can be readily supplied by any of the oil companies with oil depots in the port area.

DEVELOPMENTS: There is an ambitious programme to improve the marine terminal of the port which, among other things, includes reclamation and construction of additional storage facilities. Works on the breakwater, marginal wharf for fishing boats, and an industrial estate complete with a new pier, as well as the removal of wrecks (parts of sunken ships) inside the harbour are expected.

GANGWAY/DECK WATCHMEN: The employment of gangway/deck watchmen though not compulsory is recommended.

OPENING/CLOSING HATCHES: An additional charge for this job is imposed if carried out by stevedores. The crew can, however, do the job.

CERTIFICATES: Those required are:
Certificate of Registration.
Certificate to Operate.
Certificate of Officers and Engineers (Licenses).
Officers and Crew-Seamen's Book.

CUSTOMS ALLOWANCE: 200 cigarettes for each crew member, and 1 bottle of liquor for each crew member.

IDENTIFICATION CARDS: Absolutely needed.

CONSULS: None at San Fernando.

REPAIRS: Deck and engine repairs are limited only to re-winding, welding, fixing electrical devices and connections, patching, and repainting.

DRY DOCKS: Except for the dry dock maintained and operated by the Atlantic Gulf and Pacific Company for the exclusive repair of U.S. Navy LCMs, no facilities of this nature in the port at present.

REPATRIATION: Effecting crew changes and arranging necessary repatriation are carried out by the Immigration Office in the port with the assistance of the ship Agent and the Foreign Embassy concerned.

AIRPORT: An airport, which is served by the Philippine Air Lines on a daily schedule to and from Manila and other points in Northern Luzon, is located about 1 km. from the pier area.

TIME: Local Civil Time is 8 hours ahead of GMT. This time reckoning is constant throughout the year.

HOLIDAYS: New Year's Day (January 1st); Bataan Day (April 9th); Holy Thursday (variable); Good Friday (variable); Labour Day (May 1st); Independence Day (June 12th); Republic Day (July 4th); All Saints' Day (November 1st); National Heroes Day (November 30th); Christmas Day (December 25th); Rizal Day (December 30th). When any holiday falls on a Sunday, the following day (Monday) is by law considered a legal public holiday. As a general rule, employees of the government in the Philippines do not work on Saturdays.

POLICE/AMBULANCE/FIRE: For Police and Fire, either call No. 99 (Phil. long distance tel.) or No. 0 (Gov't tel. System). For Ambulance, call directly for Lorma Hospital, Bethany Hospital or La Union Provincial Hospital on any of the 2 telephone systems above said.

TELEPHONE: Facilities for placing telephones on board vessels are not available at present.

AUTHORITY: Philippines Ports Authority, Poro Point, San Fernando.

TACLOBAN: 11.15 N. 125.00 E. (See Plan)

See "General" before first port.

PILOTAGE: Notice of ETA of vessel must be given at least 24 hours in advance and must be sent through cablegram direct to Collector of Customs, Tacloban City.

ANCHORAGES: Safe anchorage: low tide, 17 ft. draft; high tide, 19 ft. draft; area for anchorage, 300 ft. length.

ENTRY RESTRICTIONS: At the discretion of the Collector of Customs.

MAX. SIZE: Permissible length 300 ft. Draft low tide, 17 ft.; high tide, 19 ft.

HEALTH: Pratique is only necessary and required in the first port of entry; it is automatic when entering ports in the same country or state.

RADIO: Radio communication of the Philippines, Inc., Manila.

TUGS: Ship's Agent arranges tug's lines with watchmen.

BERTHING: Inform Customs Collector at least 24 hours before ETA of vessel so that berthing space can be reserved.

STEVEDORES: ETA advices should be furnished to stevedores through ship's Agent.

MEDICAL: Advance notice of required medical attention to ship's Agent essential.

FRESH WATER: Fresh water available delivered by water-tank truck.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Necessary for safety of vessel. Ship's Agent makes all necessary arrangements.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CERTIFICATES: All documents required by International Shipping Rules and Regulations.

CUSTOMS ALLOWANCE: One carton cigarettes per week for each man. Wines/spirits at the discretion of the Collector of Customs.

IDENTIFICATION CARDS: Needed for inspection by Immigration Officer.

REPAIRS: Not possible.

REPATRIATION: Immigration Officer effects crew exchanges and arranging necessary repatriations.

AIRPORT: Distance from airport, 9 km., and is regularly served by airlines.

TIME: GMT plus 8 hours. No alterations during the year.

HOLIDAYS: Depending upon agreement with stevedores, work may be performed during holidays.

POLICE/AMBULANCE/FIRE: All departments are within one minute's call from the harbour.

TELEPHONES: Can be connected on board if required.

AUTHORITY: Collector of Customs.

TANAUAN: 11.06 N. 125.01 E. (See Plan)

SHIPMASTERS REPORT: October 1976

N.I.D.C. Coconut Oil Pier: Location of berth 11° 06′ 15″ N. 125° 01′ 30″ E. The berth is 7 miles from the Pilot boarding point. Least depth of water in channel from sea to berth, 32 ft. At berth bottom is mud and sand. Density 1025. Docking and undocking in daylight only at any stage of tide.

Anchorage 1.5 miles North of Mariquitdaquit Light. Terminal Information: Use shore hoses. Length of pipe-line – 3,000 ft. connection at manifold – 8 in. Shore-booster pump not used. No steam. Product handled, coconut oil.

Port Information: Pilotage compulsory. Pilot requires 12 hours and 24 hours notice. Pilot boards 1 mile North of Mariquidaquit Island and comes from Tacloban. It is unsafe to enter and leave after dark. Vessels can enter and leave any state of tide. Max. LOA 1,000 ft. Max. beam 90 ft. Max. draft 31 ft. No tugs available. Vessel able to berth and unberth without aid of tugs.

Facilities available. Fresh provisions available from Tacloban, a small town, 20 km away. Chandler requires payment in cash for goods.

Airport at Tacloban. Doctor and hospital available. Groceries, meats and laundry available.

No fresh water, repairs, Lloyds surveyor or fuel available.

ZAMBOANGA: 06.54 N. 122.04 E. (See Plan)

See "General" before first port.

PILOTAGE: Vessels approaching the port use International Code Signals for calling Pilot.

Pilot Station: Telegraphic address is Zamboanga Pilots, Zamboanga City. Estimated time of arrival (ETA) must be radioed 24 hours in advance. Pilots always on duty. Pilot boat is wooden launch painted white with red trimmings and displaying the pilot flag. The exact area where a Pilot will board vessel is in the vicinity of Little Sta., Cruz Island, for vessels coming from West, and near the vicinity of Rio Hondo for vessels coming from East. Alternative area in the event of bad weather is in the vicinity of Zamboanga Pier at a distance of at least 1 mile either way. Vessels awaiting Pilot should not necessarily drop anchor, provided 24 hours notice of their ETA is given by local Agents or the Master, to the Zamboanga Pilots, for a Pilot is *always* on duty.

ANCHORAGES: Owing to the steep bank, strong currents and hard, uneven bottom, there are no good anchorages off Zamboanga. However, anchorage may be made anywhere Southward of the wharf at a distance of about 3 cables from shore Eastward of an imaginary line from the Tide Indicator, at a depth of between 25 and 30 fathoms and giving 7 shackles of chain in the water. This will hold vessel even at strongest current of 6 knots. In the event of very bad weather the vessel should transfer her anchorage to Caldera

Bay, which is approximately 7 miles West of the anchorage area.
MAX. SIZE: No limits for anchoring. For berthing, up to 32 ft. draft.
HEALTH: Quarantine Officer will board the vessel for the necessary inspection of all crew on board. Thereafter he issues pratique, if and when he finds that there is no disease or fever on board. The pratique is valid until after the vessel departs to a foreign port.
RADIO: Universal Telecommunication Service, the Capitol Radio Telecommunication, the Telefast Radio Communication, the Radio Communications of the Philippines and the Telecom, operated by the National Government for receiving and transmitting radio messages. Night and day services.
TUGS: The position where tugs normally join the vessel is in the stream and the usual ship's lines or tug's lines are used. There is no charge collected for the use of the tug's lines.
BERTHING: The Zamboanga Government wharf is about 800 ft. long with a depth at the latest survey of the following: East end 30 ft.; mid-section 25 ft. and West end 21 ft. There is a private wharf at Baliwasan and vessels of 15,000 g.r.t. can dock there with the following limitations: Draft forward must not exceed 32 ft.; draft aft must not exceed 36 ft., upon completion of loading. Vessels docking at this wharf can only be docked at *flood* tide (current running East to West) and can only be undocked in the same manner.

2 anchors must be used in berthing and vessels lay alongside the concrete pier port-side-to. This wharf in Baliwasan is for loading coconut oil and copra pellets only.

TANKERS: There are 4 oil depots at Gavilan Pt. and at Baliwasan. (Shell, Mobil, Esso and Caltex.) Max. tonnage of 4,000 gross with a draft of not more than 18 ft. can be moored for discharge.
STEVEDORES: The Master of the vessel shall wire to the local Agents of the vessel so that a contract could be made with the shipper to arrange gangs.
MEDICAL: It is necessary for Agents to receive advance notice of required medical attention. Hospital facilities are available at all times. Inoculations are also required by the Quarantine Officer upon boarding a vessel.
FRESH WATER: Fresh water can be obtained only at night-time due to low pressure. If there is no available space at the Zamboanga Pier the vessel has to wait at the anchorage for a berthing space to get water supply.
FUEL: Fuel, diesel, and crude oil available.
FIRE PRECAUTIONS: Smoking is entirely prohibited on board a tanker entering this port. The Master must advise all persons boarding his vessel.
DEVELOPMENTS: Improvements are carried out every year to the local wharf adding additional berths and dredging to increase draft.
GANGWAY/DECK WATCHMEN: The services of watchmen are necessary to foil looters from boarding the vessel.
OPENING/CLOSING HATCHES: Normally opening and closing of the hatches are done by the crew, and if the job is done by stevedores the vessel has to pay.
CUSTOMS ALLOWANCE: 200 cigarettes per man. Upon arrival in port the cigarettes are sealed in a bonded store by the Customs authorities, and can be opened only upon permission granted by the Collector of Customs.
IDENTIFICATION CARDS: All crew members to have identification cards for immediate identification in case of trouble while the crews are on shore.
CONSULS: None available.
REPATRIATION: Effecting crew changes and arranging necessary repatriation are carried out by the Immigration Office in the port with the assistance of the ship Agent and the foreign Embassy concerned.
AIRPORT: Distance from Zamboanga Pier to the airport is 3 km. Served by regular airlines. There is a daily flight from Zamboanga to Manila by Philippine airlines. Airport open to International flights.
TIME: Local Civil Time is 8 hours ahead of GMT. This time reckoning is constant throughout the year.
HOLIDAYS: Cargo work can be arranged with the Stevedoring Company through the shipper to work during holidays, including Sundays.
POLICE/AMBULANCE/FIRE: Police Department, tel. 06; Ambulance, Zamboanga General Hospital, tel. 08; and Fire Department, tel. 00.
TELEPHONES: Telephones cannot be installed on board when docked at the pier as is not allowed by the City Government.
SERVICES: Special services may be available, e.g. tank-cleaning equipment, facilities for discharge of tank-washings, compass adjusting, through representations to be made with the shipper or local Agent of the vessel.
AUTHORITY: The Collector of Customs.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Poland

GDANSK: 54.21 N. 18.39 E. (See Plan)

ICE: Efforts made to keep port open all year round. Only in very severe winter are difficulties experienced.

DOCUMENTS:

12 Copies Cargo Manifest.
2 copies Bills of Lading.
Discharge Books to be collected for presentation.
Ship's Register.
Maritime Declaration of Health.
Ship's Articles/Crew List.
Deratisation Certificate or exemption from Sanitary Certificates, covering food cargoes and/or of animal origin, destined for discharge here.
Specification of Dangerous Cargo even if in transit.
2 Stowage Plans.

PILOTAGE: Compulsory. Boarding in Gdansk road. Gdansk Pilot station available on VHF, Channel No. 14.

ANCHORAGE: Gdansk roads up to buoys NP1, NP2. No tides.

RESTRICTIONS: Approaches 36 to 40 ft. depth.

MAX. SIZE: Max. size of vessels permitted to enter: draft, 33 ft. brackish water; Max. LOA 220 m. Also see "Tankers" and "Bulk Handling Facilities".

HEALTH: Maritime Declaration of Health to be presented on arrival. In the event of suspected disease, the vessel should wire to "Quarantine Gdandsk", or via Agents.

RADIO: Messages should be sent via Gdansk Radio.

RADAR/VHF: Port Radar Service acting with pilot station, contactable on VHF Channel No. 14.

TUGS: Join in Gdansk roads. Vessel's lines must be used. Tugs compulsory for all vessels over 2,000 g.r.t.

BERTHING: Max. draft mentioned below is to be taken as normal water level. No tide.

Name of quay	*Length*	*Max. Draft*
King Wladyslaw IV Basin	1,190 m.	29 ft. 06 in.
Defenders of Westerplatte	1,442 m.	33 ft. 06 in.
Oliwskie	1,278 m.	31 ft. 00 in.
Defenders of Polish Post Office	330 m.	33 ft. 06 in.
Ziolkowski (Ro-Ro)	123 m.	20 ft. 00 in.
Iron Ore and Coal Quays	1,612 m.	32 ft. 02 in.
Administration Quay	80 m.	19 ft. 02 in.
20th Anniversary Quay	1,076 m.	32 ft. 00 in.
Timber Terminal	510 m.	25 ft. 09 in.
Chemist's Quay	250 m.	32 ft. 00 in.

CRANES: Floating cranes of 26–100 tons capacity. Many portal cranes up to 8 tons capacity.

BULK HANDLING FACILITIES: Bulk and liquid sulphur handled at Post Office Defenders Quay.

Coal/Ore quays equipped with 7×16-ton cranes and 10 ore bridges of 15 tons capacity. Grain elevator at Anniversary of the Republic Quay.

A conveyor system for fertilisers in bulk 20 ton grab cranes at Chemists Quay.

In the event of no accessible berth and/or grain elevator not being available, such bulk cargoes discharged by grabs. Vessels should be suitable for grab discharge.

North Port Bulk terminal: Coal-handling facilities capable of receiving vessels up to 100,000 d.w.t. max. daily loading rate 50,000 tons. Max. draft 49 ft. 03 in.

STEVEDORES: As gangs for the following day must be ordered before 1100 hrs., vessel's ETA should reach the Agents relevantly in advance.

Stevedores work 24 hours per day, which is considered to be between 2300 to 2300 hrs. following day. First shift from 2300 to 0700 hrs., second shift from 0700 to 1500 hrs., third shift from 1500 to 2300 hrs. Port works Sundays nd holidays at premium rates.

MEDICAL: No special notice required. Full hospital facilities available.

TANKERS: Oil Terminal at North Port.

Location: Southern part of the Gulf of Gdansk, Latitude 54° 21′ N. and Longitude 18° 40′ E. approximately. Vessels to use the roads between the end of peninsula Hel and anchorage South of Latitude 54° 25′ N., approximately 0.5 mile North of the terminal. Imports crude oil, exports fuel and refined oils, as well as other products of the Gdansk Refinery. No facilities for handling liquified gases.

Facilities: One L-shaped jetty for berthing consists of one main platform and four main dolphins, fitted with quick release hooks. The main platform is fitted with gangway tower and seven movable handling arms for loading and discharging purposes. Only one mooring place available. The jetty accessible for vessels having minimum 260 ft. (about 35,000 d.w.t.) and maximum 1,000 ft. length and 49 ft. draft. For towing purposes there are available two 2,500 h.p. and two 1,650 h.p. diesel tugs, if necessary further 1,200 h.p. tugs are at hand. All tugs equipped with fire fighting equipment.

Cargo Handling Equipment: The seven mobile handling arms, Luceat Production, are used as follows: No. 2, 3 and 4 for discharging of crude oil, speed about 10,000 cu.m/hr. No. 1 and 5 for loading bunker oil and water, efficiency about 2,000 cu.m./hr. No. 6 and 7 loading liquid fuels and refined products 2,000–2,500 cu.m./hr. Loading pressure of vessels pumps should not exceed 14.5 kg./sq.cm. at any time.

For the time being, as terminal is still under construction, no facilities for handling of vessels ballast water available.

Services: Marine diesel and fuel oil available at the jetty. Storage tanks located in the neighbourhood of the terminal and connected with central pipe-line system of Poland. Laboratory, for testing purposes and repairing facilities available.

DENSITY: Salt content: 0.54%

FRESH WATER: Available at hydrants.

FUEL: Heavy, intermediate and thin fuels, marine diesel oils and gas oils available ex-shore installation or lighter. 48 hours notice required.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Normally carried out by stevedores, crew allowed to handle.

CERTIFICATES:

Load Line Certificate.
Cargo Gear Certificates.

CUSTOMS ALLOWANCE: For 3 days – 160 cigarettes or 30 cigars or 150 gm. tobacco per crew member. Master is allowed double ration. 1 bottle wine and 1 bottle of spirits per crew member for each 3 days. Master is allowed double ration.

IDENTIFICATION CARDS: Each member must be in possession of a valid Discharge Book/Sailor's Book, and will receive a separate shore permit issued by the Immigration Authorities, entitling him to go ashore within the area of Gdynia/Sopot/Gdansk.

CONSULS:

Chinese People's Republic Consulate General, tel. 41–64–76.
German Democratic Republic Consulate General, tel. 41–43–66.
Soviet Consulate General, tel. 41–06–13.

REPAIRS: All types of deck and engine repairs performed by specialised ship repair yard.

Floating docks: No. 1, 6,400 tons lifting capacity, dim. 135×25.20 m. No. 2, 8,000 tons lifting capacity, dim. 156×27.20 m. No. 3, 11,000 tons lifting capacity, dim. 176×28.00 m. 1 floating jack of 1,700 tons capacity and 3 minor docking pontoons.

REPATRIATION: Crew change and repatriation can be arranged.

AIRPORT: Gdansk Airport.

TIME: Middle European Time, which is 1 hour ahead of GMT throughout the year.

HOLIDAYS: New Year's Day (January 1st); Easter Sunday (movable); Easter Monday (movable); Labour Day (May 1st); Corpus Christi (movable); National Holiday (July 22nd); All Saints' Day (November 1st); St. Barbara, only for workers loading coal. (December 4th); Christmas Day (December 25th); Second Christmas Day (December 26th). On Christmas Eve and New Year's Eve, work is generally suspended at 1500 hrs. In justified and approved cases, overtime on Sundays and holidays is arrangeable.

TELEPHONES: Available on most general cargo quays.

GENERAL: Cargo is handled around the clock in 3 shifts of 8 hours each. Saturdays are full working days. Sunday and holiday interruptions last from 2300 on Saturdays or days before holidays, and terminate at 2300 on Sundays or holidays.

POLICE/FIRE/AMBULANCE: Police: Gdansk-Nowy Port, Wladyslawa IV-3, tel. 31–48–61; Ambulance: Gdansk-Wrzeszcs, Al. Zwyciestwa 49, tel. 41–10–00; Fire: Gdansk-Nowy Port, Na Zaspy 57, alarm phone tel. 41–22–22.

AUTHORITY: The Port of Gdansk Authority.

AGENT: Morska Agencja, Harbour Office Gdansk, Oliwska 35 – Gdansk-Nowy Port. Tel. 430–921 (day and night service). Telex: 051–641.

GDYNIA: 54.32 N. 18.34 E. (See Plan)

ICE: Efforts made to keep port open all year round. Only in very severe Winter are any difficulties experienced.

DOCUMENTS:

10 copies Cargo Manifest.
2 copies B/Lading.
Discharge Books to be collected for presentation.
Ship's Register.
Ship's Articles/Crew List.
Maritime Declaration of Health.
Deratisation Certificate.
Sanitary Certificates covering food cargoes and/or of animal origin, destined for discharge here.
Specification of Dangerous Cargo (even if in transit).
2 Stowage Plans.

PILOTAGE: Compulsory. Boarding in Gdynia roads. Gdynia pilot station available on VHF in Channel No. 12. Traffic around the clock.

ANCHORAGE: Gydnia roads at buoy GD, up to 200-500 m. off port entrance. No tides.

RESTRICTIONS: Depth in main entrance 46 ft.

MAX. SIZE: No limit on length, max. draft 37 ft. 04 in. at French Quay, also see "Berthing".

HEALTH: Maritime Declaration of Health to be presented on arrival. In the event of suspected disease the vessel should wire "Quarantine Gdynia" or via Agents.

RADIO: Message should be sent via Gdynia Radio. Port Radar Service acting with the pilot station, contactable on VHF, Channel No. 12, Gdynia. Contact Agent VHF Channel 7.

TUGS: Join vessel in Gdynia roads. Vessel's lines must be used.

BERTHING: Max. draft is at normal water depth.

Name	*Length*	*Max. Draft*
Pomeranian Quay	629 m.	27 ft. 11 in.
Silesian Quay	434 m.	26 ft. 11 in.
Swedish Quay	715 m.	30 ft. 06 in.
Danish Quay	562 m.	26 ft. 11 in.
Dutch Quay	397 m.	33 ft. 06 in.
Finnish Quay	190 m.	32 ft. 02 in.
Polish Quay	1,130 m.	29 ft. 03 in. –34 ft. 09 in.
Rotterdam Quay	310 m.	28 ft. 03 in.
Indian Quay	1,018 m.	30 ft. 02 in. –32 ft. 02 in.
Peace Fighters Quay	817 m.	30 ft. 02 in.
Czechoslovakian Quay	214 m.	28 ft. 03 in.
Romanian Quay	864 m.	31 ft. 06 in.
Hungarian Quay	215 m.	33 ft. 02 in.
French Quay (passenger terminal)	510 m.	37 ft. 04 in.
Wenda Quay	80 m.	27 ft. 03 in.
Yugoslavian Quay	183 m.	32 ft. 02 in.

CRANES: Floating cranes of 26–100 tons capacity and many portal cranes up to 8 tons capacity. Also available cranes of 11.5 and 15 tons capacity.

BULK HANDLING FACILITIES: Coal conveyor at Danish Quay capacity 400 t.p.h.

Container terminal at Polish Quay equipped with 40-ton multipurpose crane.

Grain elevator at Indian Quay. A special terminal at the same quay for handling aluminium oxide in bulk, through floating elevators.

Bulk cargoes handled by grabs at other quays.

STEVEDORES: Gangs for the next day must be ordered by 1100 hrs., vessel's ETA should reach the Agents relevantly in advance.

MEDICAL: No special notice required. Full hospital facilities available.

TANKERS: Berth in No. 4 basin. up to 35,000 d.w.t., brackish water.

DENSITY: Salt content: 0.73%.

FRESH WATER: Available ex-hydrants.

FUEL: Heavy, intermediate and thin fuels, marine diesel oils and gas oils available ex-shore installation or lighter. 48 hours notice required.

DEVELOPMENTS: Dredging along various quays in progress to increase draft allowed.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Opening/closing hatches normally carried out by stevedores, but crew allowed to handle.

CERTIFICATES:

Load Line Certificate.
Cargo Gear Certificates.

CUSTOMS ALLOWANCE: For each 3 days – 160 cigarettes or 30 cigars or 150 g. of tobacco per crew member. Master is allowed double ration. 1 bottle wine and 1 bottle spirits per crew member for each 3 days. Master is allowed double ration.

IDENTIFICATION CARDS: Each member must be in possession of a valid Discharge Book and will receive a separate shore permit issued by the Immigration Authorities entitling him to go ashore within the area of Gydnia–Sopot–Gdansk.

CONSULS:

Belgian V. Consulate	tel. 20–39–83
Brazilian V. Consulate	tel. 21–61–31
Dutch Consulate	tel. 20–06–85
Finnish Consulate	tel. 51–50–52
Italian V. Consulate	tel. 21–51–15

REPAIRS: All types of deck and engine repairs performed by specialised ship repair yard.

DRY DOCKS: 2 floating docks of a lifting capacity of 3,500 and 1,200 tons. 12 slipways of 150 tons lifting capacity each.

REPATRIATION: Crew change and repatriation arrangeable.

AIRPORT: Gdansk Airport, situated 20 km. from Gdynia.

TIME: Middle European Time, which is 1 hour ahead of GMT, kept throughout the year.

HOLIDAYS: New Year's Day (January 1st); Easter Sunday (movable); Easter Monday (movable); Labour Day (May 1st); Corpus Christi (movable); National Holiday (July 22nd); All Saints' Day (November 1st); St. Barbara (only for workers loading coal) (December 4th); Christmas Day (December 25th); Second Christmas Day (December 26th). On Christmas Eve and New Year's Eve work is generally suspended at 1500 hrs. In justified and approved cases overtime on Sundays and holidays is arrangeable.

POLICE/FIRE/AMBULANCE: Police: Gdynia, Chrzanowskiego 6, tel. 21–61–12; Ambulance: Gdynia, Zwirki i Wigury 14, tel. 20–00–02; Fire: Gdynia, Chrzanowskiego 17, Alarm 21–33–33.

TELEPHONES: Available on most general cargo quays.

GENERAL: Cargo is handled around the clock in 3 shifts of 8 hours each. Saturdays are full working days. Sunday and holiday interruptions last from 2300 hrs. on Saturdays or days before holidays and terminate at 2300 hrs. on Sundays or holidays.

AUTHORITY: Port of Gdynia Authority.

AGENTS: Morska Agencja, *Head Office*, Pulaskiego 8 – Gdynia. Tel. 21–49–51 (9 lines) – working from 0730 to 1530 hrs. Telex: 054–301. Cables: "MAG Gdynia".

Harbour Office Gdynia, Rotterdamska 3 – Gdynia. Tel. 20–37–04 (day and night service). Telex: 054–376.

SZCZECIN: 53.25 N. 14.32 E. Including Swinoujscie, 53.55 N. 14.15 E. (See Plan)

DOCUMENTS:

12 copies of Cargo Manifests.
2 copies B/Lading.
Discharge Books to be collected for presentation.
Tonnage Certificate.
4 copies of Crew List.
Maritime Declaration of Health.
Provision List.
Deratisation Certificate.
Sanitary Certificate covering food cargoes and/or of animal origin destined for discharge here.
Specification of Dangerous Cargo (even if in transit).
2 copies Stowage Plans.

PILOTAGE: Contact pilot station, VHF Channel 12, Working. Channel 26 or 27, call sign Polbroker. Light and sound signals used according to international rules. The Pilot is taken on board at the anchorage. Pilot compulsory.

MAX. SIZE: Max. draft at Swinoujscie, 42 ft.; max. draft at Szczecin, 28 ft.; max. length at Swinoujscie, 250 m.; max. length at Szczecin, 200 m.

HEALTH: All ships arriving Szczecin from South of Cap Finistere are subject to sanitary inspection.

RADIO: Szczecin Radio, SPE 2182 Hc/s. Medium frequencies.

TUGS: For ships over 1,500 g.r.t., 1 tug compulsory. Over 3,000 g.r.t., two tugs compulsory. Normally tugs join the vessel at the limits of the port of Szczecin to Kra quay.

BERTHING: Swinoujscie: Portowcow Quay: quay length 215 m., depth alongside 36 ft.

Gornicow Quay: quay length 300 m., depth alongside 42 ft.

Special coal handling installations with capacity up to 33,000 metric tons per day.

Wladyslawa IV Quay: 554 m. length, up to 31 ft. depth alongside.

Szczecin:

Name	*Length*	*Depth alongside*
Katowickie Quay	434 m.	up to 28 ft.
Chorzowskie Quay	290 m.	up to 28 ft.
Gliwickie Quay	263 m.	up to 27 ft.
Bytomskie Quay	330 m.	up to 28 ft.
Coal Conveyors Jetty	188 m.	up to 28 ft.
Walbrzyskie Quay	263 m.	up to 28 ft.
Bydgoskie Quay	110 m.	up to 16 ft.
Poznanskie Quay	65 m.	up to 16 ft.
Gornoslaskie Quay	330 m.	up to 28 ft.
Noteckie Quay	315 m.	up to 20 ft.
Sosnowieckie Quay	100 m.	up to 21 ft.
Parnica Quay	300 m.	up to 20 ft.
Czechoslovackie Quay	1,020 m.	up to 28 ft.
Grain Quay	201 m.	up to 28 ft.
Romanian Quay	1,212 m.	up to 26 ft.
Greek Quay	630 m.	up to 19 ft.
Soviet Union Quay	330 m.	up to 26 ft.
Turkish Quay	104 m.	up to 13 ft.
Starowka Quay	940 m.	up to 19 ft.
Huk Quay	267 m.	up to 20 ft.
Regalica Quay	210 m.	up to 18 ft.

BULK HANDLING FACILITIES: Coal conveyor belts with loading capacity 800 t.p.h.

2 grain elevators capacity 50,000 tons.

At Swinoujscie, 2 automatic conveyors for coal capacity 2,000 t.p.h.

STEVEDORES: 24 hours ETA required to arrange gangs.

MEDICAL: Doctors and hospital facilities available.

TANKERS: Max. draft at Swinoujscie, 34 ft.; max. draft at Szczecin, 21 ft. All empty tankers have to give 24 hours ETA advice whether they are gasfree and name of last cargo carried. No residue discharge facilities.

DENSITY: 1000.

FRESH WATER: Available from water boat, or directly from a quay hydrant. For deliveries of less than 5 tons, the minimum charge is as for 5 tons of water. For the supply of water on Sundays and holidays a surcharge of 25% to be levied.

FUEL: All grades of Shell fuel oil and Castrol marine lubricants.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally opened by crew.

CERTIFICATES:

Health Certificate.
Tonnage Certificate.
Trimming Certificate (Polish form) -if vessel loads coal/coke.

CUSTOMS ALLOWANCE: Each man -160 cigarettes and 1 bottle of spirit. Captain allowed double.

CARGO GEAR: No additional requirements; all gear supplied by stevedores except rain tents.

IDENTIFICATION CARDS: Each member must be in possession of a valid Discharge Book and will receive a separate shore permit issued by the Immigration Authorities entitling him to go ashore within the city area.

CONSULS: Swedish Consulate, Soviet Union Consulate, Czechoslovak Consulate, German D.R. Consulate and Cuban Consulate.

REPAIRS: All types of deck and engine repairs. 2 ship repair yards.

DRY DOCKS: Floating docks with lifting capacity of 8,200 tons 5,500 tons 3×1700 tons, 900 tons, 650 tons.

REPATRIATION: Crew changes and arranging repatriation can be done.

AIRPORT: 45 km. from Szczecin. Regular lines to Warsaw. From

Warsaw communication to every main airport in Europe.
TIME: GMT plus 1 hour; no alterations.
HOLIDAYS: New Year's Day (January 1st); Easter Monday; Labour Day (May 1st); Victory Day (May 9th.); Corpus Christi; National Holiday (July 22nd); All Saint's Day (November 1st); St. Barbara (only for workers loading coal. December 4th); Christmas Day (December 25th); Boxing Day (December 26th).

On Christmas Eve and New Year's Eve work is generally suspended at 1500 hrs. In justified and approved cases overtime on Sundays and holidays is arrangeable.
POLICE/FIRE/AMBULANCE: Police, 997; Port Police, 88068; Ambulance, 999; Fire Brigade, 998.
SHORE LEAVE: Allowed.
AUTHORITY: The Port of Szczecin Authority.
AGENT: Morska Agencja w Szczecinie, 4 Batorego Square POB 606, Szczecin, Tel. 46948, 45235, Telex: 0422147, 0422148, 0422149.

Harbour Office at Szczecin – day and night service tel. 39113, 89742, Telex: 0422235.

Harbour Office at Swinoujscie – tel. 3821. Telex: 0422330.

Harbour Office at Kolobrzeg – tel. 2788, Telex: 05337.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Portugal

AVEIRO: 40.39 N. 08.45 W.

PORT LIMITS: A vessel is considered "arrived" when she is 2 miles from the roads entrance.

DOCUMENTS: Health Certificate.

5 Crew Lists.
4 Lists of Passengers Disembarked.
2 Lists of Passengers in Transit.
5 Cargo Manifests.
1 Manifest of Cargo in Transit.
1 Provision List and Spares.

PILOTAGE: Send ETA to Agent by cable, 24 hours before arrival. Entrance depending on sea conditions and ship's draft. Contact Aveiro Pilots frequency 2182 and listen on frequency 2132 on the following periods: 0905/0915, 1105/1115, 1505/1515, 1705/1715 hrs. local time.

Pilots can be contacted by VHF Channel 16 during the same periods.

Pilot boat displays white flag, surrounded by narrow blue stripe, with black "P" in the centre. Pilot to be taken on board about 1 mile West of harbour entrance; vessel awaiting Pilot can anchor there, if weather permits.

Pilot station, located close to Aveiro lighthouse, hoists black cylinder on signal mast when entry not possible due to bad weather or any abnormal cause. Pilot station has radar that can assist vessels during approach to harbour entrance.

ANCHORAGES: Anchor W. of North Pier, at a distance of more than 0.75 mile.

RESTRICTIONS: Subject tide and bar conditions. Entering and sailing only during daylight.

MAX. SIZE: Max. draft between 16 to 18 ft. dependent on tide. Max. length 90 m.

HEALTH: Free pratique automatic for vessels coming from other Portuguese and Continental ports. Vessels coming from other countries; Health Certificate must be delivered to Agent.

RADIO: Call Aveiro Pilots during the hours above indicated, under "Pilotage". Radio station is Lisboa Radio.

TUGS: 2 tugs. 1 of 200 h.p. and 1 of 500 h.p.

BERTHING: A quay with 1,300 ft. length for handling general cargo; ten gangways in concrete for ocean fishing boats; four electrical cranes of 3, 6 and 12 tons and eleven mobile cranes for cargo-handling up to 8 tons.

SPECIALISED CARGO-HANDLING FACILITIES: A terminal for handling wine, chemicals and turpentine, another for handling liquid combustibles and chemicals.

STEVEDORES: Advise Agent 24 hours before vessel's arrival.

MEDICAL: Hospital and clinics in town. Advance notice not required. Required vaccination certificate, and when ship comes from affected regions, also yellow fever certificate.

TANKERS: Private quay of SACOR used by small-sized tankers.

DENSITY: About 1028.

FRESH WATER: Supplied by barges or tank-car or water net system. 20 t.p.h.

FUEL: Only diesel available. Smaller quantities supplied from trucks. Otherwise, from SACOR's private quay (pipe-line).

DEVELOPMENTS: Dredging harbour entrance.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Work usually done by crew.

CUSTOMS ALLOWANCE: 125 grams tobacco, and 1 bottle wine/spirits for each man.

CREW IDENTIFICATION CARDS: Crew members going ashore will need a special card issued by State Police. Ship's agent takes these cards aboard, where they are filled in accordance with crew list. See "Lisbon".

CONSULS: Nearest Oporto, 60 km.

REPAIRS: Minor repairs can be carried out.

DRY DOCKS: 1 for vessels up to 1200 d.w.t.

REPATRIATION: No difficulties for crew repatriations.

AIRPORT: Pedras Rubras (Oporto airport) at about 60 km., with 2 flights per day to Lisbon and 1 flight per week to London.

Lisbon airport at 250 km. is served by regular airlines covering all the world.

TIME: From September 26th to March 26th – GMT. From March 26th to September 26th – GMT plus 1 hour.

HOLIDAYS: New Year's Day; Portugal's Day (25th April); Workers' Day (1st May); 16th May (Municipal holiday); Race's Day (10th June); Corpus Christi (movable); Proclamation of the Republic (5th Oct.); All Saint's Day (1st Nov.); Independence of Portugal (1st Dec.); Immaculate Conception (8th Dec.); Christmas Day. No work allowed on Christmas Day and New Year's Day.

POLICE/FIRE/AMBULANCE: Police 22022; Ambulance 115; Fire 22333.

TELEPHONES: None available on board.

SHORE-LEAVE: Crew allowed ashore.

DELAYS: As a tidal port, arrivals respectively sailings subject tides. Delays may occur owing bad weather especially the Winter months.

AUTHORITY: Capitania do porto de Aveiro. Junta Autonoma do Porto de Aveiro.

AGENTS: A. J. Goncalves de Moraes, Lda, 49 Av. Dr. Lourenco Peixinho, Aveiro. Tel. 24550. Telex 22690. Cables: Amoras. Steamship and Forwarding Agents, Chartering and Brokers, Insurance Agents, Stevedores.

FIGUEIRA DA FOZ: 40.09 N. 08.52 W.

DOCUMENTS:

Health Certificate (the Pilot supplies form).
5 Crew Lists.
4 Lists of Passengers Disembarking.
2 Lists of Passengers in Transit.
5 Cargo Manifests.
1 Manifest of Cargo in Transit.
Provision and Spares List.
2 copies each Bill of Lading.

PILOTAGE: Compulsory. Send ETA to Agent by cable 24 hours before arrival. Convenient try arrive 1 hour before high tide. Call Figueira-Pesca frequency 2182 and listen on frequency 1785 or 1834. Await Pilot 0.5 mile from the piers. VHF Channel 16 is being used experimentally.

ANCHORAGES: South of N.W. Azimuth of North Pier, at a distance of more than 0.5 mile.

RESTRICTIONS: No services during night.

MAX. SIZE: Max. draft 12 ft. Max. length 65 m.

HEALTH: Free pratique authorised for vessels coming from other Portugese Continental ports. For vessels coming from other countries, Health Declaration supplied by the Pilot must be filled in.

RADIO: Figueira — Pesca listens on 2182 Khz permanently, except between 1900 hrs. (on Saturday) till 0100 hrs. (On Monday).

TUGS: 2 tugs available, 200 h.p. and 120 h.p.

BERTHING: The port is in the mouth of the Mondego River. The anchorage is on sand and outside the harbour.

Concrete Quay: Length 360 m. Depth 6 m. Cranage : Three electric – two 6 ton at 20 m. and one 3 ton at 16 m. Four mobile – one 1.8 ton at 12 m. and three 1.5 ton at 8 m.

Wood Quay: Length 140 m. Depth 3 m. Cranage: One 6 ton crane.

Tidal Harbour: Water area 6 ha. Length of quayage 600 m.

Depths on Bar: M.H.W.S.T. 3.8 m. M.H.W.N.T. 3.00 m.

There is about 320 m. of quayage for small ships and fishing craft.

STEVEDORES: Advise agent 24 hours before arrival.

MEDICAL: No prior advice is necessary. All medical facilities available.

DENSITY: About 1028.

FRESH WATER: Each quay has its own installations.

FUEL: Only diesel available.

DEVELOPMENT: Dredging in progress.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Work usually done by crew.

CUSTOMS ALLOWANCE: No limit, but must be declared.

IDENTIFICATION CARDS: See Lisbon.

CONSULS: France, Spain and Great Britain.

REPAIRS: There is a shipyard and repair facilities, also a shipway for ships up to 4,000 tons.

REPATRIATION: No difficulty in crew repatriations.

TIME: From last Sunday September till last Sunday March (GMT) and the rest of the year GMT plus 1 hour.

HOLIDAYS: New Year's Day; Saint Friday; 25th April; 1st May; Corpus Christi (movable); 10th June; 15th August; 5th October; All Saint's Day (1st November); 1st December; 8th December; 24th December; 25th December.

Also holiday on 24th June.

POLICE/FIRE/AMBULANCE: Police 22022; Ambulance 22122; Fire 22122.

SHORE LEAVE: Crew allowed ashore.

DELAYS: As a tidal port, arrivals respectively sailings subject tides. Delays may occur owing to bad weather especially during winter months.

AGENTS: A. J. Goncalves de Moraes, Lda., Rua da Republica, 262- Figueira da Foz — Portugal. Tel. 22584. Telex: 1707. Agents, Chartering and Brokers, Insurance Agents, Travel Agents, Stevedores.

LEIXOES and OPORTO (Douro River): (See Plan)

Leixoes: 41.11 N. 08.43 W. Oporto: 41.09 N. 08.37 W.

DOCUMENTS:

Health Certificate.
5 Crew Lists.
Provision List — ship and individual.
Tobacco Declaration and Entrance Forms supplied by Agent on arrival.
5 Manifests and 2 copies of each B/L concerning cargo to be discharged.
1 Transit Manifest if cargo in transit exists.

PILOTAGE: Always compulsory for ships calling Oporto (Douro River) and Leixoes. Approximate ETA should be given to Agent with ample notice. Contact radar station or Pilot station VHF at any time, Channel 16. Boats black, white flag. Pilots to be taken on board in the roads. Entering or sailing Douro River only during daylight and subject to tide.

ANCHORAGES: Leixoes in the roads or outer-harbour. Douro in the roads or river.

RESTRICTIONS: Douro: subject tide and bar conditions.

MAX. SIZE: Douro River: Max. draft 14 ft. and length about 60 m. subject to Bar and weather conditions.

Leixoes: Can accommodate tankers up to 52 ft. and cargo ships of 31 ft.

HEALTH: Free pratique authorised for vessels coming from other Portuguese Continental Ports. For vessels coming from other countries. Health Declaration supplied by the Pilot must be filled in, and delivered to the Agent.

RADIO: Within 50 miles Estacao Radar Leixoes, or through Lisbon Radio Station.

RADAR/VHF: Estacao da Radar de Leixoes, Contacts radar/VHF. Range 50 miles. Channel 16, 13, 12 and 29.

TUGS: Normally join the vessel: *At Leixoes:* In the outer harbour up to 700 g.r.t.; from 700 up to 1,800 g.r.t. 1 tug compulsory. Over 1,800 g.r.t., 2 or more tugs required.

At Douro River: as a rule service necessary on arrival/sailings. Thus join the vessel after passing the bar.

BERTHING *Outer Harbour:* The depth of water at the entrance and in the centre of the outer harbour is 10.00 m. at MLWST; Maximum rise of tides 3.99 m.; Minimum rise of tides 0.07 m.; Total water area 117.36 ha.; Breadth of entrance (harbour) 220.05 m.; Breadth of entrance (dock No. 1) 70.10 m.

Dock No. 1: Length of North Quay 487 m.; South Quay 551 m.; Maximum draft 31 ft.

Dock No. 2: Length of North Quay 670 m. and South Quay 743 m.; Maximum draft 31 ft.

South Mole: Length of Quay 370 m.; Maximum draft 22 ft.

Dock No. 2 South Container Terminal: This facility has a quay length of 150 m. (492 ft.) with a depth of water alongside of 11 m. (36 ft.) There is a total area of 5.5 hectares (13.59 acres) of which 4.5 hectares (11.12 acres) are used for container marshalling and storage. It is equipped with one 30-ton Liebherr container gantry crane with an outreach of 24.38 m. (80 ft.), two 30-ton Karricon 3043 straddle-carriers, capable of stacking three high, two 35-ton side-loaders, capable of stacking two high, and two 12-ton container transporters.

CRANES: *Dock No. 1:* One 94-ton crane, two 5-ton cranes, eight 3-ton cranes and one 15-ton crane.

Dock No. 2: Two 15-ton cranes and thirty-one 5-ton cranes.

South Mole: One 50-ton crane; six 5-ton and one 2.5-ton crane.

BRIDGES: Bridge at Leixoes between Dock 1 and Dock 2 opening regularly.

STEVEDORES: Ordered by Agents according berth and cargo.

MEDICAL: Masters to advise by radio prior to arrival if medical attendance is required on board. Hospital facilities available.

TANKERS: *Berth A:* This is outside the outer harbour; depth of water 17.00 m.; deadweight capacity 135,000 tons.

Berth B; This is within the outer harbour; depth of water 9.70 m.; deadweight capacity 27,000 tons.

Berth C: Located within the outer harbour; depth of water 5.70 m.; deadweight capacity 5,000 tons.

DENSITY: 1026.

FRESH WATER: Can be supplied by shore installations or barge, according to quay.

FUEL: All grades available. Supplied by oil-carriers or pipe-line and by barge at all berths.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Work always done by crew.

CERTIFICATES:

Ship register. Safety Equipment.
Safety Radio. Load Line and Derating Certificates.

IDENTIFICATION CARDS: See Lisbon.

CONSULS:

Austria	Tel.	32328	Ireland	Tel.	27243
Belgium	,,	23508	Italy	,,	26243
Bolivia*	,,	391111	Japan*	,,	690961
Brazil	,,	24463	Malawi	,,	673801
Chile	,,	28421	Mexico	,,	54151
Colombia	,,	67254	Nicaragua	,,	29731
Denmark*	,,	933655	Norway	,,	27243
Dominica	,,	21938	Peru	,,	23435
Ecuador	,,	36753	Spain	,,	25213
France	,,	23349	Sweden	,,	27243
Germany	,,	65132	Switzerland	,,	26742
Great Britain	,,	684789	South Africa	,,	22277
Greece	,,	22277	Turkey	,,	25150
Holland	,,	24867	*On the coast.		

REPAIRS: All types of deck engine and electrical repairs can be carried out.

DRY DOCKS: Only small dry docks available for fishing-boats.

REPATRIATION: No difficulties for crew changes or repatriations.

AIRPORT: Distances: Oporto 17 km., Leixoes 7 km. Airport served twice a day through Lisbon Airport.

TIME: GMT plus 1 hour and no alterations during the year.

HOLIDAYS: New Year's Day; Good Friday; 25th April; Work Day; Portugal's Day (10th June); Corpus Christi (movable); Ascension Day (15th August); Proclamation of the Republic (Oct. 5th); All Saints' Day (Nov. 1st); Independence of Portugal (Dec. 1st); Immaculate Conception (Dec. 8th); Christmas Day.

POLICE/AMBULANCE/FIRE: Leixoes: Police 933427; Ambulance 115/930018; 932701; Fire 9953334/932701. Oporto: Police 26821; Ambulance 115/484121; Fire 484121/390121.

TELEPHONES: Only available on certain quays.

SERVICES: Limited tank-cleaning may be performed. Discharge of tank washings subject port authorisation. Compass adjusting possible.

SHORE LEAVE: Crew allowed ashore.

AUTHORITY: Administracao dos Portos do Douro e Leixoes.

AGENTS: A. J. Goncalves de Moraes, Lda., Rua da Nova Alfandega, 18 — POB 185 — Porto, Portugal. Tel. 28741 (14 lines) Telex: 2381-2382. After office hours; Hugo L. Myhre 690481; Jorge Barreira 492501. Agents, Chartering and Brokers, Insurance Agents, Travel Agents, Chartering and Brokers, Insurance Agents, Travel Agents, Stevedores.

LISBON: 38.43 N. 09.11 W. (See Plan)

PORT LIMITS: A vessel is considered to be an "arrived vessel" when, after entering the Tagus Estuary, she has left behind the alignment between the Torre of S. Juliao and the Torre of Bugio.

DOCUMENTS:

Health Certificate.
6 Crew Lists.
10 Passenger Lists.
2 Lists of Articles held by the crew: cameras, binoculars, radios, cigarettes, spirits, etc.
2 Stores Lists.
All to be signed by ship's Master.

Certificates for vessels up to 500 tons: – tonnage register, loading and navigation certificates. For vessels over 500 tons: – tonnage register; loadline; radio; safety equipment and navigation certificates.

CARGO DOCUMENTS:

10 Manifests.
3 sets of Bills of Lading.
For cargo in transit: 2 Manifests.

PILOTAGE: Compulsory. Pilot boat anchored outside the river at Cascais Bay, day and night, but Pilot can also board vessel inside the river at Belem Station.

Pilots are to be requested not less than 6 hours or more than 24 hours prior to the ship's arrival, by a radiogram addressed to "Pilotos Lisboa", or by a radio call direct to the pilot boat stating ship's name, estimated time arrival at the pilotage area, the station where ship wants to take a Pilot, and vessel's draft. Any vessel failing to correct her ETA or arriving more than 2 hours after her ETA may have to wait at Cascais before a pilot is available to board.

Pilots can be contacted by VHF Channels 13 and 16, on permanent watch, and by radio-telephone 2182 kHz.

MAX. SIZE: Depth alongside piers varying between 15 and 34 ft.

HEALTH: Ordinary visit made at central area with vessel anchored, from 0800 hrs. to sunset. Master may ask for free pratique to get ship moored immediately on arrival. For this, necessary to cable the Health Authorities, addressing cable as follows: Estacao Maritima de Lisboa, Rocha do Conde de Obidos, max./min. respectively 15/6 hours prior to the ship's arrival. Text of cable: "ship's name, nationality, code (MIBDU), day and time of arrival" signed by the Master.

RADIO: ETA to be advised by Master, to Agent, 24 and 12 hours before ship's arrival. Lisboa Radio: call sign CUL, medium and short waves by code 720, 22, 24. By VHF Channels 5, 9, 21, 16 and 19.

BERTHING: Subject to berth availability.

SPECIALISED CARGO-HANDLING FACILITIES: *Container Terminal* at Santa Apolonia equipped with two portainers of 30 and 36 tons respectively, side loaders, semi trailers, tractors, etc., depth 8.5 m.

Roll-on/roll-off Terminal at Alcantara for ferry boats and cargo.

Grain Elevators and Silos at Poco do Bispo operated by Federacao Nacional dos Produtores de Trigo. Unloading by elevator up to 400 t.p.h.

Ore Terminal: At Barreiro there is a terminal for unloading ore from railway wagons to lighters, intended for carrying ore, in particular, to the national steel works (Siderurgia Nacional).

Cement Storage Terminal: This is at Poco do Bispo and is operated by Secil.

STEVEDORES: Ordered by Agents according berth and cargo.

MEDICAL: Masters to advise by radio prior arrival if medical attendance required on board. Hospital facilities available.

TANKERS: Shell, Petrogal and Esso berths exposed to 3–4 knots HWST current. Essential to use good new mooring lines.

Cabo Ruivo Terminal: This is operated, on a concession basis, by Soponata and has depths of 11 m., capable of mooring tankers up to 65,000 d.w.t. alongside its jetty.

Fuel Oil Facilities: The port of Lisbon fuel oil installations belong to private companies and are concentrated along both banks of the Tagus at the following points:

Sacavem and Cabo Ruivo (with oil refinery facilities), Montijo, Barreiro, Santa Iria, Porto Brandao, Porto dos Buchos.

DENSITY: 1025.

FRESH WATER: Usually supplied by barge unless vessel lying alongside a pier where water provided.

FUEL: Shell, Esso, Petrogal. These companies can supply through their own barges or alongside their private bunkering stations on pier.

IDENTIFICATION CARDS: Crew members going ashore will need a special yellow card issued by Agent and stamped with police visa. The cards are supplied by Agent to be completed on board in accordance with crew list particulars. With these shore passes crew members may circulate between Lisbon and Cascais, and Lisbon and Sintra.

Master and/or Owners will be fined Esc. $1,000 for any crew member found ashore without that card. A double fine will be imposed in case of recurrence.

Similar cards, but white, are required for passengers in transit.

CONSULS: Practically all countries are represented in Lisbon.

REPAIRS: There are several repair work-shops. The biggest is Lisnave Shipyard with several docks, one for vessels up to 300,000 tons and a new dock where vessels up to 1,000,000 tons can be repaired.

AIRPORT: Within the Lisbon area. Regular International services.

REPATRIATION: No difficulties for crew changes or repatriation.

POLICE/AMBULANCE/FIRE: Maritime Police 608104; Ambulance 115; Fire 322222.

TIME: September 26th–March 26th – GMT. March 26th–September 26th – GMT plus one hour.
HOLIDAYS: 1st January; 25th April; 1st May; 29th May; 10th June; 15th August; 5th October; 1st November; 1st December; 8th December; 25th December.
DEVELOPMENTS: In a second stage of the Santa Apolonia container terminal there will be a new wharf of 500 m. length, with water depths of 13.5 m. and a close levelled paved ground area of nearly 50,000 sq. m. will be prepared. This terminal will have, when completed, an 850 m. long wharf and a close paved area of 75,000 sq.m.

This second stage will also include two roll-on/roll-off berths, as well as lift-on/lift-off equipment. It is operated by the Port Authority.
AUTHORITY: Administracao Geral do Porto de Lisbon.

AGENTS: A. J. Goncalves de Moraes, Lda., 22, Rua do Alecrim – Lisbon-2. P.O. Box 2772. Tel. 364943–366671. Telex 12296/7/8. Cables: Amoras. Steamship and Forwarding Agents, Chartering and Brokers, Insurance Agents, Stevedores.

SETUBAL: 38.30 N. 08.55 W.

DOCUMENTS:
- 5 Crew Lists.
- 5 Passenger Lists.
- Personal belongings of the Crew (portable radio, binoculars, cameras, etc).
- Store List.
- Health Declaration.

For cargo: Dangerous Cargo List. Cargo Manifest. Transit Cargo Manifest (if any). Copy of B/L.
PILOTAGE: The pilotage service is supplied exclusively by the "Corporacao de Pilotos do Rio e da Barra de Setubal" which runs a permanent service.

To assure prompt attention requests for Pilots must be made in the following manner:

Entries: To send at least 6 hours beforehand a radiotelegram or a radiotelephone message preferably on S.S.B./AM to Pilotos de Setubal giving the name of the ship, ETA and draft.

This information must be confirmed on VHF or IF two hours before the ship arrives at the bar.

Departures and movement in the River: Between 0800 hrs. and 18.00 hrs. on weekdays and 0800 hrs. and 1300 hrs. on Saturdays. Sundays and holidays, to communicate by telephone or on VHF with the "Estacao de Pilotos de Setubal" at least one hour beforehand, giving the name of the ship, the time and place where the Pilot is required and the service needed.

Only in cases of emergency will requests be accepted outside these hours.

To effect requests for Pilots, the Corporacao de Pilotos de Setubal use the following means of communication:

VHF — Listening permanently on Channel 16 (156.80 m/cs.) being able to reply on any of the following Channels as requested: 6, 8, 13, 16, 18, 22, and 73.

IF — Listening in permanently on 2182 kc/s., replying Pilotos de Setubal on 2132 kc/s., their working frequency. Once contact has been established ships must change to this frequency. Communications can be made in SSB or AM according to the equipment of the ship.

Telephone of CTT — No. 22914.

The Pilots embark by motor launch based in Setubal and waiting near the fort at Portinho da Arrabida when necessary and the weather permits.

To increase speed and safety on embarking and disembarking, ships of more than 4,000 tons gross, when light, and those of greater capacity in any condition, unless they have a door in the side or other modern means for Pilots to board and leave, and if the weather permits, should lower the gangway to about 3 m. above sea level and fix a rope-ladder so that it stays alongside the lower platform of the gangway.

Bad weather from the South, causing breaking waves at the edge of the shoals, sometimes prevents the pilotage service from operating.

In such conditions, ship must contact the Pilotos de Setubal to discover the state of the bar and limitations imposed on the pilotage service.
ANCHORAGE: Only inside harbour with a Pilot aboard.
RESTRICTIONS: No restrictions on night entry. At low tide vessels only up to 22 ft. draft. Max. draft 27 ft., length/breadth no restrictions.
HEALTH: Free pratique automatically given when ships come from other Portuguese port. Otherwise, Health Certificate is to be handed over to Health Authorities during clearance procedures.
RADIO: Call through Lisbon Radio.
TUGS: 5 available.
STEVEDORES: Ordered by the Agent some time in advance.
MEDICAL: Prior to arrival and in order not to delay ship's clearance, Master should inform by radio if medical assistance required, this only in case of contagious or epidemic diseases.
TANKERS: Shell Maritime installation with private pier. Discharge lines 4 in., 6 in. and 8 in.
DENSITY: About 1026.
FRESH WATER: Supplied from shore to all piers.
FUEL: Ordinary fuel available at Shell Installation to ships holding contract with Shell; or fuel supplied from lorry if ship holds contract with other company.
FIRE PRECAUTIONS: No smoking on deck or piers.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: By crew unless otherwise specified in C/P. Stevedores usually help.
CUSTOMS ALLOWANCE: About 200 cigarettes and 2 bottles of spirits per man.
CARGO GEAR: Supplied by stevedores.
IDENTIFICATION CARDS: Supplied and filled in by the Agent. Crew members cannot leave Three Castles area (Setubal-Palmela-Sesimbra) without a special permit from Customs Guards obtained through Agency.
CONSULS:

Finland	tel. 26018
France	" 24612
Spain	" 22018

REPAIRS: All types available. Lisnave shipyard and dry docks at Lisbon within about 50 miles.
DEVELOPMENT: Setenave is presently building a Shipyard for new building and repairs for very large ships in the estuary of Setubal.

The facilities will consist of: 1 repair dock for ships up to 1,000,000 d.w.t. 1 repair dock for ships up to 350,000 d.w.t. New building berth for ships up to 700,000 d.w.t.
REPATRIATION: All facilities.
AIRPORT: Nearest at Lisbon, about 50 miles away.
TIME: From September 26th to March 26th — GMT. From March 26th to September 26th — GMT plus 1 hour.
AUTHORITY: Junta Autonoma do Porto, Setubal.

AGENT: — A. J. Goncalves de Moraes, Lda., 281, Av. Luisa Todi-Setubal. Tel. 22399. Telex 16212. Cables: Amoras. Steamship and Forwarding Agents, Chartering and Brokers, Insurance Agents, Stevedores.

VIANA DO CASTELO: 41.41 N. 08.50 W.

DOCUMENTS: Health Declaration.
- 3 Crew lists.
- Provision list (ships and individual).
- Tobacco Declaration and Entrance Forms supplied by Agents on arrival.
- 2 Manifests and 1 copy of each Bill of Lading concerning cargo to be discharged.
- 1 Transit Manifest if cargo in transit exists.

PILOTAGE: Always compulsory. ETA should be given to Agent with ample notice. Signals; during the day Flag "G" of International Code, and at night 3 long whistles. Boats black with white cabins. Pilots to be taken on board in outer or inner harbour respectively with bad or good weather.
ANCHORAGES: Outer or inner harbour according to weather conditions.
RESTRICTIONS: Entering and sailing only during daylight unless exceptionally good weather.
MAX. SIZE: Max. draft 15 ft. on HWST and 13 ft. on HWNT, with good sea conditions. Max. breadth 13 m.
HEALTH: Free pratique authorised for vessels coming from other Portuguese Continental ports. For vessels coming from other countries Health Declaration must be filled in and delivered to the Agents.
RADIO: Call Viana do Castelo Pilots frequency 2182 kc/s. and listen on 2132 kc/s.
TUGS: No tugs.
BRIDGES: One bridge which allows entrance/sailing at any time.
STEVEDORES: Ordered by Agents 8 hours in advance.
MEDICAL: No prior advice is necessary.
FRESH WATER: Supplied by shore installations.
FUEL: Only small quantities of gas-oil can be supplied.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Work usually done by crew.
CUSTOMS ALLOWANCE: No limit, but must be declared.
IDENTIFICATION CARDS: Required.
CONSULS: France 22412. Spain 23018.
REPAIRS: All types of deck, engine and electrical repairs can be carried out.
DRY DOCKS: Three dry docks available.

	Length	*breadth*	*draft*
Dock 1	203 m.	34.0 m.	18 ft.
Dock 2	127 m.	18.5 m.	18 ft.
Dock Eng. D. Pacheco	104 m.	11.0 m.	16 ft.
Fitting Dock	190 m.	65.0 m.	21 ft.

No special equipment for tank washing is available.
REPATRIATION: No difficulties for crew repatriation.
AIRPORT: Nearest Oporto airport at 55 km.
TIME: From September 26th to March 26th – GMT. From March 26th to September 26th – GMT plus 1 hour.
HOLIDAYS: 1st January; Holy Friday; 25th April; 1st May; Corpus Christi; 10th June; 15th August; 5th October; 1st November; 1st, 8th, 24th and 25th December.
POLICE/AMBULANCE/FIRE: Tel. 115.
SHORE LEAVE: Crew allowed ashore.
AUTHORITY: Junta Autonoma dos Portos do Norte.

AGENTS: Antonio C. Esperanca, Largo 5 de Outubro, 32 -Viana do Castelo. Tel. 22320 and 22100. Telegraphic address A. Esperanca. Agents, Stevedores, Insurance, Brokers.

VILA REAL DE SANTO ANTONIO:
37.10 N. 07.26 W.

DOCUMENTS:
- 2 Health Certificates.
- 3 Crew Lists.
- 1 List of Passengers in Transit.
- 2 Lists of Passengers Disembarking.
- 2 Dangerous Cargo Lists.
- 1 Ship's Register.
- 1 Tonnage Certificate.

PILOTAGE: Black boat, wooden hull, white "P" at bow. Stationed near buoy No. 1 (harbour entrance). All sea-going vessels entering or leaving harbour are obliged to avail themselves of the services of a Pilot. Latest 24 hours before prior arrival cable "Corporacao dos Pilotos de Vila Real de Santo Antonio" or to Agent. Departing vessels should apply for their Pilots at least 6 hours before the time of departure.

MAX. SIZE: Entrance channel 4,000 m. long, has a depth of 4 m. (12 ft.) at LW. Vessels drawing up to 5.5 m. (16 ft.) can enter under normal circumstances 1 hour before HW, a keel clearance about 1 ft. will be maintained.

TUGS: Tugs up to 105 h.p. available.

BERTHING: 1 pier 300 m. long. Depth at pier 20 ft.

STEVEDORES: Ordered by Agents. ETA to stevedores is necessary. No work allowed on Sundays.

MEDICAL: Inoculations in hospital Marques Pombal -Vila Real de Santo Antonio.

FRESH WATER: Obtainable alongside quay.

FUEL: Gas-oil can be supplied in small quantities.

GANGWAY/DECK WATCHMEN: Compulsory.

OPENING/CLOSING HATCHES: Crew allowed open and close.

CUSTOMS ALLOWANCE: About 200 cigarettes and 1 bottle of spirits per man.

CONSULS:
- Britain, Falconer, Rua Dr. Oliveira Salazar, No. 4
- Netherlands, Matias Gomes, Avenida da Republica, 73
- France, Santiago Ponce Medeiros, Avenida da Republica, No. 114
- Finland, Emilio Garcia Ramirez, Avenida da Republica, No. 133
- Greece, Jose Rodrigues Marques, Avenida da Republica, No. 109
- Italy, Mario Parodi, Avenida da Republica, No. 11

REPAIRS: There is 1 small ship-repair yard at Vila Real de Santo Antonio.

HOLIDAYS: 1st January; Holy Friday; April 25th; 1st May; 10th June; 15th August; 5th October; 1st November: 1st December; 8th December; 24th December; 25th December.

POLICE/AMBULANCE/FIRE: Police 66; Ambulance 202; Fire Brigade 202.

AUTHORITY: Junta Autonoma dos Portos and Delegacao Aduaneira de Vila Real de Santo Antonio.

AGENT: See "Lisbon".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Puerto Rico

AGUADILLA: 18.22 N. 67.12 W.

DOCUMENTS:
- 1 copy of Inward Foreign Manifest (U.S. Customs Form 5727-A), Cargo for San Juan.
- 1 Stores List.
- 1 Crew Purchase List.
- 1 Passenger List (if any).
- 1 Crew List (U.S. Form 1-418).
- 1 copy of Ships in Transit Cargo Manifest.
- Clearance from Last Port.

PILOTAGE: Mayaguez's Pilots provide service in Aguadilla. Advise ETA in good time to Aguadilla Terminal.
RESTRICTIONS: Open port, very deep, safe in good weather. Cold fronts from North cause very heavy swells. Cannot berth during this kind of weather.
MAX. SIZE: 600 ft. long, 36 ft. draft.
HEALTH: Advise arrival to Aguadilla Terminal Inc. for free pratique.
BERTHING: The Aguadilla Shipping Terminal operates a bulk sugar-loading facility. Sugar-loading vessels tie-up on mooring buoys. There is 40 ft. or more depth at the outer end of the bulk sugar-loading berth. Ship ties up to 4 buoys and two bollards at main tower. Spring lines needed for shifting. Terminal boat handles lines, no charge; ship's lines not less than 600 ft. long.
MEDICAL: 24 hours notice preferred; 90 miles for nearest hospital except emergencies.
TANKERS: Molasses tankers -10 in. connection (loading only). Only sugar and molasses loaded at the only loading facility available. Rate 66 t.p.h. sugar; 500 t.p.h. molasses.

There is also a mooring buoys and pile clusters berth for the tanker traffic that supply aviation gas for Ramey Air Force Base.
FRESH WATER: Available. 2 in. pipe-line with meter, 40 c/ton.
GANGWAY/DECK WATCHMEN: Usually crew members are used.
OPENING/CLOSING HATCHES: Performed by stevedores.
CERTIFICATES/CUSTOMS ALLOWANCE: U.S. Customs regulations.
IDENTIFICATION CARDS: Required to go ashore.
CONSULS: No local representation.
REPATRIATION: Can be arranged.
AIRPORT: 20 minutes drive. Regular airlines.
TIME: Atlantic Std. Time, 4 hour less than GMT. No alterations during year.
HOLIDAYS: Refer to "San Juan".
SHORE LEAVE: Allowed.
DELAYS: No delays unless another ship is already berthed.
AUTHORITY: Puerto Rico Ports Authority, Harbour Master.

GUANICA: 17.57 N. 66.54 W.

DOCUMENTS/GENERAL INFORMATION: Refer to "Ponce".
PILOTAGE: Port operations are under the control of the Captain of the port. Pilot services are available day and night.
ANCHORAGE: Harbour is located 8 miles Westward of Guayanilla Bay. Though small, it is one of the best hurricane harbours in Puerto Rico.
TUGS: Available from Guayanilla.
BERTHING: Pier facilities are owned by the Guanica Central and used for bulk sugar shipments and limited general cargo operations. On the East side of the harbour entrance there is a reinforced concrete bulkhead wharf 700 ft. long with depths of 28 ft. alongside for the handling of bulk fertilisers. Small craft landings and facilities are along the boulevard fronting the beach.
FRESH WATER: Available in limited quantities for emergencies only.
FUEL: Available by trucks from Ponce.
MEDICAL: Medical assistance is available; if hospitalisation is required for any crew member, it will probably be necessary to arrange for admittance to a Ponce hospital.
CONSULS: None available locally, nearest at Ponce, Puerto Rico.
AUTHORITY: Port Captain, Puerto Rico Ports Authority.

GUAYANILLA: 18.00 N. 66.46 W. (See Plan)

Oil Terminal owned by Commonwealth Oil Refining Co.
DOCUMENTS/GENERAL INFORMATION: Refer to "San Juan".
PILOTAGE: Port operations are under the control of the Captain of the port and pilot services are available day and night.
ANCHORAGE: It is the largest hurricane harbour and one of the best in Puerto Rico. Available for vessels of any draft. The harbour is protected at its entrance by extensive reefs which extend a mile or more offshore. The entrance channel between these reefs is about 1.5 miles long and about 0.4 mile wide.
MAX. SIZE: Tankers up to 680 ft. LOA, with max. draft 35 ft. 6 in. forward and 38 ft. aft.
TUGS: Available 24 hours daily, as requested by vessel.
BERTHING: Fuel dock. 2×680 ft. berths with 36 ft. 06 in. depth alongside. Mooring buoys placed to assist in clearing dock and mooring dolphins. No slop disposal facilities. The Union Carbide Company has berthing facilities for barge operations.

New port facilities for Commonwealth Oil Refining Co. and Pittsburgh Plate Glass are owned by the Puerto Rico Ports Authority.
FRESH WATER: Available whenever requested by the vessel.
FUEL: Available only whenever arranged by owners of the vessel and/or charterers prior to arrival.
MEDICAL: Medical service is available; hospitalisation at Ponce, which is only 15 minutes distance.
CONSULS: None available locally; nearest at Ponce, Puerto Rico.
AUTHORITY: Commonwealth of Puerto Rico — Harbour Master. Port facilities are operated and owned by the oil refinery.

JOBOS (Aguirre): 17.56 N. 66.13 W.

DOCUMENTS/GENERAL INFORMATION: Refer to "Ponce".
PILOTAGE: The Port of Jobos is served by the Pilots of Port Ponce. Services must be arranged in advance.
ANCHORAGE: A fine land-locked harbour, located on the South coast, approx. 42 nautical miles Eastward of Ponce and 20 miles West of Point Tuna. Anchorage inside the bay is Southward of the pier in depths of 19–24 ft. soft mud bottom.
RESTRICTIONS: The principal entrance is from Westward between Morrillo Cay and Ratones Cay, thence through buoyed channel to the bulk sugar-loading pier at Central Aguirre. Private range lights mark the dredged cuts. Controlling depth is 28.5 ft.
TUGS: No tug-boats available.
BERTHING: A 1,000 ft. finger pier at Central Aguirre, 29 ft. depth alongside. Pipe-lines for water and molasses, a conveyor belt for bulk sugar and a gantry crane are on the pier.
FRESH WATER: Fresh water is available at this dock.
FUEL: No bunkers are available at this dock.
MEDICAL: Medical assistance is available; if hospitalisation is required for any crew member, it will probably be necessary to arrange for admittance to a Ponce hospital.
CONSULS: None available locally; nearest available at Ponce.
AUTHORITY: Puerto Rico Ports Authority, port facilities owned and operated by Central Aguirre Sugar Company.

LAS MAREAS: (Guayama) 17.55 N. 66.10 W. (See Plan)

The Puerto de las Mareas Terminal is located on the South side of the island of Puerto Rico. It is located approximately 26 nautical miles East of the port of Ponce. The nearest city is Guayama. All vessels calling at Phillips Puerto Rico Core Inc., Puerto de las Mareas Terminal should be consigned to Phillips Puerto Rico Core Inc., and all official documents for such ships should show them so consigned. In conformance with port regulations, no vessel will be allowed to tie up alongside a pier without having first obtained a berthing permit from the Ports Authority Captain of the port.
DOCUMENTS: The following documents are required by the Customs and Immigration Authorities for entry and clearance:
- Master's Oath (Original and 1 copy).
- Stores List (Original and 2 copies).
- Crew Purchasing List (Curio List) (Original and 2 copies).
- Inward Foreign Manifest (Original and 3 copies).
- Quarantine Free Pratique (will be furnished by Doctor).
- Deratisation Certificate (in date).
- Crew List (1 certified and 2 not certified copies).
- Clearance from Last Port (depends on sailing port).
- Crewmen Landing Permits (for each crew member without the plastic Form I-189).
- Passenger List (if any passengers).

The Passenger List must show full names, sex, age, nationality, and occupation of passengers landing at Puerto de las Mareas. The ultimate destination of in-transit passengers must also be shown in the passenger list.

Deratisation Certificates can be renewed at the port.

In most cases, outward clearance and cargo documents can be delivered on board by the Ship's Agent, making it unnecessary for Masters to obtain such clearance in person from the U.S. Customs Office.
PILOTAGE: The use of Pilots is compulsory for all vessels, with the

exception of American Flag vessels bound to or arriving from a U.S. port which may dispense with Pilots provided the vessel has on board a deck officer qualified and licensed by the United States Coast Guard, as a harbour Pilot for Puerto de las Mareas. Vessel's Agent will arrange for Pilot, upon notification in the arrival notice, who will board inbound vessels off the entrance to the harbour about 1 mile off-shore.

When approaching the dock and channel, vessels must have one anchor, to be designated by the Pilot, free of the hawse pipe and ready for quick release if necessary to stop the vessel.

Every vessel requiring a Pilot must provide, properly rigged and secured, a pilot ladder which conforms to international safety standards. When picking up or dismissing the Pilot, the vessel must heave-to and provide a lee with the pilot ladder rigged on the lee side.

APPROACHES: The harbour is entered through a channel 250 ft. in width and its narrowest portion, bearing N. 25° E. It is protected on the Eastern side by a rubble mound breakwater extending approximately 700 ft. from the shore line. The dredged channel extends out to the 40-ft. depth contour and has a width at this contour of approximately 900 ft., narrowing to 250 ft. approximately 2,100 ft. inshore from the 40-ft. contour. The 250-ft. wide portion of the channel is approximately 1,000 ft. long. At the inshore end of the 250-ft. wide channel, the harbour itself extends for a length of 2,300 ft. and a maximum width of 950 ft. The harbour has a depth of 38 ft. below mean low water. The above dimensions are given to the bottom of the channel; the sides of the channel and the harbour are sloped at 1 in 3.

NAVIGATIONAL AIDS: (A) Seabuoy: The Seabuoy is located 300 ft. West of the centre line of the channel 2 miles offshore from the end of the rubble mound breakwater. It displays a white light through 360° flashing 0.4 second on and 3.6 second off. The buoy is painted with black and white vertical stripes and is fitted with a radar reflector.

(B) Channel Marker Buoys: 2 lighted channel marker buoys are provided, located 550 ft. on either side of the centre line of the channel, 2,024 ft. offshore from the end of the rubble mound breakwater. These are lighted and marked as follows:

(i) Port-to (inbound vessels). This buoy has a 360° green light, flashing 0.5 second on and 2.0 seconds off. It is equipped with day-boards 3 ft. square, and painted black with green reflective perimeter.

(ii) Starboard-to (inbound vessels): This buoy is a 360° red light, flashing 0.5 second on and 2.0 seconds off. It is equipped with triangular day-boards 4 ft. by 4 ft., painted red.

(Both these buoys are located at the 40-ft. depth contour.)

(C) Channel Marker Navigation Lights: There are 4 channel marker navigation lights, 3 of which are located on piling, and 1 on the end of the rubble mound breakwater.

(i) Port-to (inbound vessels): This marker is located on piping 400 ft. from the centre line of the channel, 2,024 ft. inshore from the channel marker buoys. The light is located 20 ft. above MLW, and is displayed through 360°. It is a green light, flashing 0.5 second on, 2.0 seconds off. The marker is fitted with 3 ft. square day-boards, painted black with reflecting green perimeter.

(ii) Starboard-to (inbound vessels): This marker is located on a tower at the end of the rubble mound breakwater, 50 ft. above MLW. The light is displayed through 360°, red, flashing 0.5 second on and 2.0 seconds off. The marker is equipped with 4 ft. by 4 ft. red triangular day-boards.

(iii) Port-to (inbound vessels): This marker is located 175 ft. from the centre line of the channel 1,000 ft. inshore from the end of the rubble mound breakwater. It is equipped with a green light showing through 360°, flashing 0.5 second on and 2.0 seconds off. The light is located 20 ft. above MLW. The marker is equipped with 3 ft. square day-board, painted black with green reflective perimeter.

(iv) Starboard-to (inbound vessels): This marker is located 175 ft. from the centre line of the channel, 1,295 ft. from the end of the rubble mound breakwater, and is mounted on piling with the light 20 ft. above MLW. It is equipped with a 360° red light, flashing 0.5 second on and 2.0 seconds off. The marker is equipped with red day boards 4 ft. by 4 ft. triangular in shape.

(D) Obstruction Light: This light is mounted on the turning dolphin and displays a 360° steady red light.

(E) Range Lights: The front range light is mounted on a tower located on the centre line of the channel. It consists of a set of double red aircraft warning lights 75 ft. above MLW. It is fitted with 4 ft. by 8 ft. day-boards, painted with red-orange reflective coating. The light is located 3,500 ft. inshore from the end of the rubble mound breakwater.

The back range light is located on the centre line of the channel, 5,500 ft. inshore from the end of the rubble mound breakwater. The light consists of a set of double red aircraft warning lights, 110 ft. above MLW. The tower is fitted with 6 ft. by 12 ft. day-boards painted with red-orange reflective coating with a 3 ft. white stripe down the centre.

RESTRICTIONS: The entrance channel has a depth below MLW of 40 ft. and the harbour itself has a depth of 38 ft. below MLW. Shipmasters are cautioned that swells in the approach channel can increase the draft of their vessels, therefore caution must be exercised in entering the channel in periods of heavy weather.

RADIO: Agents of vessels or owners or its representatives should advise Phillips Puerto Rico Core Inc. by telex, cable or telephone, 72 hours, 48 hours, and again 24 hours before their expected arrival at the sea buoy.

ITT Telex No. 385347 "Philcorgya".
Puerto Rico Communication Authority-Telex No. 347.
Telephone (809) 864-1515.

Incoming vessels should advise the Agent by radio 48 hours and again 24 hours before their expected arrival at the sea buoy. Coast stations available for such advice are:

Lantana Radio (WOE) -Lake Worth, Florida. (Equipped with RCA automatic land-line circuit direct to New York City, San Francisco, California and Washington, D.C.)

New York Radio (WNY) -New York City. (Equipped with RCA automatic land-line circuit direct to New York City, San Francisco, California, Washington, D.C. Also equipped with teletypewriter (TWX) for direct communication with steamship companies in the United States having this equipment.)

Chatham Radio (WCC) -Chatham, Massachusetts. (Equipped with RCA automatic land-line circuit direct to New York City, San Francisco, California, Washington, D.C.)

San Juan Radio (WCT) -Radio Corporation of Puerto Rico Marine Station, Transmits at 2530 kc/s., receives at 2134 kc/s., watch at 2182 kc/s.

In addition to the above commercial radio facilities, incoming vessels may contact the port through facilities on tug stationed at the port. These facilities are as follows:

HF radio:	range 2 to 300 miles. 2182 kc., working frequencies 2638 and 2738.
VHF radio:	range 30 miles. Channel 16 (156.8 Mc/s), working frequency Channel 14 (156.7 Mc/s).
SSB radio:	12 Mc/s, 8 Mc/s, 4 Mc/s.

Vessels diverted to Puerto de las Mareas must furnish the required 48-hour and 24-hour notices of arrival, unless notice of diversion is received when less than 48 hours before anticipated arrival, in which case the notice of arrival will be given as soon as notice of diversion is received. In such cases, however, Phillips Puerto Rico Core Inc. reserves the right to refuse to load or unload such vessels if tankage is not available for the cargo, or if cargo is not available to loading.

TUGS: As a safety measure, Masters of vessels calling at Las Mareas are advised to engage tugboat assistance on arrival, turn ship around, and tie up alongside the pier, heading bow out to sea. Arrangements for the use of tugboats should be made well in advance of vessel's arrival of the sea buoy.

BERTHING: The dock at the terminal consists of a finger pier approximately 1,122 ft. in length inside the harbour with a tanker loading berth on each side. The finger pier consists of a cargo platform 45 ft. by 90 ft., with fitted fender piling and dolphins. The cargo platform is connected to shore by a driveway 12 ft. 6 in. wide. The mooring and breasting dolphins outboard of the cargo platform are connected to each other and to the platform by a walkway. No launches are required to handle mooring lines. The top of the cargo platform is 12 ft. above MLW level. Water depth alongside the finger pier is 38 ft. at MLW. There is no current at the dock or in the harbour.

The fender system and breasting dolphins are designed to withstand the forces exerted by a vessel of 81,300 tons displacement approaching the dock with a velocity component perpendicular to the dock face of 0.30 ft. per second.

Bollards for mooring lines are provided on the breasting dolphins, the mooring dolphins and the turning dolphins. Each of the bollards and their associated dolphins are designed to withstand 120,000 pounds of mooring line tension.

Vessels will be required to vacate berths promptly on completion of loading or discharging cargo. Permission to use a berth when not loading or discharging cargo may be granted under special circumstances, and must be requested in writing to captain of the port.

Vessels will be allowed 1 hour in which to vacate the berth after completion of cargo handling, to start when the last hose is disconnected.

Three hours will be allowed for ballasting at the berth after completion of discharging cargo. Vessels awaiting cargo papers and/or Customs clearance must vacate the berth on expiration of allowed time and move to anchorage to wait for delivery of the papers.

If the vessel fails to vacate the berth on the expiration of the allowed time, it will be held liable for payment of any demurrage and/or damages incurred by Phillips Puerto Rico Core Inc., as a result of delays to other vessels waiting berths, or for any other consequence of its failure promptly to vacate the berth.

Turning basin 1,100 ft. wide and 1,060 ft. long, outboard of the turning dolphin, is provided. The turning basin has a depth over its entire area of 38 ft. at MLW. The turning dolphin at the end of the finger pier is designed to assist vessels in turning in the basin. Normal procedure will be for vessels to enter the harbour and turn prior to docking. In the case of loaded vessels entering the harbour, they may, at the Master's discretion, wait until they have discharged, and turn just prior to leaving the harbour.

HURRICANES: The South coast of Puerto Rico is subject to winds of hurricane force, accompanied by abnormally high tides, during the late Summer and Fall. In the event of such abnormal conditions, vessels may be required to put out additional moorings, or if necessary, to suspend all operations and put to sea until normal conditions prevail.

MEDICAL: U.S. Public Health Service doctors will be available for attendance on vessels at Puerto de las Mareas, upon receipt of notice 48 hours prior to arrival. If hospitalisation is required for any crew member, arrangement could be made through the ship's Agent with hospitals located in the municipality of Guayama. Ambulance service can be furnished through request to Agent.

TANKERS: The various cargoes available at the Puerto de las Mareas terminal include motor fuel, cyclohexane, benzene, paraxylene, orthoxylene, mixed xylenes, paraffinic naphtha, and other special products. Feedstock for Phillips Puerto Rico Core Inc. facilities is naphtha, and there is a fuel oil unloading line. Cargo handling is accomplished through various sizes of lines, as follows:

Product	*Hose size (in.) (each side of dock)*	*Line size*	*Loading/ discharging rate with one pump*
Naphtha feedstock	4-8	20	13,700 bph
Motor fuel	3-8	20	12,000 bph
Motor fuel	2-8	12	5,700 bph
Benzene	1-8	12	2,000 bph
Cyclohexane	1-8	10	3,000 bph
Mixed xylene	1-8	12	3,400 bph
Orthoxylene (high purity)	1-6	8	800 bph
Orthoxylene (standard purity)	1-6	8	2,600 bph
Paraffinic naphtha	2-8	16	7,500 bph
Paraxylene	1-6	8	2,000 bph
Toluene	1-8	8	2,000 bph
Fuel oil	1-8	12	2,000 bph
Ballast	1-8	8	3,000 bph
Domestic water	1-2	2	7 tph

CONNECTING/DISCONNECTING HOSES: A crew will be provided by the terminal to connect and disconnect hoses on the ship. Vessels are requested to have blanks removed from the cargo lines and hose handling booms rigged on arrival at the dock.

READINESS: Notice of Readiness to load or discharge is warranty that the vessel is in all respects ready to receive or discharge cargo, and that the vessel's equipment is ready and capable of loading or discharging petroleum or petrochemical products. Phillips Puerto Rico Core Inc. reserves the right to refuse to accept such notice of readiness if, upon inspection, the vessel is found not to be ready to receive or discharge cargo. Vessels will be accepted loading or discharging on a "first come, first served" basis. Vessels may tender notice of readiness upon arrival, berth or no berth, according to the terms of the charter party or contract of affreightment under which they have been engaged.

BALLAST: Ship's Masters are reminded that they are prohibited by Puerto Rico law from pumping dirty ballast overboard when within the Puerto Rican limits. Facilities are provided for disposing of dirty ballast ashore at Puerto de las Mareas. Vessels provided with separate clean ballast systems completely segregated from the cargo system and reserved for clean ballast only, may pump ballast overboard from such systems while at the dock, provided the tanks are inspected and approved for such pumping by the Dockmaster. Heavy fines are enforced for any discharge of dirty ballast, and due to the limited area of harbour, any violations will be quickly detected and reported.

Ballast is pumped ashore through an 8-in. line, capable of receiving at a pressure at the ship's rail of 100 psi. The ballast facilities are sufficient to accommodate 30,000 barrels of dirty ballast. Vessels are requested to arrive with minimum of dirty ballast.

FRESH WATER: Available at the dock in limited quantities.

FUEL: No bunkers available at Puerto de las Mareas. In an emergency, bunkers may be delivered by barge from Ponce. In such cases, however, special permission must be obtained from the Harbour Master to take bunkers from the barge while loading or discharging cargo. Lubricating oils may be obtained from Ponce.

STORES: May be ordered through the ship's Agent for delivery at the terminal, but must be ordered at least 48 hours prior to vessel's arrival.

CONSULS: Consular representatives of the following nations are available in Ponce:

Venezuela Dominican Republic Spain
France Netherlands Sweden
Panama Honduras

Further information can be obtained through the Agent.

REPAIRS: Complete repair and dry dock facilities are available in San Juan. Limited facilities for emergency repairs are availabe at Ponce. Requests for such services should be made to the Agent 24 hours prior to arrival.

SURVEYORS: There are no classification society surveyors stationed at Puerto de las Mareas, but they are available on call from Ponce or San Juan. Requests for survey services should be made through the vessel's Agent at least 24 hours prior to arrival.

CARGO INSPECTION: Representatives of Chas. Martin Inspectors of Petroleum Inc. will be available for cargo quantity and quality inspection as required. Address: POB 1017, Guayama, Puerto Rico 00654. Telephone: (809) 864-0428, 864-1515.

CUSTOMS: U.S. Customs and Immigration Authorities will board vessels at the dock, except in unusual circumstances, in which case they will board the vessel at anchor outside the harbour. The vessels will be required to furnish an accommodation ladder.

American Flag vessels will not require Customs entry or clearance unless arriving or departing to a foreign port.

HEALTH: The usual regulations concerning sanitation apply to the Harbour of Puerto de las Mareas. The use of rat guards on all lines is compulsory, under penalty of fines for failure to comply. Trash and galley refuse may not be dumped into the waters of the harbour and must be kept on board until the vessel has sailed. Discharge of toilets and bathrooms into waters of the harbour is prohibited. Sanitary facilities are provided on the dock for use by crew members while their vessels are at berth.

FIREARMS: All firearms and ammunition should be shown on the stores list and may not be removed from the vessel during its stay in Puerto Rican waters. Any violations of this regulation will result in fines and confiscation of firearms and ammunition.

SAFETY: The provisions of Part 35 "Operations" of the Rule and Regulations to Tankvessels, Subchapter D (CG-123) published by the U.S. Coast Guard are in force at Puerto de las Mareas, and must be observed under penalty of fine and imprisonment as provided therein.

Particular attention is called to the following safety precautions:

(1) Vessels must be, and remain, in readiness to sail from the dock at any time. In the event of engine repairs, which might interfere with such readiness to sail, being required, written permission must be obtained from the Harbour Master before such repairs may be undertaken.

(2) Scuppers must be plugged during cargo-handling operations.

(3) Absolutely no smoking or open lights will be permitted on the dock or open decks.

(4) Screens in good conditicns must be used over gauging hatches when not actually gauging.

(5) Operations may be suspended at the discretion of the Master, or may be required to be suspended by the Harbour Master, during severe electrical storms.

(6) In the event of a breakdown of communications between dock and the shore terminal during loading operations, and the need to shut off the flow of cargo to the vessel, an emergency signal consisting of a continuous sounding of the ship's whistle shall be given. The signal shall not be discontinued until the flow of the cargo has been shut off.

(7) An electrical bonding cable will be provided from the dock to the ship. This bonding cable must be firmly secured to a clean metal surface of the vessel's hull or cargo piping before hoses are connected, and must remain in place until the hoses are disconnected.

Violations of these and other safety regulations, as described in Parts 35 of Subchapter D will result in the suspension of cargo-handling operations by the Harbour Master, or the PPRC dock personnel or safety inspectors, without recourse. Such suspension of cargo operations will continue until the violations are corrected or the safety hazards removed.

MAIL: Official and personal mail may be addressed to the vessel in care of the Agent, and will be delivered to the vessel by the Agent on arrival. The Agent will accept official and personal mail from the vessel, and will ensure its delivery to the local U.S. Post Office, upon receipt of a mail transmittal slip to support disbursements.

SHORE LEAVE: Normally, there are no restrictions on shore leave. In order to avoid sailing delays, due to late return of crew members, Masters are requested to ensure that all crew members are aboard at sailing time.

Crew of foreign vessels must present valid passports, current individual International Vaccination Certificates, and a copy of Form I-95, properly filled out, in order to be passed through the terminal gates.

Taxi service is available from Guayama and may be called from the gate.

AUTHORITY: Puerto Rico Ports Authority; port facilities operated by Phillips, P.R. Core, Inc.

MAYAGUEZ: 18.12 N. 67.09 W.

DOCUMENTS: If vessel staying less than 24 hours:

Crew List.
Stores List.
Cargo Manifest.
Crew Purchase List.
Valid Load-line Certificate.
Ship's Register.
Clearance from Previous Port.

Vessels working cargo. 2 sets of documents to be prepared as follows:

Original:

1 copy of Inward Foreign Manifest (U.S. Customs Forms 5727-A), Cargo for San Juan.
1 Stores List.
1 Crew Purchase List.
1 Passenger List (if any).
1 Crew List (U.S. Form 1-418).
1 copy of Ship's in Transit Cargo Manifest.
Clearance from Last Port.

Duplicate:

Same as original except the in-transit Cargo Manifest.
If vessel has on board cargo for another American port, an extra copy of the original Cargo Manifest is required.
Crew members to declare individually all articles such as souvenirs, etc.

Agents require:

3 sets of Bills of Lading.
2 copies of Manifest (for San Juan only).
1 copy of Crew List.
1 copy of Stores List.
1 copy of Crew Purchases List.
1 copy of Narcotics List.
1 copy of Passengers List.

Certificates:

Valid Load Line Certificate.
Ship's Register.
U.S. Tonnage Tax Certificates (if any).

PILOTAGE: Ships Agents must make arrangements with Captain of the Port Office at Mayaguez Pier well in advance, not less than 24 hours, of arrival of vessel at harbour entrance. Pilot boats are painted black (hull) and white (topside) as required, showing the letter "P" on each bow. Pilots board 1 to 2 miles offshore of sea buoy depending on weather conditions. Pilot service available day and night.

ANCHORAGES: Close to the entrance channel and boundaries. Sufficient depths for larger vessels.

RESTRICTIONS: The bay is easily entered day or night and is a good harbour in any weather, except in a hurricane. The harbour is 3.8 miles wide, and offshore is protected by shoals which extend across the harbour entrance in a general North by West direction.

The principal channel is about 0.4 mile wide, with depths at the entrance of about 47 to 120 ft. and it is marked by lighted buoys and the range. Depth in the inner channel is approximately 30 ft. and close alongside the pier from 28 to 29 ft.

MAX. SIZE: Cargo vessels 600 ft. or more in length call at the port. Safe draft for operations at the wharf is 27 ft.

RADIO: Communication to all points, including ships at sea, is available through commercial systems. Cables-Telex via RCA Communications, Inc., a global service of Radio Corporation of America. ITT World Communications, Inc., tel. 830-3316. Puerto Rico Telephone Company, local and overseas communications services, 129 and 128.

TUGS: Not used at Mayaguez Port.

BERTHING: Berthing permit required from the Ports Authority. The Puerto Rico Ports Authority operates the terminal facilities which consist of a bulkhead wharf approximately 1,200 ft. long, apron width, 30 ft., and transit sheds. There are other berthing facilities in the port which are owned by the tuna packing plants.

STEVEDORES: Arrangements are made by the ship's Agents or representatives.

MEDICAL: The Agent should know in advance any medical needs so that he can make the necessary arrangements with the U.S. Public Health Service. Good medical and hospital services available.

TANKERS: See "Port of Guayanilla". Regular calls from Esso and Texaco to unload fuel by means of barges in order to supply tanks on land by means of pipes located at berthing facilities.

FRESH WATER: Available at pier facilities alongside the berth in 4 outlets to supply any amount required at any time. Hose connections of 2.5 in. or less, maximum pressure.

FUEL: All grades available.

FIRE PRECAUTIONS: Standard fire and safety precautions throughout. U.S. Coast Guard regulations.

DEVELOPMENTS: it is planned to locate a heavy lift crane on the berth facility.

GANGWAY/DECK WATCHMEN: Ship provides own gangway watchmen.

OPENING/CLOSING HATCHES: By stevedores.

IDENTIFICATION CARDS: Required to go ashore.

CONSULS: Dominican Republic, France, tel. 832-4322. Others at San Juan.

REPAIRS: Call San Juan facilities where complete salvage equipment is available. Service to other ports of the island.

REPATRIATION: Arranged by ship's Agents.

AIRPORT: Mani Airport, 15 minutes from pier, served by regular airlines daily from Mayaguez to San Juan.

TIME: GMT minus 4 hours all year round.

HOLIDAYS: Refer to "San Juan".

POLICE/AMBULANCE/FIRE: Telephone numbers: Police, 343-2020, 832-2300; Ambulance, 832-0496, 832-3212; Fire, 343-2330, 832-2330.

TELEPHONES: Can be arranged by Puerto Rico Telephone Company.

SHORE LEAVE: Allowed.

AUTHORITY: Puerto Rico Ports Authority.

PONCE: 17.58 N. 66.37 W.

DOCUMENTS: If vessel staying less than 24 hours:
Crew List.
Stores List.
Cargo Manifests.
Crew Purchase List.
Valid Load Line Certificate.
Ship's Register.
Clearance from Previous Port.

Vessels working cargo: 2 sets of documents to be prepared as follows;
Original:
1 copy of Inward Foreign Manifest (U.S. Customs Form 5727-A), Cargo for San Juan.
1 Stores List.
1 Crew Purchase List.
1 Passenger List (if any).
1 Crew List (U.S. Form 1-418).
1 copy of Ship's in Transit Cargo Manifest.
Clearance from Last Port.
Duplicate:
Same as original except the in-transit Cargo Manifest.
If vessel has on board cargo for another American port, an extra copy of the original Cargo Manifest is required.
Crew members to declare individually all articles such as souvenirs, etc.

Agents require:
3 sets of Bills of Lading.
2 copies of Manifest (for San Juan only).
1 copy of Crew List.
1 copy of Stores List.
1 copy of Crew Purchases List.
1 copy of Narcotics List.
1 copy of Passengers List.
Certificates:
Valid Load Line Certificate.
Ship's Register.
U.S. Tonnage Tax Certificates (if any).

PILOTAGE: Port operations are under the supervision of the Captain of the Port and pilot services are available day and night.

ANCHORAGE: Harbour is protected from the prevailing Easterly trade winds by enclosing reefs. To the Southward the harbour is exposed and for this reason is not safe in a hurricane.

RESTRICTIONS: Depths: Entrance channel 36 ft.; turning basin, 31 ft.; anchorage, 40 ft.

BERTHING: The municipal pier is a concrete and steel construction 430 ft. long by 100 ft. wide, with a steel and cement transit shed. The municipality has also built a concrete bulkhead wharf extending East-West for 2,260 ft. from the pier. To the North of the bulkhead wharf there is a manoeuvring basin 30 ft. deep. Depth alongside: Pier 1A, 30 ft.; Pier 2, 29 ft. 6 in.; Pier 3, 30 ft.; Pier 4, 30 ft.; Pier 5, East-side, 33 ft.; Pier 5, West-side, 32 ft.

FRESH WATER: Water is available whenever ordered in advance for 24 hour daily service or at request during office hours.

FUEL: Available by pipe-line: (Texaco only) diesel, gas oil, No. 6 fuel oil. By trucks (Chevron, Shell, Esso).

MEDICAL: Ambulance permanently available at dock area, hospital and doctors service available as requested to the Agent.

CONSULS:
Colombia
Denmark
Dominican Republic
France
Honduras
Holland
Panama
Spain
Sweden
Switzerland

REPATRIATION: Arranged by ship's Agents.

TIME: GMT minus 4 hours.

HOLIDAYS: Refer to "San Juan".

DEVELOPMENTS: The expansion of the 260 ft. N.-S. bulkhead is completed and length increased to 600 ft. There is a 76 ton gantry crane in operation.

The Trailer wharf is completed but not operational as no crane available.

The Port Board is working on the development of a dry dock for ship repair.

AUTHORITY: Muelles Municipales de Ponce.

SAN JUAN: 18.28 N. 66.07 W. (See Plan)

DOCUMENTS: Foreign vessel calling for fuelling purposes and staying less than 24 hours:
Crew List.
Stores List.
Cargo Manifests.
Crew Purchase List.
Valid Load Line Certificate.
Ship's Register.
Clearance from Previous Port.

No Customs formal entry or clearance is required if vessel departs before 24 hours and transacts no other business related to cargo or passengers.

Vessels working cargo. 2 sets of documents to be prepared as follows:
Original:
1 copy of Inward Foreign Manifest (U.S. Customs Form 5727-A), Cargo for San Juan.
1 Stores List.
1 Crew Purchase List.
1 Passenger List (if any).
1 Crew List (U.S. Form I-418).
1 copy of Ship's in-transit Cargo Manifest.
Clearance from Last Port.
Duplicate:
Same as original except the in-transit Cargo Manifest.
If vessel has on board cargo for another American port, an extra copy of the original Cargo Manifest is required.
Crew members to declare individually all articles such as souvenirs, etc.

Agents require:
3 sets of Bills of Lading.
2 copies of Manifest (for San Juan only).
1 copy of Crew List.
1 copy of Stores List.
1 copy of Crew Purchases List.
1 copy of Narcotics List.
1 copy of Passengers List.

U.S. Customs clearances: Documents required:
Outward Foreign Manifest.
Crew List in duplicate (American vessels only).

(Functions of admeasurement and documentation of American vessels are performed by the office of Marine Inspection, U.S. Coast Guard, Post Office Building, San Juan, Puerto Rico).

Consular clearances for the Dominican Republic:
5 copies of Crew List.
5 copies of List of Weapons and Ammunitions on board.
5 Lists of Passengers.

Consular clearances for Venezuela:
6 copies of Store List.
8 copies of Crew List.
7 copies of Passengers List.

Purser shall supply the Agents with necessary information to fill the inward and out bound cargo reports which have to be filled at Customs House after departure of the vessel.

Customs Inspector requires:
Valid Load Line Certificate.
Ship's Register.
U.S. Tonnage Tax Certificates (if any).

PILOTAGE: Compulsory. Ships Agents must make arrangements with Pilot station well in advance – not less than 24 hours – of arrival of vessel at harbour entrance. Pilot boats are painted black (hull) and white (topside). Show the letter "P" on each bow. Pilots board 3 miles offshore of sea buoy. Call Pilot station on Channel 16 VHF. There is no inner anchorage for incoming vessels to wait for the Pilot.

ANCHORAGES: Deep draft anchorage "E", on the S.W. shore of Isla Grande, is for vessels awaiting Customs or quarantine, and no vessel shall remain more than 24 hours without a permit from the Commonwealth and U.S. Coast Guard Captain of the Port. Restricted Anchorage "F" (Fox), shoreward of the West margin of Anegado Channel, is for vessels discharging explosives. No vessel shall anchor without a permit from the Captain of the Port. Anchorage "D", East end of San Antonio Channel, is for yachts, schooners and small craft.

RESTRICTIONS: Besides the harbour entrance channel (Bar Channel) and the main ship channel (Anegado Channel) with depths of 42 ft. and 36 ft., respectively, there are 4 other navigable channels in the inner harbour:

The Army Terminal Channel, which runs in a straight North to South direction is approximately 1 mile long and 300 ft. wide. Charted Depth in the Army Terminal Channel and alongside Piers 1 and 3 is 35 ft., safe draft 33 ft. Depth in other channels varies 30 to 32 ft. and alongside pier facilities 28-30 ft.

The Puerto Nuevo Channel, approximately 1 mile long, 300 ft. wide, with an average depth of 32 ft.

The Graving Dock Channel, approximately 1 mile long, 300 ft. wide, with an average depth of 30 ft.

San Antonio Channel, approximately 1.5 miles long, 300 yards wide, mid-channel average depth 35 ft.

MAX. SIZE: Cargo vessels 750 ft. in length call regularly at the Port of San Juan. Channel to tanker's berth, 36 ft.

RADIO: Radio communication to all points, including ships at sea, is available through commercial systems. Cables-Telex via RCA Communications, Inc., a global service of Radio Corporation of America, tel. 723-6170, San Juan, Puerto Rico.

The signal station at Fort San Cristobal in San Juan harbour is manned around the clock for radio-telephone communication with incoming and outgoing ships traffic. Transmitting vessels can communicate with the station through 156.8 mHz (Channel 16) for call and reply and working Channel 14, 156.7 mHz.

Vessels approaching to enter San Juan Harbour shall remain outside not less than 3 miles Northerly of the harbour entrance to pick up the Pilot, and vessels about ready to depart shall inform the signal station via radio-telephone of their intentions.

TUGS: Caribe Tugboat Corp., tel. 724-2427, and Port San Juan Towing Company, tel. 724-2360, operate a fleet of tug-boats. Tugs join vessel just inside harbour entrance.

Use of tug-boats compulsory for docking and undocking vessels 8,000 tons displacement and over unless equipped with bow or side thrusters.

BERTHING: All vessels must request and obtain well in advance before arrival a berthing permit from the Ports Authority.

Pier 1: North shore of the harbour, in the Old San Juan waterfront, East of Customs Building and next Westerly to the ferryboat landing. Modern twin berth, 770 ft. long, double deck, cruise and passenger vessels terminal, pierside passenger and baggage gangways, elevators, parking and shopping. Water and light facilities available.

Ferry Terminal: Next Easterly to Pier 1. Ferry terminal for the San Juan-Catano ferry fleet.

Pier 3: North shore of the harbour, Old San Juan waterfront next Easterly to the ferry terminal. Tourists ships terminal similar to Pier 1. Depths in the approaches and alongside tourist piers 35 ft.

Wharf No. 6: An extension of the open bulkhead Easterly of Pier 3 marginal wharf, 940 ft. long, accommodates cruise and passengers vessels. Water and light facilities available.

Pier 7: Northerly continuation of Pier No. 6, 472 ft. long, 1 berth, general cargo pier. Operated by the San Juan Dock Company.

Pier 8: East of Pier 7, finger pier, 3 berths, general cargo pier. Transit shed area and other covered storage 175,508 sq. ft. open area 40,000 sq. ft. Water and light facilities available.

Pier 9: East of Pier 8. Finger pier, 3 berths, general cargo pier. Net storage space pier shed 133,738 sq. ft. open area 40,000 sq. ft. Water and light facilities available.

Pier 10: North shore of San Antonio Channel. East of Pier 9. Finger pier, 1 berth, tug and barge terminal. No transit shed space. Water, fuelling facilities and light available.

Wharf No. 11: East of Pier 10, marginal wharf, 1 berth, 580 ft. of bulkhead, general cargo pier. Transit shed area 100,000 sq. ft. ample back area. Gulf Puerto Rico Lines' pier. Water and light facilities available.

Wharf No. 12: An extension of Wharf No. 11 Bulkhead 550 ft. long, wide apron, 15,000 sq. ft. transit shed area, 37,000 sq. ft. open storage. General cargo wharves. Water and light facilities available.

Wharf No. 13: Prolongation of Wharf No. 12: 28,000 sq. ft. transit shed area, 55,000 ft. open storage area, general cargo wharf. Water and light facilities.

Pier 14: Extension of Piers 12–13 bulkhead; marginal wharf, general cargo pier, wide apron. 446 ft. long, 40,000 sq. ft. transit shed area, ample back area. Water and light facilities available.

Frontier Base Pier: Navy facility operated by the Puerto Rico Ports Authority under contract. 2 berths for sea-going vessels. Depth alongside 30 ft. Principally used for the handling of open storage cargo and the berthing of cruise vessels and conventional ocean carriers handling open storage cargo.

Isla Grande Terminal: South shore of San Antonio Channel. Marginal wharf. 1,500 ft. long bulkhead. Wide aprons. Transit shed 32,000 sq. ft. with 240,000 sq. ft. of paved open area. Easterly section of bulkhead for shallow draft vessels.

Container terminals:

(a) In Westerly section P.R. Maritime Shipping Authority lift-on-lift-off trailership terminal; bulkhead wharf 950 ft. long. Wide apron, ample trailers marshalling yards. 2×45 tons capacity container handling cranes.

(b) On the South shore, berthing facilities, 300 ft. bulkhead wharf with adjacent areas for TMT's roll-on/roll-off operations. Shoreside concrete ramp extending out seaward. Tug-barge operation, loading and unloading through bow and side ramps. Max. draft approximately 18 ft.

(c) Interisland Intermodal Inc. roll-on/roll-off shoreside ramp, barge-tug operation; loading and unloading at bow. Max. draft 18 ft.

U.S. Navy property under lease and operated by the Puerto Rico Ports Authority.

Pier 15/16: General cargo pier. Dry dock, floating dock, ship repairs, foundry. 1 wooden floating dry dock of 1,000 tons capacity. Floating crane 25 tons lifting capacity. 4 mobile cranes 45 tons capacity. Reinforced concrete graving dock. Fuel and water available. United States Navy installation under lease to Abarca Dry Dock and Marine Terminals for commercial ship repair and dry-docking operations. Bulkhead wharf and finger pier used by commercial vessels.

Puerto Nuevo Docks: Terminals "A" and "B" marginal wharves. 2×500 ft. berths. 102,000 sq. ft. transit shed area. 2 cargo sheds. 30 ft. depth alongside. General cargo piers. Limited open storage area.

Trailership Terminals: (3 at Isla Grande port zone, above, 10 at Puerto Nuevo port zone. Berths C, E, F, G, H, J, K, L, M and N and West side Army Terminal).

Berth "C": P.R. Maritime Shipping Authority's roll-on/roll-off terminal. Shoreside movable ramps for side loading and unloading. Extra wide pier platform, ample trailer marshalling yards. 30 ft. depth alongside, approximately.

Berth "D": 100,000 sq. ft. of transit shed space for break-bulk operations and cargo stripping. Marginal wharf 40 ft. wide, 600 ft. long. Ample cargo shed used for distributing cargo coming in trailers for different consignees. Ample trailer marshalling yard. 30 ft. depth alongside, approximately.

Berths "E", "F", "G", "H", "J", "K", "L", "M" and "N": 600 ft. each, continuous bulkhead wharves, lift-on/lift-off operation. Max. draft alongside 30 ft. Extra wide pier platforms. Ample trailer marshalling yards. Five 25 ton capacity pierside cranes are installed at Berth "E" to "H".

Army Terminal Pier: Finger pier; 3 berths. Approximately 50,000 sq. ft. transit shed area. East and West berths 600 ft. each. North berth 200 ft. Under the control of the Ports Authority. West side, ramp for roll-on/roll-off operation.

Isla de Cabras Pier: Explosives handling pier at Isla de Cabras. Ports Authority property.

Bulk Grain Handling Facilities: Berthing, silos and other shoreside installations for the receipt of shipments of bulk grains (Nebraska Mills, California Rice Mills, Red Seal, etc.).

STEVEDORES: Arranged by the ship's Agents.

MEDICAL: Medical attendance and services are available for seamen at the United States Marine Hospital in San Juan (out-patients). The Presbyterian Hospital handles internal cases.

TANKERS: Caribbean Oil Refinery pile clusters berth, max. permitted draft 33 ft.; Navy Oil Pier, max. permitted draft, 29 ft.

FRESH WATER: Most of the piers have adequate installations to supply water.

FUEL: Served in barges either alongside the vessel at the pier or at anchor. Other combustible liquids are delivered in tank trucks by Shell, Esso and Texaco.

REPAIRS: Abarca Dry Dock and Marine Terminals handles dry docking and major vessel's repairs. San Juan Shipyard and Marina, at Isla Grande, and Vaello Shipyard at La Puntilla, Catano, operate marine railways for dry-docking and repairs of small vessels. The Puerto Rico Lighterage Company handles minor ship repairs.

DEVELOPMENTS: 2 additional trailership berths are under construction at the Puerto Nuevo port sector.

GANGWAY/DECK WATCHMEN: Ship provides own gangway watchmen.

OPENING/CLOSING HATCHES: By stevedores.

IDENTIFICATION CARDS: Required to go ashore.

CONSULS:

Belgium	tel. 725-3179	Honduras	tel. 723-5230
Bolivia	,, 723-0180	Italy	,, 722-4344
Colombia	,, 722-3562	Panama	,, 767-2175
Denmark	,, 725-3885	Holland	,, 723-1442
El Salvador	,, 723-9160	Mexico	,, 724-7812
Finland	,, 722-0283	Sweden	,, 725-1842
France	,, 722-3415,	Uruguay	,, 723-1787
	725-4279	Venezuela	,, 725-4055
Great Britain	,, 767-4435	Spain	,, 722-1045
Dominican Rep.	,, 725-9550, 722-4422	Germany	,, 725-5912, 722-2595

REPATRIATION: Arranged by ship's Agents.

AIRPORT: On outskirts of port area, served by regular airlines.

TIME: GMT minus 4 hours.

HOLIDAYS: *New Year's Day (January 1st); Three Kings' Day (January 6th); De Hostos Birthday (January 11th); Washington's Birthday (February, Third Monday); Emancipation Day (March 22nd); *Good Friday; De Diego's Birthday (April 16th); Memorial Day (May, Last Monday); *Independence Day (July 4th); Munoz Rivera's Birthday (July 17th); *Constitution Day (July 25th); Barbosa's Birthday (July 27th); *Labour Day (September, First Monday); Columbus Day (October 12th); Veteran's Day (November 11th); Discovery of Puerto Rico (November 19th); *Thanksgiving Day (November, Last Thursday); Elections Day (November every 4 years); *Christmas Day (December 25th). Any holiday falling on Sunday is observed on the following Monday.

*No cargo operations on these dates.

POLICE/AMBULANCE/FIRE: Police, 343-2020; Ambulance, 765-9700; Fire, 343-2330.

A Ports Authority ambulance stationed at Pier 14 is available for emergency service.

AUTHORITY: Puerto Rico Ports Authority.

AGENT: Continental Shipping, Inc. P.O. Box No. S-2467 San Juan, P.R. 00903. Cable: Conship. Telex: R.C.A. (325) 2770. Tel. (809) 725-2532.

YABUCOA: 18.02 N. 65.48 W. (See Plan)

Man-made harbour and channel located at the S.E. corner of Puerto Rico. Berthing facilities for deep draft tankers and a barge dock. Port and shoreside installations for the receipt and shipment of fuel oils and liquid chemicals for the Puerto Rico Sun Oil Company, a petro-chemical complex and barge dock and shoreside facilities for Union Carbide Graphite of Puerto Rico.

Facilities consist of the following: Ship channel 500 ft. wide, 40 ft. depth. Turning Basin. Dock and operating platform for a max. of 100,000 tons d.w.t. tank vessels. Mooring, breasting and turning dolphins. Catwalks. Additional dock appurtenances (fire-fighting equipment, protective jetty, etc.). Pilot services available day and night and tugboats available.

AUTHORITY: Captain of the Port, Puerto Rico Ports Authority.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Qatar

DOHA: 25.17 N. 51.32 E.

DOCUMENTS: The following documents will be required at this port:

Agents:

1 copy of the Arrival Report (Supplied by the Agent on boarding).
1 copy of the Crew List.
1 copy of the International Declaration of Health.
1 copy of the Passenger List (if applicable).

Port Health:

1 copy of Crew List.
1 copy of Dates and Types of Inoculations.
1 copy if the International Declaration of Health.

Immigration:

4 copies of Lists of Passengers Landing (if applicable).

Customs:

Bonded Store List (Bond will be sealed but issues are available).
Port Clearance Certificate should be procured before the vessel sails.

PILOTAGE: Application for a Pilot should be made through the Agent in Bahrain at least 24 hours before arrival.

Pilot station keeps a VHF watch 24 hours a day on Channel 16. Call sign DOHA PORT. Similar watch kept on R/T 2182 K/cs.

Pilot boat proceeds to the vicinity of the Doha Outer Buoy, position 25° 17′ 06″ N. 51° 41′ 26″ E. when the pilot is required. Pilot launches are painted white. When the vessel is underway the Pilot requires a pilot ladder complete with manropes. When the sea is calm and the vessel is at anchor the accommodation ladder may be used.

ANCHORAGES: Near the Outer Buoy and Southerly from it only. Min. depth of water 5 fathoms.

RESTRICTIONS: Compulsory pilotage for all vessels of 14 ft. draft or more. Naval vessels exempted. Depth of water in entrance is 27 ft. plus tide and the min. depth of water required under the keel for manoeuvring in the channel is 3 ft.

Max. draft for normal or average high waters is 28 ft. 9 in.

MAX. SIZE: Max. length 525 ft., max. breadth 75 ft. max. draft 28 ft. 9 in. Vessels of 560 ft. have been accepted in favourable conditions.

HEALTH: The International Flag signals for pratique must be flown and remain up until the vessel is cleared by the Port Health Authorities. A Port Health Official will board the vessel in the anchorage or at the Deep Water Jetty when the vessel is alongside. There is no automatic or radio pratique available.

RADIO: ETA and Agents messages should be routed through Bahrain Radio. Radio-telephone communications through Doha Port signal station. Calling and listening 2182 kHz. Working frequencies, 2638 kHz, 2738 kHz, 2570 kHz.

TUGS: One Government tug M. T. *Raiyan* Is normally available to assist in berthing operations . The only exception being when the tug is under repair.

BERTHING: Berthing alongside the Deep Water Jetty (30 ft.). It is 2,400 ft. in length and can accommodate four vessels at any one time with drafts of up to 28 ft. A further two berths may be constructed at a later date.

Normally berthing and unberthing to and from the deep water jetty is not at any time without certain reservations:

(*a*) Draft and trim of vessel.
(*b*) Height of tide.
(*c*) Visibility from Navigation Bridge.
(*d*) Prevailing weather conditions.

The duty Pilot has the option to berth or unberth a vessel at his discretion after consultation with the Senior Pilot, when the above mentioned conditions are unfavourable.

STEVEDORES: ETA advice is required on the number of gangs workable. Advance notice is required for any heavy lifts (say in excess of 10 tons) and the consignees name if possible as special arrangements have to be made for handling. Average discharge rate is 75 tons per hook day.

MEDICAL: Unless an emergency no advance notice is required. Hospital facilities do exist and a doctor will visit on request. Current Vaccination and Cholera Certificates are required.

DENSITY: The density of the water is salt (1025) at all states of the tide.

FRESH WATER: Fresh water is available in small quantities (50 tons) at the anchorage and larger quantities when alongside the jetty and is supplied by motor tankers.

FUEL: At present time no fuelling available.

GANGWAY/DECK WATCHMEN: The Public Security Department (Police) post a guard at each gangway, but it is advisable the ship also supplies a watchmen. Before landing *every* crew member must lodge his passport or seamen's identity card with the guard when alongside the jetty and at the dock Police Station when at the anchorage.

OPENING/CLOSING HATCHES: This work may be carried out by either crew or stevedores, but usually by the latter.

CUSTOMS ALLOWANCE: Qatar is "dry" and no official allowance is made. The bond is sealed on the ship's arrival.

CARGO GEAR: No additional requirements apart from those required by International Law.

IDENTIFICATION CARDS: Discharge Books or Passports are required to be handed to the Police before any crew member may proceed ashore.

CONSULS: The following countries maintain embassies in Qatar:

Iran
Great Britain
Saudi Arabia
Kuwait
Iraq
U.S.A.
Egypt
France
India
Jordan
Yemen
Netherlands
Tunisia

REPAIRS: Only minor repairs can be carried out. Metal-locking, bottom brushing and underwater welding.

REPATRIATION: Crew changes can be carried out. The Agents will require to know the names, discharge book or passport numbers and necessary information of dates, etc. well in advance for the authorities. Repatriation is normally by air, but Asian crews can be repatriated to Pakistan and India by sea.

AIRPORT: It is about 3 miles from the port to the airport. There are regular flights to Europe, U.K. and India by British airways, M.E.A. Air India, P.I.A. etc.

TIME: The standard time in Qatar is GMT plus 3 hours.

HOLIDAYS: The holidays in Qatar are usually religious and therefore fall on movable dates. As far as shipping is concerned there are only two days when work is not possible under any circumstances.

POLICE/AMBULANCE/FIRE: Police 4646; Ambulance 5151; Fire 5252.

TELEPHONES: Telephone available at the new Jetty. No. 25782.

GENERAL: Particular attention must be paid to:

(1)The Qatari flag must be flown at all times at the fore mast.

(2) Liquor is not allowed ashore and it is a serious offence to offer alcohol to a Qatari.

(3) Smoking is not permitted in any public places during the month of Ramadan.

SHORE LEAVE: Shore leave is permitted after the Immigration Authorities have cleared the ship and given permission, in writing, on the Crew List. Seamens' documents or passports must be deposited with the police at the gangway and retrieved on returning aboard.

DELAYS: The only delays that can be expected for berthing are on draft. No delay exists for vessels up to 22 ft. 6in. Over this delays may occur awaiting tides. Congestion delays for the discharge of cargo do occur from time to time but the max. that can be expected is 1/2 days.

AUTHORITY: Port Department, Ministry of Communications & Transport.

AGENTS: The Qatar National Navigation & Transport Co. Ltd., PO Box 153, Doha, Qatar, Qatar Arabian Gulf. Telex: DH 206. Tel.: 23864. General Manager: 22245. Shipping Manager: 21138. Cargo Supervisor: 21213. Cable address: "Navigation Dohao".

HALUL ISLAND: 25.38.55 N. 52.25.33 E. (See Plan)

Halul Terminal S.B.M.

Qatar national flag should be flown during hours of daylight.

DOCUMENTS: Master required provide 2 copies of crew list and show Light Dues receipt. All other necessary papers will be supplied on arrival, by Berthing Master.

PILOTAGE: Berthing Master will board incoming vessels in approximate position with Halul lighthouse bearing 270°×2.5 miles (that is to the Eastwards of the island) only. Vessels are requested *not* to pass to the Westwards or the Southwards of the island when approaching the anchorage or pilot cutter, as this is a hazardous area due to numerous underwater pipe-lines. Masters requested provide a good lee for the launch to facilitate boarding of Berthing Master and the lifting on board of equipment.

ANCHORAGE: To the Eastwards of Halul Island centred in a position with Halul lighthouse bearing 270°×2.3 miles. Depth about 80 ft. and bottom sand.

MAX. SIZE: SBM No. 1 up to 65 ft. draft (240,000 tons). SBM No. 2 up to 100 ft. draft (500,000 tons).

HEALTH: If sickness on board, details should be included in ETA message. No Doctor on Halul. In emergencies the services or advice of Company's Medical Officer based in Doha may be obtained. If Medical Officer or patient has to be flown to or from Doha, the tanker concerned will be charged for helicopter hire. Round trip is approximately £80.

RADIO: Vessels should establish communications with Shell Company of Qatar Ltd., Doha, at least 48 hours before arrival Halul Terminal, giving ETA local time and quantity of cargo required in metric tons. Message to "Shell Qatar Doha" via Bahrain Radio. Any changes in ETA should be passed via Bahrain Radio, or if within range through station "A7S" (see below).

A private radio station, call sign"A7S", operated by Shell Company of Qatar Ltd., situated in position 25° 17′ 12″ N. 51° 34′ 39″ E. A continuous listening watch maintained on 500 kHz. Incoming tankers should listen for the "A7S" traffic list which is transmitted on 438 kHz at 0400, 0800, 1200 and 1600 hours GMT after first calling on 500 kHz. Other details shown in Admiralty List of Radio Stations Volume 1.

A standard information cable is passed to all incoming tankers by station A7S (Alpha-seven-Sierra).

Ship's radio station must not be used while tanker moored to SBM.

VHF: A VHF station on Halul Island, call sign "Halul Control", maintains a continuous watch on the International Marine Band, Channel 6. The station has a range of approximately 50 miles and incoming tankers should establish communications with this station as soon as possible. Ship-to-shore communication during loading is by portable VHF Radio telephone provided by the terminal.

TUGS: Not available.

BERTHING: Approach is from the open sea, passing to the Eastwards of Halul. There are 2 single buoy moorings. Number 1 SBM in position 25° 39′ 00″ N., 52° 25′ 55″ E. fitted with 2×810 ft.×16 in. floating hose strings and connected to 1×30 in. shore submarine and one double 15 in.×150 ft. nylon floating mooring lines from the buoy. This berth will primarily accommodate vessels up to 120,000 d.w.t., but however, may be used for larger vessels if required. Loading rates of up to 8,000 cu.m. may be given. Number 2 SBM in position 25° 38′ 36″ N., 52° 27′ 35″ E. fitted with 2×885 ft.×24/20 in. floating hose strings and connected to 2 double 15 in.×150 ft. nylon mooring lines from the buoy. This berth will accommodate vessels of over 120,000 d.w.t. with up to a draft of 100 ft. Loading rates of up to 15,000 cu.m. will be given. In both berths, mooring lines from the buoys are secured on the forecastle head using equipment provided by the terminal. A suitable messenger rope should be ready for use. No moorings are used aft. The Berthing Master will advise in detail the mooring procedure.

Hose Connections: No. 1 SBM amidships port side 2×16 in. hoses. Hose derrick should be rigged to lift at least 5 tons and 2×16 in. reducers should be fitted on the port side only.

No. 2 SBM amidships, starboard, side 2×20 in. hoses. Hose derrick must be rigged to lift at least 10 tons and 2×20 in. reducers should be fitted on starboard side only.

Hose connection carried out by ship's personnel with advice from Berthing Master. Tankers *not* permitted to immobilise main engines or auxiliaries whilst moored to SBMs.

DENSITY: At berth, 1028/1030 (approximately).

CARGO: Flash point below 32° Fahrenheit.

H_2S content. Masters should refer to the International Oil Tanker and Terminal Safety Guide Section 1. 4. 2. on the subject quoted here for easy reference.

1.4.2. Hydrogen Sulphide – H_2S. Hydrogen sulphide has a disagreeable odour characteristic of rotten eggs which quickly deadens the sense of smell so that a dangerous concentration may be present which cannot be detected by odour.

If exposure to hazardous concentrations of this gas is likely to occur, appropriate safety precautions should be taken. Suitable respiratory protection should be available during ullaging and sampling.

The TLV is given as 10 p.p.m. but concentrations in enclosed spaces should be reduced as far below this level as practicable and if men are to work without breathing apparatus, a nil concentration should be achieved before entry is permitted and effective ventilation should be maintained.

On tankers regularly committed to the carriage of sour crude, H_2S gas indicators should be provided.

It is important to realise that the concentration of H_2S can be measured and expressed in two different ways.

the p.p.m. in the liquid, by weight;

the p.p.m. in the air, by volume.

Producing and processing departments at terminal often use the liquid measure for H_2S content, and this could be confusing to tanker officers who usually think of H_2S as expressed in air volume measure. There can be a vast difference between the two measures. The measure in air is higher and can be very much higher. For example, chemists have measured a concentration of 7,000 p.p.m. (deadly) in the vapour stream coming out of ullage opening when a tank is being topped off with a crude oil containing only 70 p.p.m. H_2S in the liquid. Therefore, it is of vital importance to appreciate that a sour crude can release a lethal concentration of H_2S into the air.

The following guide to the effects on exposed persons of various atmospheric concentrations of H_2S gives some indication of its dangers:

Measured in air by volume	
50 to 100 p.p.m.	Eye and respiratory tract irritation after exposure of 1 hour.
200 to 300 p.p.m.	Marked eye and respiratory tract irritation after exposure of 1 hour.
500 to 700 p.p.m.	Dizziness, headache, nausea, etc., within 15 minutes; loss of consciousness and possible death after 30 to 60 minutes exposure.
700 to 900 p.p.m.	Rapidly produces unconsciousness and death occurs a few minutes later.
1000 to 2000 p.p.m.	Death is apparently instantaneous.

Apparent death from H_2S is not irreversible as prompt and efficient artificial respiration may restore life.

The terminal should advise the Master if the cargo to be loaded contains H_2S in concentrations which cause the gases vented during loading to be hazardous if inhaled. When handling cargo with noticeable H_2S content or when ballasting after discharge of such cargo, it is recommended that the following precautions should be taken.

The officer supervising the operations should keep a sharp watch on personnel for signs of fatigue or distress.

Lifelines, breathing apparatus and resuscitator should be readily available.

Loading through the pumproom should be avoided where possible to reduce the possibility of H_2S contamination of the pumproom atmosphere.

Gas should be vented through the cargo tank venting system and, if open ullaging is necessary, the ullage plugs should be kept open only for a minimum period of time.

When ullaging tanks, personnel should work in pairs and stand at right angles to the wind direction in relation to the ullage opening.

Personnel should not enter a pumproom without first starting the ventilation, checking that there is no gas present, and without someone else standing by. If any gas concentration is recorded, a self-contained breathing apparatus should be worn.

Other spaces into which H_2S may have been drawn should be ventilated and checked before entry.

Persons overcome by H_2S should be moved to a gas free area immediately and artificial respiration should be administered at once.

Gas tests should be made on deck and in accommodations at regular intervals and particularly during the topping-off periods. If concentrations exceed 10 p.p.m. inside the accommodations or 50 p.p.m. on deck more than 10 ft. from a gas outlet, the loading rate should be adjusted and if this does not result in a decrease of the gas concentration, loading should be stopped until conditions have improved or other suitable measures are taken.

During discharge, the pumproom bilges should be kept dry.

During loading or ballasting operations, conspicuous notices warning of potential danger should be posted on deck and at pumproom entrance, and at the entrance to any other space which could be affected.

TIME: Local time is GMT plus 3 hours.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS/STORES/LAUNDRY: Not available.

TANK CLEANING: No facilities available and ships must arrive with clean ballast, lines and pumps.

CUSTOMS: Trading in liquor is *strictly* prohibited and no alcoholic drink should be offered to Arab nationals.

SHORE LEAVE: Not permitted.

AGENT: The Shell Company of Qatar Ltd.

UMM SAID: 24.54 N. 51.34 E. (See Plan)

DOCUMENTS:

Health Declaration.
Crew Lists.
Light Dues Receipt.
Other necessary papers supplied on arrival.

BUOYED CHANNEL: All vessels wishing to navigate the Umm Said buoyed channel must obtain prior clearance from Umm Said Control who can be contacted on VHF Channels 14 or 16 or by Telex via Bahrain Radio, addressed to Petroqat Umm Said. This precaution is essential to avoid unexpected encounters with deep-laden oil tankers.

APPROACHES:

Umm Said Approaches

Light Buoys	*Latitude North*	*Longitude East*	*Shape*	*Colour*	*Light*
Kareinein (K)	25° 24′ 22″	51° 56′ 21″	Pillar	Red with Letter K and Radar Reflector	Fl. 10 sec.
Mishut (M)	25° 15′ 55″	51° 46′ 48″	Pillar	Black with White Letter M	Gp. Fl. (2) 20 sec.
Wakrah (W)	25° 09′ 17″	51° 41′ 55″	Can	Red and White vertical stripes with Letter W in black	Gp. Fl. (3) 20 sec.
Hul (H)	25° 02′ 53″	51° 41′ 55″	Can	Red with Letter H in white	Gp. Fl. (4) 20 sec.
No. 1	25° 01′ 05″	51° 42′ 11″	Conical	Black	Fl. 6 sec.
No. 2	25° 00′ 59″	51° 42′ 20.5″	Can	Red	Fl. R. 5 sec.
No. 3	25° 00′ 44.6″	51° 42′ 17.7″	Conical	Black	Fl. 1 sec.
No. 4	25° 00′ 40.3″	51° 42′ 27.5″	Can	Red	Fl. R. 1 sec.
No. 6	24° 59′ 48″	51° 42′ 31″	Can	Red	Gp.Fl. (2) R 10 sec.
No. 7	24° 58′ 14″	51° 42′ 34″	Conical	Black	Fl. 6 sec.
No. 8	24° 58′ 22″	51° 42′ 42″	Can	Red	Fl. R. 6 sec.
No. 9	24° 56′ 43″	51° 42′ 09″	Conical	Black	Gp. Fl. (3) 15 sec.
No. 10	24° 56′ 39″	51° 42′ 25″	Can	Red	Gp. Fl. (2) R. 10 sec.
No. 11	24° 55′ 46.5″	51° 42′ 16.5″	Conical	Black	Fl. 2 sec.
No. 12	24° 55′ 47″	51° 42′ 25.5″	Can	Red	Fl. R. 2 sec.
S.E. Arrif	24° 53′ 42″	51° 43′ 09″	Conical	Black	Gp. Fl. (3) 15 sec.
S. Arrif	24° 51′ 06″	51° 41′ 02″	Conical	B.W. Cheq.	Fl. 5 sec.
No. 1	24° 52′ 33″	51° 40′ 07″	Conical	Black	Gp. Fl. (3) 15 sec.
No. 2	24° 53′ 40″	51° 39′ 59″	Can	Red	Fl. R./sec.
No. 3	24° 54′ 15″	51° 39′ 58″	Conical	Black	Fl. 2 sec.
No. 4	24° 54′ 11.3″	51° 39′ 52″	Can	Red	Gp. Fl. (3) 15 sec.
Turning Buoy	24° 54′ 45″	51° 39′ 24″	Can	R. W. Cheq.	Fl. R. 3 sec.
E. Anchorage	24° 54′ 27″	51° 36′ 25″	Can	Red	Gp. F. (2) R. 10 sec.
S. Anchorage Light Beacon	24° 52′ 57″	51° 33′ 56″	Can	Red	Fl. R. 6 sec.
Spit Light	24° 57′ 23″	51° 35′ 35″	Bn. 9 ft.	B.W.H.S.	Gp. Fl. (2) R. 6 sec.

Approach to Umm Said Terminal: With Halul Island peak astern steer 235° for a distance of 31.5 miles to (K) 'Kareinein' light buoy in position Lat. 25° 24′ 21.5″ N., Long. 51° 56′ 20.6″ E., thence 226°, 12 miles to (M) 'Mishut' light buoy in position Lat. 25° 15′ 55″ N., Long. 51° 46′ 48″ E.

From 'Mishut' light buoy steer 214° for a distance of 8 miles to (W) 'Wakrah' light buoy, leaving this light buoy on the port hand.

From 'Wakrah' light buoy steer 180° for a distance of 6.4 miles, to (H) 'Hul' light buoy leaving this buoy to port.

From a position of two cables West of (H) 'Hul' light buoy, steer 164° for a distance of 1.9 miles to pass between Nos. 1 and 2 Outer Channel buoys, thence 158° 30′ 0.3 miles to pass between Nos. 3 and 4 Outer Channel buoys, thence 178°, 0.9 miles to leave No. 6 Outer Channel buoy on port hand, thence 173°, 1.6 miles to pass between Nos. 7 and 8 Outer Channel buoys, thence 191° 30′, 1.6 miles to pass between Nos. 9 and 10 Outer Channel buoys, thence 176°, 0.8 miles to pass between Nos. 11 and 12 Outer Channel buoys.

From a position midway between Nos. 11 and 12 Outer Channel buoys, steer 157° for a distance of 2.2 miles, leaving 'S.E. Arrif' buoy on the starboard hand, thence 217° for a distance of 3.25 miles, leaving 'S. Arrif' buoy on the starboard hand.

After rounding 'S. Arrif' buoy, steer 335° for a distance of 1.7 miles, passing close West of No. 1 Inner Channel buoy, thence 003°, 1.1 miles, passing close East of No. 2 inner Channel buoy.

From a position close East of No. 2 Inner Channel buoy, steer 348°, 0.5 miles to pass between Nos. 3 and 4 inner Channel buoys thence 323° to round 'Turning' buoy, leaving this buoy on the port hand.

From 'Turning' buoy steer 264°, 2.7 miles to pass Northward of 'East Anchorage' buoy, thence about 250° for the anchorage.

The inward passage with cargo ships of moderate draft or light tankers, should present no difficulty.

Outward Passage: The reverse track is followed as for the inward passage described above.

Speed must be reduced before rounding the 'Turning' buoy and the passage in the Inner Channel must be made at slow speed to avoid increase of draft due to 'draw down' or 'heel under helm'.

The Outer Channel should also be taken at moderate speed to avoid 'draw down' and 'canal action' when passing close to shoal patches.

Charts: Admiralty Chart No. 3787 – Ras Abu al Mishut to Fasht al Arrif.

Admiralty Chart No. 3950 – Fasht al Arrif to Ras Laffan.

Depths: In the Outer Channel there are least depths of 37 ft. (11.28 m.) in the vicinity of Nos. 1 and 2 buoys, 3 and 4 buoys and Nos. 9 and 10 buoys.

Between the Outer and Inner Channel the depth varies from 40 ft. (12.2 m.) at Nos. 11 and 12 Outer Channel buoys through 72 ft. (22.0 m.) and 78 ft. (23.8 m.) between 'S.E. Arrif' and 'S. Arrif' buoys to 47 ft. (14.3 m.) close to No. 1 Inner Channel buoy.

In the Inner Channel the least depth is 38 ft. (11.6 m.) between Nos. 3 and 4 Inner Channel buoys.

From the Inner Channel to the Anchorage the depths vary from 43 ft. (13.1 m.) between the Channel and 'Turning' buoy to 48 ft. (14.6 m.) at the Anchorage.

Tidal Streams: In general the flood stream sets to the S.S.W. and the ebb stream to the N.N.E. the rate being up to two knots at Springs.

Cross sets will consequently be experienced in the channel, more particularly in the Northern part of the Outer Channel, between the Outer Channel and 'S.E. Arrif' buoy and between 'S. Arrif' buoy and the 'Turning' buoy. It should be noted that at the Outer Channel entrance the flood stream continues to set to the Southward for some time after the tide has started to fall.

Tides: The tides in this area have a large diurnal component and at times there is only one high water and one low water in the twenty-four hours. This irregularity is more pronounced at Umm Said than at the Outer Channel entrance for which predictions are made.

In December the higher high water, or the only high water during periods of single day tides, occurs between 0500 and 1400 hrs.; in March between 2200 and 0900 hrs.; in June between 1800 and 0100 hrs. and in September between 0900 and 2100 hrs.

At Umm Said there are a few days in the year when the tide does not rise above 5 ft. (1.52 m.) and there are considerable periods each day when the predicted height of the tide is greater than 3 ft. (0.91 m.).

In the vicinity of Nos. 3 and 4 Inner Channel buoys, High Water occurs about 1 hour after High Water at the Outer Channel entrance and the rise of tide is slightly more than at the Outer Channel entrance.

The Higher High Water is normally 5 ft. (1.52 m.) or better rising to 8 ft. (2.44 m.) at exceptional Springs.

Abnormal Meteorological conditions may affect all the above tides by ±2 ft. (0.61 m.).

PILOTAGE:

Inward: Except on special request Pilots are not provided for the inward passage. Tankers should proceed to Eastern Anchorage, having first received clearance from Umm Said Terminal to enter channel. This is to ensure that all outward bound vessels are aware of traffic movements in channel. Pilot will board incoming vessels at "W" Wakrah Buoy, if requested.

Outward: Compulsory.

N.B. It is requested that tankers of 40,000 d.w.t. and over should have rigged, when in light condition, an accommodation ladder lowered to about 12 ft. above the water. This can be adjusted to suit conditions. A Pilot ladder should be rigged immediately abaft the accommodation ladder, to within 2 ft. above the water. This will enable Pilot to ascend Pilot ladder clear of launch, and then step on to lower platform of accommodation ladder. Vessels should comply with the current U.K. Merchant Shipping (Pilot Ladders) Rules.

When automatic Pilot hoists are used a responsible English-speaking officer must always be in attendance.

Pilotage is compulsory for dry cargo ships bound for Umm Said anchorage. Pilotage performed by Doha Pilots.

ANCHORAGE: Eastern Anchorage. Depth 48 ft.

MAX. SIZE: Draft of laden tankers leaving Umm Said controlled by depth at outer end of Outer Channel. This is 37 ft. (11.28 m.) below Chart Datum and Zero of Predictions. Tide rarely falls below 1 ft. above datum, so that there is normally 38 ft. (11.58 m.) or more in the channel.

Even under worst weather conditions there is no appreciable movement on larger ships in Outer Channel. As deep-draft vessels always reduce speed between Nos. 3 and 4 Inner Buoys and in Outer Channel, there is very little "draw down". Deep-draft vessels should endeavour to pass between Nos. 1 and 2 Outer buoys at higher high water for the Outer Channel entrance.

In general, limitations are as follows:

- *(a)* Ships drawing 35 ft. (10.67 m.) or less can sail at any time on any day.
- *(b)* Ships drawing 36 ft. (10.97 m.) will rarely have to use tides.
- *(c)* Ships drawing 37 ft. (11.28 m.) will usually have to use tides.
- *(d)* Ships drawing 38 ft. (11.58 m.) always have to use tides.
- *(e)* Ships drawing 39 ft. (11.89 m.) will occasionally be neaped.
- *(f)* Ships drawing 40 ft. (12.19 m.) will be neaped 120 days + a year.
- *(g)* Ships drawing 41 ft. (12.15 m.) can sail occasionally. The best months are June and July.
- *(h)* Ships drawing 42 ft. (12.80 m.) are not worth programming as on the few days when predictions indicate they could sail, meteorological conditions may well cut the tides.

Underkeel Clearance: The following table stipulates the *minimum* underkeel clearance for vessels using the Umm Said Channels entering inward and departing outward.

Vessels up to 99,999 d.w.t.	—	3 ft. Clearance
Vessels from 100,000 to 149,999 d.w.t.	—	4 ft. Clearance
Vessels over 150,000 d.w.t.	—	5 ft. Clearance
L.P.G. Carriers (all sizes)	—	5 ft. Clearance

Navigation in shallow waters: The navigation of deep drafted vessels at high speeds in shallow waters introduces certain hazards. Pilot/Mooring Masters and Masters of ships should be guided by the following:

- *(a)* Due consideration should be given to the effect of draw down at speed on vessel's draft in shallow water, bearing in mind vessel's trim.
- *(b)* If possible, confirm actual height of tide against predictions and if not, bear in mind that after strong winds the actual height of tide may be reduced and extra caution must be exercised for a few days during and after bad weather.
- *(c)* Ensure accuracy of vessel's draft reading, including the midship drafts, having in mind the tendency of vessels to sag and the adverse effect of a small list.
- *(d)* Reduce to a minimum safe speed to pass over and near shoal areas.
- *(e)* Reduce to a minimum safe speed when negotiating turns in order to reduce heel under helm.
- *(f)* Note that list can mean an appreciable increase in draft.
- *(g)* When strong tidal streams are running across a channel, extra vigilance is required, and allowance made for set, particularly at reduced speed, to ensure vessel proceeds along mid-channel.

HEALTH: (Quarantine and Medical Clearance). The Medical Officer of Qatar Petroleum Company Ltd. will carry out these duties. Medical attention to Masters and crews of ships arranged by Qatar Petroleum Company's Medical Officer when asked for by Master.

RADIO: When advising their ETA ships must state their last port of call and if there is any sickness on board. If the last port of call is Bahrain or Ras Tanura, the previous port must be stated.

Vessels are requested to inform Petroqat, Umm Said by cable of their ETA at (W) Wakrah Light buoy and whether or not Pilot required, 72 hours and confirm 24 hours prior to their arrival. It should be clearly indicated that times quoted are in GMT. They should also state the quantity of cargo, in long tons, and the maximum loading rate required.

These cables should be addressed to Petroqat, Umm Said, and passed via the Bahrain Coast Radio Station.

VHF: The Umm Said Terminal is equipped to operate on five channels of the International Maritime Mobile Telephone Service as follows:—

Channel No.	Transmit Frequency mc/s	Receive Frequency mc/s
9	156.45	156.45
11	156.55	156.55
12	156.60	156.60
14	156.70	156.70
16	156.80	156.80

A continuous listening watch is maintained on Channels 16 and 14, the call sign being "Umm Said" and the range of station is approximately 50 miles.

Berth Radio Frequency: Tanker berthing/loading operations are carried out using Pocketfones on a frequency of 155.975 mc/s transmit and receive. These Pocketfones are classed intrinsically safe and also have the facility of use on Channels 14 and 16.

TUGS: Given sufficient prior notice a tug can usually be made available on request.

A mooring barge is available to assist in raising and connecting hoses.

BERTHING: Pilots act in same capacity as Mooring Masters in the berthing, after which they supervise raising of flexible hoses and connection to ship's manifold. During loading operation they act as company's representatives.

Vessel's crew are expected to assist with hose connecting.

Mooring, loading and unmooring carried out night and day and necessary standards of safety can only be maintained if vessels have equipment suited to terminal requirements.

North Berth is a Single Buoy Mooring in Position 24° 53′ 37.2″ N., 51° 34′ 54″ E. connected to the shore installation by a 36 in. submarine pipe-line. The seaward end of the pipe-line and buoy terminates in two 16 in. flexible hoses. Vessels are moored by a single hawser from bow to buoy.

The following equipment should be carried by each vessel:

(a) An 8 in. circumference × 120 fathom nylon hawser trailed by a similar hawser, ready to run out from the bow. Also 1 spare 8 in. × 120 fathom nylon hawser.

(b) 1 good boat rope 4.5 in. circumference at least 200 ft. long at portside.

(c) Derrick or crane rigged over the starboard side manifolds should be capable of lifting 16 in. float hose to a height of up to 30 ft. above deck.

(d) Reducers or adaptors to be bolted to 2 ship's flanges so as to take 12 in. hoses.

Warning: Ship's anchors must never be used within 0.5 mile of this berth or the 36 in. submarine pipe-line and must therefore be well secured at all times.

The South Berth consists of a Conventional Buoy Mooring, connected to the shore by a 24 in. submarine pipe-line. The seaward end of the pipe-line terminates in two 12 in. flexible hoses.

Following equipment should be carried:

(a) Port and starboard anchors to be fitted with marker buoys and sufficient line.

(b) 2 good boat ropes 4.5 in. circ., at least 200 ft. long.

(c) A good line by the Pilot ladder for hauling on board equipment such as hose clamps, wrenches, reducers and elbows.

(d) 4 good mooring lines aft, of a suitable size for the vessel on which they are used. Each line should consist of 120 fathom hawser, tailed by a similar hawser and ready to run out if required.

(e) 2 good mooring lines forward similar to the after lines for use on breast buoy if necessary.

(f) 2 good rope stoppers to be available forward. 4 good rope stoppers to be available aft.

(g) Derricks or cranes reaching over hose connection should be capable of lifting flexible hose from sea-bed to a height of up to 30 ft. above deck.

(h) Reducers or adaptors to be bolted to ship's flanges, so as to take 12 in. hose.

(i) Carpenters stoppers are provided on loan by Q.P.C. for use with Company's 4.75 in. wires and chain stoppers should not be used.

Note. Where a vessel has 2 or more loading connections, the ship's flanges should not be less than 4 ft. apart.

TERMINAL INFORMATION:

Berth	*Max. t.p.h.*	*Fixed sea-line*	*Overrall hoses*
North (SPM)	4,300	One – 36″	Two – 12″
South (CBM)	3,800	One – 24″	Two – 12″

Depth of water: Available depth of water at seaward end of sea-line is as follows:

North Berth (SPM) 65 ft. (19.6 m.)
South Berth (CBM) 44 ft. (13.41 m.)

An allowance of 8 ft. for South Berth has been made for height of sea-line end cradle above the sea bed.

Berth limitations:

North Berth (SPM) – Bow to manifold 550 ft.
South Berth (CBM) – Head North – All vessels under 900 ft.
Head South – All vessels under 1,100 ft.

After the vessel has been securely moored in berth, the hoses are lifted and connected to the ship's manifold.

The Mooring Master will not transmit any loading instructions to the shore until the officer-in-charge of the deck is satisfied that the hoses are connected correctly and that all valves have been set for receiving cargo.

While in berth, ships should be ready to move under their own power in the event of their breaking adrift, catching fire, fire in adjacent berths or other emergency. No repairs should be carried out while in berth which would immobilise the ship or impair her fire-fighting efficiency.

The Mooring Master will instruct the Master of the vessel as to any signals needed for local requirements.

The Mooring Master brings a portable radio to the ship.

The radio may not be used for private conversation. Use of the ship's radio while at the loading berth is strictly prohibited.

When loading is completed, hoses will be disconnected and lowered, under the supervision of the Mooring Master.

Ships will then proceed to an anchorage allocated by the Mooring Master or direct to sea.

L.N.G. Jetty: This is a 'T' type jetty with breasting dolphins flanked either side by two mooring dolphins. Water depth at the berth is 42 ft. Chart Datum.

BULK HANDLING FACILITIES: A Government Jetty has been constructed in Umm Said Bay connected to a Fertiliser Production Plant and grain mill. There are facilities alongside the quay for loading bulk urea and bagged urea; for loading refrigerated liquid ammonia; discharging bulk grain.

Vessels up to 60,000 d.w.t. may be accepted alongside.

The jetty is 700 ft. long, 100 ft. wide; the deck level being 20 ft. 3 in. above. Admiralty Chart datum. There is a least depth of 40 ft. alongside.

Government Pilots provide berthing assistance. See "Doha".

Operational Equipment:

Ammonia Arm: One 10 in. liquid ammonia loading arm and one 6 in. vapour loading arm at a fixed point serving the North berths.

Ship Loaders: 2 loading mobile machines (ship loaders) serving the whole of South side of the jetty, one of which is capable of loading bulk urea.

Grain Unloading: 6 unloading points for connecting 2 mobile grain unloading machines.

Conveyor: System for export of bagged and bulk urea and import of grain.

Crane: 10-ton swl dockside mobile crane serving the whole of the North side of the jetty.

CARGO:

1. Flash Point. Flash point of Qatar crude is below 32° Fahrenheit.

2. H_2S Content. Qatar crude contains concentrations of H_2S (sulphuretted hydrogen). This is an evil-smelling poisonous gas which can be lethal depending on concentration of gas in the air inhaled. It can be detected normally by smell, but unfortunately a high concentration of the gas rapidly paralyses sense of smell and may lead to a false sense of security. It is, therefore, important that when the presence of the gas is detected the area or compartment concerned must be left with all possible despatch until adequate ventilation can be carried out. *The explosimeter will not detect this type of gas.* The under-noted precautions have been evolved as necessary to provide against a possible accident.

(a) During loading gas should only be allowed to escape via the agreed venting arrangements.

(b) When ullaging tanks, personnel should keep windward of the tank opening and avoid breathing fumes as much as possible. If H_2S is inadvertently inhaled the man should leave the area and not return until his sense of smell has been restored.

(c) No one should enter any pump room or any compartment where gas could collect unless another person is standing. by.

(d) Lifelines, breathing apparatus and resuscitator should be readily available.

(e) As a precautionary measure, the gas ejector for the pump room should be put into operation at any time entry is made into this space whilst the possibility of H_2S gas entering pump room from cargo or empty tanks exists.

LOADING:

(a) Readiness. Notice of Readiness will be received by Company Representative provided vessel ready to load. Lay time will commence as stipulated in the export agreement between purchasers and vendors. A full cargo is deemed to be the maximum cargo which can be loaded in your ship at Umm Said consistent with safe underkeel clearance on sailing.

The Company will make every effort to load tanker on arrival provided berth available and weather permitting.

Advice from vessel which states she is ready to receive cargo is considered as final, and as indicating that every operation necessary aboard vessel has been completed. As soon as possible after such a signal has been received, and without further advice, loading will commence. Damage to hoses can occur if ship'sovalves ae not open at the start of loading. To prevent excessive pressure from surge to ship/shore connections, ship's valves should be operated slowly.

Full cargo is deemed to be the maximum cargo which can safely be loaded in the vessel at Umm Said. Completion of loading is subject to the normally accepted tolerances above or below the required cargo.

(b) Pipe-lines. Each berth connected to shore installation by 1 or 2 submarine pipe-lines. The seaward ends of pipe-lines terminate in 12 in. flexible hoses, there being 2 such strings of hoses at each berth.

(c) Tank Dips. When loading, dips shall be taken frequently of vessel's tanks, thereby preventing loss of oil through a leaking hose. This particularly applies at night, as seepage of oil is practically invisible on the water during darkness. Inspection of vessel's tanks will be made before loading commences by a ship's officer and a representative of the Terminal. Opening dips and closing ullages will be taken and the quantity of cargo calculated. Particular care must be exercised by ship's personnel, towards completion of loading, in the "topping-off" of tanks to ensure that Terminal given timely advice of any decrease in pumping rate required. Adequate "Stand-by" notice should be given before the final "Stop".

(d) Loading Pumps. Two 1,200 h.p. pumps are used to load crude oil and it is important to note that any rapid changes in the oil velocity may cause pressure surges in the loading system. A pressure surge may rupture the flexible hoses connected to your vessel spilling dangerous quantities of crude oil onto the decks or surrounding areas. To avoid these risks, valve operations and tank switching should be done with extreme care. Please ensure that 15 minutes notice is given for 'Slow Speed' and/or 'Stop' instructions.

BALLAST: When a vessel enters port waters in ballast, the ballast water for overside discharge must be clean and a declaration signed by the Master and delivered to the representative of the Terminal to this effect. Ashes, oil, oily water or other refuse must not be discharged overboard in port waters. Vessel's scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard whilst in port waters.

The attention of Masters is drawn to the volume entitled 'International Conference on Prevention of Pollution of the Sea by Oil' 1962 and subsequent publications issued by the International Maritime Consultative Organisation.

Vessels are subject to heavy fines and liabilities for claims arising from pollution of the sea and shore areas.

In Umm Said the 'load on top' system is normal procedure and Masters of all tankers are required to certify quantity of slops on board and their intention of 'loading on top'. If 'load on top' system is not used the Master will be required to certify adequate reasons for not doing so, e.g., vessel drydocked in last port, etc.

1. Essential that vessel is adequately ballasted to ensure safe handling and manoeuvring. Please comply with Mooring Master's requests as to ballast quantity and disposition.
2. Umm Said is an open roadstead and subject to sudden changes in weather. On occasions it is of great advantage to commence loading whilst discharging ballast or prior to completely deballasting to avoid having the vessel in a flying light condition.
3. No cleaning of boiler tubes whilst ship is in port.
4. All pump-room seacocks must be closed before commencement of loading.

FUEL: Bunkers not available.

FRESH WATER: Not available.

CUSTOMS ALLOWANCE: The State Laws of Qatar are very strict about the import of liquor and its consumption both on the mainland and on vessels in the harbour. Under special guarantees the Company is permitted to import a limited quantity of liquor for consumption by certain categories of senior employees only. No employee, whether senior or junior, is permitted to import any liquor direct or to bring any liquor ashore from vessels, and under no circumstances should liquor be offered for consumption on your vessel to any company employee unles he is of staff status. At the present time vessels enjoy the privilege of not having to seal their liquor stocks whilst in port, but you will readily appreciate that this privilege would be withdrawn if the above rules are not strictly observed. We invite your co-operation in ensuring that this rule is strictly observed whilst your vessel is at Umm Said.

REPATRIATION: Immigration/Transit facilities for arriving or departing ship personnel are good. Ample notice should be given on passport details to ensure minimum delay to travelling personnel.

DERATISATION: No facilities.

DISCHARGE CERTIFICATE: The Master of every vessel loading at Umm Said is handed a Discharge Certificate for completion by the Customs or Port Authority at port of discharge and return by air mail to the Director of Petroleum Affairs, Government of Qatar, Doha, c/o Q.P.C. Umm Said within 40 days of sailing from Umm Said. It must be emphasised that failure to comply with this requirement may result in delay or even boycott of the vessel upon return to Qatar. It is therefore in best interest to ensure that Agent at port of discharge attends to despatch of this certificate with least possible delay and by *airmail.*

AGENT: Agency carried out by Qatar Petroleum Company Ltd.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Reunion Island

POINTE DES GALETS: 20.55 S. 55.18 E.

PILOTAGE: Compulsory for all vessels of over 50.0 m. LOA. Pilot is normally ordered by ship's Agent, or in particular cases by the Harbour Master if contacted by VHF beforehand. Pilot launch carries regulation pilot signals. Pilot boards at the entrance to the port about 1 mile from the breakwaters.

APPROACHES: *Channel and Buoyage:* The leading line 102° 30′ for entry is determined by day, but 2 rectangular white signs, bordered in red with a thick black line denoting the centre line. At night the leading line is 2 red lights. In the channel the depth is 10 m., 70 m. wide and is buoyed by 4 spars, 2 on each side.

The leading marks for access to the North Port, South and Fishing Port, respectively 009°, 189° and 260°, are marked as shown below:–

North Port:– by day, 2 red rectangular signs, with a thick white line marking the centre line, at night, 2 fixed red lights.

South Port and Fishing Port:– 2 rectangular white signs with a black vertical line marking the centre line by day. 2 fixed green lights by night.

ANCHORAGE: There are 3 anchorages in the roads near the port.

(*a*) In Baie de St. Paul in depths of about 40 m., well marked and safe except in very strong swell.
(*b*) South of the port entrance in the immediate approaches, depths of 40 m., only used in fine weather and calm sea.
(*c*) In Roads of La Possession unmarked anchorage and little used.

If vessel requires a Pilot for anchoring, then anchorage dues are incurred. Vessels anchoring by their own means do not incur charges.

RESTRICTIONS: Manoeuvring is best done in the evening because during the day a wind can make movement difficult. The current in the channel varies in strength (between 1 and 2 knots) and direction. Its direction can only be determined by careful observation during the approach. As a consequence ships should be ready to anchor on instruction from the pilot while transitting the channel. Vessels swing in the outer port using starboard anchor.

MAX. SIZE: Under certain conditions, the topography of the port and jetties access is limited to the sizes below:–

North Port: length 160 m. width 22 m. draft 8.50 m.
South Port: length 180 m. if draft less than 7.50 m.
175 m. if draft less than 8.50 m.
160 m. if draft less than 9.00 m.
(On departure only)
Fishing Basin: length 55 m. draft 4.50 m.

Otherwise entry or departure will depend on the pilots advice. Normally entry only occurs at the following times depending on the season.

Maximum daylight 0500 hrs. – 1845 hrs.
Minimum daylight 0600 hrs. – 1800 hrs.

RADIO: Saint Denis Radio. Harbour Master's Office equipped with VHF. Call on Channel 16.

TUGS: Only used to assist vessel manoeuvring in the port. Tugs join vessel in outer harbour. Ship's lines always used.

BERTHING: Berth assigned by Harbour Master, basis vessel's length and draft. Tankers berth in the outer harbour at dolphin berth. No slop facilities.

Fore Port: (Channel: 70 m. usable width. Turning circle 270 m. Dredged to 10 m. Berth H, 170 m. long, dredged to 9 m.).

North Port: Access lock: 30 m. width, 9 m. depth.
Berth 1: 160 m. length, 8.50 m. depth.
Berths 2, 3, 4: total length 366 m., 9.00 m. depth.
Berth 5: 150 m. length, 8 m. depth.
Berth 6: (National Marine Berth) 140 m. length, 6 m. depth.
Berth 7: 210 m. length, 9 m. depth.

South Port: Berths 8, 9: Each 190 m. length, 10 m. depth.
Berth S: 120 m. length, 10 m. depth.

Fishing Basin: 6 berths, 70 m. length, 5 m. depth.

The depths above are dredged depths.

Facilities for handling 22 ton containers.

STEVEDORES: Normal working hours 0700–1700 hrs.

DENSITY: 1025.

FRESH WATER: Available by pipe-line at the quays. Rate 10 t.p.h. Not available at tanker berth.

FUEL: Large quantities available at berths Nos. 5, 8 and 9. Small quantities at other berths.

MEDICAL: Doctor and hospital facilities available.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally performed by ship's crew.

REPAIRS: Only minor repairs can be effected.

REPATRIATION: All facilities available for crew change and repatriation.

AIRPORT: 30 km. away, daily connections to Africa and Europe.

TIME: GMT plus 4 hours. No alterations during the year.

HOLIDAYS: Same as for "France".

SHORE LEAVE: Crew are allowed to go ashore.

AUTHORITY: Capitain du Port.

AGENT: SCAC La Reunion P.O. Box 705, 97474 Saint Denis De la Reunion, Tel. 21.01.32., Telex 37.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Romania

CONSTANTZA: 44.12 N. 28.41 E. (See Plan)

DOCUMENTS: As soon as vessel is boarded by the border control commission, the Master fills in a form of declaration in 4 copies, which together with Stowage Plan, Cargo Manifests, Sanitary Certificates, is handed to representative of the Agency. Also following documents are to be handed over at Harbour Master's Office:

Derating Certificate.
Certificate of Nationality.
Tonnage Certificate.
Safety Equipment Certificate.
Load Line Certificate.
Safety Radio-telegraph Equipment Certificate.
Ship's Register.
Safety Construction Certificate.

N.B. These documents will not be returned to the vessel until sufficent funds, in U.S. dollars, have been deposited by Owners to cover all vessel's disbursements.

Crew Lists and Passenger Lists must be typed in several copies (up to 7).

Purser's Report: August 1976.

The Authorities require all the ship's certificates, discharge books, health declaration, and vaccination certificates. At least 10 copies of crew list, personal declaration and 2 copies of stores list containing all items of foodstuff, bonded goods and canteen.

PILOTAGE: Upon arrival in roads, a cable must be sent through radio coast station to Agent, stating hour of arrival and asking for Pilot. If entrance is not possible immediately due congestion Agent will call back the vessel advising when Pilot may board near the port entrance in order to berth vessel.

A pilot is required for shifting in port, even for warping along the quay. Pilot-boat has black hull with "Pilot" in white on sides, and white upperworks. Pilots operate 24 hours a day on VHF Channel 14 only.

MINEFIELDS: Danger Area No. 3B (Constantza South). The area enclosed by the coast and by lines joining the following positions:

(a)	44° 09′.81 N.	28° 38′.25 E.	*(b)*	44° 08′.99 N.	28° 39′.96 E.
(c)	44° 08′.50 N.	28° 39′.96 E.	*(d)*	44° 08′.50 N.	28° 54′.01 E.
(e)	44° 00′.17 N.	28° 54′.01 E.	*(f)*	44° 00′.17 N.	28° 39′.88 E.

Danger Area No. 3A (Constantza North). The area enclosed by the coast and by lines joining the following positions:

(a)	44° 21′.79 N.	28° 41′.10 E.	*(b)*	44° 21′.79 N.	28° 52′.69 E.
(c)	44° 21′.14 N.	28° 54′.01 E.	*(d)*	44° 10′.19 N.	28° 54′.01 E.
(e)	44° 10′.19 N.	28° 42′.18 E.	*(f)*	44° 10′.48 N.	28° 42′.16 E.
(g)	44° 10′.99 N.	28° 40′.76 E.	*(h)*	44° 09′.77 N.	28° 39′.55 E.

ANCHORAGE: Anchorage areas in Constantza roads are just near the new port works in an area up to 44 ft. depth. Length and breadth have no special restrictions. Actual official permitted draft for tankers 30.6 ft. will be soon improved in new tanker berths. Constantza anchorage – East approach Nr. 2. Approach is between limits of Danger Areas Nos. 3B and 3A. Width 1.7 miles, length 15.3 miles, direction 270°–90°. Centre line joins following positions.

C1: 44° 09′.35 N. 29° 02′.20 E. At. 17.5 miles on bearing 91° 12′ from Constantza main lighthouse (nr. 1.5).

C2: 44° 09′.35 N. 28° 41′.00 E. At 2.25 miles on bearing 99° 12′ from Constantza main lighthouse (nr. 1.5).

On this approach non-degaussed vessels with a max. draft 12 m. may navigate.

MAX. SIZE: Vessels up to a max. draft 35 to 36 ft. may berth in Constantza. See "Tankers".

TUGS: Tugs normally join vessel near port entrance assisting them until berthing.

RADIO: Constantza coast radio station, call sign YQ1, frequency 462 kc/s. Operation – daily starting at 0650, 1250 and 1850 hrs. GMT.

TANKERS: 5 oil wharfs under construction capable of berthing tankers up to 80,000 d.w.t.

MEDICAL: Crew members are offered medical assistance on all working days between the hours of 0900–1200 and 1300–1700 hrs.

GANGWAY/DECK WATCHMEN: Watchmen recommended for special general cargoes. Cost will be arranged through Agent.

CUSTOMS ALLOWANCE: Small quantity permitted for each crew member out of bond but may be renewed if vessel stays longer in port.

REPAIRS: Largest dry dock in Constantza has 15,000 tons lifting capacity, second dock up to 8,000 tons.

TIME: Local time is GMT plus 2 hours.

HOLIDAYS: Official holidays in Romania: New Year's Days (1st and 2nd January); Easter Orthodox Monday (April); Labourer's Days (1st and 2nd May); Liberation Days (23rd and 24th August); Anniversary of Socialist Revolution (7th and 8th November); Christmas (25th and 26th December); Proclamation of the Republic (30th December).

STEVEDORES: Working hours 0800–1700 and 2000–0500 hrs. Saturday afternoons, afternoon of days before holidays, Monday mornings and days after holidays until 0800 hrs. usually exempted in C/P although work may be effected. Loading and discharging are generally effected by shippers and receivers, respectively at their own expense and they may work also on holidays, Sundays and Saturday afternoons, no overtime expenses being charged to the vessels for shore labourers but without payment of overtime to vessel's crew and without counting the time.

SHORE LEAVE: On completion of border inspection, crew can go ashore taking their Seaman's Books (or Passports) and the permits they receive from the soldier at the gangway. The permits must be returned to soldier upon coming back on board. In the event that crew members desire to visit another place outside Constantza they must inform Agent.

GENERAL: From the time a vessel enters the territorial waters of Romania until she leaves the respective zone, i.e. 12 miles, it is compulsory to fly the Romanian flag. Ships that call at Constantza for the first time and have not got the Romanian flag on board must have it ordered through the Agent immediately upon berthing.

SHIPMASTER'S REPORT: Rate of exchange is "Tourist Rate" which is approximately 3 times official rate. It is illegal to take Romanian money into or out of the country, any money which has not been spent must be returned to Agent in front of Customs when clearance is being given.

Any stages, gantlines or painting scows must be taken inboard at night. First opening and closing of hatches are for ship's account. Motor-boats operate a "taxi" service in harbour at a cost of 8 Lei per person per trip.

Bunkering barge *nr Monteoru* delivers oil at approximately 60 metric t.p.h. Control will only issue clearance after all cargo work, bunkering, etc., is completed.

At Mineral Berth iron ore is discharged by 2 large Gantry Cranes operating grabs, each working at approximately 200 t.p.h. Rate of discharge is frequently disrupted by shunting of railway trucks – 2 tracks serve five berths.

GENERAL: Following is an extract from "Notice to Sailors" issued by authorities at Constantza:

1. Crew members are required to observe international rules covering work protection, port sanitation and customs regulations, and in addition, Romanian law, both within the port and outside that area.

2. In order to avoid accidents concerned with port equipment, cranes, trucks, tractors and trains etc., crew members walking inside the port area are permitted to walk only on the main streets and between the berths where their vessels are moored, and/or to entrance/exit No. 1, the Navlomar Agency, the Harbour Station, the Navlomar tax-free shop or the Seamen's clinic.

3. Crew members are required to enter or leave the port area at gate No. 1.

4. Crew members are required to be back aboard their vessels by 0400 hrs.

5. Crew members wishing to visit other zones in the country are required to obtain a visa from the ship's Agent.

6. Transportation with the port by motor-boat which leaves the Harbour Station every fifteen minutes and calls at all berths in the port, is available subject to crew members being in possession of the proscribed ticket issued by ship's Agent and duly signed and stamped by the ship's Master.

7. The tax-free shop is located next to the Harbour Station. All purchases must be retained aboard under customs control until the vessel has sailed.

8. It is forbidden, either to bring-in or to take-out Romanian currency. Such currency is obtainable from Navlomar Agency at Master's request and for Owner's account. All Romanian currency remaining in crew members possession must be returned to the Master before sailing, and the Master is required to return the currency to Navlomar.

9. The port Polyclinic is available for medical attention to crew members at the following times: Monday, Wednesday and Friday, between 1300 and 1600 hrs. Tuesday, Thursday and Saturday, between 0800 and 1300 hrs. In cases of emergency, assistance is obtainable by telephoning 16528.

10. Crewmail and messages are delivered daily by ship's Agents, and outgoing crewmail is collected for despatch at the same time.

AGENT: Navlomar Shipping Agencies, Telex 014-259. Cables "Navlomar Constantza".

SULINA (including Galatz and Braila): 45.09 N. 29.39 E.

DOCUMENTS: Within maximum 1 hour from fulfilment of arrival formalities the Master or Chief Mate reports at the Harbour Master's Office where he hands the following documents:

Certificate of Nationality.
Tonnage Certificate.
Safety Equipment Certificate.
Load Line Certificate.
Safety Radio-telegraphy Equipment Certificate.
Safety Construction Certificate.
Cargo Gear Certificate.

The above certificates are to be valid and not to expire before ship's sailing the port, Load Line Certificate and Cargo Gear Certificate not to be older than 12 months, and same remain with the Harbour Master until ship's departure when returned through the representative of the Agency that accompanies the Control Commission on departure.

PILOTAGE: Notice of arrival to Pilot station at Sulina is to be sent in due time through Navlomar Sulina.

Sulina – S.E. approach nr. 5. Width 1.6 miles. Length 7 miles. Direction 146°–326°. Centre line joins the following positions:

S1: 45° 03′.01 N., 29° 53′.4 E. At 11.5 miles on bearing 124° 24′ from Sulina lighthouse (nr. 1.20).

S2: 45° 08′.9 N., 29° 47′.9 E. At 5.75 miles on bearing 95° 42′ from Sulina lighthouse (nr. 1.20).

Thence on the No. 01 Sulina black light and whistle buoy, and afterwards on the line of Sulina Entrance leading lights (301° 12′) into Sulina Channel and so to harbour. On this approach non-degaussed vessels with max. draft 7 m. may navigate.

The port of Galatz is situated on the left side of the Danube 79 miles from the Black Sea.

RESTRICTIONS: Vessels calling at Danube ports are obliged to wait in roadstead of Sulina, at least 1 mile away from the black buoy (a black floating cylinder marked 01 in white, which is lighted at night by green flashing light). All vessels both entering and going out of Sulina channel as well as during navigation in the channel and Danube, are obliged to have on board a Danube Administration Pilot. As a rule, entering and leaving the Sulina channel, as well as navigation in the channel, is prohibited after night-fall.

MAX. SIZE: The draft at Sulina bar is 23 ft. passable. Any other changes of official draft are broadcast daily, at 1150 hrs. on 1935 m. long wave. Galatz: Max. passable draft River Danube is 23 ft. (7.01 m.) for vessels up to 180 m. LOA.

MINEFIELD: Danger Area nr. 7 A (Sulina). The area enclosed by the coast and by lines joining the following positions:

(a)	45° 13′.27 N.	29° 40′.42 E.	*(b)*	45° 11′.77 N.	29° 41′.42 E.
(c)	45° 09′.17 N.	29° 57′.22 E.	*(d)*	45° 07′.37 N.	29° 57′.22 E.
(e)	40° 03′.07 N.	29° 54′.82 E.	*(f)*	45° 03′.07 N.	29° 39′.34 E.

CLEARANCE: On arrival in Sulina harbour vessel has to stop to complete border and sanitary formalities and after vessel has completed same, with Danube Administration Pilot on board, proceed to destination. After the vessel has completed manoeuvring to come alongside berth, she is boarded by the sanitary commission. If the vessel has passed the sanitary inspection she is boarded by border control commission which includes a representative of the Agency, the latter assisting the Master in fulfilling arrival formalities and facilitating meeting of any requirements on ship's part. The Master fills in a form of declaration in 3 copies which together with the Stowage, Plan, Cargo Manifest, etc., are handed to representative of the Agency upon his leaving ship. A supplementary declaration is to be completed by the Master, stating: 1. Who supports disbursements expenses (name, mail address, telegraphic address, number of telex). 2. Who supports the supplies of bunkers, provisions other services, etc. (name, mail address, telegraphic address, number of telex).

RADIO: Constantza – coast radio station. Call signal YQ1, frequency 462 kc/s. Operation daily, starting with 0650, 1250 and 1850 hrs. GMT. Contents of transmission: meteorological and navigation notices. Weather forecasts are broadcast in clear English or codified; radio notices to mariners and navigation warnings are broadcast in Romanian, Russian and English.

BERTHING: After arrival in Galatz roads and port Pilot boarded, the berthing of the vessel is done as ordered by the Port Authorities according to the possibilities of operation (loading/discharging) and to the availability of berths.

MEDICAL: Crew members are offered medical assistance if necessary when the Master requests, and they have to come to the Agency Office between 0800 and 0900 hrs. every day, except Sundays and holidays.

STEVEDORES: Working hours: 0700–1500 and 1500–2300 hrs.

CUSTOMS ALLOWANCE: For releasing cigarettes from Customs seal it is necessary to notify the Agent who, in turn, will arrange with the Customs House. Attention is drawn to the fact that bringing into or taking Romanian currency out of the country is prohibited. According to requirements of crew, the Master gets from Agent any sum of Romanian currency. The respective sum is charged in the disbursements account at official exchange rate +200% premium granted to seamen. Before departure from port the Master is obliged to return to Agent the sums of Romanian currency unspent against receipt. The sums are returned in front of the representative of the Customs during the control for departure.

OPENING/CLOSING HATCHES: Opening and closing of the hatches is to be performed by crew whenever requested due to weather conditions.

CARGO GEAR: Rigging of derricks, the good working condition of the winches and derricks, are permanent obligations of the vessel according to requirements of working gangs. The hatch ways must be opened or closed to their full size. The removable beams or covers shall always be stowed on deck on the side where work is not being carried on, so that they may not hinder working gangs or cause accidents. During operations, the vessel is recommended to close the hatches with rain tents, ship's property, if bad weather. If cargo handling gear gets out of order during operations, the waiting time of workers is charged against vessel and such time lost for breakdown of winches not to count as laytime.

SHORE LEAVE: On completion of border inspection crew can go ashore taking their Seamen's Books (or Passports) and the permits they receive from the soldier at the gangway. The permits must be returned to the soldier upon coming back on board. In the event that Crew members desire to visit another place of Galatz they shall inform the Agent.

GENERAL: From the time a vessel enters the territorial waters of Romania until she leaves the respective zone, i.e. 12 miles, it is compulsory to fly the Romanian flag. Ships that call at Galatz for the first time and have not got the Romanian flag on board must have it ordered through the Agent immediately upon berthing at Sulina Harbour. Throwing garbage overboard or pumping out dirty ballast or bilge water is allowed only beyond the territorial waters of Romania. Non-observance of these rules may result in fines varying between 3,000 and 10,000 lei imposed by the Harbour Master.

AGENT: Navlomar Shipping Agency.

Galatz: 20, 13 Junie. Telex 225. Cables "Navlomar Galatz".
Braila: 2 Imparatul Traian. Telex 10. Cables "Navlomar Braila".

NOTES

Please also advise Shipping Guides (Services) Ltd.

St. Lawrence Seaway

ST. LAWRENCE SEAWAY (See Plan)

DOCUMENTS: For Agent in Montreal, 3 unfreighted copies of Complete Manifest for Seaway Toll purposes covering all cargo to be discharged in the Great Lakes.

The St. Lawrence Seaway Authority requires one Transit Declaration Form. Also for cargo to or from overseas one unfreighted copy of the complete Manifest is required.

In first U.S. port, a "Traveller" is made up by the Customs Inspector with the following documents:

2 complete sets of U.S. Cargo Manifests, plus 6 copies for Agents.
1 set Manifest of Cargo for first U.S. port.
4 Stores Lists.
4 Personal Effects Lists.
4 Firearms and Ammunition Lists.
4 Crew Lists, Form 1–418.
4 Narcotics Lists.
4 Vessel's Itinerary Lists.
Vessel's Registry and copies of Paid Tonnage Tax Certificates.
Health Pratique.
Clearance from previous port.
2 sets Bills of Lading.
3 copies Stowage Plan.

In subsequent U.S. ports the following are required:

5 sets Manifest of Cargo for that port.
The Traveller and Permit to Proceed issued in previous port.
2 Stores Lists.
2 Personal Effects Lists.
2 Firearms and Ammunition Lists.
2 Crew Lists.
2 Narcotics Lists.
2 Sets Bills of Lading.
3 copies Stowage Plan.

Vessels navigating St. Lawrence Seaway are required to complete applications for:

(1) Certificate of financial responsibility.
(2) Certificate of Insurance, form FMC 225,
(3) Oil discharge assurity Bond, form FMC 226,
(4) Guarantee in respect of liability for discharging oil, form FMC 227.

These applications have to be filed with the Secretary of the Federal Maritime Commission before a certificate is issued. The oil pollution liability certificate should be retained aboard the vessel.

ICE ADVISORY SERVICE: Ships inbound from seaward between December 15th and April 15th should advise the Ice Information Officer, Sydney, 36 hours prior to entering Cabot Strait, stating their position, destination, whether loaded or in bulk. This procedure will facilitate the passing of ice information to the ship as necessary. Ice information is also available from radio stations at Halifax, Seven Islands, Wirringate and Grindstone. The Canadian Broadcasting Corporation Maritime Network also broadcasts ice information daily during the winter navigation season. Supplementary ice information may also be obtained from the Canadian Marine Service Icebreakers.

During the ice season, radio broadcasts of ice information are made twice daily from Marine radio stations as follows: Cape Race, Newfoundland; Fox River, Quebec; Mont-Joli, Quebec; Halifax, Nova Scotia.

PILOTAGE: The first Pilot station when entering the St. Lawrence River is at Les Escoumins, 80 miles West of Father Point. This Pilot will take the ship to the Quebec Pilot station 121 miles to the West. Off Quebec a new Pilot boards to take the ship to Trois Rivieres, where there is another change of Pilot for the remaining trip to Montreal.

Pre-clearance: Vessels intending to transit the St. Lawrence Seaway must be pre-cleared by a representative who shall assume responsibility to the authority for payment of all tolls and charges to be incurred.

Application for pre-clearance Form SLS 429 may be obtained from the St. Lawrence Seaway Authority, Cornwall, Ontario, or from the St. Lawrence Seaway Development Corp., Massena, New York.

RESTRICTIONS: The average navigation season in the Montreal–Lake Ontario section of the St. Lawrence River is from April 1st to December 18th.

Locks Nos. 1 to 7: length 860 ft., width 80 ft., depth 30 ft., channel depth 27 ft.

Welland Canal Locks: No. 1: length 865 ft., width, 80 ft. Nos. 2 to 7: length 859 ft.; width, 80 ft. No. 8: length, 1,380 ft.; width, 80 ft.; channel depth 27 ft.

St. Mary's River Locks: MacArthur: length, 800 ft.; width, 80 ft. Poe: length, 1,200 ft.; width, 110 ft.; depth, 32 ft. Davis: length, 1,350 ft.; width, 80 ft. Sabin: length, 1,350 ft.; width, 80 ft. Canadian: length, 900 ft.; width, 59 ft. The channel depth (lower end) to the Canadian Lock is 20 ft., with a normal depth of 18 ft. 3 in. over the sill. As Easterly gales raise, and Westerly gales lower the water levels below the Lock temporarily, it is recommended that Masters of larger vessels ascertain the available depth from the canal office prior to locking.

Speed Limits: 10 m.p.h. upbound, 12 m.p.h. downbound in the Beauharnois Canal; 9 m.p.h. Port Weller Harbour and Welland By-Pass Channel; 7 m.p.h. in all other canals. The speed limits vary from 10 m.p.h. to 18 m.p.h. in most remaining sections of the St. Lawrence River; Lower Detroit River 12 m.p.h.; St. Clair River 9 m.p.h. to 12 m.p.h.; St. Mary's River 10 to 15 m.p.h. Speed limits are detailed in a seaway notice issued early in the year.

MAX. SIZE: Length 730 ft., beam 75 ft. 6 in., draft 26 ft. Masts must not exceed 117 ft. above water level.

HEALTH: All ocean-going vessels must obtain a free pratique before entering the Seaway. Vessels entering the Seaway direct may receive quarantine inspection and clearance from the Canadian authorities at Montreal while at anchor awaiting entrance to the Seaway.

RADIO: *Notice of Arrival.* Master must give at least 24 hours notice to commander, 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also at least 24 hours notice of ETA at first U.S. discharge port is required.

Welland Canal: Whenever an approaching vessel arrives at calling-in-point (CIP) 15 or 16 it must call Seaway Welland on Channel 14, 156.7 mHz. It shall inform the Traffic Control Centre of its destination. The Traffic Controller will obtain the particulars required before transit is permitted and will give the necessary dispatch information to the vessel.

Great Lakes: It is recommended that vessels within a radius of 35 miles of a shore station use their FM transmitting and receiving equipment to ensure better connections. This pertains especially to vessels at anchor or in the proximity of a port or berth.

Radio Stations: Buffalo, New York, marine operator. Port Burwell, Ontario, marine operator. Geneva, Ohio, marine operator. Loraine, Ohio, marine operator. Rogers City, Michigan, marine operator.

IDENTIFICATION CARDS: In the first U.S. port, the immigration officer requires an alphabetical crew list made up on Form 1–418 and visaed by the American consul in the last overseas port. This crew list should contain the name of every crew member on board. Also needed are 3 copies of this crew list on the same form. The Immigration Officer will require all seamen's books and passports, to issue the completed crew landing permits made out on Form 1–95A. The Master will be given a crew list receipt which will indicate the names of crew members detained on board, if any. In case a crew member is detained on board, he cannot go ashore, and at irregular times an officer of the Immigration Service will check if the crew member is on board. A fine of $1,000.00 will be imposed on the vessel for each detained Crew member who is not on board.

TUGS: Whistle signals differ from those in international usage and are as follows:

1. Ship to Tug: 1 Long and 1 short (—.) = ship ready to proceed, O.K. or all right. 1 Long and 2 Short (—..) = let go the bow tow-line. 1 Long and 3 Short (—...) = let go the stern tow-line.
2. Both Ship to Tug and Tug to Ship: 1 Short(.) = work propeller ahead when stopped, *or,* stop propeller when working, either ahead or astern. 2 Short (..) = work propeller astern. 3 Short (...) = slow down or check. 4 Short (....) = work propeller strong in the same direction it is working at the time the signal is blown. 5 or more Short blasts (.....) = the standard danger signal.

SEAWAY EQUIPMENT: *Radio-telephone Equipment:* All vessels, other than pleasure craft of less than 65 ft. in overall length, must be equipped with VHF radio telephone equipment, in addition to the FM equipment otherwise required. The radio transmitters must have sufficient power output to enable the vessels to communicate with Authority Stations from a distance of 30 miles and must be fitted to operate from the wheelhouse and to communicate on 156.55, 156.6, 156.65, 156.7 and 156.8 mc/s.

Stern Anchors: Every vessel of more than 350 ft., the keel of which was laid after January 1, 1975 is required to be equipped with a stern anchor.

Propeller Direction in Alarms: Vessels in excess of 260 ft. in overall length shall be equipped with propeller direction and shaft r.p.m. indicators or visible and audible wrong-way propeller direction alarms located in the wheelhouse and in the engine-room.

Sewage and Galley Waste Disposal Systems: Sewage retention tanks and galley waste grease traps are required for vessels not otherwise equipped with containers for ordures. At Montreal, or at Port Colborne, vessels without retention tanks intending to call at Chicago must put on board chemical toilets which are offered for rental by 2 chemical companies. 2 to 10 chemical toilets are required for each ship at a rental charge of $75.00 each per trip into the Lakes.

Oily Water separators: Vessels which cannot contain waste oil products are required to be equipped with oily water separators or other such equipment for the extraction of oil products from waste water before discharge.

Rudder Angle Indicators: Vessels in excess of 260 ft. in overall length shall be equipped with rudder angle indicators located in the wheelhouse.

Gyro Compass: It is recommended that vessels be equipped with a gyro compass.

Radar Equipment: It is recommended that vessels be equipped with radar.

Vessels not fitted for the Seaway as prescribed above, will incur expenses for the rental, installation and removal of compulsory fittings.

REGULATIONS: For additional information on regulations and procedures, Masters and Owners are urged to refer to the Seaway Handbook and Seaway Notices.

AUTHORITY: The St. Lawrence Seaway Authority.

St. Pierre and Miquelon

ST. PIERRE: 46.47 N. 56.10 W. (See Plan)

DOCUMENTS: Formalities completed on arrival. Advise Port Service beforehand of vessels ETA, length, tonnage and draft.

Declaration of Health.
Derat Certificate.
2 Crew Lists.
2 Passenger Lists.
2 Cargo Manifests of any cargo to be discharged.
2 Crew Declarations (tobacco, liquor, souvenirs).
Certificate of Registry.

PILOTAGE: Contact Pilot 1 hour before arrival calling TXU by radio telephone on 2182 kc/s. or VHF Channel 16. Permanent watch kept. Pilot boats equipped with VHF Channel 12, radar, and radiotelephone. Pilot launch available at entrance to N.E. channel in position 46° 48' N. 56° 08' W. in the vicinity of the Land Fall Buoy.

Pilot launch named *Radar*, length 45 ft. The hull is black and superstructure white with "Pilote" painted on each side. Pilot launch carries the International Signals for pilot launch day and night.

When the weather is bad contact Pilot on Channel 12 for instructions.

Pilot is compulsory for vessel of 150 g.r.t. and over.

ANCHORAGE: In the roads, depth 13 m., not secure in strong East winds.

Shipmaster's Report: The anchorage in the roads where fish is loaded ex-trawlers is absolutely not secure, even with moderate winds from any direction, and engines should be on stand-by continuously. Several ships have gone on the rocks in a matter of minutes.

MAX. SIZE: Max. draft 8 m. New Port: max. length 110 m. Old Port: max. length 70 m. Channel depth 5 m. below chart datum.

HEALTH: If suspected disease on board contact St. Pierre Health Service, tel. 279.

Masters of vessels arriving at St. Pierre may obtain free pratique via TXU. Message to be sent to Harbour Master Saint Pierre 12 hours before arrival.

In the message the Master has to specify name of vessel, total number of crew member,. where ship coming from, and if everybody on board healthy; in these conditions flag "Q" is not necessary on arrival, but if any suspected disease or fever on board, advise Health Authority as well as Agent, and stand by instructions for berthing. Flag "Q" has to be flown on arrival in the roads.

RADIO: St. Pierre Radio, call sign TXU, receiving on 2182 kc/s. transmitting on 2410 kc/s.

Masters of vessels arriving are requested to send their ETA to Harbour Master Saint Pierre 12 hours before arrival and corrected by a further message if necessary. The ETA should be GMT. Also advise maximum draft and length.

Saint Pierre Radio is equipped with VHF Channels 16, 24 and 26 and maintains permanent watch on Channel 16.

TUGS: No tugs available but the pilot launch (230 h.p.) will assist on Master's request.

BERTHING: Mole du Commerce; length 170 m., depth alongside 8.50 m.

Quai de Peche: length 135 m., depth alongside 6 to 7 m.

Mole Frigorifique: 3 berths, No. 1; 120 m. length, 7 m. depth. No. 2; 85 m. length, 6 m. depth. No. 3; 120 m. length, 5.5 m. depth.

Old Port: Quai de la Douane: length 123 m., depth 6 m.

Quai de l'Alysse: length 50 m., depth, 6 m.

Pilot will inform Master of berthing prospects and any special requirements.

STEVEDORES: ETA notices are to be sent to Agent 24 hours prior arrival. Stevedore in Saint Pierre is Paturel Freres (tel. 604 and 295). Cable Address "Reltupa Saint Pierre". Telex Reltupa 20 QN.

Approximately 100 men are available for working on board vessels when loading/discharging or transhipping in the port. Crew are allowed to work only when no gangs are available.

One normal shift 0730 to 1600 hrs. every week-day, Saturday 0730 to 1200 hrs.:

Day overtime, Saturday 1200 to 1600hrs.
Night overtime, every day after 1600 until 2400 hrs.
Extra overtime, night after 2400 until 0700 hrs., and Sundays and holidays.

Work done with ship's derricks.

It is requested that a net be put under the gangway before starting work.

Pallets, slings, fork-lift and crane (5 tons) available at a charge.

TANKERS: 1 berth alongside dolphins in depth of 8.50 m.

MEDICAL: All facilities available.

FRESH WATER: Available at berths. Supplied by hoses, rate 25 cu.m./hr.

FUEL: Only diesel oil SG 825/840 at 15° C available at all berths.

OPENING/CLOSING HATCHES: Normally carried out by crew.

IDENTIFICATION CARDS: Each man to carry passport or seamen's book.

CONSULS: Local representatives for Canada, Netherlands, Norway, Portugal and Spain.

REPAIRS: Small repairs can be effected. Floating dock, capacity 750 tons, for vessels up to 13 ft. 6in. draft.

REPATRIATION: Can be arranged.

TIME: GMT minus 3 hours all the year round.

AMBULANCE: Telephone: 279.

AIRPORTS: Connections from St. Pierre to Sydney (Nova Scotia) International Airport.

TELEPHONES: Not possible to place telephones on board. It is possible to contact the shore on Channel 16 via Saint Pierre Radio.

SERVICES: Compass adjusting, radar repairs, radio, Decca, Loran and gyro-compass repairs and maintenance possible.

AUTHORITY: Officier de Port.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Samoa

APIA, Western Samoa: 13.50 S. 171.45 W.

DOCUMENTS:

1 Clearance from previous port of call.
3 Crew Lists.
3 Passenger Lists.
2 Health Documents.
1 Manifest.
Bills of Lading.
Ship's Papers (stores and poisons).

PILOTAGE: 24 hours ETA is required. Pilotage is compulsory for merchant vessels. Pilot boards 1.5 miles outside harbour on line of leading beacons. Pilot boat painted white with red awning. "Pilot" written on both sides of wheelhouse in brass lettering.

By night, in addition to usual navigation lights, Pilot boat carries standard identification, i.e. a red light on foremast with all-round visibility. Exemption from pilotage may be granted to Masters of vessels trading regularly to Apia, but pilotage dues are still payable.

ANCHORAGES: In 20 fathoms outside a line drawn between the 2 reefs and preferably on line of leading beacons. Bottom is coral.

RESTRICTIONS: No night-time or tide restrictions. Turning basin dredged to 36 ft., extending to 1,200 ft. from each end of the wharf. Arrivals preferred during daylight hours.

MAX. SIZE: Shore bollards to take stern and bow lines for vessels up to 800 ft. in length. Maximum draft 35 ft. Maximum length 600 ft. if moored to buoy. No limit to beam. Tankers only use the buoy.

Present arrangement for tankers not considered satisfactory now that there is a wharf. Oil companies are considering an alternative arrangement.

HEALTH: Doctor boards vessel on arrival.

RADIO: Signals to incoming ships by radio or radio-telephone from Apia radio station 5WA. For radio, ships should call on 500 kc/s. and operate on 483 kc/s. For radio-telephone, ships should call on 2182 and operate on 2162 or other available frequency as may be arranged once contact has been established. Apia maintains continuous service. Call sign "Apia Radio" repeated.

Apia radio maintains continuous service, and the Port Administrator and Harbour Master can be called on Channel 16 during normal working hours. The tug and pilot launch also operate on Channel 16 and all can switch to Channel 14 or 12 on request.

TUGS: 2 tugs available, *Pualale*, 460 h.p. and *Savaii*, 400 h.p.

BERTHING: Small charge made for use of hawsers and moorings. Export Wharf – reinforced concrete wharf 604 ft. in length on the East side of inner harbour. Maximum draft alongside 36 ft. All loading and discharging is carried out with ship's gear. No wharf cranes available. This wharf and all surrounding areas enclosed by fence is Customs area and all vessels trading to or from places outside Western Samoa must depart from or arrive at this wharf.

Buoy – 1 mooring buoy (red with white top) for use by tankers only. Usual to moor to buoy by the stern, using 2 wires and not less than 2 ropes. Length of moorings will be advised by Pilot or Harbour Master having regard to sea conditions and interval between swells.

New wharf 604 ft. long, vessels up to 700 ft. may be berthed.

STEVEDORES: Arranged by ship's Agents.

MEDICAL: Advance notice to Agents preferable. No private doctors but good general hospital where seamen may be admitted.

TANKERS: Shell, Mobil, and B.P. operating in Samoa, and have own discharging facilities. Tanker terminal situated on West reef. Vessel's stern moored half way between reef and buoy. Discharge line is 6 in. diameter. Launch service may be provided between ship and shore at a small charge.

TIDES: Mean high water intervals 6 hrs. 27 mins., Spring range 3.2 ft., mean range 2.6 ft. Tidal stream normally slight, but after heavy rain outflow from rivers and streams can cause it to become quite strong.

The current across the harbour entrance about 600 m. off the reef can be variable, but is predominantly Westerly and velocities up to four knots have been reported but this is not normal.

FRESH WATER: Available at wharf from shore installation.

FUEL: Only light diesel fuel available.

FIRE PRECAUTIONS: Fire services available on wharf, station is 0.5 miles distant.

GANGWAY/DECK WATCHMEN: Recommended and available.

OPENING/CLOSING HATCHES: Opened and closed by stevedores.

CUSTOMS ALLOWANCE: No enforcements.

IDENTIFICATION CARDS: Not needed.

CONSULS: The New Zealand High Commissioner represents all British subjects; French Consul, tel. 156.

REPAIRS: Minor repairs only.

AIRPORT: 25 miles from Apia on Western side of Island. Regular and frequent mail and passenger services.

TIME: GMT minus 11 hours. No alteration to clocks.

HOLIDAYS: No cargo on Sundays between 0300 and 2100 hrs. The recognised holidays are Christmas, New Year, Boxing Day, Good Friday, Easter Monday, Whit Monday, Anzac Day and Independence holidays from 1st June to 3rd June.

TELEPHONES: Police and public telephones near wharf and provisions are available for telephone connection to tourist vessels berthed at the wharf.

POLICE/AMBULANCE/FIRE: Hospital 364; Police 390; Fire 200.

GENERAL: *Supplies:* Provisions available. Deck and engine room supplies can be obtained in limited quantities.

Divers: No divers other than scuba divers are available, and skin divers may be recruited for up to 50 ft. diving.

Oil Pollution: The pumping of bilges, etc., within harbour limits is not permitted and *heavy penalties will be imposed for any breach.*

Garbage Disposal: The dumping of refuse of any kind within harbour limits is strictly prohibited. Properly covered receptacles will be made available and rubbish disposal vans will clear them as necessary. A small charge will be made for this service.

AUTHORITY: Port Administrator and Harbour Master.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Saudi Arabia

TRAVEL FROM BAHRAIN: Travel is permitted from Bahrain to Saudi Arabia, *provided* travellers *(a)* hold a valid International Vaccination Certificate showing that the holder was immunised at least 5 days before travelling to Saudi Arabia, but not more than 3 months previously; *(b)* that any traveller proceeding to Saudi Arabia from Bahrain should have taken the prescribed doses of Tetracycline over the 48-hour period immediately before travelling. The fact that the passenger has taken the Tetracycline should be certified by the Bahrain Health Department.

DAMMAM: 26.30 N. 50.12 E.

LOCATION: Situated on the East coast of Saudi Arabia, in the Arabian Gulf, is operated by the Saudi Government Railroad.

FLAG: In addition to the quarantine signals which are to be shown until pratique is granted, the Saudi Arabian Flag must be flown from vessel's foremast while in port of Dammam.

DOCUMENTS: In order to cope with Port, Customs and Agent's requirements, following documents should be airmailed to Agents prior to arrival of vessel at Dammam port:

12 copies of Cargo Manifest for each port of loading, all typed, stamped and signed.
2 copies of Freight Manifest.
3 copies of Hatch List.
3 copies of Stowage Plan.
1 copy of each non-negotiable Bill of Lading.
List of Dangerous Cargo on board, if any.

The particulars of the certificates required by the SOLAS regulations are entered in SGRRO Form No. 805 on the arrival of the vessel at the anchorage and the certificates are sighted after berthing. Also see "Health".

PILOTAGE: Pilotage at Dammam port is compulsory. Manoeuvring of vessels in the vicinity of pier or in anchorage will always be performed under supervision of a Dammam port Pilot.

The Dammam port Pilot will board vessels at anchor off approaches to port or when they are abeam of Dammam Beacon No. 2 (approximate position 26° 33′ N., 50° 11′ E.), and will then pilot vessels to anchorage or berth at pier.

ANCHORAGE: The approach anchorage area is situated South of parallel 26° 34′ 00″ N., and may be demarcated on the East by the 6 fathoms contour starting in proximity of Beacon No. 1 coming up to light buoy No. 3, and thereafter remaining West of line drawn from light buoy No. 3 to Beacon No. 6. On the West, the approach anchorage area extends within the 6 fathom contour, starting from Beacon No. 2 up to Beacon No. 4 and thence remaining North of line joining Beacon No. 4 and Beacon No. 6.

The vessels anchored in approach anchorage are required to keep fairway clear for access to and from port.

WEATHER: The peninsula of Saudi Arabia is almost of an equatorial climate. In Winter the temperature is rather low but in Summertime it rises over 50 degrees Centigrade. Rain is generally scarce. During major part of year, but especially during Summer, the relative humidity is high. From July to September it frequently exceeds 85%.

Winds in this area are not predictable for more than a few hours. They vary in strength and direction, although prevailing winds are from N.W.

Visibility is generally good. There are times, however, when it is reduced to a very short distance due to fog or dust held in suspension in the atmosphere.

TIDE: The Diurnal tide rise at port of Dammam is approximately 8 ft. at springs, and 5 ft. at neaps. Currents generally drift with tide, and run in or out of the port in counter clockwise rotation. Depending on weather conditions and other contributing factors, these currents are slow moving at all times, speed reaching maximum of 3 knots.

MAX SIZE: See "Berthing".

HEALTH: In accordance with international practice, quarantine signals must be displayed by all vessels approaching Dammam port. These signals shall be displayed continuously until pratique granted. Such signals are the following: Sunrise to sunset – Quarantine Flag; Sunset to sunrise – Signal Lights – red over white.

The Port Doctor or Quarantine Officer will board the vessel either at anchorage or at pier. Documents required for immediate inspection are the following:

Maritime International Health Certificate (from the last port).
Valid Deratisation or Deratisation Exemption Certificate.
Crew List (3 copies).
Passenger List, if any.
Valid Smallpox Vaccination Certificates (of a date not exceeding 3 years) for all crew members and passengers.
Valid Cholera Certificates (of a date not exceeding 3 months) for all crew members and passengers.
Valid Yellow Fever Certificates for all crew members and passengers.
Certificates of Inoculation against any communicable diseases prevailing at the ports of departure.
Ship's Log Books.

RADIO: (Also see "Agents"). Vessels bound to Dammam are required to notify their Agents 72 hours steaming-time prior to arrival, giving ETA in GMT, total weight tons of cargo for discharge at Dammam, number of workable hatches, Max. arrival draft and overall length of the ship. ETA notice should then be confirmed 48 hours and again 24 hours before arrival.

Vessels' messages to Agents can be given by contacting via wireless Aramco Radio Station "HZY" on 500 kc/s, which station provides free of charge service.

VHF: V.H.F. system has been installed in the Harbour Master's Office. Its international calling and answering frequency is on Channel 16. Masters of vessels on approaching Dammam are required to give the positions of their ships to the Port Radio Control.

TUGS: In all there are 10 high powered Tug Boats available in the port. Two of them are 1500 h.p. and two 1350 h.p. The remaining are between 800 to 1000 h.p. They are available to assist vessels in mooring or unmooring. Whenever such assistance is provided, Master and crew of tug shall, in the performance of such services as they render to the vessel, become and be deemed to be the Agents and servants of the Owners and/or charterers of the vessel assisted.

BERTHING: The Port has 19 working berths. Of these, 2 at North Pier 744 ft. 06 in. long and 501 ft. long respectively and have a depth of 12 to 14 m. Of the remaining 17 berths 1, 2, & 3 are 240 m. long, 14 m. depth and berths Nos. 4, 5, 11, 12 and 13 are 180 m. long 11 to 14 m. depth.

(a) Other port facilities (tugs – lighters – railway cars). 10 tug boats, 14 lighters of from 150 to 250 tons capacity each, 10 reefer railroad cars of 1300 cu. ft. capacity, 1 railroad flat car of 80 tons capacity. A large stock of railroad cars of any type of 45 tons capacity each.

No floating cranes, no water or oil barges, no repairs facilities, no transhipment facilities.

(b) Priority: There is no berthing priority at Dammam Port for any ship or type of cargo carried whatsoever. However, vessels carrying small quantities of cargo, may be berthed, irrespective of turn, at the Main Pier No. 4 berth, immediately on arrival if such a berth is available and provided that there are no other vessels in port within such category.

(c) Registration. Incoming vessels are assigned berth on a "first come, first served" basis. Every possible effort is made to berth vessels immediately upon arrival. If no berth available, vessels will be listed "in turn" in accordance with time of arrival at prescribed anchorage area (South of Beacon No. 2), pratique granted and presentation of cargo documents to the Port Authorities.

In the event of long delay in berthing due to port congestion or otherwise, vessels once "in turn", may be allowed to take up registration and proceed for any other Gulf port for any intended purpose, and return thereafter to Dammam still keeping their position "in turn". In order, however, that a registered vessel may be still considered in turn, is necessary that she return to Dammam within the time limit intimated to the Master at time the ship was cleared out. Failure to return to Dammam within such time limit, will automatically result in loss of ship's turn and postponement to bottom of waiting list.

CRANES: *Main Pier;* Capacity 3–6 tons. *North Pier;* None available.

DISCHARGE RATE: General cargo 100/125 tons per hatch per 24 hours. Bagged cargo 150/175 tons. Steel products, 125/150 tons.

STEVEDORES: Stevedoring operations at Dammam are performed by the Saudi Stevedoring Company. Charges are levied on weight/measurement basis, in accordance with current tariff.

A limited amount of stevedoring gear and equipment can be made available by Saudi Government Railroad on request of Master or Agents. A charge is levied for rental of this equipment.

MEDICAL: Masters may obtain medical attention for ship's personnel from port doctor who may in case of serious illness or injury recommend treatment to local hospitals. The port doctor ordinarily will treat minor illness or injuries on board ship.

Masters of vessels at sea may use services of Aramco Radio Station "HZY" without charge to obtain medical advice at any time.

WATER: Well water is obtainable at all Dammam piers at the rate of 4/5 t.p.h.

Both well water and distilled water, though in limited quantities, may be also obtainable in Ras Tanura but only in conjunction with and during bunkering operations. The maximum quantity of distilled water obtainable is 15 tons per vessel.

Fresh water also available from private barge.

FUEL: Vessels requiring bunkers have to call at nearby port of Ras Tanura where bunkers facilities are operated by Aramco. No bunkers supplied however unless a nomination is made available at Ras Tanura through Aramco New York. To obtain such nomination, Owners/Charterers/Operators are required to handle the necessary arrangements in advance of time directly with Aramco New York or one of its off-takers.

Fuel oil and marine diesel available from private barges.

CUSTOMS: All materials to be either exported from or imported into Saudi Arabia are subject to examination by Customs Authorities. The importation of certain articles, such as the following, is strictly prohibited:

Alcoholic beverages, including beer and wines.
Explosives.
Firearms.
Implements of war of any kind, including antiques.
Religious matter not pertaining to the Moslem faith.
Playing cards and gambling devices.
Narcotics.

Trafficking in these items between ships or between ships and shore is strictly prohibited, regardless of whether they are alongside the piers or at anchor.

CONSULS: Except for the U.S. Consulate-General residing in Dhahran, no other foreign consulates are available.

DEVELOPMENTS: 9 additional berths Nos. 14-22 have been provided in the East port, 4 have already been put into commission and the remaining 5 are nearing completion. 5 of them will be 180 m. long, draft 7 to 12 m. and the other 4 will be 240 m. long, draft 14 m.

Berths Nos. 14, 21 and 22 have been earmarked for handling of

Ro/Ro, timber and steel ships respectively. They will have 14 m. of water alongside.

Berth No. 14 has already been put into commission and generally used for berthing of conventional Ro/Ro ships and those requiring stern docking. The limitation for stern docking ships is 32 ft. wide. The quay at high water is approximately 1 m. and at low water approximately 3 m. above the water level.

Berths Nos. 15, 16 and 17 have also been put into commission and are generally used for ships carrying direct delivery cargo.

Six warehouses at berths Nos. 12, 13, 14, 15, 16 and 18 are under construction, their floor area will be 5,640 sq. m. respectively.

Under Phase 3 of the port expansion plan 16 more berths will be constructed (23-38) on West side of the port. 9 berths will be 180 m. long, 12 m. deep and 7 will be 240 m. long, 14 m. deep. Berths Nos. 23 and 24 have been earmarked for container ships.

Also included in the plan is the construction of 6 covered warehouses with a floor area of 5,740 sq.m. respectively. Further 6 side open warehouses with similar floor area will also be constructed.

Shortly a cold storage warehouse opposite berth No. 19 will be constructed having a floor area of 3,248 sq.m. temp. 23° F and one chamber for chilled cargo – floor area 377 sq.m. temp 1° F.

The work for installing electric shore cranes on berths Nos. 1, 2, 3, 4, 5, 11, 12 and 13 has commenced and is expected to be completed by the end of this year.

Each berth will have 4 cranes – 3 of 6 tons capacity and 1 each of 15 tons capacity. These will be placed in such a way that for special loads 2 of the 15 ton cranes can work at tendum. These cranes have been supplied by Messrs Sothert and Pitt of England and are being erected by their Engineers.

REPAIRS: Relatively limited repair service is available from local business concerns and replacement parts are practically unavailable.

Deep-sea divers, operating from modern and well-equipped diving boats, are available at Dammam.

A Lloyds representative is available in Dammam.

AIRPORT: Very good airlines facilities available. Daily departures for any part of the world.

TIME: GMT plus 3 hours all year round.

POLICE/AMBULANCE/FIRE: Ambulance 3182; SGRR Police 3771; SGRR Fire House 2211.

SHORE LEAVE: Ship's personnel and passengers are not permitted ashore for any purpose whatsoever until pratique has been granted. All shore leave is contingent upon compliance with quarantine regulations and subject to proper permission granted by Immigration Authorities. The necessary arrangements can be made by ship's Agent on Master's request. While in port, the vessel's personnel is under jurisdiction of the Law of Saudi Arabia.

GENERAL:

(a) General Port Charges. Vessels arriving at Dammam port are required to pay for: Pilotage in and out; Handling of mooring lines; Harbour dues; Quarantine fees; Dockage charges; Stevedoring; Tallying; Car and launch hire; Supplies and services as otherwise required; Agency fee and commission.

(b) Port working hours. Work at Dammam port is performed 7 days a week, from Saturdays to Fridays, Friday being the regular week holiday. 3 shifts are normally worked each day: from 0700 to 1500 hrs., from 1500 to 2300 hrs. and from 2300 to 0700 hrs.

(c) Dangerous cargo. Vessels carrying explosives, ammunition, highly inflammable liquids and/or any other cargo of dangerous natures, will not be berthed alongside piers. All discharging operations will have to be performed in anchorage into barges as available and weather permitting. Only daylight work is permitted.

(d) Lubricating oils. Lubricating oils are available in limited drum quantities if ordered in advance by letter or cable through Agent.

(e) Provisions. A large variety of frozen, fresh and canned goods is available in the local market. Supplies can be arranged through recommended ship chandlers upon Master's request.

(f) Laundry. Modern washing and dry cleaning facilities are available at Dammam and Al-Khobar. Deliveries can be arranged within 24 hours.

AUTHORITY: Director-General, Saudi Government Railroad Organisation

AGENT: Gulf Agency Co. (Saudi Arabia) Ltd., POB 86, Dhahran, Saudi Arabia, Cables "Confidence Bahrain" stating for Dammam or "Confidence Dammam".

Vessels equipped with VHF, can communicate, when within range, with Agent on stand-by Channel 16 by calling "Confidence Dammam". Voice contacts may be also established via VHF, on the same channel as above, with Ras Tanura office, by calling "Confidence Ras Tanura". Once contact is established on Channel 16, communication will continue by switching on available working channels as directed.

Telephone: Normal working hours 23425 and 23426; After office hours 23526 and 41742.

JEDDAH: 21.28 N. 39.11 E.

LOCATION: The port stands to S.W. of the city, on an island called Jazirat al Mafsaka approximately 600 acres in area. The island is connected with mainland by a causeway.

The harbour is sheltered by several long lines of coral reefs and islands. The access is through 2 narrow channels.

PORT LIMITS: The limits encompass all waters, islands, channels, passages, piers, wharves, jetties, landing-places, sheds, warehouses, workshops, basins, slipways and bridges, etc., contained within the parallels extending from shore seaward to 39° 06′ East Long. and between 21° 27′ and 21° 31′ North Lat. including Qaham and the approach beacons, Mismari and Shib el Kabir.

CLIMATE: Tropical desert, hot climate. Humidity very high during Summer months, but Winter is mild and pleasant. Rainfall is negligible and does not exceed more than 3 to 4 in. per annum.

General direction of wind is mostly N.W., mild in intensity. Winds of gale force occur very rarely. The effect of high winds when they do occur in the harbour is not felt due to barrier reefs breaking force of waves. Waves inside harbour not generally above 1 to 2 m., although waves up to 6 m. may sometimes occur beyond outer reef.

Tides of Indian Ocean do not affect Red Sea due to construction of the Bab-el-Mandab. There is, however, a local semi-diurnal tidal oscillatory motion of the sea along its length, giving a high tide at one end and at the same time a low tide at the other. Jeddah Port is hardly affected by these tides and there are almost no currents produced by these movements.

The variation between Summer and Winter water levels is approximately 50/60 cm. only.

Visibility in the port area is generally good, occasionally obstruction to vision occurs due to dust, but such occurrences are seldom of long duration.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
Last Port Clearance.
Vaccination Certificates.
Stores List.

Prior to the vessel's arrival the following documents are required for translation and submission to the various authorities:

7 copies Cargo Manifest.
1 copy Freight Manifest.
2 copies Stowage Plan.
2 copies Hatch List.
1 copy each non-negotiable Bill of Lading.
7 Lists of Dangerous Cargo, whether for discharge or in transit.

PILOTAGE: The Pilot station is off Kaham beacon (Lat. 21° 27′ 02″ N., Long. 39° 06″ 32″ E.). Pilotage is compulsory and available during daylight hours only. Pilots do not usually keep station unless expecting a vessel.

ANCHORAGE: If vessel arrives Pilot station too late for entry, anchorage may be made 0.5 mile North or South of the Kaham Beacon.

Arriving vessels will remain at Outer Anchorage until turn for berthing, or proceeding into Inner Anchorage for discharge into lighters.

RESTRICTIONS: No navigational aids marking approaches to port, and therefore there is no night navigation. A lighthouse and lighted marker buoys are scheduled for positioning in the development of the new port.

Only Saudi nationals are allowed to board vessel.

HEALTH: Doctor boards vessel before arrival at berth and grants free pratique.

(a) Cholera: All arrivals from infected or endemic areas are required to possess a certificate showing 2 injections made not less than 7 days and not more than 30 days before arrival. For re-vaccination carried out within 6 months of a recorded vaccination or re-vaccination, a single injection renders the certificate valid for a further 6 months.

In addition, arrivals must submit a certificate dated not more than 7 days before their departure recording the negative results of stool culture. This certificate must be delivered by a licensed laboratory and attested by the Health Authority.

(b) Smallpox: All arrivals are required to submit a valid vaccination certificate in accordance with International Sanitary Regulations.

(c) Yellow Fever: All arrivals from infected or endemic areas are required to submit a valid vaccination certificate in accordance with International Sanitary Regulations.

(d) Mecca: All Muslim crew members who wish to visit Mecca and Medina should have in their possession 2 recent passport-size photos. These should bear the crew member's name and C.D.C. number to enable Agent to obtain permission for the pilgrimage. Crew members must also have in their possession the above-mentioned medical certificates, otherwise permission may not be granted to them to visit Mecca and Medina.

RADIO: Masters should give their Agents an ETA not later than 48 hours before arrival. Jeddah Radio "HZH" operates on 500 kc/s. with limited working hours.

TUGS: There are 2 port department tugs 1 of 1,000 and 1 of 700 h.p. These tugs are supplied free for assisting berthing/unberthing of vessels.

REGISTRATION: System in effect.

BERTHING: Berthing Priority. Generally priority in order of arrival, but also following priorities:

- *(a)* Vessels in distress.
- *(b)* Vessels carrying pilgrims and passengers.
- *(c)* Vessels carrying army stores and equipment.
- *(d)* Vessels instructed to have a special priority by the Ministry of Communications.
- *(e)* Vessels carrying livestock.
- *(f)* Vessels carrying explosives and other dangerous goods.
- *(g)* Vessels carrying freezer cargo, fruit, vegetables and perishable goods, foodgrains and flour.
- *(h)* Vessels carrying less than 100 tons of cargo.
- *(i)* Regular mail vessels.

In the inner harbour there is a finger pier connected to the main quay by a Trestle Bridge. The pier accommodates large vessels with a draft of 29 ft. on the Southern side and 32 ft. on the Northern side.

The main quay consists of 8 berths for large vessels with a depth of 30 to 34 ft. alongside. These berths have large warehouses adjacent to each berth. There are 3 more berths which are used by coasting vessels.

Roll-on/Roll-off: Max. draft 8.0 m. Length of berth, 170 m. (4 vessels can berth at one time). Height of Quay, 7.0 m. No linkspan, no tide.

The Petromin Jetty can take 2 vessels at its floating pipe-lines. Vessels moor to 2 anchors with stern moorings to buoys. This is solely an oil berth used for discharging/loading tankers and bunkering other vessels.

Container Vessels: The following is part of a Jeddah Port Administration Circular to all Agents in the port.

1. Cellular Container vessels, if self-sustained by ships gear and required shore handling equipment can be considered for preferential berthing on Fridays, when general cargo vessels are not being worked. If a general cargo vessel is displaced by a preferential vessel on a Friday, the general cargo vessel must be back on the berth and working by 0800 hrs. Saturday whether or not the preferential vessel has completed.

There are presently 10 berths available. Vessels are assigned priority by the Government on the basis of national requirements and generally includes vessels carrying passengers, animals, foodstuffs, reefer cargoes and national defence items. There is also a commitment to discharge lift-on lift-off automobile carriers on Fridays.

In this respect kindly note that Ro/Ro vessels are given preferential berthing — not priority — on the basis that they occupy only a short length of quay, if their cargo is on some form of trailers, or in Containers which can be rapidly placed on trailers, or is wheeled equipment which can be rapidly transported to the Ro/Ro park without congesting the berth.

2. Containers may be handled from barges fitted with ramps, capable of working in a similar manner to Ro/Ro vessels.

3. The operator must supply sufficient lift trucks of required capacity to handle loaded Containers of the vessel and the shore area, as well as sufficient road transport to move the containers from the vessel to the allocated shore area.

4. Allocated shore areas for transit cargoes and not for storage.

5. The Head of Jeddah Customs has instituted a procedure for the rapid clearance of full Containers for one consignee, destined to Jeddah or up-country. Agents are requested to familiarize themselves with this procedure.

6. Failure to move Containers rapidly from an allocated shore area could result in delay in berthing a following vessel of the same line.

7. Kindly note that for several months to come, operators will be required to provide lift trucks for loading Containers on to road transport for delivery to consignees.

8. The Port is preparing suitable land area for the handling and distribution of loaded Containers and a separate area for empty Containers. Handling equipment has been ordered, but, until further notice please be guided by this Circular.

9. Lines presently shipping Containers to Jeddah are requested to confirm their frequency of service and number of units per voyage.

Lines planning expansion of existing services, or the introduction of new services are requested to send details to the Jeddah Port Administration in order to allow proper planning and discussion with the Line concerned to ensure maximum utilization of space and facilities and avoid lengthy delays.

STEVEDORES: *Working Hours:* Normally every day except Friday, first shift 0700–1600 hrs., second shift 1800–2400 hrs. Arrangements can be made to work overtime outside these periods. Discharging on barges can be continuous.

BARGES: The Port Department operates about 16 barges of capacities 200 to 400 tons. These are supplied free to the vessels and are used for off-loading steel, drums, heavy lifts and marble.

Sambouks are used for discharging timber and are supplied free but private barges may be used to expedite for which a charge will be made.

CRANES: There are sheerlegs situated on the tip of the finger pier with a lifting capacity of 40 short tons. Vessels can use this appliance for the discharge of heavy lifts.

In addition there are several port department mobile cranes with capacities from 2 to 30 tons used for rehoisting cargoes discharged on barges and handling cargo in the storage areas. These are not normally available to ships. With the exception of heavy lifts discharged by sheerlegs all cargo is handled by ship's gear.

MEDICAL: Doctors, dentists, eye specialists and hospitals are available.

FRESH WATER: Only available alongside berths as no water barges are available. Rate about 25 t.p.h.

FUEL: Owners requiring bunkers should ask their normal suppliers to arrange the stem through Arabian-American Oil company, New York. The latter will advise their Jeddah office who will in turn confirm the stem with Petromin. Spot bunkers are usually available on cash payment. If the Petromin Jetty is occupied by tankers, vessels requiring bunkers will have to wait until the berth is vacant. Private barges can also supply bunkers and prices are reasonable with no shifting expenses incurred.

FIRE PRECAUTIONS: A fire-float is available.

REPAIRS: Very limited, due to the difficulty of enabling non-port workers to enter the port area. Facilities exist for repairs to Decca radar.

GANGWAY/DECK WATCHMEN: 2 coastguards are stationed permanently on board and require accommodation and food. Coastguards keep constant check on liquor seals and may search personnel going ashore.

CUSTOMS ALLOWANCE: The consumption of alcohol including beer is prohibited. Ship's bonded stores are sealed by the Coastguard after the vessel has been granted free pratique. Any alcohol found after this will be confiscated and a fine imposed of Riyals 1,000.00 per bottle and possible imprisonment for the offender(s).

REPATRIATION: Several flights daily from Jeddah. A visa is required for entering or leaving the country.

AIRPORT: Situated close to the city. A new airport is under construction about 40 km. to the North.

TIME: GMT plus 3 hours.

HOLIDAYS: Every Friday is a holiday, although vessels can be worked from 0700 to 1000 hrs. to finish, at overtime rates.

SERVICES: Good laundry and ship-chandlering facilities.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: Discharge books or passports must be left at the gate, and collected when re-entering the port area.

GENERAL: The Saudi Arabian flag (in good condition) must be flown from 0600 hrs. to sunset.

Communications by cable are lengthy, and about 3 days should be allowed to receive a reply to a cable. Exterior telephone calls require 1 day's notice.

Vessels carrying explosives for discharge Jeddah or any other port are not permitted to berth inside harbour. Such vessels will be discharged at the Outer Anchorage and must be capable of discharging all cargo with ship's gear.

SHIPMASTER'S REPORT No. 1: August 1975

The port of Jeddah is heavily congested and cargo vessels may expect to wait up to five weeks for a berth. Passenger vessels wanting a berth alongside should request this well before the expected call.

Berths: These are good, well fendered, and have depths of 33 ft. alongside most of them.

Anchorages: These are both protected and restricted by the series of coral reefs off the port. Due to congestion, the anchorages are very crowded and it is necessary for ships to moor rather than lie to single anchor. Holding ground is not good and when the afternoon breezes blow strongly it is sometimes prudent to have engines on stand by. At night it is frequently calm and fenders are required as ships make contact.

Bunkers: Bunkers are available by barge. On this vessel's last call ships calling at Jeddah for bunkers only were waiting up to 3 days. On our first call, although bunkers were ordered in good time, they were not delivered at all.

Tugs: There seems to be 2 harbour tugs and a number of smaller ones for towing lighters etc. They seldom appear when ordered, this was confirmed by the pilots.

On our last call, although ship was manoeuvring with difficulty, tugs were not available either for entering port or berthing.

Pilots: Pilots are excellent. Pilot boat waits in El Hariq, North of Qaram Reef. Under no circumstances will Pilot meet ships further out. Departing, Pilot leaves in "Middle Gateway" or before.

Navigation Aids: Port only operates in daylight and there are no lights. The airport radio beacon is very useful especially as in the reduced visibility so often encountered in the Red Sea, nothing is seen visually until the ship is inside the outer dangers.

There are a number of chimneys and water towers visible to the North of the port, but these are not marked on the charts.

The radar picture can be misleading when compared with the coastline on the chart. The strongest echo is given by the anchored ships.

Qaram beacon is lying on its side at present. The wreck on the next reef to the South, which looks like a small ship under way, is usually seen first.

Agency Service: All requests for water, cash, shore labour etc. must be made in good time. At anchor, Agent's launch visits only infrequently. On vessel's last call, Agents did not board ships in the anchorage at all, even though the ship was in a certain amount of trouble. The normal practice seems to be for the Master to go to the agency office himself to chase things up. The office staff are all most pleasant and helpful.

There is good telex communication, except on Fridays, but telephone calls to UK are all but impossible. By local custom, the agency closes at 1400 hrs., reopens at 1900 hrs. daily.

SHIPMASTER'S REPORT No. 2: April 1976. Report on New Clean Oil Terminal.

Charts Required: BA 2599 Approaches to Jeddah BA 2577 Jeddah Harbour.

Pilot Station: Lat. 21° 27′ 15″ N. Long. 29° 06′ 00″ E.

Position of New Clean Oil Terminal: Lat. 21° 26′ 55″ N. Long 39° 09′ 20″ E.

Approach to Terminal: Through Middle Gateway, Inner Gateway then South for 10.5 cables.

Depths: Least depth in approach channel 50 ft. and at berth 40 ft.

Moorings at Berth: Both anchors down with 6 shackles of cable on each. 8 Stern lines to buoys, viz 2 lines on each quarter to stern buoys. 2 Quarter lines on Starboard side to Starboard Quarter buoy. 1 line from main deck to Starboard Quarter buoy. 1 line from main deck to Port Quarter buoy.

Cargo Hoses: 3×8 in. Floating cargo hoses connected to Port side manifolds, viz, one for Mogas/Jet fuel, one for A.D.O./Kero and one for Fuel oil. Shore ends of hoses connected to manifolds on causeway. Shore line sizes given as Mogas/Jet Fuel 8 in. A.D.O./Kero 12 in. and Fuel Oil 12 in.

Back Pressure: Back pressure allowed 100/115 p.s.i. giving the following discharge rates. Mogas/Jet Fuel 160 m/t.p.h., A.D.O. 320 m/t.p.h., Kero 340 m/t.p.h. Fuel Oil 300 m/t.p.h.

Bunkers: Fuel Oil and Diesel Oil are shipped at berth after discharge of cargo.

Fresh Water: Not available at berth.

Accommodation Ladder: Rigged on Port side.

Shore Leave: By boat, takes 20 mins to cover the 1 mile distance. No one is allowed to land on the causeway.

Seamens' Identification: To leave dock area seamen must deposit their Seamans I.D. Card, C.D.C. Book or passport at the dock gate. Documents are picked up on return to dock gate.

Communications: Jeddah Radio H.Z.H. can be contacted on 500 kHz. and no traffic lists are sent.

Jeddah Port is now operating a VHF Station "Jeddah Signal Station" which can be contacted on VHF Channel 16, but meantime is only concerned with berthing of dry cargo ships. This VHF station is British manned, but is not in contact with Pilots by radio or telephone.

Tanker Operations Communications: Jeddah Oil Refinery can be contacted on VHF Channel 11 when approaching Pilot station and will pass messages to Agent and inform Pilot when requested to do so. Unfortunately information supplied by using this method is not always reliable as sometimes they don't know what tanker movements are scheduled. Usually Pilot will take vessel into anchorage if discharging berth is not available. No berthing operations are conducted in the Port of Jeddah between the hours of sunset and sunrise.

AUTHORITY: Saudi Government Railroad Organisation.

AGENT: Gulf Agency Company (Saudi Arabia) Limited, King Abdul-Aziz Street, POB 2038, Jeddah, Saudi Arabia. tel. 31481, 22080, 31435, after hours 39434. Telex: 40047 ("GACSHIP SJ"). Cables: "GulfAgency Jeddah".

Copies of correspondence to the Jeddah Office should be sent to Ras Tanura Office.

JU'AYMAH: 25.56 N. 50.03 W.

OPERATORS: Arabian American Oil Co.

FLAG: In addition to the quarantine signals which are to be shown until pratique is granted, the Saudi Arabian flag must be flown from the vessel's foremast while at Ju'aymah. Vessels should provide themselves with this flag before arrival but, if circumstances render this impossible, such flag may be purchased from the vessel's Agent.

The Saudi Arabian flag is properly displayed when the writing appears on top and the sword on the bottom.

CHARTS AND PUBLICATIONS: It is recommended that vessels scheduled to call at Ju'aymah should have on board suitable navigation charts such as the following: British Admiralty Charts 2847, 2858, 2882, 2883, 2886, 3776, 3777 and 3788; U.S. H.O. Charts 62032, 62410, 62414 and 62415. Up-to-date "Sailing Directions", "Pilot Book" and "Light Lists" should also be consulted.

IMPORTANT FEATURES: 1. The Ju'aymah loading facilities are located approximately 20 miles N.N.W. of the Port of Ras Tanura and 7 miles offshore in Saudi Arabian waters. The loading facilities consist of an oil platform, a control platform and three single point mooring berths.

2. Pilots/Mooring Masters advise on the mooring and unmooring at the buoy moorings and supervise the movement of all vessels in the vicinity of the loading facilities. Presently no charge is made for this service.

3. Mooring and unmooring, connecting and disconnecting of the cargo and bunker hoses are to be performed by the crew of the loading tanker under instructions from the Pilot/Mooring Master.

4. Safety rules are strictly enforced. The Mooring Master will make a thorough inspection of the tanker prior to and during loading operations.

5. When vessels are scheduled to load cargo at both Ras Tanura and Ju'aymah, Aramco reserves the right to advise the vessel at which berth the loading shall start and finish.

6. Aramco maintains a radio station (call letters HZY) for the exchange of messages with ships. For frequencies and transmission times, see "Radio". All incoming tankers should establish early contact with this station at least 72 hours before arrival in order to transmit ETA data and other information as requested in "Radio".

7. Unless instructed otherwise, vessels must arrive at Ju'aymah with propellers almost covered and trimmed not more than 8 ft. by the stern. Masters are urged to maintain radio contact with HZY or ship-to-shore communication by VHF voice radio in order to obtain the latest weather information.

8. The consumption of alcoholic beverages is prohibited within the Kingdom of Saudi Arabia. All alcoholic beverages are to be under lock and key during the vessel's stay. Vessels moored at a Ju'aymah berth or anchored at the anchorage are considered to be in the kingdom of Saudi Arabia.

9. Displays of quarantine signals on approach to Ju'aymah must be maintained until pratique is granted. Ships will not be berthed until the information requested in the quarantine message has been received. The flag of Saudi Arabia must be flown throughout the vessel's stay in port.

10. To permit more rapid ship turnaround, an Early Departure Procedure is available. This procedure permits a quick departure of the vessel after loading, with no delay to await delivery of documents at anchorage.

11. No medical facilities are available at the Ju'aymah Terminal. Requirements for medical assistance or hospital service should be addressed to the ship's Agent. The Aramco radio station HZY, may be used at any time, without charge by vessels at sea to obtain medical advice.

12. Small craft are not allowed in the vicinity of a tanker and no one is permitted to board or leave a tanker while cargo loading operations are in progress.

13. Water, galley fuel and diesel fuels are not available at the Ju'aymah Terminal loading buoys.

DOCUMENTS: Some of the tankers which will load at Ju'aymah will have called at Ras Tanura first and will have been cleared by Saudi Arabian Government authorities there. The Ras Tanura Quarantine Customs and Coast Guard clearances will continue in effect at Ju'aymah and no further Goverment formalities will be required. Seals placed on ships stores at Ras Tanura must remain intact until the tanker has completed loading at Ju'aymah and been completely cleared for departure.

Those tankers which call only at Ju'aymah will require appropriate arrival clearances. After loading operations are completed at the time of unmooring the tanker must have on board port clearance documents, bill of lading and export manifest.

To permit more rapid ship turnaround, an Early Departure Procedure is available by which a ship may clear the port and depart without the necessity of waiting for the delivery of documents at anchorage. Use of this special service is encouraged and it should be requested and arrangements with the Agent should be made at the earliest opportunity. When operating under Early Departure Procedure, it is imperative that, after departure, HZY Traffic Lists be copied until cargo quantities are resolved and the ship's Agent is authorised to approve documents.

Port Clearance and Cargo Documents: The port clearance documents consist of the following:

(a) Permit of Departure: This form (in English) is filled out with information supplied by tankers in their quarantine radio message.

(b) Port Clearance Application. This form (in Arabic) is filled out with information from the Permit of Departure form.

(c) Saudi Arabian Government Port Clearance. This official port clearance form (in Arabic) must be filled out with information provided by the Port Clearance Application.

Both the Permit of Departure and Port Clearance forms are to be aboard the tanker at the time of unmooring.

The cargo documents consist of the following:

(a) Bill of Lading. This is an Aramco prepared document. The required information, except for the cargo quantity, will be filled prior to the arrival of the tanker and a copy will be given to the Master by the ship's Agent upon arrival of the ship. After the ship finishes loading, Shipping and Documentation Unit will radio the cargo quantities to the Master who will fill in these quantities on this copy of the Bill of Lading and will instruct his Agent to sign, on the Master's behalf, the original Bill of Lading.

(b) Export Goods Manifest. This is a Saudi Arabian government document required for every ship which has loaded cargo in Saudi Arabia. The Master will receive from the ship's Agent the original export goods manifest forms covering each consignment of cargo loaded. It is imperative that the Master deliver these papers to the consignee upon arrival at the discharge port(s).

PILOTAGE/ANCHORAGE: The Northern Holding Anchorage and Ju'aymah Pilot Boarding Area have been laid out to expedite shipping and provide ready access to the Ju'aymah berths. The anchorage area varies in depth from 12 to 28 fathoms (72 to 168 ft.) and holding ground is only fair.

Vessels which have anchored at the Northern Holding Anchorage should immediately advise Aramco, via radio HZY, of the following information:

(a) Time of arrival at the anchorage area (in GMT).

(b) Approximate position in the anchorage area in relation to Ju'aymah light beacon J1 and Ras Tanura light beacon No. 3.

They should then contact Aramco Terminal Planning office and Ras Tanura Pilot Office by VHF radio Channel 16 if vessel is equipped with VHF.

NAVIGATION AIDS:

Light Beacon: "J1" – black and white gp. fl. (3) every 8 secs. Radar reflector position: 27° 02.0′ N. 50° 07.8′ E.

Light buoys: (all fitted with radar reflectors):

"J2" – Can red – flash red every 6 sec. Position 27° 01.9′ N. 50° 10.8′ E.

"J3" – Conical black – flash white every 10 sec. Position: 27° 00.4′ N. 50° 07.3′ E.

"J4" – Can red – group flash (3) red every 12 sec. Position: 26° 57.45′ N. 50° 09.8′ E.

"J5" – Conical black – group flash (3) white every 12 sec. Position: 26° 58.7′ N. 50° 04.6′ E.

"J6" – Can red – flash red every 5 sec. Position: 26° 54.6′ N. 50° 07.8′ E.

"J7" – Conical black – flash white every 6 sec. Position: 26° 58.7. N. 50° 02.7′ E.

"J8" – Pillar red – flash red every 3 sec. Position: 26° 54.35′ N. 50° 03.6′ E.

"JE" (Exit buoy) – Can red – flash white every 2 sec. Position: 27° 10.5′ N. 50° 12.6′ E.

"JD" (Departure buoy) – Can red – flash white every 4 sec. Position: 27° 10.5′ N. 50° 24.2′ E.

Red light float: marked "Ju'aymah"

Red – flash white every 10 sec. Racon x-bands (3 cm.) – code response Morse letter Zulu – Response pulse length is 22 ml, sweep time is 48 sec. Position: 27° 10.5′ N. 50° 36.0′ E.

Ras Tanura Channel

Light buoy: (Mid-Channel Marker at Caution Area):

"RT 1" – Spherical black – intermittent quick flash white. Position: 26° 56.2′ N. 50° 12.6′ E.

A Northern holding anchorage: area bounded by:

	North	East
(a)	27° 08.5′	50° 13.5′
(b)	27° 08.0′	50° 20.0′
(c)	27° 02.05′	50° 17.0′
(d)	27° 03.0′	50° 11.5′

Ras Tanura channel caution area: area bounded by:

	North	East
(e)	26° 58.7′	50° 13.0′
(f)	26° 57.0′	50° 15.2′
(g)	26° 54.7′	50° 13.0′
(h)	26° 56.6′	50° 10.7′

Ju'aymah Pilot boarding area: area bounded by:

	North	East
(i)	26° 58.7′	50° 13.0′
(j)	26° 56.5′	50° 10.7′
(k)	26° 58.0′	50° 09.5′
(l)	27° 01.0′	50° 10.7′

INBOUND TRAFFIC PROCEDURES: Arriving tankers which will be loading at Ju'aymah, should proceed as follows:

(a) Vessel with no Special Instructions: The vessel should make for a position approximately 2 miles North of Ras Tanura Light Float position 27° 05.6′ N. 50° 57.5′ E. and then enter the inward channel. This will take the vessel past the Approach Buoy to the Entry Buoy. The vessel should then proceed to the Northern Holding Anchorage. The anchor time and position should be passed to the Aramco Terminal Planning Office and Ras Tanura Pilot Office.

(b) Vessel Proceeding to Ju'aymah: The vessel should make for a position approximately 2 miles North of the Ras Tanura Light Float position 27° 05.6′ N. 50° 57.5′E. and enter the inbound channel. Proceed past the Approach Buoy and Entry Buoy and make for a point approximately 2.5 miles N.E. of Buoy 3A position 26° 56.3′ N. 50° 11.5′ E., and proceed into the Ju'aymah Pilot Boarding Area. The vessel should notify Ras Tanura Pilot Office on passing the Ras Tanura Light Float and will in turn be advised of berthing prospects. Should the Pilot not be boarding immediately on the vessel's arrival, the vessel may be instructed to anchor in the Pilot Boarding Area, and to pass the anchoring time and position to the Ras Tanura Pilot Office.

(c) Vessel Proceeding from Northern Holding Anchorage to Ju'aymah: On receiving instruction to proceed to Ju'aymah, the vessel should heave up anchor and re-enter the inbound channel making for a point approximately 2.5 miles N.E. of Buoy 3A position 26° 56.3′ N. 50° 11.5′ E. and proceed to the designated Ju'aymah Pilot Boarding Area. If the vessel has been advised that the Pilot will not board immediately on arrival, it may be instructed to anchor in the Pilot Boarding Area and await further instructions. The anchoring time and position should be passed to the Ras Tanura Pilot Office.

(d) Vessel Proceeding from Ras Tanura to Ju'aymah: The vessel should depart Ras Tanura and follow the departure channel towards the mid-channel marker buoy, R.T.1, position 26° 56.2′ N. 50° 12.6′ E. The vessel should proceed into the Ju'aymah Pilot Boarding Area, exercising due diligence in this area. If the vessel has been advised that the Pilot will not board immediately on arrival, it may be instructed to anchor in the Pilot Boarding Area and await further instructions. The vessel should inform Ras Tanura Pilot Office of its anchor time and position.

(e) Vessel Proceeding from Ras Tanura to Northern Holding Anchorage: The vessel should leave Ras Tanura and follow the departure channel observing the separation scheme to the Approach Buoy, 27° 06.5′ N. 50° 42.0′ E. and then proceed to the Northern Holding Anchorage. The vessel should inform Ras Tanura Pilot Office of its anchor time and position and await further instructions.

DEPARTURE FROM JU'AYMAH: A separate departure channel has been provided for all vessels using the Ju'aymah facilities. The Pilot will disembark and the vessel will proceed via the departure channel between Light Beacon J 1, 27° 02.0′ N. 50° 07.8′ E. and J 2 buoy 27° 01.9′ N. 50° 10.8′ E. The vessel should then proceed towards the exit buoy JE 27° 10.5′ N. 50° 12.6′ E. and from there set an Easterly course North of JD buoy 27° 10.5′ N. 50° 24.2′ E. to the Ju'aymah Light Float, 27° 10.5′ N. 50° 36.0′ E.

MAX. SIZE: 750,000 d.w.t. Also see "Developments".

HEALTH: Quarantine information request (see "Radio") must be received prior to berthing. Vessels failing to supply necessary information may incur extensive delays.

In accordance with international practice, quarantine signals must be displayed by all vessels approaching Ju'aymah. The following signals must be displayed continuously until pratique is granted:

Sunrise to sunset – Quarantine flag
Sunset to sunrise – Signal lights, red over white

Radio Pratique: A modified radio pratique procedure is in use at Ju'aymah. Port conditions permitting, vessels supplying requested quarantine information (see "Radio") may be moored on arrival and proceed with hose connecting operations prior to arrival on board of a Quarantine Officer. Vessels failing to supply information may be delayed at anchorage until cleared by the Quarantine Officer. Extensive delay can be incurred by vessels failing to supply requested information promptly.

RADIO: Vessels must keep Aramco Tanura fully advised via HZY regarding estimated time of arrival (ETA) at the Northern Holding Anchorage, as well as actual arrival time and position in the anchorage. All messages, of any nature whatsoever, to radio station HZY must be addressed to "Aramco Ras Tanura". It is required that vessels provide a minimum of three notices of ETA information at about 72, 48 and 24 hours "steaming time" from the Northern Holding Anchorage. Shorter notices may result in delays. If loading part cargoes at other Arabian Gulf ports prevents a vessel from furnishing an accurate ETA, steps should be taken to dispatch a message either directly to HZY or through the ship's Agent giving the best estimate possible at the time. This message should then be followed by an accurate ETA immediately upon departure for Northern Holding Anchorage. Failure to give at least 24 hours notice will result in vessel delays for which Aramco will hold no responsibility.

Radio Messages: Upon first contact with an inbound tanker scheduled for Ju'aymah berthing, HZY will transmit the following three standard messages of 237, 50 and 32 words:

237 word message:

Master Rastanuraradio/HZY

Contact HZY soonest advising one ETA GMT Northern Holding Anchorage two any later ETA changes three Agents name and requirements four arrival departure draft fore and aft five deballasting hours six maximum loading rate fullstop vessel urged to accept highest possible loading rate stop advise if cargo or residue aboard to be commingled with Ju'aymah cargo fullstop if VHF aboard call Aramco Terminal Planning for berthing instructions when 100 miles out on 156.80 Channel 16 stop if no VHF aboard contact HZY 500 kHz and copy traffic lists on odd hours for berthing instructions stop on arrival anchorage advise HZY official arrival readiness time and position relative beacon 3 and beacon J1 stop radio messages without charge stop Pilots require sufficient clean ballast for manoeuvring and will board in pilot boarding area for mooring stop recommend propellers almost covered and trim limited to 8 ft. stop vessel will moor to loading buoy using one headrope forward from buoy terminating in three inch chafing chain stop have one ship 3 inch minimum circumference messenger line or mooring rope forward for passing to launch stop have derrick rigged on port side at cargo manifold for lifting mooring gear cargo and bunker hoses stop ships two cargo manifolds to be 16 inch ANSI 150 and after bunker connection on midship manifold to be 12 inch ANSI 150 stop advise if reducers required and derrick lifting capacity. Aramco

50 word message:

Master Rastanuraradio/HZY

Please advise any epidemic diseases or illness on board and status of crew's International Certificates of Immunization and all ports called past thirty days also destination stop Agent stop flag stop net registered tonnage stop vessel will not be allowed to berth until this information is received. Aramco

It is important that you send a reply to the above two messages as soon as possible after receipt.

32 word message

Master Rastanuraradio/HZY

Imperative that any ship operating under early departure procedure copy Aramco HZY traffic list after departure until cargo quantities are resolved and Agent is authorised to approve documents. Aramco

The HZY Marine Station transmits on frequencies of 430; 8480; 12811 and 16960 kHz.

The number of operators on duty varies with the traffic load. During the peak period from 0400 to 1200 hrs. GMT there are 3 operators and a traffic clerk on duty. From 1200 to 2000 hrs. GMT there are two operators on duty and from 2000 to 0400 hrs. GMT one operator handles the station.

The hours of operation on the various frequency bands is as follows:

16 mHz Band 0600 to 1300 hrs GMT (Traffic List sent at 0600, 0800, 1000 and 1200 hrs. GMT)

12 mHz Band 0600 to 1800 hrs. GMT (Traffic List sent every even GMT hour on the hour)

8 mHz Band 1800 to 0400 hrs. GMT (Traffic List sent every even GMT hour on the hour)

Medium Frequency Band 24 hour continuous operation with a speaker watch on 500 kHz. (Traffic List sent every odd GMT hour on the hour)

From 0400 to 2000 hrs. GMT there is one operator that works exclusively on the MF Band and the station transmits to the ships on 430 kHz and receives on any agreed to ship working frequency. One or two HF operators are assisting this MF operator in monitoring the speaker watch on 500 kHz.

From 2000 to 0400 hrs. only one operator is on watch in the station. He keeps speaker watch on 500 kHz, works ships on 430 kHz and 8 mHz. The Traffic List is also sent at 0430 hrs GMT daily on 430 kHz and 8 mHz and at 1630 hrs. GMT on 430 kHz and 12 mHz. Available Weather/Hydros are also sent at these times.

It is requested that all vessels forward their local weather observations to this station, either in code or plain language, to assist in preparation of the Arabian Gulf forecasts.

VHF: VHF radio working Channels 11, 12 and 14, and calling Channel 16 are available for ship-to-shore communications at Ju'aymah. Channels 12, 13, 14 and 16 are monitored 24 hours a day at the Aramco Terminal Planning Office, which is located in Dhahran. Ras Tanura Pilot Office can be contacted on Channel 16. VHF equipped vessels should try to contact the Aramco Terminal Planning office on Channel 16 when they are within 100 miles range of Ju'aymah and while at anchor. Use of the high frequency radio transmitter or radar equipment is not permitted while vessels are moored at an oil loading berth. Use of the VHF is permitted to contact Pilots, Agents or the Aramco Terminal Planning Office.

RADAR: *Radar Surveillance Advisory System:*

Radar Surveillance Advisory System is now operational in Ras Tanura Arrival and Departure Channel, Ras Tanura East Channel, Ras Tanura Anchorage area and Juaymah area.

All ships must contact Ras Tanura Pilot Office on Channel 16 when approaching these areas and maintain VHF watch on Channel 10 when inbound and outbound in these areas.

All ships movements will be observed within the dependable range of the radar (12 to 14 miles).

Each ship arriving and departing Ras Tanura will be tracked and identified when possible.

Radar Surveillance Advisory System will communicate with ships in English on VHF Channel 16 and 10 in order to provide the following services:

1. Advise ships' Masters of channel and port condition, congestion, weather, tides, navigational aids, etc.
2. Ships' Masters will be informed of movement of other vessels.
3. Ships' Masters will be advised of Ras Tanura Port Regulations pertaining to vessels' movements and vessels violating port regulations.
4. Incoming vessels will be advised of the port regulations pertaining to movement of deep draft departing vessels. It may be necessary for incoming vessels to reduce speed to permit safe passage of outgoing deep draft vessels.
5. Masters of departing vessels from Ras Tanura into dredged channel will be informed of priority of movements of their vessel and other vessels.
6. Ships' Masters will be advised of berthing prospects and anchoring conditions.
7. Ships' Masters will be warned when dangerous manoeuvring situations appear to be developing.

The Radar Surveillance Advisory System had been established in order to increase the safety of ships navigating in the Ras Tanura area. It is an information and advisory service only, and in no way assumes control of ships navigating in the area.

To make this radar assistance effective, the cooperation of ships' personnel is expected and appreciated.

TUGS: There are two mooring launches available.

BERTH DESCRIPTION AND FACILITIES: Ju'aymah is an Aramco crude oil and fuel bunker loading facility designed for loading and topping-off deep-draft tankers. The port area is located approximately 20 miles N.N.W. of Ras Tanura and 7 miles offshore in Saudi Arabian waters.

The offshore platforms consist of the following:

(a) An Oil Platform (130 ft. by 190 ft.) located in 50 ft. of water at Lat. 26° 54′.8 N. and Long. 50° 01′.2 E. This platform receives crude oil and fuel bunkers from the onshore storage tanks through two 56 in. submarine crude pipe-lines and one 24 in. submarine bunker pipe-line, each being about 35,770 ft. long. The crude oil and bunkers are metered on this platform. The platform is well lighted with general purpose lighting. In addition, one fixed white light has been established on each corner of the platform, with a range of visibility of approximately 5 miles.

(b) A control platform (70 ft. by 70 ft.), located 150 ft. North of the Oil Platform and connected to it by a walkway bridge, houses the communications and radar equipment, testing laboratory, offices, control system and meteorological equipment. This platform is marked by a fixed red aircraft warning light.

3 single point mooring buoys have been established. Crude oil and bunkers are received at each buoy from the oil platform through 1 bunker and 2 crude oil submarine lines which are connected to the buoy by flexible submarine hoses. The floating hoses, which extend approximately 1,100 ft. from each buoy, consist of two 24 in. crude loading hoses with 16 in. tails and one 12 in. bunker loading hose, each with ANSI flanges for connection to the ship's manifold. The max. loading rates through each buoy are 130,000 barrels per hour for crude oil and 5,000 barrels per hour for bunkers. Each buoy is marked by a white flashing light with a range of visibility of approximately 5 miles.

The 3 mooring berths at Ju'aymah are as follows:

(a) Ju'aymah Berth No. 31 located at Lat. 26° 55′.6 N. and Long. 50° 02′.4 E. Min. water depth in the berth is 93 ft.

(b) Ju'aymah Berth No. 32 located at Lat. 26° 56′.4 N. and Long. 50° 02.1′ E. Min. water depth in the berth is 102 ft.

(c) Ju'aymah Berth No. 33 located at Lat. 26° 57′.0 N. and Long. 50° 02′.7 E. Min. water depth in the berth is 103 ft.

BERTHING PROCEDURE: A Pilot and a Mooring Master will board the arriving tanker assigned a berth at Ju'aymah at the Pilot Boarding Area located approximately 8 miles East of the Ju'aymah berths. They will carry portable VHF radio sets to be used while on board the tanker for communications with the Ju'aymah Control Platform and the mooring boats. They will advise the Master on all manoeuvres and operations relative to berthing, connecting and disconnecting the hoses and unberthing. The services of the Pilot and Mooring Master and of the mooring launches and their crews are provided without charge and upon the express understanding that they become the agents and servants of the owners and/or charterers of the vessel in every respect. Aramco shall not be responsible and shall be held harmless from all liability for any damage resulting from or caused by any action taken, order given or decision made (or any omission thereof) by the Pilot, Mooring Master or launch crew, or in any respect to the handling of such vessel. Damage or injury to any Aramco facility, equipment or personnel by any vessel calling at any loading terminal of the Port of Ras Tanura shall be the responsibility and liability of the owners and/or charterers of the vessel.

Mooring equipment and other equipment supplied at Ju'aymah will be lifted aboard the tanker from the mooring launch which transports the Pilot and Mooring Master to the Pilot Boarding Area. This equipment will include such things as special mooring gear to be used at the bow, various gaskets, bolts, tools, adapter spool pieces (when required); and portable radios to be used for communications with the Ju'aymah Control Platform during loading operations.

A number of forms related to the oil loading operation will be carried aboard the tanker by the Pilot and Mooring Master. These include a form for description of pertinent parts of the tanker's loading manifold, an ullage calculation sheet for use by the First Officer of the loading tanker and forms for maintaining a log of the berthing, loading and unberthing operations. One form entitled "Instructions to Vessels and Conditions of Use of Loading Facilities" outlines the conditions of the use of the loading facilities and must be signed by the Master of the tanker prior to the start of the berthing operation.

During the approach and while mooring, the tanker's anchors must be secured by stoppers to prevent accidental dropping with subsequent damage to the loading buoy mooring chains or the undersea pipe-lines. Mooring boats will normally assist in the berthing, mooring and hose handling operations. A boat will approach the tanker's bow, take the messenger line and secure it to the end of a 10 in. polypropylene "pickup" line from the mooring arrangement. The "pickup" line will be hove through the centre of port mooring chock until the chafing chain is in the chock. A 15in. nylon strop which previously will have been secured to the tanker's bollards will then be secured to the chafing chain using a 3 in. bow shackle between the strop and the chafing chain. On tankers equipped with a Smit's towing bracket or brackets, the chafing chain will be secured to an open link in the bracket using a bow shackle. *Mooring and unmooring, connecting and disconnecting of the cargo and bunker hoses is to be performed by the crew of the loading tanker under the direction of the Pilot and Mooring Master.* Communications between the Pilot and the Mooring Master or the bridge and forecastle will be by means of portable VHF radio.

PRELOADING PROCEDURE: Upon completion of berthing, a Pilot/Mooring Master, who will remain on board throughout the loading and unberthing of the tanker, will carry out activities related to Aramco safety requirements and planning, and monitoring of the loading operation.

In order to avoid delays in connecting hoses, tankers scheduled to load cargo and bunkers at Ju'aymah should have an adequate number of reducing spools to fit 16 in. and 12 in. standard 150 pound ANSI flanges on the portside manifold.

Aramco is a member of the International Oil Tanker Terminal Safety Group and participates vigorously in a programme developed to ensure adequate safety aboard tankers during the time they are at Aramco piers or berths. A part of this programme involves use of a check list by the Mooring Master to make a thorough inspection of tankers both prior to and during loading operations. This programme is in effect at Ju'aymah, and Mooring Masters who board tankers will be making necessary inspections, posting authorised smoking locations, issuing letters of protest for violations, and shutting down loading or refusing to load a tanker if unsafe conditions are not adequately corrected.

BALLAST REQUIREMENTS: Due to the exposed location of the Ju'aymah berths, tankers scheduled to load crude at Ju'aymah should arrive with adequate clean ballast for safe handling having due regard for existing weather and sea conditions. Tankers will be required to arrive with propellers almost covered and sufficient clean ballast tanks available to allow a trim of 8 ft. by stern. Masters should contact Ras Tanura Pilot Office for weather conditions at the loading facilities.

Aramco is particularly interested in having vessels complete the deballasting operation promptly after berthing in order to minimise time at berth. Simultaneous loading and deballasting is encouraged on properly equipped vessels. Owners/operators or charterers of vessels requiring time to deballast in excess of what Aramco considers standard will be so notified by letter with a copy to the Master.

Discharge into the sea of oil or oil base products in combination with ballast water is not allowed. Since the Ju'aymah Terminal does not have facilities to receive any oil residues or oily ballast water, tankers arriving with such materials on board will be sent to anchorage to await further orders unless the vessel agrees to load on top of such material or unless the ship's Master agrees to segregate such materials in a separate tank. Ships which release oil or oil residues including oily ballast water in either berth or anchorage area will be held responsible for all clean up costs.

LOADING PROCEDURES: The oil loading operation will be controlled by VHF radio voice communications between the Mooring Master on the loading tanker and the Ju'aymah control platform. All operations including switching of tanks and topping off must be directly and personally supervised by a ship's officer. The max. crude loading rate at any of the berths will be 130,000 b.p.h.

Upon being informed by the loading tanker's personnel that the tanker is ready to start loading, the Mooring master will request the loading operation to proceed according to previously agreed plan with respect to start-up rates, max. loading rates and topping off rates. Need for emergency shut down of loading aboard the tanker must be communicated via VHF from the loading tanker to the Ju'aymah control platform.

In the event of the failure of the VHF communications system, the tanker will sound 5 long blasts on the ship's whistle followed by 1, 2 or 3 short blasts for a tanker at berth 31, 32 or 33 respectively. Loading operations will be stopped and will not be resumed until communications have been re-established.

UNMOORING PROCEDURE AND DEPARTURE: Upon completion of loading, documentation procedures, disconnection and removal of hoses, the tanker will be unberthed by the Mooring Master. To unmoor from the buoy, the pickup rope is taken to the winch and the weight is taken off the chain. The chain is then unshackled and the rope is slacked as the tanker backs out of the berth. The end of the pickup rope is cast off and floats free.

Upon completion of unmooring, the tanker will make a lee, the mooring and hose connecting equipment will be transferred to the mooring launch and the Pilot/Mooring Master will disembark.

The tanker will then be free to leave the port via the Ju'aymah Departure Channel if the Early Departure Procedure is being followed and all cargo and port clearance documents are completed and on board. Otherwise, the tanker must proceed to the Northern Holding Anchorage to await port clearance and document delivery by ship's Agent.

FUEL: Fuel bunkers are available at each Ju'aymah berth through 12 in. hose. Failure of a vessel to provide adequate advance notice of fuel bunker requirements could result in vessel delays.

DENSITY: 1025.

GENERAL: *Onshore Facilities:* The tank farm with all its associated facilities is located along the coast of Ras Al Ju'aymah, 11 miles N.W. of the Ras Tanura Refinery. A small boat pier for the use of pilot boats, mooring launches and Agents' launches is located 8 miles N.W. of the Ju'aymah Tank Farm.

Oil Inspection: No independent inspection service is available at Ju'aymah. In cases of an abnormal difference between ship and terminal cargo quantities, it is essential that Aramco personnel investigate ship measurement of cargo.

Ship Agencies: Vessels calling at Ju'aymah should address all ship's business messages to their Agent through "Aramco HZY". Matters concerning provision supply, minor repairs, local medical or hospital services, mail, crew changes, etc. are to be handled by the ship's Agent.

Time Zone: The company generally bases its local time on the 45th meridian (3 hours East of Greenwich). In order to avoid any confusion, all communications should be quoted in GMT.

Arab League Ban: All member states of the Arab League prohibit the export through their ports of any material consigned to Israel. Further, all ships having called at Israeli ports subsequent to April 25, 1952, are banned from Saudi Arabian ports.

Security Patrol Boat: An Aramco Security Patrol Boat will patrol the Ju'aymah offshore area.

Saudi Arabian Government Regulations: Saudi Arabian Government Regulations are strictly enforced, and Masters having any doubts concerning the interpretation of these regulations are urged to consult their Agent. While in port, whether at anchorage or at berth, the vessel's personnel are under the jurisdiction of Saudi Arabian laws.

Consumption of alcoholic beverages, including beer and wine, is prohibited in Saudi Arabia. Penalties are severe and major delays to vessels can be incurred for violations.

Port Officials: Saudi Arabian Government Port Authorities are located in the Customs House, the Port Office and the Quarantine Office at Ras Tanura. A Coast Guard Detachment is located at Ju'aymah.

A United States Consulate General is established at Dhahran, which is approximately 50 miles by road from Ras Tanura.

A British Political Agent is established on Bahrain Island. It is very difficult, however, to contact Bahrain Island by shore telephone from Ras Tanura of Ju'aymah, and Masters having business there usually arrange to call at the port of Sitrah (sometimes spelt Sitra).

Inbound Clearance: The ship's Agent will develop information necessary to fill in clearance application and port clearance forms. Cargo requirements will be reconfirmed, and information required to expedite mooring, hose connection and other operational details will be exchanged with the Ras Tanura Pilot Office on VHF radio prior to the tanker's arrival at Ju'aymah.

Swimming: Or other activities involving life boats in the vicinity of a tanker are not permitted.

SAFETY REGULATIONS: *General:* The Port of Ras Tanura (including the Ju'aymah Loading Facilities) maintains a vigorous safety programme. Aramco is a member of the International Oil Tanker Terminal Safety Group (IOTTSG) and as such follows the procedures recommended by this organisation. As is done at other Gulf oil ports, the Pilot/Mooring Master as terminal safety representative will discuss in detail with the tanker Master, each item of the "Declaration by Master" which reviews safety requirements and procedures. Prior to start of loading cargo and at several times during the loading, the Pilot/Mooring Master, in company with one of the ship's officers, will check to ensure that safe loading practices are being observed.

Procedure in Case of Fire or Explosion: What will be done in the event of a fire or explosion on board a vessel which is berthed at a Ju'aymah buoy, depends upon the particular facts and circumstances of the incident. It is impossible to indicate exactly what practices will be applied before an evaluation of the specific emergency situation can be made by the Pilot/Mooring Master. His decisions will be based on the following principles:

(*a*) An evaluation of the particular emergency will be made by the Pilot/Mooring Master. His decision as to course of action will be based on the location, type and extent of fire, or explosion, taking into account tide and wind conditions, buoy location and proximity of other vessels.

(*b*) Circumstances permitting, a burning vessel will not be permitted to remain moored to the buoy, and the Master will unmoor the vessel when directed to do so by the Pilot/Mooring Master.

(*c*) Assistance will be rendered by available launches, tugs and other craft to the extent possible, as requested by the Pilot/Mooring Master.

(*d*) Prime consideration governing action to be taken will be to protect personnel, terminal facilities and other vessels, and to contain and control the emergency.

Should a fire or explosion occur at a buoy mooring, the oil loading platform or control platform, all cargo operations will be stopped and all vessels should stand by to disconnect and unmoor when so instructed by the Mooring Master, or when the need to take such action becomes self evident.

The signals for emergency are a continuous ringing of the ship's alarm bells supplemented by six short blasts followed by one long blast of the ship's whistle or siren. Assistance may be summoned on VHF Channel 16. Location, nature of emergency and type of assistance required should be given.

It is the responsibility of the tanker's personnel to watch its tanks at all times and to give ample warning to reduce the loading rate or shut off the pumping.

DEVELOPMENTS: SALM Berths No's 34 and 35 in operation for vessels up to 750,000 d.w.t. Depth at No. 34 – 129 ft. and No. 35 – 117 ft.

Loading through two 48 in. pipe-lines to each SALM and two 16 in. hoses. Loading rates up to 18,000 t.p.h. Bunker line 12 in. available.

AGENT: Gulf Agency Company (Saudi Arabia) Ltd. PO Box 621, Ras Tanura, via Dhahran. Cable Address: Confidence Bahrain, stating "for Ras Tanura".

Agent will be responsible for all ships business, which includes obtaining inward and outward clearance, pratique, medical facilities, provisions, repatriation, repairs and diving services.

JUBAIL: 27.05 N. 49.40 E.

New port under construction.

The completed port will comprise an Open Sea Tanker Terminal, Industrial Harbour, and Commercial Harbour with protective rubble mound breakwaters.

Dredging is proceeding for both harbours including entrance channels. The Industrial Causeway extends some 6 miles out to sea and is in progress. Work will shortly start on the East Breakwater, followed by the North Breakwater and Open Sea Tanker Terminal.

The ends of structures under construction or other obstructions will be marked by lighted buoys with White Flashing Light Characteristics. All vessels are requested to give a wide berth when in the vicinity of the construction work.

Note: Shipping approaching Jubail from the centre of the Gulf are advised to keep to the East of the Rennie Shoals and to avoid the Ras Tanura and the Juaymah Departure Channels when proceeding towards Jubail.

RAS-AL-KHAFJI: 28.25 N. 48.32 E.

Ras-al-Khafji is situated in divided Neutral Zone approximately 60 miles South of Kuwait, this area is under joint jurisdiction of the Saudi Arabian and Kuwaiti authorities; vessels are therefore required to fly the flags of both Governments from the foremast, Saudi Arabia starboard side. Kuwait port side of mast. Onshore base situated in approximately 28° 25′ North, 43° 31′ East, and within a distance of 6 miles (10 km.) offshore, the Company has laid two conventional sea-berths and two single-buoy moorings for loading tankers and also an anchorage area for cargo ships working cargo. Outside this distance is an anchorage area for tankers.

In addition to exporting crude oil, fuel oil and naphtha are also exported.

OPERATORS: The Arabian Oil Co. Ltd. (Japan).

APPROACHES: Approaches to Ras-al-Khafji marked on appropriate U.S.H.O. and British Admiralty Charts, and are deep enough for majority of vessels using the port to proceed with normal caution using the buoys as centreline markers. A single patch with a depth of 56 ft. (17.07 m.) exists North of courseline between Buoys Nos. 2 and 3, and this necessitates caution on the part of large tankers leaving Ras-al-Khafji in loaded condition.

For tankers arriving Ras-al-Khafji without necessary charts, the full information will be given by telegram if request is sent to "Arabia-oil Kuwait" (via "9KK", Kuwait Radio Station) a few days before arrival. Alternatively, if vessel has VHF, the buoy positions will be given to them upon request to "Ras-al-Khafji" as the vessel approaches, but prior notice of requiring this service should be given in vessel's arrival message.

NAVIGATIONAL AIDS: All geographical positions given although approximately correct, are intended for reference purposes only as certain differences are known to exist between these positions and those shown on the U.S.H.O. and British Admiralty Charts of the area.

Conspicuous Marks. Flare stacks in offshore field and ashore normally visible at a great distance, but may occasionally be extinguished.

No. 1 Flare	Lat. 28° 28.3′ N.	Long. 48° 57.0′ E.
No. 2 Flare	28° 27.0′ N.	48° 54.8′ E.
No. 3 Flare	28° 29.8′ N.	48° 56.0′ E.
No. 4 Flare	28° 30.3′ N.	48° 58.0′ E.
Onshore Flare	28° 24.5′ N.	48° 32.4′ E.

Aids to Navigation:

No. of Light-Buoy	*Lat.*	*Long*	*Characteristic*
1.	28° 36.0′ N.	49° 10.0′ E.	Gp. Fl. (2) 4 sec.
2.	28° 36.0′ N.	49° 00.0′ E.	Fl. 4 sec.
4.	28° 34.9′ N.	48° 51.3′ E.	Fl. R. 4 sec.
5.	28° 32.6′ N.	48° 49.0′ E.	Gp. Fl. (5) 10 sec.
6.	28° 33.8′ N.	48° 48.0′ E.	Fl. R. 3 sec.
7.	28° 32.9′ N.	48° 47.2′ E.	Fl. 4 sec.
8.	28° 33.4′ N.	48° 45.7′ E.	Fl. R. 4 sec.
9.	28° 31.4′ N.	48° 43.9′ E.	Fl. 3 sec.
10.	28° 29.5′ N.	48° 37.8′ E.	Gp. Fl.R(2) 6 sec.
11.	28° 28.3′ N.	48° 39.2′ E.	Fl. 3 sec.
12.	28° 25.6′ N.	48° 36.0′ E.	Fl. R.3 sec.

No. of Light-Buoy	*Colour*	*Height of Light (m.)*	*Visibility (miles)*	*Remarks*
1.	V.S.B.W.	7.0	10.0	Entrance
2.	V.S.B.W.	4.2	7.0	
4.	R.	4.2	4.0	At Reef
5.	B.	7.0	10.0	
6.	R.	4.2	4.0	At Reef
7.	B.	4.2	4.0	
8.	R.	4.2	4.0	
9.	B.	7.0	10.0	
10.	R.	4.2	4.0	Anchorage
11.	B.	4.2	7.0	
12.	R.	4.2	3.5	Shoal

All buoys have radar reflectors.

Khafji Channel:

With the installation of No. 4 sea berth, Khafji Channel for ocean tankers entering to and leaving from AOC berths has been established in a water area North side of the old channel which was removed. The channel area Eastward of Light Buoy No. 2 has never been changed.

For the purpose of securing safe navigation of 250,000 ton tankers with normal caution using the above aids to navigation, sufficient depth of water, 73 ft. at least, and passable channel breadth, 2,100 ft. as minimum corresponding to two times overall length of the mammoth tanker, are allowed.

A "Z" formed patch with the least depth of 70 ft. (21.30 m.) exists at the centre of the channel S.S.E. of Light buoy No. 8, hence deep tankers sailing from berth No. 4, especially under the condition of prevailing tide current, should take caution to the shoal.

If required, a Mooring Master on duty will guide a deep tanker to the favourable position in the channel.

DOCUMENTS: *(a)* Clearance. Master should submit following documents to Saudi Arabian Government through Agent (2 copies each):

Maritime Declaration of Health.
Health Condition of Crew.
Details of Air-conditioning.
Crew List.
Vaccination List.
Passenger List (if any).

Note Forms 1–3 are supplied by the Agent.

(b) Cargo. All cargo documents and shore figures are usually prepared on shore, and this takes about 1.5 hours with a further 30 minutes before the documents arrive at the ship. Ship's Statement of Cargo is, however, prepared on board. Wherever necessary Mooring-Master will sign documents on behalf of the Company.

Following cargo documents are to be completed after loading:

Notice of Readiness.
Bill of Lading.
Time Sheet.
Ship's Statement of Cargo*.
Certificate of Delivery‡.

Note: *Ship's Statement of Cargo includes the items for "clean ballast declaration" and "dry inspection" altogether in one form.

‡Certificate of Delivery should be handed to ship's Agent at port of discharge for certification by Customs Authorities. Agent should then return Certificates to the Company as soon as possible. Non-compliance with this requirement could involve vessel in serious difficulty. Masters therefore advised to ensure that their Agents at each discharging port return the Certificates at the earliest possible moment.

All certificates are to be sent direct to Arabian Oil Company and the Agents should be notified accordingly. It is understood that Arabian Oil Co. do not require legalised certificates and only certificates attested by the Customs at discharging ports will suffice.

EARLY DEPARTURE DOCUMENTATION: This documentation system aims to assist ships to depart early from this port after they complete loading by saving time awaiting documents. For this reason, relevant tanker documents will be signed previously by ship's Master or signed by their Agents at this port, depending on Master's choice on the request sheet. Completed tanker documents, therefore, will not be despatched to ships after completion of loading.

It must be noted that this system is not compulsory at this port, but it is at Master's option on condition that ships can communicate on Harbour Service VHF Radio or Marine Communication Band 2150 mc/s. to receive shore figures and time after departure.

READINESS: Master should present Notice of Readiness to load to Company's Mooring Master who will sign it on behalf of the Company. The Notice should be tendered as the time of the vessel's arrival at tanker anchorage area, which is, in principle, understood to be either time of dropping anchor in anchorage, or if vessel does not anchor, the time that Mooring Master boards to commence berthing.

MOORING MASTER: Compulsory for berthing and unberthing at Ras-al-Khafji, and Company's Mooring Masters will board vessels at anchorage area to take them to allocated berths. After berthing, Mooring Master will remain on board vessel until it is unberthed and cargo documents are completed. During this time he will act as the Company's representative in charge of all operations and shore personnel where the Company is concerned.

Notwithstanding presence of Company's Mooring Master on board, the Master of the vessel remains responsible for his vessel at all times and in all respects. In event of any emergency, however, the necessary steps should be taken by joint action between the Master and the Mooring Master.

The Master of each vessel shall give to Mooring Master all information necessary for safe handling and safe operation of vessel while it is in berth.

BALLAST: All vessels required to have on board sufficient clean ballast to give safe draft for manoeuvring purposes. Vessel arriving with too little ballast may be required to increase quantity, should Mooring Master feel that it would not be safe to berth vessel in its arrived condition. Recommended arrival condition is with propeller completely or almost completely immersed and vessel trimmed not more than 10 ft. (3.05 m.) by stern.

In good weather conditions, Mooring Masters will normally permit vessels to start deballasting as they approach the berth in order to save ship's time.

BOARDING: All vessels required to provide safe means of access for personnel boarding and leaving and should have accommodation ladder rigged on port side. In the case of vessels assigned to Berth No. 3, an accommodation ladder which leads down forwards is liable to be blocked by floating hoses, and in such cases the ladder should be rigged on starboard side. A ladder aft is always suitable on the port side.

For the benefit of people boarding at the anchorage area, vessels should provide a safe means of access on the lee side.

ANCHORAGE: *(A) Tankers:* Within 1 mile radius of position 28° 29.5′ N. 48° 39.0′ E. The Western extremity of tanker anchorage is marked by No. 10 Lighted Buoy. The depth of water varies from 65 ft. (19.81 m.) to 79 ft. (24.08 m.), the major depth of water is more than 70 ft. (21.33 m.), with a generally good anchor holding ground of clay mud. Vessels should anchor as close as possible to this lightbuoy to await berthing.

(b) Dry-cargo. Anchorage for dry-cargo ships located about 4 miles to West of tanker anchorage, and is centred in position 28° 26′ 08″ N., 48° 33′ 04″ E. and marked by a flashing white buoy. Cargo ships should anchor within 0.5 miles radius of this buoy, where depths are between 36 ft. (10.97 m.) to 50 ft. (15.24 m.) in good holding ground of clayey mud.

(c) Prohibited Area. An area bounded by straight lines joining following points is prohibited to anchoring and fishing due to presence of well-heads, Flow Stations, Gathering Station, etc. and numerous pipelines and power transmission cables on the sea bed. Additionally, the area bounded by five light-buoys is prohibited to navigation by all vessels or craft except those operating on direct instructions from the Company.

	Lat.	*Long.*	
(a)	28° 24′ 48″ N.	48° 31′ 57″ E.	
(b)	28° 25′ 33″ N.	48° 32′ 55″ E.	
(c)	28° 26′ 45″ N.	48° 35′ 16″ E.	
(d)	28° 25′ 50″ N.	48° 35′ 40″ E.	
(e)	28° 29′ 04″ N.	48° 52′ 34″ E.	
(f)	28° 32′ 00″ N.	48° 54′ 00″ E.	Red. Fl. Yellow 3 secs.
(g)	28° 35′ 00″ N.	49° 00′ 00″ E.	Red. Fl. Yellow 3 secs.
(h)	28° 32′ 00″ N.	49° 04′ 00″ E.	Red. Fl. Red 3 secs.
(i)	28° 28′ 00″ N.	49° 04′ 00″ E.	Red. Fl. Red 3 secs.
(j)	28° 24′ 00″ N.	48° 52′ 00″ E.	Red. Fl. Red 3 secs.
(k)	28° 26′ 53″ N.	48° 52′ 00″ E.	
(l)	28° 23′ 13″ N.	48° 31′ 48″ E.	

HEALTH: No radio pratique will be given. Vessels must be cleared by quarantine office on arrival. (In the past, tankers were given free pratique at the request of Agents and on the production of the copy of telegrams from vessels confirming that all crew members possess valid cholera and vaccination certificates and that there is no sickness on board. This procedure has changed recently and all vessels are boarded by quarantine officer and pratique is given only after checking the documents concerned.)

RADIO: (Also see "Approaches"). Advise ETA Khafji at least 4 days, and again 1 day, before arrival through normal radio services. As an alternative to the route through Kuwait Radio Station (call sign: 9KK), vessels may send their first message through Singapore, Bombay or Bahrain Radios. Confirmation of ETA should be made a few hours before arrival by calling "Ras-al-Khafji" on Channel 16 VHF. All cables should be addressed to "Arabia-oil Kuwait".

The first message should be sent according to following form, but any items which are the same as a recent previous voyage to this port may be omitted.

(1) ETA Ras-al-Khafji
(2) Last port
(3) Deballasting time
(4) Quantity and type of cargo and bunkers required
(5) Maximum loading rate
(6) Diameter of cargo and bunker connections
(7) Distance from manifold to ship's side
(8) Derrick capacity

(9) Whether Ras-al-Khafji is first or second port (when taking part cargo)

Note: Item (9) should only be answered in cases where vessels are taking part cargo at Ras-al-Khafji. If second port, the first loading port should be mentioned.

Communications between shore and loading berth mainly sent and received by means of FM wireless telephone, which is brought on board tankers at time of arrival.

VHF: Short-range communication can be made with Terminal Office by calling "Ras-al-Khafji" on VHF Channel 16. Working channels are 9, 11, 12, 13 and 14. Vessels should call Ras-al-Khafji several hours before arrival to confirm ETA and receive berthing instructions. After anchoring they should advise their anchoring time and then maintain watch on Channel 16 until the Mooring-Master boards. Terminal VHF normally operative between 0400–1400 hrs. GMT, and is used outside these hours by special arrangements with individual ships.

TUGS: The undermentioned tug-boats are available for mooring and unmooring purposes: "Chiyoda Maru No. 2" 200 g.r.t., 1,320 b.h.p.; "Chiyoda Maru No. 3" 175 g.r.t., 1,320 b.h.p.; "Chiyoda Maru No. 4" 236 g.r.t., 2,200 b.h.p.

One of these tugs stands by near the berths as long as any vessel remains moored. Two mooring boats are used for handling ropes and hoses.

BERTHING: 1. Personnel. After vessels berthed, Company's Loading Operator and Mooring Crew will board. Loading Operators work shifts and there will always be one on board vessel while in berth. This man acts as assistant to Mooring-Master, and should be treated as such at all times. In particular he will carry out Safety Inspections and handle communications between ship and shore, particularly those communications regarding cargo.

Ship's personnel requested to give Loading Operator all required information and necessary assistance to allow him to do his job properly. Any disputes arising from his actions should be referred to Mooring-Master for final decision.

Mooring Crew will connect and disconnect hoses as required, but may at any time be transferred to another vessel for the same purpose. While they remain on board, vessels are requested to provide them with following: use of Smoking Room, toilet and washing facilities; hot and cold drinking water; utensils for eating and drinking (it is not normally necessary to supply food).

2. Description of berths.

(a) Sea-Berth No. 1

Position: 28° 26′ 10″ N., 48° 34′ 57″ E.

Depth: 53 ft. (16.15 m.) at Indian Spring Low Water.

Permitted draft: 47 ft. (14.33 m.) max.

Type of berth: conventional four-buoy system where vessel moors to two anchors and one buoy forward and to three buoys aft.

Length: Designed for tankers of 800 ft. (245 m.) length but can be used by tankers of any size, although tankers of less than 650 ft. (200 m.) overall length sometimes experience difficulty in mooring if their lines are less than a full 720 ft. (220 m.).

Submarine Pipelines and Hoses: From the ex-Loading Dock one 26 in. crude oil line and one 18 in. fuel oil line have been laid to the manifold position. Two 10 in. rubber hoses for crude oil and one 12 in. rubber hose for fuel oils are connected to ship's manifold. These hoses approximately 225 ft. (69 m.) long and maximum lifting weight of the two crude oil hoses together is 4.5–5 tons. For bunkering purposes one section of 6in. hose is attached to the end of the 12 in. fuel oil hose.

(b) Sea-Berth No. 2

Position: 28° 25′ 55″ N., 48° 35′ 28″ E.

Depth: 53 ft. (17.07 m.) at Indian Spring Low Water.

Permitted draft: 47 ft. (14.32 m.) max.

Type of berth: As Berth No. 1.

Length of berth: As Berth No. 1.

Submarine Pipelines and Hoses: From the ex-Loading Dock one 26 in. crude oil line, one 10 in. bunker line and one 4 in. marine diesel line have been laid to the manifold position. Two 10 in. rubber hoses for crude oil, one 6 in. rubber hose for bunkers and one 4 in. rubber hose for marine diesel oil are connected to ship's manifold. All these hoses approximately 225 ft. (69 m.) in length, and the maximum lifting weight of two crude oil hoses together is 4.5–5 tons.

(c) Loading Rates at Berths No. 1 and No. 2

Crude oil rate is 30,000 bbls/hr or 4,000 tons/hr.

Fuel oil loading rate at Berth No. 1 is 7,000 bbls/hr or 1,000 tons/hr.

(d) Preparation on board before Berthing at Berths No. 1 and No. 2

Vessels should have ready:

(i) Both anchors.

(ii) 3 ropes forward and 9 ropes aft.
Some wires are acceptable in place of equivalent number of ropes. No shore wires used from buoys to ship. All ropes and wires should be in good condition and preferably without splices.

(iii) Port derrick rigged for minimum lift of 5 tons, using a wire runner and a hook.

(iv) Two 10 in. ASA 150 hose connections for crude oil, and one 12 in. ASA 150 for fuel oil cargo (at Berth No. 1 only), at the ship's port side manifold.
If ASA 150 is not available, the Company should be advised before arrival.

(e) Mooring and Unmooring at Berths No. 1 and No. 2

On approaching berth a ship's line is passed to one tug from centre fairlead aft. This line should be of good strength and well made fast on board.

When in position off berth, starboard anchor is let go and slacked away easily to about 9 or 10 shackles on deck. Port anchor is then let go and paid out easily as vessel swings round into berth using tugs and engines as required. At same time, starboard anchor is hove-in to about 6 or 7 shackles on deck and then made ready for slacking away again.

As vessel backs down berth the anchors are slacked away as necessary, and ropes sent to forward (No. 4) buoy. When stern passes close to starboard quarter (No. 1) buoy, ropes are sent away to this buoy, hove-in tight and put on bitts ready for slacking if necessary. Ropes then run to port quarter (No. 3) buoy, hove tight, and lateral position in berth adjusted between port and starboard quarter buoys. Lastly, ropes are run to the stern (No. 2) buoy and tug line also passed to this buoy. The fore-and-aft position is then adjusted between the anchors and the sternlines. A second tug is used to assist in lateral positioning of the vessel, and two mooring boats are used for running lines to buoys, normally taking two ropes at a time.

In Wintertime 3 ropes are used to each buoy, but in summer 2 of these may be dispensed with at Mooring Master's discretion.

When properly positioned in berth, distance from ship's side to manifold marker buoy should be about 50-66 ft. (15–20 m.).

When hose disconnection completed, vessel unmoors by letting go all lines on buoys No. 3 and No. 4, followed by those on buoy No. 2 and lastly those on buoy No. 1. Vessel then heaves both anchors as necessary until they are up and clear, and vessel can leave berth.

Tugs used as required to keep vessel away from manifold marker and mooring buoys.

Mooring-Master may vary this procedure according to prevailing weather.

(f) Hose Connection and Disconnection at Berths No. 1 and No. 2

After completion of mooring, mooring boat will pull hosemarker buoys to ship, and connect to ship's port derrick runner. The two crude oil hoses are lifted together from seabed by ship's derrick, and connected directly to manifold by Company's Crew.

Fuel oil hose at Berth No. 1 is lifted separately and connected in similar manner.

Time taken for hose connection about 1–1.5 hours depending on number of hoses connected. Hose disconnection takes about 1 hour, and is done in reverse manner to connection.

(g) Loading Restriction at Berths No. 1 and No. 2

Due to there being only one cargo pipeline between ex-Loading Dock and the shore, it is not possible to load vessels in berths No. 1 and No. 2 simultaneously. Therefore, when these berths both occupied, one vessel will be loading while the other is deballasting; the latter arranging to finish ballast about 1 hour before the other vessel finishes cargo.

(h) General Description of Berth No. 3

Position: 28° 27′ 06″ N., 48° 36′ 28″ E.

Depth: 62–64 ft. (18.90–19.51 m.), but 59 ft. (17.98 m.) over pipelines, at Indian Spring Low Water.

Permitted draft: Normally 54 ft. (16.46 m.), but 56 ft. (17.07 m.) permissible using rise of tide.

Type of berth: Single-buoy-mooring system consisting of a buoy 30 ft. (9.14 m.) in diameter, moored to 8 pendant legs of 3.5 in. high strength chain shackled to anchor piles at a radius of 575 ft. (175 m.), and having a rotating deck carrying pipeline and mooring connections.

Moorings: Attached to mooring connections on the buoy are two 12 in. nylon ropes (97 mm. dia., breaking strain 150 tons). These ropes are 120 ft. (37 m.) long, and have at their free end a length of stud link chain which includes a "sister-plate" for receiving the shackles used on deck of tanker. From outer end of this chain is connected a 10 in. polypropylene "pick-up" rope about 180 ft. (55 m.) in length. Rope supported by "doughnut" floats, and chain hung by large plastic buoys 5 ft. in diameter, coloured red and green.

Submarine Pipelines and hoses: One 36 in. crude oil line and two 12 in. fuel oil lines have been laid approximately 30,000 ft. (9 km.) from shore to position close under buoy. From underwater manifold the crude oil goes to the buoy through 20 in. underwater hose; fuel oil lines joined at manifold and fuel oil led to buoy through one 10 in. submarine hose. From deck to buoy 20 in. crude oil hose and 10 in. fuel oil hose are supported by floats, and have a length of 690 ft. (210 m.) to a hose raft, at which position the 20 in. hose is divided into 3 strings of 12 in. floating hose. These, together with the 10 in. fuel oil hose, extended for a further 180 ft. (55 m) making a total length of 870 ft. (265 m.) including the raft. At their free end the hoses are paired and connected to 2 large plastic buoys each 4 ft. in diameter.

Loading Rate: Maximum loading rate of crude oil is 45,000 b.p.h. or 6,200 t.p.h. The fuel oil loading rate is 5,000 b.p.h. or 700 t.p.h.

(i) Preparation on Board before Berthing at Berth No. 3

Before arriving at anchorage, vessels assigned to Berth No. 3 should have ready:

(a) Two mooring ropes forward, together with rope stoppers, and also one or two steel crowbars.

(b) Port derrick rigged for 10 tons, or maximum lift if 5–10 tons.

(c) Three 12 in. ASA 150 hose connections for crude oil, and one 10 in. ASA 150 for fuel oil cargo, at the port side manifold. If ASA 150 is not available, the Company should be advised before arrival.

(j) Mooring at Berth No. 3

Mooring Master will board from tug which carries mooring and hose connection materials. Vessels should have crew standing-by ready to receive these materials, and should maintain a lee until this is completed.

Mooring Master will instruct crew in setting-up of forward mooring, where two 12 in. nylon ropes are made fast round port and starboard bitts with their attached shackles about 12 ft. (3.66 m.) inboard from the fairleads of panama leads as far forward as possible. Size of fairlead opening should be at least 12 in. to prevent chain jamming in fairleads.

Approaching berth, tanker should lower a mooring rope from each bow as a messenger. Mooring boat will take port rope first, and connect it to the port "pick-up" rope which should then be hove-in while the boat returns to take the starboard rope for connection to its "pick-up" rope. These two ropes are then hove-in until the chains come into the fairleads, and the shackles can be made fast in the "sister-plates". The "pick-up" ropes are then slacked back until the nylon ropes have the weight.

Usual time from sending away first line until all fast is about 20 minutes.

(k) Unmooring from Berth No. 3

After hose disconnection completed, the weight is taken on "pick-up" ropes, nylon ropes are unshackled, and as vessel backs off berth the "pick-up" ropes are slacked off and then dropped into the water. The tug will come alongside either before or after vessel backs off berth, whichever is convenient, and the nylon ropes and the 2 big shackles are passed to the tug. Unmooring time usually 10 minutes.

(l) Hose Connection and Disconnection at Berth No. 3

After completion of mooring, the mooring boat which has been holding the hoses clear during berthing, will bring the hoses to the ship and connect the derrick runner to the buoy having two 12 in. crude oil hoses. These are usually lifted aboard together and connected directly to ship's manifold, making any necessary separation of hoses as may be required according to lifting capacity of ship's derrick.

The hoses are hung off on 2 in. diameter nylon ropes and lashed to the rail to prevent shock loads due to wave action being transmitted to manifold flanges.

After the first pair of hoses have been connected, the second buoy is lifted and the remaining crude oil hose and the fuel oil hose connected in similar manner to the first 2 hoses. If a vessel requires a loading rate of 5,000 t.p.h. or less, only 2 crude oil hoses are connected. According to the number of hoses to be connected, connection takes 1.5–2.5 hours.

Hose disconnection is done in a reverse manner to connection, and takes about 1–1.5 hours.

(m) Berth No. 4 (S.B.M.).

The S.B.M. is located in a position Lat. 28° 27.9′ N. Long. 48° 38.6′ E., approx. 12,300 ft. E.N.E. of Berth No. 3.

Tanker manoeuvring area is designated within 2,000 ft. (609 m.) radius from the S.B.M. Since two loading pipe-lines are trenched under sea bed, the area is imposed on prohibition of vessels' anchoring.

The water depth in the area has been recorded 70 – 73 ft. (21.33 – 22.25 m.) except 69.5 ft. (21.18 m.) above the pipe-lines by precise echo-sounding.

The deepest draft of tanker is normally 64 ft. (19.50 m.), but 66 ft. (20.10 m.) is permittable using rise of tide.

Berth Loading Control Platform: An oil-well jacket type Berth Loading Control Platform with a rotating light-beacon, a typical of offshore valve station, is located in a position Lat. 28° 27.0′ N., Long. 48° 35.8′ E., about 3,600 ft. (1,500 m.) Westward of Berth No. 3. The light, Fl. R. ev. 10 sec. 16 M. (Ra. Ref.), is visible at a great distance.

Crude floating hose: From S.B.M. to floating manifold length 810 ft., diameter 24 in., test pressure 200 p.s.i., 1 line weight 3,460 kg.

From floating manifold to hose line close to tanker: Number of hoses 3. Nominal size 14 in., length 150 ft. Test pressure 200 p.s.i., weight 2,080 Kg.

Floating Bunker Hose: One line of 10 in. diameter. Length 260 ft., test pressure 200 p.s.i., weight 1,210 kg.

Loading rate: Crude 40,000 – 60,000 b.p.h. Bunker light fuel min. 1,860 b.p.h., heavy fuel min. 2,000 b.p.h.

Weight of Hose Lines:

Height of Loading Deck above sea surface	Hose Length	Weight One 14 in. Hose Line (Kg.)	One 14 in. + One 10 in. Hose Lines (Kg.)
30 ft (9.14 m.)	40 ft. (12.2 m.)	3,600	5,500
40 ft. (12.20 m.)	50 ft. (15.2 m.)	4,600	6,100
50 ft. (15.24 m.)	60 ft. (18.3 m.)	5,600	6,700
60 ft. (18.29 m.)	70 ft. (21.3 m.)	6,600	7,300

Note: The above figures include the weight of crude oil, marker buoy, lifting chains and fittings.

LOADING: Loading crude cargo on top of oily residue is acceptable.

(a) Dry Inspection. Upon completion of deballasting the Mooring-Master will inspect the tanks.

If the tanks are not satisfactory, he may require further pumping until such time as they reach the required standard.

(b) Loading Operations. When ship is ready for loading, ship's officer must inform Loading Operator who will transmit necessary orders to Control Room on shore.

Loading is started by booster pump, and after everything has been checked and found satisfactory on board loading rate will be gradually increased by starting further booster pumps and then main pumps in sequence until the required loading rate is reached; provided always that required rate is within capacity of the pumps.

Loading rates can be varied at any time during loading upon 5-10 minutes notice to the Mooring-Master or Loading Operator on board.

In emergency, the immediate stopping of all loading can be accomplished.

When loading is completing, the rate is gradually reduced first by stopping the main pumps and latterly the booster pumps, one by one according to the request of the ship's officer. At the final stage of loading only booster pumps should be on the line, and the ship's officer should tell the Loading Operator to "Stand-by" at least 5-10 minutes before finishing cargo.

Shore pumps will stop about 15 seconds after their control buttons are pressed, but the oil will continue to flow for several minutes, depending on amount of time since main pumps were stopped.

All stops for cargo completion must be given by the ship, as "shore-stop" is *NOT* practised at this port.

(c) Overflows and Spillage. In the event of overflow or spillage during loading, cargo will be stopped immediately and will remain stopped until such time as Mooring Master considers it safe to resume loading. This will normally be when all the overflowed oil has been cleared off the deck and there is no longer any unusual danger involved. It is ship's responsibility to clear oil away as soon as possible after occurrence.

(d) Ullaging and Gauging. After loading completed, Mooring Master will witness final ullaging on board so that ship's figures can be calculated.

On shore a group of Government and Company gaugers will take manual gauges of the shore tanks before and after loading, and from these gauges the Bill of Lading figures will be calculated.

(e) Saybolt Inspection. The oil inspectors of E.W. Saybolt & Co., S.A., based in Mina Abdullah, Kuwait, are available at this port upon consignee's special request. They will carry out or witness gauging of the shore tanks, dry inspection and ullaging of the ship's tanks, calculation of shore and ship's figures, analysis of oils, etc., issuing the necessary certificates according to consignee's requirements.

STEVEDORES: Dry-cargo vessels calling Ras-al-Khafji to give at least 72 hours notice to Agents to arrange labourers. Stevedores will be arranged from Kuwait. Ship's gear used for discharging which takes place at anchorage into barges.

MEDICAL: Company operates a clinic and a hospital at Ras-al-Khafji. Medical and dental treatment can be given in cases of emergency or serious illness or injury. Epidemic diseases or cases of serious injury or disease requiring operations, etc. are normally transferred to State hospitals in Kuwait. Company's doctor will not normally attend on board unless patient is incapable of attending clinic. Requests for medical attention should be given to ship's Agent as early as possible before arrival.

FRESH WATER: Not available except in cases of extreme emergency.

FUEL: (Also see "Berthing").

(a) Grades. Marine diesel oil (MDO), light bunker oil (LBO) and heavy bunker oil (HBO) are supplied. Each loading berth has pipe-line which can deliver light and heavy bunker oils, but only Berth No. 2 has marine diesel line. At Berths No. 1 and No. 3, marine diesel oil supplied from barge for which no extra charge made.

"Bunkering Information" booklet, which gives full details of bunkering services at this port, is available from the Company upon request.

(b) Bunker Nomination. Owners, Operators or Charterers should nominate their vessels' bunker requirements *to the Company's Head Office in Tokyo.*

Vessels requested confirm grade and quantity of bunkers required *direct to "Arabia-oil Kuwait"* (via "9KK") through normal radio services at least 4 days before arrival; or in cases where vessels receive instructions less than 4 days away, they should advise bunker requirements as soon as possible.

(c) Bunkering Operation. Bunkers normally supplied to vessels in berths while they are discharging ballast or loading crude oil. At Berths No. 1 and No. 3 MDO supply from a barge will be done usually before loading cargo.

Except in special circumstances when previously agreed, bunker supply is Stopped Onshore when requested quantity has been pumped according to shore tank gauging.

Berth	*Marine diesel oil*	*Light and heavy bunker oils*
No. 1	4″ 80 t/hr*	6″ 400/300 t/hr
No. 2	4″ 40	6″ 400/300
No. 3	4″ 80*	10″ 400/300

Note: *(a)* *Supply from a barge with 4″ rubber hose.

(b) In Winter time the rates for light and heavy bunker oils decrease due to the low sea-water temperature increasing the viscosity of these oils.

Bunkering for Cargo Vessels.

Bunker supply to cargo ships from a barge or a coastal tanker is available.

CUSTOMS: Upon arrival Master required submit to Customs a manifest of any cargo to be landed at Ras-al-Khafji and to sign a declaration that no intoxicating liquors or drugs will be landed. After loading completed, Customs will sign an Outward Manifest and issue Port Clearance. These will be handed to Master by Agent.

In normal circumstances Customs Officers do not board tankers, but board cargo ships and leave a Customs Guard on board throughout vessel's stay.

Import of following articles forbidden:

Alcoholic beverages.
Pornographic literature, photographs, pictures and films.
Explosives.
Firearms or implements of war of any kind.
Religious matters not pertaining to the Moslem faith.
Playing cards and other gambling devices.

REPAIRS: Some minor repairs may be made on board using shore assistance in case of extreme emergency, but such repairs must be made only with prior permission of Company's Terminal Office should it be required to do them in berth. Preferably all repairs should be carried out at anchorage. In all cases when shore assistance is required Master should notify ship's Agent well in advance.

DRY DOCKS: None.

REPATRIATION: May be accomplished by making special arrangement through the ship's Agent, well in advance of vessels arrival.

Marine Superintendent of Owners, or Owners Representatives and businessmen visiting Kuwait must have valid visas. Such visas can be obtained from Kuwait Government's diplomatic missions abroad.

AIRPORT: Crew joining must be routed through Dhahran. Kuwait Airport 110 km. Dammam 325 km.

TIME: GMT plus 3 hours throughout year.

TELEPHONES: No facilities for placing on board.

SERVICES: Swedish Welfare for Seamen, Lloyd's Surveyor, Butterworth Tank Cleaning Machines and Equipment and Underwater cleaning.

Provisions and deck stores are available from ship chandlers in Kuwait in limited kinds and quantities. Prices at Khafji may be a little more expensive than in Kuwait due to the transportation charges made. In all cases the ship's Agent should be advised of the requests at the earliest possible time before arrival.

SHORE LEAVE: Not normally permitted by Authorities except by arrangement through the ship's Agent.

AUTHORITY: Arabian Oil Company.

AGENT: See "Ras Tanura"

RAS TANURA: 26.38 N. 50.10 E. (See Plan)

OPERATORS: Arabian American Oil Co. ("Aramco").

FLAG: Saudi Arabian flag must be flown from vessel's foremast while in port. Vessels should provide themselves with this flag before arrival but, if circumstances render this impossible, such flag may be purchased from the vessel's Agent. Saudi Arabian flag is properly displayed when writing appears on top and sword or swords on the bottom.

IMPORTANT FEATURES:

1. There are 2 piers and a Sea Island having a total of 18 oil-loading berths. In addition, a small oil-loading pier is located on West side of Ras Tanura peninsula. A 20,000 d.w.t. bunkering vessel is stationed in the anchorage area to refuel vessels that require bunkers only.
2. Aramco Harbour Pilots moor, unmoor and supervise movement of all vessels in vicinity of piers except coastal tankers loading at West Oil Pier. Normally no charge made for this service.
3. Safety rules strictly enforced. Receipt of instructions must be acknowledged before vessel will be berthed.
4. Aramco maintains radio station (call letters HZY) for exchange of messages with ships. All incoming tankers should establish early contact with this station order transmit ETA data, etc.
5. Vessels arriving at Ras Tanura shall retain sufficient clean water ballast on board for the safe handling of the vessel from the anchorage area to the piers. Every effort should be made to reduce the quantity of ballast on board to a minimum and to have the ballast in as few tanks as practical in order to reduce the time spent draining. During adverse weather conditions sufficient ballast shall be retained on board the vessel to assure easy handling and good steering qualities. Ballast pumping equipment should be ready to commence discharging ballast when the vessel is in position in the berth.
6. Consumption of alcoholic beverages prohibited within Kingdom of Saudi Arabia. Local officials carry out inspection to confirm that all alcoholic beverages under lock and key during vessel's stay. Vessels moored at loading piers or anchored in harbour considered to be in Kingdom of Saudi Arabia.
7. Display of quarantine signals on approach to Ras Tanura must be maintained until pratique is granted. The flag of Saudi Arabia must be flown throughout the vessel's stay in port. Ships cannot be berthed until the quarantine message has been received (see "Radio").
8. To permit more rapid ship turnaround, an "Early Departure Procedure" is available. This service provides for a quick departure of the vessel after loading, without necessity of waiting for delivery of documents at anchorage. This special service should be requested and arranged with Agent at earliest opportunity.
9. All vessels transitting the "deep-water departure channel" must maintain a minimum 5 ft. keel clearance.

LOCATION: Aramco's shipping and refining facilities situated on Saudi Arabian coast of Gulf on Peninsula known as Ras Tanura. The peninsula, which has a total length of 13 statute miles, has as Southern extremity a 5 mile-long sandspit with max. width about 5 miles. Near its tip are Company's piers, shipping tanks, and terminal offices. Refinery and its storage tanks located about 7 miles to the North. There is a survey reference point located at Southern tip of peninsula, over which a beacon tower has been erected. Exact position of this beacon is Lat. 26° 37′ 25″ N., Long. 50° 09′ 50″ E. All bearings are referenced to this point, which is officially known as Ra's at Tannurah. The name "Ra's-at-Tannura" (variously spelled) appears on most charts and publications.

Port of Ras Tanura is a roadstead and there are only open anchorage areas for oil tankers and other vessels. Some protection is afforded by land on the West and shoals to the North, East and South. These shoals tend to keep the sea down to such an extent that vessels do not ordinarily register heavy movement.

APPROACHES: The inner channel at Ras Tanura port has been buoyed for the safe navigation of deep-drafted outward bound vessels where marine navigation aids, in accordance with international standard, have been installed. The channel has a certified depth of 69 ft. at ISLW.

The Port of Ras Tanura should be approached from the North. Vessels approaching in ballast should pass Westward outside, but close to, the buoyed deep-water departure channel in order to provide adequate sea room within the lines of buoys. The buoyed channel, designated as the "deep-water departure channel", has a clear swept depth of 69 ft. at ISLW. The buoyed width of the shoal area passage between buoys 15, 16, 17, and 18 is 800 ft.

Caution:

All vessels approaching the Ras Tanura anchorage from the North or South, shall reduce their speed sufficiently to ensure the safety of other vessels and themselves, and when passing through the anchorage the speed shall not exceed 5 knots per hour.

All vessels approaching the ports of Ras Tanura and/or Dammam are to stay clear of the "deep-water departure channel". The lighter draft vessels approaching should give way and endeavour to avoid getting into crossing situations that might require an outward bound vessel to alter course. Such vessels may be extremely limited in their room to manoeuvre due to their deep draft. Vessels departing the ports of Ras Tanura and/or Dammam are required to use the "deep-water departure channel".

The areas around the approaches to Ras Tanura and Northward along the Arabian coast have many drilling platforms, wells and other structures which may be hazards to navigation. Appropriate navigation charts should be kept up to date and consulted when sailing in this area.

Separation Zone (arriving vessels):

- *(a)* All arriving vessels should stay within the IMCO Designated arrival lane.
- *(b)* From Approach Buoy or Entry Buoy to Buoy No. 4 the separation zone is 0.75 mile.
- *(c)* From Buoy No. 4 to Buoy No. 5 the separation zone is 0.5 mile.
- *(d)* From Buoy No. 5 to Buoy No. 7 the separation zone decreases to nil.
- *(e)* From buoy No. 7 to buoy No. 17 all arriving vessels are to keep to the West of Buoys, No. 7, 9, 11, 13, 15 and 17.

Separation Zone (Departing Vessels):

- *(a)* All departing vessels should stay within the IMCO Designated Departure lane.
- *(b)* From Buoy No. 17 to Buoy No. 5 all departing vessels are to keep to the East of Buoys No. 17, 15, 13, 11, 9, 7, and 5.
- *(c)* The separation zone starts at Buoy No. 7 and increases to a width of 0.5 mile at Buoy No. 5.
- *(d)* Buoy No. 4 to Buoy No. 5 the separation zone is 0.5 mile wide.
- *(e)* From Buoy No. 4 to the Entry Buoy or Approach Buoy, the separation zone width is 0.75 mile.

Ras Tanura East Channel: A new channel with a least known depth of 40 ft. I.S.L.W. has been established. The channel is marked by Light Buoys fitted with Radar Reflectors. This channel is now open for ships not exceeding 35 ft. in draft and 800 ft. in length.

Use of this channel will relieve the congestion experienced when smaller ships used the Ras Tanura Northern channel and anchorage.

The channel is marked by buoys as indicated below:

Name of Buoy	Position	Day Mark	Light Characteristics
RTE 1	Lat. 26° 42.5′ N.	Black Pillar	Fl. W. ev. 10 secs.
	Long. 50° 50.0′ E.		
RTE 2	Lat. 26° 46.9′ N.	Red Can	Gp. Fl. W.2 ev. 10 secs.
	Long. 50° 34.1′ E.		
RTE 4	Lat. 26° 45.5′ N.	Red Can	Fl. W. ev. 3 secs.
	Long. 50° 24.6′ E.		
RTE 5	Lat. 26° 40.1′ N.	Black Conical	Gp. Fl. W.3 ev. 10 secs.
	Long. 50° 22.3′ E.		
RTE 6	Lat. 26° 41.5′ N.	Red Can	Fl. Red ev. 5 secs.
	Long. 50° 23.8′ E.		
RTE 7	Lat. 26° 37.3′ N.	Black Conical	Qk. Fl. W. (60 per min.)
	Long. 50° 16.1′ E.		
RTE 8	Lat. 26° 36.6′ N.	Red Can	Fl. Red ev. 3 secs.
	Long. 50° 15.8′ E.		

Buoy Light Visibility:

White 7 miles
Red 5 miles

Directions:

Inbound vessels passing Bahrain Light-ship should steer a course to pass about 1.5 miles North of Buoy RTE 1; thence steer a course of 285° for a distance of about 14.75 miles to a position about 1 mile North of Buoy RTE 2. From this position, steer a course of 259° for about 9.5 miles to a position about 1 mile Northwest of Buoy RTE 4. From this position steer a course of 191° for about 6.5 miles to a position about 0.25 mile East of Buoy RTE 5. From this position steer a course of 243° for about 6.5 miles to a position about 0.2 mile South of Buoy RTE 7; thence alter course to make the Port of Destination.

Special Notes:

The following regulations and special notes are promulgated for the use of ship's Masters entering and leaving Ras Tanura and Dammam ports:

Inbound Vessels:

1. Vessels fitted with the appropriate VHF radio equipment are requested to monitor Channel 16 when in the vicinity of Ras Tanura channel and anchorage area.

2. Vessels shall report time of passing Beacon No. 3 to Ras Tanura Pilot station.
3. Vessels shall report time of passing Buoy No. 7 to Ras Tanura Pilot station.
4. Vessels proceeding within the area bound by Channel Buoy No. 9 and the Southern extremity of Ras Tanura anchorage should limit speed to a maximum of 5 knots.
5. No overtaking is permitted in the Ras Tanura arrival channel after passing buoy No. 9.
6. A minimum distance of 1 mile shall be maintained between vessels proceeding in the same direction after passing Buoy No. 9.
7. Vessels passing Buoy No. 17 must navigate with extreme caution and give way to vessels departing from the berths.
8. Freighters transitting the Ras Tanura port area, bound for Dammam, should alter course Eastward after passing clear of Buoy No. 17 and keep to the Eastern sector of the tanker anchorage.
9. Under no circumstances shall inbound vessels navigate in the buoyed deep-water departure channel.

Outbound vessels:

1. All vessels are to monitor Channel 16 when in the vicinity of Ras Tanura channel and anchorage area.
2. Vessels departing from Ras Tanura anchorage must advise Ras Tanura Pilot office of their intentions 30 minutes before departing.
3. Freighters outbound from Dammam shall, when passing Dammam Channel Beacon No.1, alert Ras Tanura Pilot office of their estimated time of arrival at the Southern extremity of the tanker anchorage. Freighters should keep to the Eastern sector of the tanker anchorage and avoid the manoeuvring area from the anchorage to the piers.
4. Vessels manoeuvring within the area bound by the Southern extremity of the Ras Tanura anchorage and the entrance to the departure channel (Buoys 17 and 18) should limit speed to a maximum of 5 knots.
5. Any departing vessel shall not overtake any vessel ahead until both vessels have passed clear of Buoy No. 5.
6. A minimum distance of 1 mile is to be maintained between vessels proceeding in the same direction until clear of Buoy No. 5.
7. Under no circumstances shall outbound vessels navigate in the arrival channel.

Keel Clearance: No vessel may transit either channel unless it has at least 5 ft. of keel clearance.

Communication – VHF Radio: Maintaining a continuous radio watch aboard all vessels in the Ras Tanura vicinity cannot be overemphasised, particularly in the event of unforeseen circumstances developing the port area. A two-way exchange of information is an essential prerequisite to a safe, efficient port operation. Vessels in the Ras Tanura anchorage that are not fitted with VHF radio are requested to maintain a radio watch with the local station HZY.

RADAR: *Radar Surveillance Advisory System:* Radar Surveillance Advisory System is now operational in Ras Tanura Arrival and Departure Channel, Ras Tanura East Channel, Ras Tanura Anchorage area and Juaymah area.

All ships must contact Ras Tanura Pilot Office on Channel 16 when approaching these areas and maintain VHF watch on Channel 10 when inbound and outbound in these areas.

All ships movements will be observed within the dependable range of the radar (12 to 14 miles).

Each ship arriving and departing Ras Tanura will be tracked and identified when possible.

Radar Surveillance Advisory System will communicate with ships in English on VHF Channel 16 and 10 in order to provide the following services:

1. Advise ships' Masters of channel and port 'condition, congestion, weather, tides, navigational aides, etc.
2. Ships' Masters will be informed of movement to other vessels.
3. Ships' Masters will be advised of Ras Tanura Port Regulations pertaining to vessels' movements and vessels violating port regulations.
4. Incoming vessels will be advised of the port regulations pertaining to movement of deep draft departing vessels. It may be necessary for incoming vessels to reduce speed to permit safe passage of outgoing deep draft vessels.
5. Masters of departing vessels from Ras Tanura into dredged channel will be informed of priority of movements of their vessel and other vessels.
6. Ships' Masters will be advised of berthing prospects and anchoring conditions.
7. Ships' Masters will be warned when dangerous manoeuvring situations appear to be developing.

The Radar Surveillance Advisory System has been established in order to increase the safety of ships navigating in the Ras Tanura area. It is an information and advisory service only, and in no way assumes control of ships navigating in the area.

To make this radar assistance effective, the cooperation of ships' personnel is expected and appreciated.

DOCUMENTS:

(a) Following documents required for immediate inspection by boarding officials:

Maritime International Declaration of Health. (1 copy from last loading port to be surrendered).
Valid Deratisation or Deratisation Exemption certificate.
Vaccination List (2 copies).
Stores List (2 copies).
Crew List (3 copies).
Passenger List.
Smallpox Vaccination Certificate, of a date not exceeding 3 years, for all passengers and crew members.
Certificates of Inoculation against any communicable diseases prevailing at the ports of departure.
A complete set of Log Books covering the period since the vessel's last call at Ras Tanura. In the case of a first visit, log books must cover the period from the date of a vessel's first sailing or from April 25, 1952, whichever date is most recent.

(b) "Early Departure Procedure." To permit more rapid ship turnaround an "Early Departure Procedure" is available. This service provides for a quick departure of the vessel after loading, without the necessity of waiting for delivery of documents at anchorage. This special service should be requested and arranged with Agent at ship's earliest opportunity. When vessel is ready to leave port a Ministry of Health permit and port clearance will be given to Master by ship's Agent.

(c) Export Goods Manifest. Master will receive from Agents, Export Goods Manifest forms covering each consignment of cargo loaded. A letter addressed to the consignee will accompany these forms. This letter provides detailed instructions as to requirements and disposition of the Export Goods Manifest forms. It is imperative that Master delivers these papers to consignee upon arrival at the discharge port(s).

(d) Discharge Certificates. According to local procedure, certificates showing details of cargo loaded at this port on any tanker, are airmailed by Agents to the receivers of cargo at the port of discharge along with a self-addressed envelope, and returned to the Arabian American Oil Company in Ras Tanura signed by the recipient Customs Authorities

PILOTAGE:

(a) Channel Pilots. Approach channels well marked by lighted, radar-reflecting beacons and buoys. For these reasons, Channel pilots not provided.

(b) Harbour Pilots. Harbour Pilots provided for assistance to Masters of vessels using the Port. Aramco Pilots are on duty continuously. If a berth is available and the ship's radioed quarantine message and notice of arrival and readiness have been received, an Aramco Harbour Pilot will board the incoming vessel while it is underway. The point of boarding will be South of Buoys 17 and 18 and East of the Sea Island. Aramco Harbour Pilots will pilot vessels to berth at all piers. All manoeuvring of vessels in vicinity of or at the piers will be under supervision of an Aramco Harbour Pilot. VHF radio contact may be made between ships and the Port Control and the Pilot's Office at frequencies listed under "Radio".

The services of the Pilots are presently provided without charge, but the Company reserves the right to charge for these services.

If the freeboard of a vessel exceeds 30 ft., an accommodation ladder is required in conjunction with the pilot ladder. This requirement does not involve vessels equipped with *approved* pilot hoists. The deck of the Ras Tanura pilot launch, from where the Pilot boards, is approximately 6 ft. above the water.

Upon request from ship's Master, additional pilotage assistance to transit the Ras Tanura departure channel is available to all VLCC vessels of 150,000 d.w.t. and above which have a deep draft of 60 ft. or more when fully loaded.

On departure from Ras Tanura, an Aramco Harbour Pilot remains on board such vessels until the vessel is headed on a safe Northerly course in line with the axis of the departure channel, providing the Pilot conning the vessel can disembark safely. In the event of adverse weather and/or sea conditions, the Master and Harbour Pilot shall arrive at a mutual agreement as to when and where a proper lee can be provided in order to allow the Pilot to disembark safely. In this event, however, the Pilot shall not disembark until he has discussed thoroughly with the Master, weather conditions, channel entrance identification, and the manoeuvers required to transit the dredged section of the departure channel safely.

Pilot Ladder requirements:

1. The ladder should be kept in good order, cleaned and should be of adequate length and strength.
2. The vertical distance between steps should not exceed 15 in. The outboard edge of the step should project from 5 to 6in. from the hull. Ladders must be so constructed that the steps will remain flat or at right angles to the hull while supporting the weight of a person.
3. Spreaders at suitable intervals should be provided to prevent the ladder twisting and the ladder should be properly secured with the steps level.
4. The deck in the vicinity of the ladder should be clean and free of oil and grease.
5. When possible on vessels so equipped, the pilot ladder shall be made fast alongside of an area where there is a break in the rail or an opening in the bulwark. This allows a person to step directly on the deck and is considered most desirable. The boarding position should be as near midships as possible.
6. During the hours of darkness, it is necessary that the pilot ladder be adequately lighted. It is emphasised that not only the ladder but the deck area close by the head of the ladder should be illuminated.
7. A manrope or safety line should be rigged in the close proximity of the ladder.
8. Responsible deck department personnel are to be in attendance when the Pilot boards or leaves the ship.

ANCHORAGES: All vessels must have anchors well secured when approaching or departing from the Sea Island facilities. No anchor or chain clearing operations are permitted while alongside any berth.

The suggested anchorages in the port of Ras Tanura have been laid out to facilitate shipping in general. They provide vessels with ready access to the piers. The anchorage area ranges in depth from 5 to 12 fathoms. Holding ground in these areas is only fair, as the bottom is varied in character, it is recommended that anchored vessels lie to a long scope of chain whenever the weather is unfavourable.

Any vessels having anchored in the suggested anchorage area should immediately advise Aramco, via Radio HZY, the following information: *(a)* Time of arrival in the anchorage area (GMT). *(b)* Approximate position in the anchorage area in relation to the North Pier. *(c)* Contact Aramco Terminal Planning Office by VHF radio Channel 14 or 16 if vessel is so equipped.

Holding anchorage: Due to the increase in the ship traffic and congestion in the port of Ras Tanura, an area designed as a "Holding Anchorage" has been established outside of the port. When a tanker is nominated to load at Ras Tanura and the port anchorage is congested, the tanker may be instructed to proceed to the "Holding Anchorage" to await instructions and its turn for a loading berth. Normally, this procedure will only be instituted when a port anchorage is congested or will become congested and it is anticipated that the vessel will have an extended period.

The perimeter lines for the port of Ras Tanura "Holding Anchorage" join the following points:

Points	*Lat. N.*	*Long. E.*	*Directions*
1	27° 08′ 30″	50° 13′ 30″	East to
2	27° 08′ 30″	50° 20′ 00″	South to
3	27° 02′ 30″	50° 17′ 00″	West to
4	27° 03′ 00″	50° 11′ 30″	North to Point 1

The area designated as the Ras Tanura anchorage for tankers is also being expanded. The new perimeter lines for the Ras Tanura tanker anchorage join the following points:

Points	*Lat. N.*	*Long. E.*	*Directions*
1	26° 41′ 00″	50° 12′ 45″	East to
2	26° 41′ 00″	50° 14′ 00″	South East to
3	26° 37′ 45″	50° 15′ 15″	West to
4	26° 37′ 45″	50° 11′ 15″	North East to Point 1

MAX. SIZE: Vessels up to 250,000 d.w.t. (part-cargo) have been handled. Departure channel 69 ft. ISLW – see "Approaches". Water depth at Sea Island berths is minimum of 85 ft. at ISLW, but depth of water in departure channel and not depth of Sea Island berths limits the draft of vessels calling at Ras Tanura.

HEALTH: A modified Radio Pratique procedure is in use. Vessels supplying requested quarantine information can be berthed on arrival and proceed with normal loading operations prior to arrival on board of quarantine officer. Vessels failing to supply information will be delayed at anchorage until cleared by quarantine officer. Extensive delay can be incurred by vessels failing to supply requested information promptly. Quarantine information (see "Radio") must be received prior to berthing. In accordance with international practice, quarantine signals must be displayed by all vessels when approaching Ras Tanura. These signals shall be displayed continuously until pratique granted. These signals are: Sunrise to sunset, quarantine flag. Sunset to sunrise, Signal lights, red over white.

Quarantine officer may board vessels awaiting berth in prescribed anchorage area; however, vessels proceeding directly to a berth at one of the piers will be boarded at the pier after being tied up. Pier personnel are normally allowed on board prior to arrival of quarantine official. Vessels at anchor awaiting berth should not rig an accommodation ladder, but instead should provide a safe pilot ladder in good repair, properly secured. At night, the pilot ladder must be adequately lighted.

RADIO:

(a) Station. Aramco owns and operates marine radio station call letters HZY, maintained for transacting company business with "in-or-outbound vessels" and is open 24 hours daily. Station HZY will also accept and forward messages concerning ship's agency matters to Agents. However, agency messages to Masters are not permitted. No charge for either incoming or outgoing messages. Marine transmitting antenna of HZY located at Lat. 26° 18′ 36″ N., Long. 50° 07′ 12″ E.

Due to its inland location Masters strongly advised *not* to use this antenna for radio direction-finding purposes since inaccurate bearings will be obtained due to coastal refraction.

(b) Messages. All vessels must keep HZY fully advised regarding estimated times of arrival at Ras Tanura, as well as times of actual arrival and position in anchorage. It is required that vessels provide HZY with minimum of 3 notices of ETA information at about 72, 48 and 24 hours "steaming time" from Ras Tanura. Shorter notices may result in berthing delay. If loading part cargoes at other Gulf ports prevents a vessel from furnishing an accurate ETA, steps should be taken to dispatch a message either direct or through ship's Agent giving best estimate possible at the time. This message should then be followed by an accurate ETA immediately upon departure for Ras Tanura. Failure to give at least 24 hours notice will result in an addition to allowable laytime in the event a demurrage claims is filed against Aramco.

Upon first contact with an inbound tanker, HZY will transmit the following two standard messages of 181 and 50 words;

181 word message

Master Rastanuraradio/HZY

Contact HZY soonest advising 1 ETA GMT Rastanura 2 any later changes 3 Agent's name and requirements 4 arrival departure draft fore and aft 5 arrival displacement tonnage 6 deballasting hours 7 maximum loading rate full stop vessel urged to accept highest possible loading rate stop vessels loading cargo advise previous cargo and if cargo or residue aboard to be commingled with Rastanura cargo fullstop if VHF aboard call Aramco terminal planning for berthing instructions when 100 miles out on 156.8 Channel 16 or 156.7 Channel 14 stop if no VHF aboard contact HZY 500 kHz and copy traffic lists on odd hours for berthing instructions stop on arrival anchorage advise HZY official readiness time and position relative North Pier stop radio messages without charge fullstop Pilots require sufficient clean ballast for manoeuvring and will board in anchorage for mooring stop recommended propellers almost covered and trim limited to 15 ft. stop have gangway ready stop all tanks and lines must be gas free prior loading white products fullstop suggest copy HZY traffic lists several days after departure.

Aramco

50 word message

Master Rastanuraradio/HZY

Please advise any epidemic diseases or illness on board and status of crew's International Certificates of Immunisation and all ports called past 30 days also destination stop Agent stop flag stop net registered tonnage stop vessel will not be allowed to berth until this information is received.

Aramco

It is important that you send a reply to the above 2 messages soonest after receipt.

(c) The HZY Marine Station transmits on frequencies of 430; 8480; 12811 and 16960 kHz.

The number of operators on duty varies with the traffic load. During the peak period from 0400 to 1200 hrs. GMT there are 3 operators and a traffic clerk on duty. From 1200 to 2000 hrs. GMT there are two operators on duty and from 2000 to 0400 hrs. GMT one operator handles the station.

The hours of operation on the various frequency bands is as follows:

16 mHz Band 0600 to 1300 hrs. GMT (Traffic List sent at 0600, 0800, 1000 and 1200 hrs. GMT)

12 mHz Band 0600 to 1800 hrs. GMT (Traffic List sent every even GMT hour on the hour)

8 mHz Band 1800 to 0400 hrs. GMT (Traffic List sent every even GMT hour on the hour)

Medium Frequency Band 24 hour continuous operation with a speaker watch on 500 kHz. (Traffic List sent every odd GMT hour on the hour)

From 0400 to 2000 hrs. GMT there is one operator that works exclusively on the MF Band and the station transmits to the ships on 430 kHz and receives on any agreed to ship working frequency. One or two HF operators are assisting this MF operator in monitoring the speaker watch on 500 kHz.

From 2000 to 0400 hrs. GMT only one operator is on watch in the station. He keeps speaker watch on 500 kHz, works ships on 430 kHz and 8 mHz. The Traffic List is also sent at 0430 hrs GMT daily on 430 kHz and 8 mHz and at 1630 hrs. GMT on 430 kHz and 12 mHz. Available Weather/Hydros are also sent at these times.

N.B.– To facilitate contacting a vessel after departure, it is suggested that vessels copy HZY traffic lists for several days after leaving Ras Tanura.

(d) It is requested that all vessels forward their local weather observations to this station, either in code or plain language, to assist in preparation of the Gulf forecasts. No charge for the incoming traffic or for weather observations from vessels.

(e) Agents. Messages to ship's Agents are handled by HZY, free of charge. However, the shipping Agents are not permitted to use HZY for outgoing traffic. Address message to Aramco and indicate Agent's name as the first words of text.

(f) Beacon. An aircraft radio beacon, call sign RT, which transmits on 335 kc is located at Lat. 26° 37′ 36″ N., Long. 50° 09′ 47″ E.

VHF: VHF/RT/VHF radiotelephone Channels 13, 14, and 16 are available for ship-to-shore communication at Ras Tanura. Channels 13, 14, and 16 are monitored 24-hours-a-day in the Aramco Terminal Planning Office which is located in Dhahran, approximately 25 miles South of Ras Tanura. Harbour Pilots can be contacted on Channels 14 and 16. VHF equipped vessels should try to contact the Aramco Terminal Planning Office when they are within 100 mile range of the port and while at anchor. Use of VHF while alongside the oil piers to contact the Aramco Terminal Planning Office, Pilots, or Agents is permitted.

HZY will, on request via CW, utilise voice radio, transmitting on 4372.4 and 8780 kHz and receiving in the 2, 4, 8, and 12 mHz bands.

Radio Silence. The Main wireless and radar equipment of any ship must not be operated while the vessel is alongside oil piers. Use of VHF while alongside the oil piers to contact Aramco Terminal Planning Office, Pilots, or Agents is permitted.

TUGS: Under normal operating conditions, no tow-boat or other craft is to come alongside any vessel before Harbour Pilot boards vessel. Should Harbour Pilot deem assistance of a tug to be necessary, he will give proper signal. Ship's personnel must not signal for tugs or boats to come alongside except as directed to do so by the Pilot. Mooring and unmooring assistance is provided by diesel tugs, which are regularly stationed in immediate vicinity of piers. At present no charge is made for these tugs when employed in normal mooring and unmooring operations, but a charge is made for additional or unusual services. Tugs are fitted with fire pumps and water/foam monitors to assist in fighting fires.

Aramco operates 4×4,000 h.p. tugs, bollard pull capacity of 65 tons each, 3×2,000 h.p. tugs with bollard pull capacity of 35 tons each, and 1×1,600 h.p. tug with bollard pull capacity 29 tons.

BERTHING: Harbour Pilot will direct the manoeuvring of the vessel to the assigned berth. Berthing draft should be sufficient to immerse or almost immerse the propeller, with a maximum of 10 ft. stern trim. Full power and manoeuvrability should be available.

(a) Turn. Incoming ships are assigned berths in accordance with

time of arrival, product to be loaded, size of vessel, and loaded draft. Vessels loading crude oil or crude blends will normally be assigned berths as follows: Below 60,000 d.w.t. Usually assigned to North Pier (or South Pier in case of some refined products). 60,000 to 100,000 d.w.t. May be assigned either to North Pier or Sea Island depending on berth availability. Above 100,000 d.w.t. Usually assigned to Sea Island. Endeavour is made to berth vessels immediately upon arrival and Master should maintain radio contact with station HZY. If no berth available, vessels to anchor in prescribed anchorage and maintain radio contact with station HZY or Ras Tanura Port Control office by VHF radio frequencies listed under "Radio".

(b) Ballast. Storage space is extremely small for dirty ballast and residue. Prior clearance must be arranged for discharge of reclaimed oil or dirty ballast ashore. The Sea Island does not have facilities for handling this material. Aramco strongly recommend the "Load on Top" procedure wherein such residues are commingled with crude cargo whenever possible and that new vessels be built with ballast system independent of cargo tanks. A separate ballast system shortens time in port by about 5 hours. Vessels should arrive with minimum clean ballast to enable manoeuvring under prevailing weather conditions. Masters are encouraged to take advantage of the favourable weather which prevails much of the time, particularly during summer and fall months, to minimise ballast in order to reduce turn-around time. Masters should maintain radio contact with HZY or ship-to-shore communication by voice radio in order to obtain latest weather information and advice on appropriate ballast. Aramco particularly interested in having vessels complete deballasting promptly after berthing in order to minimise time at berth. Simultaneous loading and deballasting is encouraged on properly equipped vessels. Vessels requiring excessive time to complete deballasting will be given Letters of Deficiency. To avoid any possible pollution of local waters, all tankers calling at Ras Tanura to load must do necessary tank cleaning prior to arrival. Prior to arriving at a loading berth Masters must assure themselves that all tanks, pipe-lines, and pumps are free of oil. All tank cleaning must be done East of 52nd meridian. Regulations in this regard strictly enforced to protect local fishing and pearling and reduce fire hazards. If, after arriving alongside, a vessel is found to have oil ballast water on board, it will be sent to sea to accomplish necessary tank cleaning. A new notice of readiness to load must then be given.

(c) Gangway. All vessels required to furnish their own gangway which should be made "ready" prior to berthing at North or South Pier. At the Sea Island, Aramco can furnish a gangway in some berths.

OIL LOADING PIERS: There are 2 "T" head piers (piers project from Eastern face of peninsula and are commonly referred to as South Pier and North Pier) and a Sea Island.

(a) South Pier. Designed to handle T-2 class tankers. Ships up to 25–30,000 d.w.t. are efficiently handled. An 8 ft. tide permits some flexibility in loading. Ships up to 35,000 d.w.t. will be topped off and unberthed on rising tide. The pier is mainly used to load refined products and has 1×15,000 b.p.h. crude loading system to service small crude ships. South Pier connected to peninsula by causeway and trestle, 2,300 ft. in length. Pier has 4 berths and is 1,200 ft. long and 105 ft. wide. Depths South Pier as follows: Berth 1, 33 ft. at ISLW; Berth 2, 33 ft. at ISLW; Berth 3, 33 ft. at ISLW; Berth 4, 31 ft. at ISLW.

(b) North Pier. This pier handles mainly crude shipments with loading rates up to 60,000 b.p.h. Some refined products as well as refrigerated propane and butane are also available, The berths were designed for 45,000 d.w.t. tankers; however, vessels in excess of 100,000 d.w.t. have been safely handled, berthed and loaded with sufficient attention given to approach velocities and tidal conditions. North Pier located about 0.75 miles to North of South Pier, and has causeway and trestle that extends some 3,600 ft. from the peninsula. Pier is 2,200 ft. long and 110 ft. wide, and comprises 6 berths. Depths North Pier as follows: Berth 6, 46 ft. at ISLW; Berth 7, 40 ft. at ISLW; Berth 8, 47 ft. at ISLW; Berth 9, 47 ft. at ISLW; Berth 10, 49 ft. at ISLW; Berth 11, 43 ft. at ISLW.

(c) Sea Island. Located about 5,600 ft. N.E. of the North Pier. The Sea Island has 8 berths in service. Sea Island No. 4, berths 19 and 20, the largest of these off-shore loading installations with 4 hydraulic crude oil loading arms, was inaugurated on 9th December, 1972. Berths 12–17 are capable of routinely handling vessels up to 200,000 d.w.t. Berth 18 is designed to handle vessels between 65 and 400,000 d.w.t. Larger vessels can beberthed under special conditions. Depths Sea Island as follows: Berth 12, 85 ft. at ISLW; Berth 14, 85 ft. at ISLW; Berth 15, 85 ft. at ISLW; Berth 16, 85 ft. at ISLW; Berth 17, 85 ft. at ISLW; Berth 18, 85 ft. at ISLW. Each island, or pair of berths, consist of 4 mooring dolphins and a platform with 4 breasting dolphins on each side. Length of Sea Island No. 1 (Berths 12 and 14) is 1,250 ft. whereas length of Sea Islands Nos. 2 and 3 (berths 15, 16, 17 and 18) is 1,400 ft. and length of Sea Island Berth No. 4 (Berths 19 and 20) is 1,750 ft. each between outer mooring dolphins. Sea Island facility equipped with 8 submarine crude loading lines having a combined capacity of 680,000 b.p.h. and 1 black diesel oil line having a capacity of 400 b.p.h. Prevailing wind is from a N.N.W. quarter. Sea Island design is for berthing of ships at wind velocities up to 30 m.p.h. and wind pressure of 5 lbs./sq.ft. on pier structure, and 3 lbs./sq.ft. on vessel.

(d) West Oil Pier. A small oil-loading pier with maximum water depth 32 ft. Located on West side of peninsula. However, the departure channel is presently limited to 16 ft. at ISLW. Pier is used for fuelling small craft and loading coastal tankers. Vessels taking cargo subject to same safety regulations applicable to other piers.

MOORING:

1. Full power must be available for manoeuvring to and from wharves.
2. An Aramco Pilot will pilot vessel to berth assigned.
3. All manoeuvring in vicinity of, or at piers, will be under supervision of an Aramco Pilot.
4. Aramco tugs will assist in mooring and unmooring.
5. All tank tops, ullage plugs and sighting ports will be closed before berthing.
6. Vessel's Master must notify the Pilot of any special conditions, diffculties or peculiarities such as defective equipment, lines or gear which might impose special hazards in connection with handling mooring or loading of vessels.
7. Steering gear, engine-room telegraph, whistle and all navigational equipment must be tested before any manoeuvring to or from piers is started.
8. Pilot will decline to moor vessel with unsatisfactory equipment, lines, gear, etc.
9. Aramco will loan additional mooring lines if Pilot deems them necessary.
10. Vessels must be moored to entire satisfaction of Pilot.
11. Vessels must be ready to put out more lines as required by weather changes or at request of Pilot or oil-loading personnel.
12. Winches must be ready at all times for immediate use.
13. Except in emergency, no mooring lines will be let go without permission of the Pilot.
14. While alongside wharves, maintain engines and propulsive machinery ready at all times to leave wharf on short notice under full power.
15. No repairs are permitted that will delay or interfere with this manoeuvring.
16. Non-compliance with 13 and 14 constitutes a serious safety hazard. Any towage and delay resulting from non-compliance will be for vessel's account.
17. If fire or other grave emergency occurs or danger appears imminent on either the vessel or pier, do not await arrival of Pilot – immediately let go mooring lines and personally remove vessels from pier in such manner as to best avoid damage to pier or other vessels.
18. Upon completion of loading and/or bunkering and immediately after disconnection of hoses, vessel must leave berth and await clearance in stream.

Note: Most vessels will be loaded using all-metal Chiksan arms. The use of nylon or other highly elastic line is prohibited. Mooring lines should be checked frequently and kept tight to prevent excessive movement of vessel in berth. All vessels moored with automatic tension winches shall set manual brakes on these winches. Pier crews on duty continuously to handle oil hoses/arms and mooring lines. Mooring lines on board vessels will not be handled by Aramco personnel. All loading connections equipped with electrical insulating flanges. Therefore ship-to-shore bonding cables are not used.

LOADING: A commonly-used design criterion for tanker loading rates is as follows:

> Loading rate in barrels per hour equals dead weight tonnage of vessel (b.p.h. equals d.w.t.). This rate results in loading a vessel in 7 to 8 hours.

This criterion can be achieved for vessels up to 60,000 d.w.t. at the North Pier, for vessels up to 90,000 d.w.t. at Sea Island berths 12, 14, 15 and 16 and for vessels up to 120,000 d.w.t. at Sea Island berths 17 and 18. With the installation of the fourth 16 in. loading arms in berths 15 and 16, the max. loading rate at these berths will also increase to about 120,000 b.p.h. Achieving these loading rates will depend upon availability of loading systems, whether vessel's manifold permits connecting all the arms at a berth, and the loading rate at which excessive arm vibration begins to occur.

Note: Diurnal tidal rise approx. 8 ft. at spring and 5 ft. at neaps. If at any time a ship's draft approaches to within about 3 ft. of the depth of water at the berth, loading will be suspended until an incoming tide increases the depth to permit resumption of loading and provide for safe draft of the fully loaded ship on departure.

ARAMCO's Load on Top Monitoring Programme at Ras Tanura: Independent Petroleum Inspectors will visit the vessel on berthing at Ras Tanura in order to obtain following data concerning load on top procedure:

1. Vessel's particulars.
2. Loading information.
3. Type of slop tank.
4. Total volume of contents of slop tank.
5. Amount of free water in slops.
6. Amount of oil/water mixture floating on top of the free water.
7. Express amount of oil/water mixture as per cent of vessel's d.w.t.

Vessels are requested to co-operate in providing this information to the Petroleum Inspectors and to permit measuring and sampling of the recovered slop oil.

(a) Loading Rates. Following table shows products available at each berth and nominal loading rates:

Cargo	*Available at Berths*	*Barrels per Hour*
Crude oil	12, 14, 15, 16, 17, 18, 19, 20	40,000 to 280,000
Crude oil	6, 7, 8, 9, 10, 11	15,000 to 90,000
Crude oil	1, 2, 3, 4	12,000
Fuel oil	6, 7, 8, 9, 10, 11	12,000 to 22,000
Fuel oil	1, 2, 3, 4	12,000 to 22,000
Black diesel	1, 2, 3, 4	5,000
White diesel	8, 9	12,000
White diesel	1, 2, 3, 4	8,500 to 15,000
Gasoline	1, 2, 3, 4,	6,000

Cargo	*Available at Berths*	*Barrels per Hour*
Kerosene (see X-2-34)	1, 2, 3, 4	6,500
Jet fuel (see X-2-34)	1, 2, 3, 4, 8, 9	10,000
Bunker fuel oil	1, 2, 3, 4	5,000
Bunker fuel oil	6, 7, 8, 9, 10, 11	5,000
Bunker fuel oil	12, 14, 15, 16, 17, 18, 19, 20	7,500
Bunker diesel	1, 2, 3, 4,	1,400
Bunker diesel	6, 7, 8, 9, 10, 11	1,200
Bunker diesel	15, 16, 17, 18, 19, 20	400
Refrigerated LPG	6 (8 & 10 in the near future)	8,000 to 28,000
Naphtha	7 and 8	15,000

Products can be loaded simultaneously at the respective berths if shown above as being available. It is expected that most ships will be able to receive any cargo, except crude oil, as fast as it can be delivered. Officers in charge of loading must have due regard for all safety precautions as well as for individual ship hazards. If loading of crude oil or products is too slow, Aramco will advise the vessel. Should a demurrage claim be filled against Aramco the slow loading may result in an addition to allowed lay time.

To prevent ignitions by static electricity the loading rates for kerosene, jet fuel and similar white products will be reduced.

(b) Responsibility. All operations in connection with starting of loading, discharging, switching tanks and topping off must be directly and personally supervised by a ship's officer. Upon completion of loading vessel will normally be required to leave berth immediately after disconnecting hoses/arms to await clearance in tanker anchorage.

(c) Manifold Connections. Since most tankers have manifolds located near midships, the berths at Ras Tanura are designed accordingly. Aramco recommend midship manifolds for all vessels loading at Ras Tanura. Cargo loading arms at the North Pier have 12 in. and 16 in. standard 150 lb. ASA raised-face flanges. The two refrigerated LPG loading arms at North Pier Berth 6 have 12 in. and 8 in. standard 150 lb. ASA raised-face flanges. Cargo loading arms at the Sea Island have 16 in. and 24 in. standard 150 lb. ASA flanges. Cargo loading hoses/arms at the South Pier have 8 in. standard 150 lb. ASA raised face flanges. All vessels calling at Ras Tanura should be equipped with reducing spools to fit these loading connections. These fittings should be in place prior to berthing to help expedite ship turnaround time.

(d) Refrigerated LPG. Facilities for loading Refrigerated LPG located in Berth 6. LPG loaded at approximately – 40°F. for propane and 30°F. for butane. Maximum loading rate 8,000 b.h.p. for butane and 20,000 b.h.p. for propane for simultaneous loading through separate systems. Ships arriving for Refrigerated LPG cargo should have cargo tanks chilled to desired temperature upon arrival. Before loading can start the atmosphere in cargo tanks must be too rich to explode, as shown by a combustible gas indicator, or must contain less than 9% oxygen. RLPG loading facilities consist following:

(i) Two 22-in insulated loading lines each with a 6-in. liquid return line from pier to storage tanks. 4,800 ft. lines manifolded to permit loading propane in one, and butane in the other simultaneously.

(ii) Two PCMA Chiksan loading arms, one 8-in. and one 12-in. The arms are 9 ft. 5 in. centre to centre and are located about 11 ft. 6 in. from ship's rail (12-in arm is on the North side). The 48-ft. long arms designed for maximum operating elevation of 61.5 ft. above ISLW. Arms equipped with 150 lb. USAW raised face flanges. The 8-in. and the 12-in arms manifolded to permit propane or butane loading through either arm. Using 12-in. arm propane can be loaded at rates up to 17,500 b.p.h. of —40°F. (20,000 b.p.h. equivalent 60°F. liquid). Alternatively butane can be loaded through same arm at rates up to 10,000 b.p.h. of +24°F. liquid (10,000 b.p.h. equivalent 60°F. liquid). Using 8-in. arm propane or butane can be loaded at rates up to 8,000 b.p.h. of −40°F. C_3 or +24° F. C_3.

(iii) One 20-in. ship-to-shore LPG vapour return line with 12-in.hose connection to ship's vapour manifold. The 12-in vapour return riser is located 9 ft. North of 12-in. LPG. loading arm.

(e) Blended Cargoes.

(i) Fuel/Crude. If vessel's draft permits, a full cargo of fuel or a split cargo of fuel and crude can be loaded at the North Pier. In the latter case vessel design should permit simultaneous loading of both fuel oil and crude. The maximum fuel oil loading rate on the North Pier is 25,000 b.p.h. No facilities to load fuel oil cargoes at Sea Island. However, fuel portion of split cargo could be loaded at North Pier after which vessel would be shifted to Sea Island to load crude portion. Bunker "C" fuel oil is available at Sea Island at rates up to 7,500 b.p.h., metered.

(ii) Crude/Crude Blends. Many large vessels calling at Sea Island load 2 or more segregated parcels of crude and/or crude blends. Order assure satisfactory loading rates under these conditions, the piping arrangements aboard vessels should be such as to permit loading each parcel consecutively, at rates of 60 m.b.p.h., through 2 or 3×16-in. Chiksan arms. Simultaneous loading of another non-blended crude is possible if ship's manifold allows this.

(iii) Commingled. A 60 m.b.h. blender is used to supply blends of crude oil/products/LPG to both North Pier and Sea Island. A 30 m.b.h. blender is used to load blends at North Pier only. Both blenders required full time to load blends containing LPG where homogeneity is critical. Blends that do not contain LPG not required to be homogeneous during loading. Therefore whenever possible Aramco use "batch blend" method, sometimes referred to as "commingling" or ship board blending". Blenders used to supply Sea Island with blends containing naptha.

(iv) Spiked Crude. Blends of Arab Light and Arab Medium crudes and LPG are commonly referred to as spiked crude. Order assure that boiling mixtures are not delivered to a ship at any time, blend vapour pressure calculations are made prior to each loading taking into consideration such factors as crude vapour pressure, LPG vapour pressure, and Blend temperature. LPG and crude stream rates carefully controlled in In-line Blender and spiked crude blend continuously monitored by a Hallikanen Vapour Pressure Analyser so as to at no time exceed a Reid Vapour Pressure of 13 lb. or a True Vapour Pressure of 14.7 p.s.i.a. For the amount of vapour to be vented, a non-boiling mixture with a True Vapour Pressure equal to atmospheric pressures will have only about 10–20% more than for a stabilised crude of 4–5 lb. RVP.

(f) Loading Arms/pressure.

(i) Piers. Chiksan loading arms used extensively for loading crude, crude blends, bunkers, and refrigerated LPG at Ras Tanura over North Pier. Hoses used at South Pier and for occasional product and bunker loading at North Pier. North Pier has 6 berths handling vessels up to 150,000 d.w.t., equipment as follows: Type of Arms: Chiksan HMLA* arms for crude oil, crude blends, and bunkers; Chiksan PCMA** arms for refrigerated LPG (one 8-in. arm and one 12-in. arm – both at North Pier berth 6). Number and Size; Most North Pier berths have four 12-in. arms per berth for cargo with an additional 8-in. or 12-in. arm for bunkers. The bunker arm is located South (aft) of cargo arms (except for 11 berths where arm Located North of cargo arms). 1 berth (No. 8) has 12-in. arm for loading white products (located North of cargo arms) and 3 berths (Nos. 6, 8, and 9) each have a 12-in. arm in dual service for fuel oil cargoes or bunkers. Berths 8, 9, 10 and 11 each have two 12-in arms through which fuel oil cargo can be loaded. Spacing of Arms: All arms on North Pier with exception of LPG loading arms are spaced 66 in. apart, centre to centre. Capacity: Each 12-in. arm has a capacity of 15,000 b.p.h. The point at which vibration of arm and ship's manifold becomes excessive limits loading capacity. Flanges: All 12-in. arms have 12-in., 150 lb. USAS raised face flanges. All 8-in. arms have 8-in. 150 lb. USAS raised face flanges.

*HMLA – Hydraulic Marine Loading Arm.

**PCMA – Pantograph-counterweighted Marine Arm.

(ii) Sea Island. Double Counterweighted Marine Arms. Number of Arms: Sea Island berths 12 and 14 have three 16-in. arms for cargo and one 10-in. arm for bunkers in each berth. Bunker arm located South (aft) of cargo arm in each berth. A hose length is used if vessel bunker connection is forward of manifold. Sea Island Berths 15 and 16 have four 16-in. Chiksan cargo loading arms. Berths 17 and 18 have four 16-in. cargo loading arms. 2 loading arms in Berth 18 are 72 ft. long. All other loading arms 60 ft. long. Two 10-in. bunker arms (one on each side of the cargo arms) provided in each of these 4 berths. Berths 19 and 20 are each equipped with four 24-in. crude loading arms and two 16-in. bunker arms are limited to ships of 150 m.d.w.t.– 500 m.d.w.t. sizes. Spacing of Arms: All arms on Sea Island spaced on 11 ft. centres. This large space required to permit rotating travel of counterweights. Elevation of Arms: 60 ft. arms designed for maximum operating elevation of 72 ft. above ISLW whereas 72-ft. arms operate 97 ft. above ISLW. Capacity: Capacity of each of 16-in. arms is 30,000 b.p.h. Actual capacity limited by vibration – thus ship's manifold design should be adequate and well supported. Flanges: Flanges on 16-in. arms of Sea Island Berths 12 and 14 are 16-in., 150 lb. USAS *flat* faced. Flanges on 10-in. arms of Sea Island berths 12 and 14 are 10-in., 150 lb. USAS *flat* faced. Flanges on 16-in. and 10-in. arms of Sea Island Berths 15–18 same as above except that they are *raised* face. An alarm sounds when pressure in loading arm reaches 100 p.s.i.g. and pier operator shuts down loading. A motor-operated valve upstream of loading arms is throttled during "topping-off" operations to prevent over-pressuring. In addition to alarm which sounds when loading system pressure reaches 100 p.s.i.g. at Sea Island, loading pumps shut down automatically when pressure reaches 125 p.s.i.g. This feature does not protect against high surge pressures associated with sudden shut-off against a high loading rate. Loading rate control is by means of an hydraulic coupling between pump and motor of each loading system. Speed of pump (and thus loading rate) is remotely controlled from Sea Island. Push button controls at loading arms and in control room shuts down loading pumps and closes a motor-operated valve in loading line. Pump discharge pressure on shore is 150 p.s.i.g. Pressure at ship's manifold depends on size and number of ship's lines, number of tanks being loaded, loading rates, etc. Aramco design basis is for pressure of 30 p.s.i.g. at ship's manifold when loading at 75,000 b.p.h. through Chiksan arms. Aramco recommended this same ship's manifold pressure for higher rates, also.

(g) Valves. Calculations indicate valves closing in *less than 30 seconds* when loading at high rates will cause excessive surge pressure and will possibly damage Chiksan arms and ship's loading manifold. Aramco strongly recommend that hydraulically controlled valves be adjusted to close in no less than 30–40 seconds. Several ships which have called at Ras Tanura have

hydraulically operated valves in their cargo handling systems which close in 5 to 10 seconds. Closure of valves in 5 to 10 seconds while loading at high rates will result in momentary surge pressures well above pressure rating of ship's loading system fittings and maximum pressure rating of Chiksan arms. Aramco presently limits loading rate of ships equipped with fast closing hydraulic valves. As an example, ships with rates of 22,000 b.p.h. per system.

LPG–REGULATIONS: Refrigerated LPG is loaded at Ras Tanura at North Pier Berths No. 6 and No. 8 only. (Also Berth 10 commencing March 1977. See below). The water depth at Berth No. 6 is 46 ft. at ISLW and 49 ft. at ISLW in Berth No. 8. LPG is loaded via 12 in. Chiksan arms at a maximum rate of 20,000 b.p.h. for propane and 8,000 b.p.h. for butane. The butane loading rate will be increased to 20,000 b.p.h. in the near future. A vapour return line to shore is provided and vessels must be connected to it during all loading operations.

A check of the ship's fire-fighting equipment will be made prior to start of loading and periodic safety inspections will be made by Aramco personnel throughout the loading operations.

The following specific regulations will be followed:

1. Prior to starting any RLPG cargo loading, the Ras Tanura Terminal Shift Co-ordinator shall confer with the vessel's Master and/or Responsible Loading Officer to determine the following:

   (a) Quantity and type of product in each ship tank and whether it is part cargo or residue required for cooling.

   (b) Temperature and pressure of each ship tank.

   (c) Product to be loaded in each ship tank.

   (d) Residue in the ship tanks will be measured by the Independent Inspector assigned to the ship and witnessed by an Aramco Inspector.

2. Facilities at Ras Tanura *are not* designed for loading pressure LPG and *no* LPG will be loaded into ship's tanks that are not equipped with refrigeration facilities and are not adequately chilled. Ships' tanks must be cooled to minus 38° F. maximum for A-140 propane loading and from 0° F. minimum to plus 32° F. maximum for A-160 butane loading.

3. Butane may be loaded into ships' tanks containing residues up to 10% of the cargo to be loaded.

4. Propane may be loaded into ships' tanks containing propane residue of up to 10% of the cargo to be loaded.

5. There shall be no loading of dissimilar products into the same ship tank, i.e. butane shall not be loaded into ships' tanks containing propane and propane shall not be loaded into ships' tanks containing butane.

6. Part cargo on board at the time of the ship's arrival must be measured by the Independent Inspector and witnessed by an Aramco Inspector regardless of whether Aramco cargo is to be loaded on top or not. Quantities over 10% of the cargo to be loaded are considered part cargo. Prior authorisation must be obtained to allow butane or propane loading into ship tanks containing part cargo.

7. Should the vessel be unable to comply with the above regulations owing to extremely unusual circumstances, Aramco operations and engineering management representatives shall confer with the vessel's Master and/or Responsible Loading Officer to develop a loading plan/procedure for the safest possible loading for the tanks containing dissimilar residue. The plan shall be in writing, agreed to by both parties and take into consideration loading rates, temperatures, pressures and all possible safeguards to ensure minimising the dangers to ship and shore installations. It must be understood that this procedure will involve delays to the vessel and will impose additional work-loads on both shore and ship personnel.

8. In no case will loading be permitted into ship tanks containing liquid product of a different grade in *excess of 10 tons.*

9. When a vessel requires special handling as described above, the vessel shall be given a letter of protest with copies to owners and operators. The letter shall state that the vessel has been handled on a one time basis and advise that upon its next arrival at Ras Tanura it will have disposed of any residual cargo or have a nomination which will preclude loading dissimilar products.

10. RLPG vessels with warm cargo tanks are not normally handled at Ras Tanura. When special circumstances warrant, new ships and other vessels with warm tanks may be accommodated under the following conditions:

   (a) Ship's tanks must be inerted. A sample must be taken by Aramco personnel from each of the vessel's tanks to ensure that it has been properly inerted. Tests must indicate a reading of 7.5% oxygen or lower taken by Orsat analysis or J-W oxygen indicator.

   (b) Vapour returned during chilling operations will be sent to the shore flare system.

   (c) The loading rate during the chill down period will be kept low and may be reduced if deemed necessary to minimize the amount of vapour sent to the flare or otherwise lost.

   (d) The amount loaded for chilling purposes will be measured in the ship tanks by the Independent Inspector assigned and witnessed by an Aramco Inspector.

   (e) After cargo for chilling tanks has been loaded aboard, the ship must proceed to anchorage and complete chilling of the other ship tanks before returning to berth to load cargo.

   In case the cooling operation involves cooling of these additional tanks with an oxygen content over 7.5%, the vessel must leave the port anchorage area.

   (f) Upon return to berth for continuation of RLPG cargo loading, all tanks which are to receive cargo will be ullaged by the Independent Inspector and witnessed by an Aramco Inspector.

11. During loading of refrigerated A-140 propane or A-160 butane, shipboard readings of loading compartment temperatures and pressure by grade of cargo loaded shall be witnessed several times routinely by the Ras Tanura Terminal Shift Coordinator to ensure that the ship stays within the safe loading limits for temperature and pressure for each grade listed in regulation 2.

12. At completion of loading, the designated Independent Inspector will measure all cargo tanks. These ullage measurements will be witnessed by the Aramco Inspector. These measurements will be taken on all ship tanks regardless of whether cargo was loaded into these tanks at Ras Tanura.

13. Vessels with part cargoes on board of products other than A-140 propane or A-160 butane must be equipped to keep any liquid or vapour from those cargo parcels completely self-contained. There must be neither any return of non-compatible vapour to shore recovery systems nor any venting of such vapour to atmosphere while at berth. No mixing of dissimilar refrigerated liquids is allowed at berth.

14. Vessels loading either propane or butane are expected to use the appropriate shore vapour return line but only for excess vapour which the vessel vapour recovery equipment cannot handle. Should excessive vapour be returned to shore and the situation cannot be promptly corrected aboard ship, the loading shall be shut down. Loading shall be resumed only after the loading plan has been reviewed with the Master or Responsible Loading Officer by the Ras Tanura Terminal Shift Coordinator and corrective action has been agreed upon.

15. In the event of a spill of liquid propane or butane on board the vessel, shore loading shall be shut down until proper corrective action to clean up the spill and to avoid future recurrence has been agreed upon by the Master or Responsible Loading Officer with the Ras Tanura Terminal Shift Coordinator.

16. There are no facilities at Ras Tanura for the return of either liquid propane or liquid butane cargo. Vessels must pay strict attention not to overload either of these grades.

Berth No. 10: LPG loading expected to start at this berth in March 1977.

Specifications are as follows:

LPG Loading Arms for ship connection:

No.	*Diameter*	*Length*
4	12 in.	37 ft.
2	—	—

Bunker Loading Arms for ship connection:

No.	*Diameter*	*Length*
1	8 in.	37 ft.

Bunker and LPG Arms outreach:

Max. Elevated Reach	*Min. elevated Reach*
+90 ft. at ISLW	+30 ft. at ISLW

Riser Spacing:

Bunker Line	– No. 2 LPG Line	11 ft.
No. 2 LPG Line	– No. 3 LPG Line	11 ft.
No. 3 LPG Line	– No. 4 LPG Line	11 ft.
No. 4 LPG Line	– No. 5 LPG Line	8 ft.
No. 5 LPG Line	– No. 6 LPG Line	11 ft.
No. 6 LPG Line	– No. 7 LPG Line	7 ft.

Maximum Allowable Drift:

Fore and Aft	15 ft.
Off berth	32 ft.
Manifold Range	20 ft.

MEDICAL: When necessary, Master may obtain medical attention for ship's personnel from port doctor (quarantine officer), who may in the case of serious illness or injury recommend treatment at Dammam Government Hospital, Government or private clinics in Ras Tanura, or Al-Sharq hospital in Al-Khobar. Port doctor ordinarily will treat minor illness or injuries on board ship. A charge is made for medical attention or supplies furnished by port doctor or other private sources. Medical facilities of Aramco made available in emergency only when referral is warranted medically. A charge is made for medical attention or supplies furnished by the Company. Aramco radio station, HZY, may be used without charge by vessels at sea to obtain medical advice at any time.

WATER: The natural well water obtainable in Ras Tanura is quite brackish and is used mainly for washing. Well water obtainable at all berths on North and South Piers at a rate of 50 t.ph. Water is not available at Sea Island. Vessels will be supplied with well water usually up to a limit of 100 tons at a cost of approximately $1.25 per ton. Distilled water also obtainable at all berths on North and South Piers, at a rate of 20 t.p.h., but supply usually limited to 25 tons per vessel. The cost is $4.00 per ton. Private water or bunkering barges in port of Ras Tanura.

FUEL: The maximum viscosity of fuel oil bunker is 60 SF at 122°F. The maximum viscosity of black diesel bunker is 55 SU at 100°F. About 72 hours advance notice is needed for large lifting of these fuel grades.

It is recommended that vessels taking bunkers only, call at Ras Tanura prior to loading cargo elsewhere. By following this recommendation vessel will avoid delays caused by draft and berth assignment problems.

Bunkering facilities are operated by Aramco. Failure of a ship to provide advance notice of bunker requirements could result in vessel delays. Majority of bunkering effected through temperature-compensated positive displacement meters which record on print-out forms the net barrels at 60°F. delivered. Galley fuel is available at all berths at the North and South Piers. Not available at Sea Island. Lubricating oils available in limited drum quantities if ordered in advance by letter or radio through ship's Agent.

Sea Island. One 20/22 in. line supplying bunker "C" bunkers up to a maximum of 7,500 b.p.h. Bunkering is simultaneous with cargo loading. A diesel supply line (black diesel) has been extended to berths 15 to 16 of Sea Island for bunkering vessels when alongside to either one of such berths.

SAFETY: Master should acquaint himself with Aramco's safety regulations, and obtain copy of regulations from terminal representative. Port of Ras Tanura maintains vigorous tanker loading safety programme. Arabian American Oil Company is a member of International Oil Tanker Terminal Safety Group (IOTTSG) and as such follows procedures recommended by this international organisation. Each ship's Master is presented with a "Declaration by Master" by pier safety representative who discusses each item in detail with Master. Prior to start of loading cargo and at several times during loading, pier safety inspectors will personally visit vessel and, in company with one of ship's officers, will check to ensure that safe loading practices are being observed by both ship and shore.

Hydrogen Sulphide Hazards: Aramco crudes may contain dissolved hydrogen sulphide in concentrations which would cause the gases vented during tanker loading to be hazardous if inhaled. Aramco recommend that Masters review instructions issued by Owners/Charterers about hydrogen sulphide hazards. If loading of H_2S bearing crude oil is not covered by such instructions, Aramco has available, upon request, a list of recommendations to aid Masters.

Signals for Emergency: *(a)* Ship should sound an "Emergency Stations" signal consisting of a continous ringing of ship's alarm bells supplemented by a series of short blasts of ship's whistle or siren. *(b)* Telephone is fitted on jetty. Normally, Aramco personnel will telephone for assistance. If no Aramco personnel available, ship's personnel may call for emergency assistance by dialling telephone number 3100 from any berth. *(c)* Assistance can be summoned on VHF radio if necessary. Use International Channel 16 on VHF. Give location and extent of assistance required. *(d)* Shore signal in event of an emergency is either a fire siren or a series of short blasts on an alarm or horn.

CUSTOMS: All materials to be either exported from or imported into Saudi Arabia subject to examination by Customs authorities. Importation of certain articles is strictly prohibited. Such articles include: alcoholic beverages, including beer and wines; explosives; firearms; implements of war of any kind, including antiques; religious matter not pertaining to the Moslem faith; playing cards and gambling devices; narcotics. Trafficking in these items between ships also strictly prohibited. This applies to ships at anchor as well as to ships at piers. Almost without exception, all other commodities subject to close examination and to Customs Duty if imported. Saudi Arab Government discourages trafficking between members of ship's crews and shore personnel.

CONSULS: United States Consulate General established at Dhahran, about 50 miles by road from Ras Tanura. British Political Agent established on Bahrain Island. It is very difficult, however, to contact Bahrain Island from Ras Tanura, and Masters having business there usually arrange to call at port of Sitra.

REPAIRS: Relatively limited repair service available from local business concerns. Aramco will assist in making emergency repairs on vessels only if approved by Aramco Marine Superintendent or Port Captain. Suggested that Master discuss repair charges with ship's Agent prior to authorising or requesting any repair work. Deep sea divers, operating from modern and well-equipped diving boats, available under same conditions as repairs services. When alongside Aramco piers, vessels must maintain engines and propulsion machinery in readiness to leave the pier under full power on short notice. No repairs permitted which would interfere with this requirement. Violation of this rule will entail towage from the berth at the vessel's expense and Aramco will not accept responsibility for the resulting delay to the vessel.

REPATRIATION: Arrangements can be made through ship's Agent. All crew leaving or joining vessel require valid passport or Saudi Arabian visa.

The following countries are considered cholera-infected areas: Burma, Cambodia, India, Indonesia, Laos, Nepal, Pakistan, Philippines, Singapore, Thailand, Vietnam.

All concerned persons, including regular passengers and crew members, must bring in a stool culture Certificate, and 5 day stay in a cholera-free area Certificate, in addition to the usual Health Certificate, for entry into Saudi Arabia. Persons not possessing the above-mentioned Certificates will be denied entry by Immigration Authorities, and returned to the place of their embarkation.

AIRPORT: Ras Tanura terminal about 50 miles from Dhahran Airport. This airport is serviced by many international airlines.

TIME: Company generally bases local time on 45th meridian (3 hours East of Greenwich). In order to avoid any confusion all communications should be quoted in Greenwich Mean Time.

HOLIDAYS: Ras Tanura port operates 24 hours a day, 365 days a year, irrespective of holidays.

EMERGENCY TELEPHONES: Emergency (fire, serious injury), 110; Harbour Pilot's Office (24 hours) 81495; Pilots' Office (Sea Island No. 4), 81234; Pier Foreman: North Pier, 81440; South Pier, 81461; Sea Island, 81452.

SERVICES: *(a)* Recreation Centre. Seaman's Recreation Centre located at shore end of South Pier causeway. The route to the centre and area itself is prescribed and no one should attempt to violate these limits, as Coast Guard personnel guard the route. Violators subject to arrest. Arrangements may be made through ship's Agent for launch transportation from North Pier. During limited hours, soft drinks and ice cream available at nominal cost. Motion pictures, games, and a barber shop also located at this facility. *(b)* Provisions. Ship's chandlers available through ship's Agent at piers, but are not allowed to board vessel. *(c)* Oil Inspectors. Oil inspection service maintained by following independent agencies: Charles Martin Inspectors of Petroleum Inc., 61 Broadway, New York, New York 10006; E. W. Saybolt & Co., S.A., 400 Swenson Drive, Kenilworth, New Jersey 07033; B. & R. Redwood, Orchard Lea, Winkfield, Nr. Windsor, Berks., England; U.S. Navy. *(d)* Surveyors. American Bureau of Shipping and Lloyds of London maintain a marine surveyor at nearby Manama on Bahrain Island.

SHORE LEAVE: Ship's personnel and passengers not permitted ashore for any purpose whatsoever until pratique granted. This regulation includes going to pier to read arrival draft. Personnel may go to pier if actually engaged in duties connected with discharging of ballast, loading, etc., but only after pratique granted. All shore leave contingent upon compliance with quarantine regulations. Direct transit to or from Seamen's Recreation Centre requires no special government approval. Centre is open to seamen usually between the hours of 1430 and 2230 local time each day (during summer months of May through September, Centre is open between hours of 1330 and 2130 local time.) Saudi Arab Government regulations strictly enforced, and if Masters have any doubts with regard to these regulations they are urged to consult their Agent. While in port, vessel's personnel under jurisdiction of Saudi Arab laws.

POLLUTION: Discharge into the sea of oil or or oil-base products either alone or in combination with ballast water is not allowed. Since the terminal does not have facilities to receive any significant amount of oil residues or oily ballast water, tankers arriving alongside with such materials on board will be sent to anchorage to await further orders unless the vessel has prior clearance to load on top of such materials or unless the ship's Master agrees to segregate such materials in a separate tank. Ships which release oil or oil residues including oily ballast water in either berth or anchorage area will be held responsible for all clean up costs.

Aramco vigorously observes, investigates and documents all cases of oil discharge to the sea and reports such releases to the Saudi Arabian Government in accordance with its requirements.

VISITORS: *Ras Tanura – Shipowners' Representatives requiring special permission for visits to port areas:* The Port Authorities in Ras Tanura and Dammam state that in the future they will strictly follow the regulations for the ports, stipulating that unauthorised personnel will not be allowed to enter the port areas under any circumstances.

This will also apply to temporary visitors, the purpose of whose visits partly might be to see the ports, e.g. shipowners' representatives. However, exceptions to this rule will be made, provided applications for special permits are sent to the port authorities in Dammam well in advance of the visit. As regards visits to the port area the shipowners must themselves apply for a permit with the head office of one of Aramco parent companies, i.e. Chevron, Esso, Mobil, Texaco, etc.

AUTHORITIES: The Arabian American Oil Company, Dhahran, Saudi Arabia. Cable Address, Aramco, Dammam. Port Officials: Saudi Arab Government port authorities located in Customs House, Port Office, and Quarantine Office at Ras Tanura.

AGENTS: Mail Address: Gulf Agency Co. (Saudi Arabia) Ltd., Aramco Mail Box 621, Ras Tanura, via Dhahran, Saudi Arabia. Telephones: 33171, 33132 (24 hour service). Telex: Bahrain 8211. Stating "For Ras Tanura", answerback "Gacship GJ 8211". Cables: "Confidence Bahrain". Stating "For Ras Tanura". Radio: Vessels can communicate with SSB radio station, frequencies 3539 and 6910, call-sign "Confidence Ras Tanura".

For ship to shore communication, Ras Tanura office is also equipped with VHF radio, call-sign "Confidence Ras Tanura", on Channel 16, switching to Channels 13, 6, 9 or 14 for communication.

Tanker Crew mail: To be directed to: c/o Gulf Agency Co. (Saudi Arabia) Ltd., Rahima P.O. Box, Ras Tanura, via Dhahran, Saudi Arabia, The Gulf.

YEMBO (Yenbo): 24.05 N. 38.03 E.

FLAG: Saudi Arabian flag must be hoisted.

LOCATION: On Red Sea coast, about 218 nautical miles North of Jeddah.

CHANNEL: Ships entering port pass a channel of the following measurement: Length 1647 m., width varying between 70 to 130 m., width at entrance between beacons 310 m.

BEACONS: 11 miles outside port, beacon at Al-Sharm. Height 23 ft. White flash every ten seconds. At entrance of port channel two beacons, height 15 ft. Starboard-hand beacon (black), green flash every second. Port-hand beacon (red), red flash every second.

795 m. from channel entrance on port hand is another beacon, height 15 m. (black and white squares), white flash every second.

BUOYS: Channel is buoyed with red and green port and starboard-hand buoys.

PILOTAGE: Compulsory. Vessels requiring Pilot should exhibit code flag or International light signal.

DOCUMENTS: All vessels calling Yembo should provide authorities with the following:

Passenger Vessels

- Certificate of Registry.
- International Safety Certificate (issued and validated from one of the signatory states of the pact).
- Radio-telegraphy Safety Certificate.

Cargo Vessels
- Certificate of Registry.
- Load Line Certificate.
- Safety Construction Certificate.
- Safety Equipment Certificate.
- Safety Wireless Certificate for vessel of 1,600 tons d.w.t. or more
- Safety Wireless and Telephone Certificate for vessels of 300 tons to 1,600 tons d.w.t.

Requirements of Cargo and/or Pilgrim Documents:

For Doctor
- 2 copies Passenger List – Landing.
- 2 copies Passenger List – Transit.
- 2 copies Crew List.
- 2 copies Declaration of Health.

For Customs
- 2 copies Passenger List – Landing.
- 2 copies Passenger List – Transit.
- 2 copies Crew List.
- 2 copies Ship's Bond (tobacco, spirit, wine and beer).

For Immigration
- 6 copies Passenger List – Landing.

For Agents
- 6 Copies Passenger List – Landing.
- 1 copy Crew List.

Prior to the vessel's arrival the following documents are required for translation and submission to the various authorities:
- 7 copies of the Cargo Manifests.
- 1 copy of Freight Manifest.
- 2 copies of Stowage Plan.
- 2 copies Hatch List.
- 1 copy each non-negotiable Bills of Lading.
- 1 List of dangerous cargo whether for discharging or in transit.

HEALTH: All incoming vessels should abide by health regulations and present necessary documents to the authorities in accordance with international laws, i.e. as under: Q if the health condition is clean. QQ if there is a suspicious case in the vessel. QL if there is an infectious or epidemic case on board.

RADIO: Until the implementation of a Beacon Station for navigation all ships entering port before passing the channel should contact Port Department by radio/telephone during following times: 0500 to 0600 hrs. GMT; 1000 to 1100 hrs. GMT; 1400 to 1500 hrs. GMT.

These are the decided times during normal days, but during the Hajj Season a new publication is issued to cover additional times:

BERTHING: The port has two quays built at right -angles. The Northerly berth is 170 m. long and the Easterly berth is 210 m. long. The depth is 28–29 ft. The port can accommodate 2 big and 1 small ship or 4 small ships. Turning circle is 360 m.

Mobile cranes with a capacity of between 1 and 5 tons are available. There is also a supply of fork-lifts to meet with present port requirements. Discharge is mostly carried out by ship's own gear.

There are no barges at Yembo, but 70 native lighters (sambouks) with a capacity of between 5 to 80 tons are available. The total capacity of these native lighters is 1,034 tons.

STEVEDORES: Like Jeddah, stevedoring at Yembo, is based on daily paid basis. There are no stevedoring companies and labour is engaged on day to day basis.

There is one custom warehouse at the moment (at Easterly berth) which can accommodate about 10,000 tons of cargo. This shed is near quay and can receive cargo direct into shed from vessel.

FRESH WATER: Ships receive fresh water alongside quay and a 24 hours advance notice by the Master should be given. There are no facilities to supply water at anchorage.

CUSTOMS ALLOWANCE: Each crew member may have 200 cigarettes or 0.5 lb. tobacco, but all alcohol and wine, beer, etc., must be sealed. This applies to all persons on board. For each flask/glass/bottle containing alcohol found by the customs, there is a penalty of £100 sterling.

SHORE LEAVE: Passengers may only go ashore if they have a valid visa. Crew may go ashore if they have written permission from Master and leave their passports with passport office at the port.

DEVELOPMENTS: Contracts have been signed for the construction of 5 quays and 5 mobile platforms.

AGENT: Head Office. Gulf Agency Co. (Saudi Arabia) Ltd., Shipsbrokers and Agents, POB 86. Airport Post Office, Dhahran, Saudi Arabia. Cables: "Confidence" Bahrain (stating for Dammam) or "Confidence Dammam". Tel. 23425/26. After office hours. 41742 and 23526. Telex: 60069, 60016 ("GAC SJ").

ZULUF TERMINAL: 28.23 N. 49.14 E.

TERMINAL CLOSED DOWN APRIL, 1976. THE STORE BARGE HAS LEFT. NO FURTHER OPERATIONS WILL TAKE PLACE AT ZULUF.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Senegal

DAKAR: 14.40 N. 17.26 W.

PORT LIMITS: *North:* from the point of Bel-Air by a parallel from N.E. of the N.E. Jetty of the harbour, to 1 mile N.E. by a meridian passing 2,900 m. East of the Round-Point determined by the crossing of Felix Eboue and Avenue de la Jetee Nord and by the parallel passing 2,060 m. North of Goree Island.

East: By the meridian passing 1 mile East of Goree.

South: By a line joining the Cape Manuel from the South point of Goree prolonged until it encounters the meridian passing 1 mile East of Goree.

DOCUMENTS:

5 Crew Lists.
2 Lists of Vaccinations.
6 Lists of Passengers in Transit.
6 Lists of Passengers Disembarking.
4 Lists of Crew Personal Effects.
4 Lists of Ship's Stores.
1 Maritime Declaration of Health.
2 Lists of Ports of Call.
5 Ship's Report Inwards.
1 Hatch List.

PILOTAGE: Pilots meet vessels off the North point of the Island of Goree in a naturally sheltered area.

RESTRICTIONS: During the rainy season, all vessels with a draft of more than 32 ft. 6 in. could be delayed due to the effects of swell to stay at anchorage in outer-roads and await meteorological conditions permitting their entry into the harbour.

Use of whistle signals to call Pilot is forbidden between 2200 and 0600 hrs. The harbour area is dredged to a depth of 10 to 11 m.

MAX. SIZE: Ships of 33 ft. draft are able to enter at all stages of the tide by day and night. Vessels up to 36 ft. draft may enter at high tide except possibly during the stormy season, between mid August and mid October.

HEALTH: Health Officials board vessel immediately after berthing alongside. For passenger vessels, these formalities are effected before berthing to avoid delays. Vessels at sea may obtain medical advice by VHF via Dakar Radio.

Inoculation/Vaccination can be arranged through Agent during weekdays.

Free pratique can be granted via radio by Agent, by using international Code Words "MIBDU/MIJMA".

VHF: The Port Captain's Office, pilot station and tugs are equipped with VHF, with the following channels: Channel 16 used by vessels approaching to contact pilot station or Port Captain's Office; Channel 12 used during manoeuvres for communications between Pilots and tugs; Channel 6 used only by the tug station.

TUGS: Operated by a private company, 4 tugs available up to 2,000 h.p. Compulsory for loaded tankers.

BERTHING: 9,000 m. of quay length available of which more than half has depths of 8 to 12 m. alongside.

Mole D'Escale: 6 berths, depth alongside 10 m., can be used for vessels refuelling simultaneously with cargo operations.

Pier 718 Phosphate quay (Pechiny). 215 m. long, max. draft of 25 ft. 7 in., loading average of 200 T/hour.

Pier 52 Phosphate quay (TA IBA). 170 m. long, max. draft of 36 ft., loading average of 1,000 T/hour.

The South area has three wharves with a depth of 26-33 ft.

Dock I is 460 m. long.

Berth	No.	12	Draft	26 ft. 3 in.
"	"	13	"	28 ft. 7 in.
"	"	14	"	28 ft. 7 in.
"	"	15	"	33 ft.
"	"	17	"	33 ft.

Dock II

Berth	No.	21	Draft	27 ft. 3 in.
"	"	22	"	26 ft. 11 in.
"	"	24	"	26 ft. 3 in.
"	"	25	"	25 ft. 11 in.

Dock III

360 m. long. Max. draft of 32 ft. 10 in.

TANKERS: The Petroleum Basin is dredged to a depth of 10 to 11 m. Two jetty berths can receive tankers up to 200 m. length, max. draft 32 ft. 6 in. Petroleum Wharf: 4 berths, depth alongside 12 m. (depth in approaches 11 m.) can receive tankers up to 250 m. length with a draft of 36 ft.

STEVEDORES: Normal working hours, weekdays from 0800 to 1200 hrs. and from 1400 to 1800 hrs. Saturdays from 0800 to 1200 hrs. Overtime, weekdays from 0500 to 0800 hrs.; from 1200 to 1400 hrs.; from 1800 to 2200 hrs.; from 2200 to 0500 hrs. Holidays and Sundays from 0000 to 0500 hrs.; from 2200 to 2400 hrs.

MEDICAL: *Vaccinations;* Possible from 0800 to 1200 hrs. and 1500 to 1700 hrs. Sundays and holidays excluded. *Doctors:* All kinds of specialists available. *Hospitals:* With qualified doctors and good equipment.

FRESH WATER: All quays are fitted with water hydrants. Water supplied by 3 hoses simultaneously, with a rate from 60 to 100 cu. m.p.h. Can also be supplied by barge up to 400 tons capacity.

FUEL: All grades can be supplied from the quays up to 1,000 t. p.h. Fuel can also be supplied by barge. Also see "Shipmasters' Report".

REPAIRS: All types of repair can be effected by the Naval Arsenal or by private companies.

DRY DOCK: At the Naval Arsenal, one dry dock length 189 m., width 23 m., depth up to 9.50 m.

REPATRIATION: Seamen can be repatriated to Europe without delays by air.

AIRPORT: International airport with regular services to Europe.

TELEPHONES: All berths are equipped with telephone apparatus which is placed on board vessels without charge.

HOLIDAYS: New Year (1st January); Tabaski (Variable Date); National Day (4th April); Easter (Variable Date); Labour Day (1st May); Ascension Day (7th May); Whit Monday (Variable Date); Maouloud (Variable Date); National Day (14th July); Assumption (15th August); All Saints' Day (1st November); Korite (Variable Date); Christmas (25th December);

SHIPMASTER'S REPORT: With a draft in excess of 15 m. it is not possible to anchor in the inner roads due to the swell. The swell is worst from July to October (rainy season).

The Pilot directed us to an anchorage 0.5 miles N.E. of I. de Goree but in my opinion it is a little too close. However, the nearer a vessel can anchor N.E. of Goree the better. The holding ground is very good.

It is possible to talk to Mory Fuel Company direct on VHF Channel 2. They have a barge which is able to deliver fuel oil and diesel oil, capacity 500 tons.

Three tugs available, be sure to order one well in advance before completion of bunkering or the vessel may have to wait. Bunkering undertaken day and night.

AUTHORITY: Port Autonome de Dakar.

AGENT: Socopao Senegal, 47 Avenue Albert Sarrault, B.P. 233. Tel. 26600/7. Telex 521-621-622. Cables "Freight Dakar".

KAOLACK: 14.09 N. 16.06 W.

DOCUMENTS:

2 Crew Lists.
2 Store Lists.
2 Manifest pacotille (tobacco, wine, etc.). Agents deposit to Customs office.

PILOTAGE: Pilot taken on board, and lands in Dakar. When vessels do not require tank-washing, the Pilot disembarks in roadstead.

ANCHORAGES: Sufficient for three vessels only. About 6 m. deep.

RESTRICTIONS: Night navigation forbidden in River Saloum.

MAX. SIZE: Length 105 m. (because of River Valor).

HEALTH: Agent signals to Harbour Master. Provisionally vessels quarantine in Dakar. No hospital.

TUGS: No tugs. (Only from Dakar.)

BERTHING: Signals by flag when berth available. Vessels enter at flood tide so that they can turn at anchorage to be ready for sailing.

MEDICAL: Yellow fever vaccinations only at Dakar. No hospital facilities.

DENSITY: August to December: sea water. January to July: 1.55.

FRESH WATER: Available at 10 t.p.h.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Arranged by Agent.

OPENING/CLOSING HATCHES: By stevedores.

CUSTOMS ALLOWANCE: Tobacco, No restrictions, but Customs control on board (declaration on manifest). Crew going ashore only allowed cigarettes marked "Vente au Senegal". Wine and/or Spirit, Not limited, Customs controlled.

IDENTIFICATION CARDS: Not necessary.

CONSULS: None (Dakar only). French Consulate Agent: Mr Jean Guillemot. UTRAM. Tel. 87. Telex Mafic 781 SG.

REPAIRS: None (only Dakar).

REPATRIATION: Not possible (Dakar only).

AIRPORT: None.

TIME: GMT Permanent.

HOLIDAYS: Independence Day (4th April) no loading. Tabaski (dependent on moon phase).

FIRE: Tel. 324.

TELEPHONES: Not possible to place on board.

SHORE LEAVE: Crew members allowed ashore.

REGULATIONS: Vessels must hoist Senegalese flag and notify Agent before entering port.

AUTHORITY: Harbour Master.

AGENT: See "Dakar".

Seychelles

PORT VICTORIA, Mahe: 04.37 S. 55.28 E.

DOCUMENTS:
Maritime Declaration of Health – forms obtainable from Medical Officer.
Deratisation Certificate.
5 Crew Lists and Passengers' Lists.
Dangerous Cargo List.
Ship's Register.
Crew Declaration Form.
Declaration of Stores.
Parcels List.
Firearms List.
List of Animals remaining on board.
Un-manifested Cargo List.
Cargo Manifested.

PILOTAGE: Compulsory in inner and outer harbour for any vessel of or exceeding 150 tons net burdened register.

24 hours notice, giving draft and length. Telegraphic address "Demarine" through Cable & Wireless (on schedule 500 kc/s. and 8714 mc/s. Schedule published in Radio list. Harbour control equipped with VHF Channels 16, 12 and 6).

Pilot Boat: White hull with blue cabin, with "H" flag.

Signals for Pilot: "G" by flag and/or whistle and by night "G" by morse. Pilot boat stationed inshore and proceeds to sea to meet approaching vessels. Pilot can board in any weather. While awaiting Pilot; vessel can anchor in any suitable anchorage in the pilotage area. Vessels should call "Harbour Control" on VHF, Channel 16, two hours before arrival between 0700 and 1800 hrs. Between 1800 and 0700 hrs. the station may not be manned.

ANCHORAGES: (1) Anchorage A. In depth of 66 to 72 ft., fine sand and shells. Good holding, 9.75 cables, 058 degrees from Victoria Lighthouse.

(2) Anchorage B. In depth of about 64 ft., sand and coral. Good holding, 8.25 cables, 074 degrees from Victoria Lighthouse.

(3) Anchorage D. In depth of 78 ft. coral and sand. Good holding, 3 cables, 048 degrees from Victoria Lighthouse.

(4) Anchorage E. In depth of about 78 ft., sand and shells. Good holding, 1.25 miles, 089.5 degrees from Victoria Lighthouse. Super tankers and large vessels anchor outside the Fairway Buoy in any suitable anchorage. The Master should always contact Harbour Master for anchorage instructions.

RESTRICTIONS: All shipping movement in Inner Harbour to take place during daylight hours only. In Outer Harbour, night movement at discretion of Master. No tide restrictions.

HEALTH: "Q" Flag or international red over white. Medical Officer boards vessels at anchor and before entering Inner Harbour. Crew Lists with vaccination dates against smallpox, yellow fever and cholera if vessel from infected places. Health clearance given at Port Victoria only. Hospital facilities available. Vessels proceeding to the inner harbour may be disinsectised.

RADIO: Cable and Wireless, Port Victoria, Mahe. Call sign ZCQ. Harbour Control equipped with VHF, Channels 16, 12 and 6.

TUGS: One twin-engine 2,000 b.h.p. tug in full operation. Vessels of up to 650 ft. are able to berth alongside.

BERTHING: Due to limited space no berth can be reserved either alongside or at anchorage. All assistance given to position every ship in best available place.

Mahe Quay (New deep water port) is now in full operation. Two vessels can berth alongside. Berth No. 1 is allocated to oil and cement tankers and Berth No. 2 to cargo and passenger ships. Maximum depth of water at all berths is 35 ft. There are connections for fuel, fresh water and telephones at all berths. Passenger terminal, Port Offices and Customs are situated at the New Port area.

A tanker berth at Seychelles International Airport supplies fuel to the Airport.

STEVEDORES: ETA advice required two to three days before ship's arrival in port. Loading and Discharging: General Cargo: average 8 to 10 t.p.h. per gang (subject weather conditions). Bagged Cargo: average 10 to 15 t.p.h. per gang (subject weather conditions).

TANKERS: Usual safety requirements. Max. length 400 ft. No night discharge at present. Discharge line 6 in.

DENSITY: Average 1025 at all states of tide.

FRESH WATER: In good supply. By mains when alongside and steel barges when at anchor. All water supplied is chlorinated. Two special steel water barges with capacity of 100 and 80 tons each with pumping capacity of 40 t.p.h. per barge. Vessels should request water at least 72 hours before arrival.

FUEL: Marine diesel, viscosity Redwood 42 secs. at 100° F. Gas oil viscosity Redwood 35 secs. at 100° F. Due to limited stock, it is advisable to give one week's notice, preferably through Shell International, London.

GANGWAY/DECK WATCHMEN: Customs Officer on duty at all times if vessel is discharging cargo.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCE: At Custom Officer's discretion.

CARGO GEAR: All cargo slings and gears supplied by ship.

IDENTIFICATION CARDS: Not required.

CONSULS: French, Mr. Alain Brugere, Arpent Vert, Mont Fleurie, Mahe, Seychelles.

Netherlands, Norway, Sweden, Denmark, Finland and Iceland. Mr. Harold Hunt, Port Victoria, PO Box 83, Mahe. Tel. 2353.

REPAIRS: Only minor repairs to deck: gas welding, pipe bending, etc.

DRY DOCKS: None.

REPATRIATION: Crew changes for British ships and nationalities represented. Repatriations for same by Agents.

AIRPORT: In operation. Several flights weekly.

TIME: GMT plus 4 hours, throughout year.

HOLIDAYS: *Public and Estate:* New Year (1st and 2nd); Good Friday; Easter Monday; Official Anniversary of the Birth of the Sovereign (8th June); Corpus Christi (15th August); All Saints' Day (November 1st); Immaculate Conception (December 8th); Christmas Day (December 25th).

POLICE/AMBULANCE/FIRE: Police 2011; Fire 2555; Ambulance 2555.

A telephone is placed on board ships alongside. Rate as follows: Warships Rs 40/-per day. Other ships Rs 30/-per day.

SERVICES: No tank-cleaning equipment, no facilities for discharge of tank washing, no compass adjusting, radar or radio engineer available for small repairs.

SHORE LEAVE: All members of the crew are allowed ashore. No limit to shore leave. Crew to be in possession of identity card or discharge book.

DELAYS: Berthing: limited berth. Loading or discharging: weather conditions. Bunkering: space alongside.

REFUSE: No refuse to be dumped in the harbour and approaches. When alongside Mahe Quay, adequate bins for garbage collection are available.

AUTHORITY: Ministry of Ports and Marine Services.

AGENT: The Union Lighterage Company Limited, PO Box 38, Mahe, Seychelles. Tel. 2424 and 2425. Telex Unilight SZ 219. Cable address: "Lighterage Mahe Seychelles."

NOTES

Please also advise Shipping Guides (Services) Ltd.

Sierra Leone

FREETOWN: 08.30 N. 13.14 W (See Plan)

DOCUMENTS:

5 Crew Lists.
5 Ports of Call Lists.
5 Passengers in Transit Lists.
5 Passengers Landing Lists.
1 Crew Declaration (signed by Crew Members).
1 Store List.
1 Arms Ammunition List.
1 Port Health Declaration.
1 Vaccination List (smallpox, cholera and yellow fever).

Port Health Declaration, Crew Declaration Form and Arms and Ammunition List, all special forms, which obtained from boarding party or, if required, mailed in advance to ship's owners.

1. *For vessels working cargo (discharging):*

(a) From each port of loading, by air mail to vessels Agent: 2 copies of Cargo Manifest, 1 copy of Freighted Manifest.

(b) On arrival: 5 copies of Cargo Manifests, 1 copy each Bill of Lading (non-negotiable).

Note: Customs and Port Authority insists on documents in English, and that Manifests should show weights and measurements. Non-compliance with these instructions places vessel's Agent in difficult position, and vessel may not discharge without payment of fine.

2. *Required by Port & Stevedores for vessels working cargo:* 4 copies Stowage Plan, 4 copies Hatch Lists. List of all lifts over 3 tons.

PILOTAGE: Vessels can enter and leave port anchorage without Pilot. Pilotage only compulsory for vessels berthing alongside Queen Elizabeth 2nd Quay or Kissy Oil Jetty. Upon Master's request, Pilot available at Fairway Buoy with 24 hours notice. Normally only at daylight hours. Port entrance is between Cape Sierra Leone to South and Fairway Buoy to North. Is approx. 1 mile wide and min. draft 36 ft. To West harbour is protected by sand shoals, nearest to entrance is O'Farrell Shoal about 1.5 mile North of Cape Sierra Leone.

Pilots board from a launch painted black, with white superstructure, with letter "P" on each bow.

Aberdeen Signal Station will give an anchorage to every vessel arriving or, if a vessel is berthing on arrival, will advise where the Pilot is boarding. This is normally off the quay. The Signal Station is equipped with VHF, standing-by on Channel 16, switching to Channel 12 for communication.

The Pilot Office, Queen Elizabeth II Quay, is also equipped with VHF, standing-by on Channel 16, switching to Channel 12 for communication. The Port Operations Manager is available on this link.

ANCHORAGE: With Falconbridge Point Beacon bearing as follows (all bearings true): Note: Falconbridge Point Beacon circular steel tower 8 ft. high, painted white with 2 horizontal black bands; Fl. white every 2 seconds.

Anchor Berth	Bearing (T)	Distance (Cables)
E. 3	138	10.5
E. 4	154	9
E. 5	180	8
E. 6	207	8
F. 5	136	7
F. 6	154	6
F. 7	184	5
F. 8	210	5
F. 9	232	7
F. 10	242	9
F. 11	249	11
G. 1	99	15
G. 2	100	12
G. 3	104	7
G. 4	126	3
H. 1	184	2
H. 2	234	3
H. 3	252	5
H. 4	258	7
B. 1	236	11 (Vessels bunkering ex-barge)

With Cline Point bearings as follows

Anchor Berth	*Bearing (T)*	*Distance (Cables)*
D. 1	*232*	*5.5*
D. 2	*253*	*7*
D. 3	*253*	*3*
D. 4	*273*	*5.5*
C. 1	*244*	*4*
C. 2	*270*	*5*
B. 3	*280*	*7.25*

With Kissy Oil Jetty bearing as follows (T):

Anchor Berth	*Bearing (T)*	*Distance (Cables)*
B. 2	*235*	*1 mile*

No draft restriction at anchorage, also no length and beam restrictions and vessels can arrive and sail any hour day and night.

RESTRICTIONS: *Draft Limits for Deep Laden Vessels: (Draft Limits:* 38 ft. (11.6 m.) plus height of tide to a maximum of 48 ft. (14.6 m.).

Time Limits:

1. From 5 hours flood tide to high water.
2. From low water to 1 hour Flood Tide.
3. During hours of daylight only.

Vessels of 36 ft. draft and over must keep to the time limits.

Vessels of under 36 ft. draft may navigate the channel at any time but attention is drawn to the strong cross currents.

(H.M.S. Hydra has commented strongly on this danger).

HEALTH: Pratique by radio or on boarding. See "Agents Cable Requirements".

RADIO: *Freetown Radio, Coast Station:*

Watch is maintained on 500 kc/s from 0700–2200 hrs. GMT on week-days, and 1200–1400 hrs. GMT on Sundays and Public Holidays.

The working frequency is 421 kc/s and traffic lists are broadcast on this frequency after preliminary announcements on 500 kc/s at 0730, 0830 hrs., etc.: up to 2130 hrs. GMT. On Sundays and holidays, traffic lists are broadcast at 0800, 1200 hrs. and 1700 hrs. GMT.

Time GMT	*9LL Freq.*	*Search-band for reply*
0800–0900 hrs.		
1300–1430 hrs.	6411	6 mc/s
1700–1830 hrs.		
0900–1000 hrs.		
1200–1300 hrs.	8710	8 mc/s
1830–2000 hrs.		
1000–1100 hrs.	13042.5	12 mc/s
1530–1700 hrs.		

On Sundays and other holidays the H.F. Schedules are as follows:—

0830–0900 hrs.	8710	8354 to 8374 kc/s
0930–1000 hrs.	13042.5	12531 to 12561 kc/s
1330–1400 hrs.	6411	6 mc/s
1600–1630 hrs.	13042.5	12531 to 12561 kc/s
1700–1730 hrs.	8710	8354 to 8374 kc/s

Traffic lists are broadcast at the commencement of every HF Schedule and repeated at intervals during the Schedule.

Ships Radio telephone and Harbour Service: Watch is kept on 2182 kc/s for casual R/T traffic from 0800–2000 hrs. GMT on weekdays, and 0800–1730 hrs. GMT on Sundays and holidays.

Ships are advised to arrange their calls in advance by W/T where possible so it can be ensured that the called party is available. Calls can be connected to or from any number on the Freetown Telephone Exchange. Longer range contacts should be in the 8 mc/s maritime band, the frequency of 9LL in this band being 8768.9 kc/s.

Other Services: Navigational warnings issued from time to time by the Harbour Master are broadcast on W/T. Spoken telegrams are accepted at ordinary W/T rates on RT.

VHF: *Freetown Radio:*

A 24-hour watch is kept on Channel 16 switching to Channel 26 for communication. Calls can be connected to the Freetown Exchange. Masters are advised the fullest use should be made of this service, particularly after office hours and during the early hours of the morning or late at night when no cable service is available. The Authority tugs are also equipped with VHF, watch being kept on Channel 16 switching to Channel 12 for communication. The same is applicable to the Lighterage service, which keeps watch and communicates on Channel 12.

Signal Station	Channel 16
Pilot Office (Freetown Pilot)	Channel 16
Harbour Master	Channel 16
Operations Manager (OPMAN)	Channel 16

AGENTS CABLE REQUIREMENTS: Masters requested cable ETA as early as possible. Following information required:

(a) For vessels working cargo: 1. Discharge or Loading Hatch distribution. 2. Gangs required. 3. If Explosives on board for Freetown or in transit.

(b) For vessels bunkering: Bunkers and water required.

(c) For Tankers discharging: 1. Total Displacement. 2. Draft. 3. Cargo particulars (quantity and grade).

(d) For vessels embarking/disembarking krooboys: 1. If krooboys provisions required and for how long. 2. Cash requirements. 3. If service on arrival if arriving between 2200 hrs. and 0700 hrs., bearing in mind the high costs for Customs overtime and port service.

(e) In general: 1. Cash requirements. 2. Water requirements. 3. Medical attendance, if required on arrival.

When ETA received and confirmed agent will cable vessel informing despatch prospects and if not berthing on arrival, anchor berth.

Note: For vessels returning to Freetown from round trip to coast, information should be cabled if any over-carried cargo, etc., to be discharged.

TUGS: Two tugs available, *Sewa* (2,200 h.p.) which is sea-going and *Bintimani* (2,200 h.p.). Both are twin-screw with diesel engines and are equipped for salvage having fire-fighting equipment and a 10-ton derrick. Normally 1 tug used for berthing and unberthing operations, but 2 if necessary. Charges for berthing and unberthing include use of 1 tug, whether required or not. Tugs' lines £3.50.

BERTHING: All alongside berths: between hours of 0630 and 2330. Kissy Oil Jetty; vessels of 15,000 tons and upwards, berthing flood-tide only.

Queen Elizabeth II Quay No. 1: Berthing length: no restriction;

breadth: no restriction; max. draft 31 ft. 6 in. At this draft vessels must be 180 ft. from steps East end of quay. Vessels up to draft not exceeding 24 ft. may berth as far East as steps. Unberthing not permitted from 1 hour after high water until 1 hour after low water. Pilots may at their discretion, under favourable conditions, extend these times.

Berth No. 1A: As for Berth No. 1, max. draft 31 ft. 06 in.

Berth No. 2: Berthing and unberthing, length and breadth no restrictions. Max. draft 31 ft. 06 in. No tidal restrictions.

Berths No 3 and 4. Max. draft 32 ft. 06 ins.

Berths No. 5 and 6. Max. draft 30 ft.

Facilities for loading Palm Kernel Oil available only at Berth No. 1.

Bulk Grain: No. 1 Berth is equipped for discharging grain in bulk through a conveyor built on No. 1 Shed to the Flour Mill. The actual discharge is effected by mobile vacuvators. Four such units are available with total potential of 80 t.p.h., though a more realistic figure would be in the region of 60–70 t.p.h. Grain vessels are worked around the clock.

Pilotage also undertaken to and from Kissy Cold Store Jetty, a private jetty, but pilotage not compulsory.

King Tom Jetty: Berthing *not* allowed.

Kissy Cold Store Jetty: Berthing and unberthing in daylight hours only, restricted as follows: Length of vessel 290 ft. Breadth, no restriction. Maximum draft, 14 ft. 06 in. Favourable weather conditions. Berthing Port side alongside Pontoon/lighter; Starboard anchor to be used. Berthing: 30 mins. to H.W. Unberthing: 1 hour after H.W. Tug must be used for both operations.

Dispensation will only be granted in exceptional circumstances to berth or unberth vessels before 0600 hrs. and after 2330 hrs.

During discharging and/or loading, Customs Officers, normally 2, as well as 2 Port Authority Discrepancy Clerks (only when discharging) will be on board. In accordance with regulations same should be provided with food during normal meal hours. Recommended that vessels provide food in order not to encounter unnecessary delays.

Sherbro River: Anchorage daylight only. Length of vessel up to 470 ft. Breadth, no restrictions. Max. draft, 24 ft. 06 in. The passage between No. 1 Buoy and No. 8 Buoy and between No. 1 Buoy and Yangsai anchorage must be navigated in daylight hours only.

The Channel between Buoy Point and Yangsai must be navigated only during period two hours to H.W., and on a rising tide, buoy point being area which restricts draft. Bagru River Anchorage Buoy 8, length and breadth unlimited. Max. draft 24 ft. 06 in. Limitations as regards vessel's dimensions, drafts and times at which movements may be carried out should not be deviated from without prior permission of the Harbour Master.

MECHANICAL EQUIPMENT:

Type	*Capacity*	*Complement*
Portal Quay Crane	3 tons	2
Portal Quay Crane	5 tons	1
Mobile Crane	15/30 tons	1
Mobile Crane	3 tons	1
Mobile Crane	4 tons	12
Mobile Crane	5 tons	2
Mobile Crane	7 tons	2
Fork Trucks	10 tons	2
Fork trucks	4,000/5,000 lbs.	30
Tractors	—	26
Trailers	6 tons	24
Trailers	8 tons	3
Trailers	10 tons	48
Trailers (Pole)	10 tons	4
Landrover Fire Engine	—	2
Lancer Boss Fork Lift Trucks	26 tons	1
	10 tons	1
	5,000 lbs.	10

Additional fork lift trucks on order including 1 of 27 tons capacity.

Berths 3 to 6 are not equipped with Portal Cranes.

DANGEROUS CARGO: Dangerous cargo, explosives, small arms, ammunition, *must not* be unloaded either alongside or into lighters unless Port Authority has been notified on approved form, and has given permission for cargo to be discharged. Vessels should cable prior arrival if dangerous cargo for discharge on board.

LIGHTERAGE: Lighterage operations have now virtually ceased to exist. 1 covered lighter of 100 d.w.t. 5,000 bale capacity is available if required.

A specially fitted pontoon (PM2) is also available for the disembarkation/embarkation of Kroo labour for vessels at anchorage. This service is available throughout the day and night, as is the water supply by barge.

STEVEDORES: (See "Agents Cable Requirements") ETA as soon as possible. Discharge/loading hatch distribution. Gangs required. Bunkers and water requirements information re explosives. For tankers discharging — total displacement and draft. Work ashore undertaken by Sierra Leone Ports Authority on cargo quay, Queen Elizabeth II Quay, whilst work on board as well as discharging and/or loading to or from lighters at stream undertaken by Sierra Leone National Shipping Co., stevedoring division.

Working hours alongside quay: Normal working hours from 0800 to 1200 hrs., from 1300 to 1700 hrs., Saturdays: from 0800 to 1200 hrs.

No meal-break but the hour 1200 to 1330 hrs. counts overtime.

Working at Stream: Discharging and/or loading to or from lighters effected 24 hours a day. Gangs can be arranged at anytime between 0730 hrs. and 1800 hrs. week-days. On Sundays and holidays work must be arranged on the previous day.

MEDICAL: Hospital facilities available.

TANKERS: No special requirements. Two berths, maximum length 600 ft. (may be extended by arrangement with Pilot). Maximum draft 32 ft.

Berth 6: There is a draft restriction of 30 ft. Crude Oil tankers at this draft discharging through the temporary facilities must berth on the first of the ebb tide (Starboard side alongside). Other ships at this draft must berth from 1 hour prior to H.W. to H.W. slack (either side alongside).

Kissy Oil Jetty: The following Rules and Regulations on Berthing and Unberthing are now in force. No deviation under any circumstances from these is permitted.

Mooring Buoys: Berthing and Unberthing are restricted as follows:— Vessels are to moor to head, stern and starboard quarter mooring buoys off Kissy Oil Jetty. Vessels anchor to be used. Vessels are only allowed to berth/unberth beginning of Flood Tide in favourable weather conditions between hours of Sunrise and Sunset. Pilots are to ensure that a Berthing or Unberthing operation must be completed before darkness. No Unberthing during hours of Darkness or Ebb Tide.

Distance between Head (West) and Stern (East) buoys 1,100 ft. Length of vessel to within this limit allowing safety factor for length of mooring ropes to Head and Stern buoys. Breadth no restriction. Maximum draft 32 ft. Mooring restricted to vessels up to and not more than 27,000 tons displacement.

Under no circumstances are vessels allowed to rest against any part of Kissy Oil Jetty centre section or East and West Dolphins.

Moorings from vessel to Shore Bollards can be used to position vessel as close to Kissy Oil Jetty as possible. No moorings are to be used on any part of Kissy Oil Jetty.

DENSITY: 1018 to 1025.

FRESH WATER: Good fresh water is available at all quay berths and at Kissy Oil Jetty. There are also 3 water barges with a total capacity of approximately 400 tons.

(Supply Rates:—	Old berths	Approx: 20/25 t.p.h.
Dependent on	New berths	Approx: 40/50 t.p.h.
Ships intake)	Kissy Oil Jetty	Approx: 15/20 t.p.h.
	Barges	Approx: 25/30 t.p.h.

FUEL: A 24 hour Shell/Mobil bunkering service is available at all berths. The supply rate is up to 200 t.p.h. dependent on ships intake.

The supply rate at Kissy Oil Jetty is 100 t.p.h. Thin fuel oil is not available at the latter jetty but is obtainable at Queen Elizabeth II Quay.

A Limited supply of Gas Oil (Shell) is available ex-bowsers on the Quay berths. Sufficient notice should be given to the Oil Company for this service.

Texaco/BP supply bunkers to vessels at anchorage with 3 barges of 750 tons capacity each supply rate 200 t.p.h. 1 of their tugs also has a storage capacity of 40 tons.

A 24-hour Pilotage service is available (including Pilotage from the Fairway Buoy if requested) for all vessels requiring bunkers only.

GANGWAY/DECK WATCHMEN: Strongly recommended, available through Agent.

OPENING/CLOSING HATCHES: By stevedores, except mechanical hatches.

CERTIFICATES:

- Ship's Register.
- Deratisation Certificate.
- Deck Passengers Certificate.
- Radio Certificate.

CUSTOMS ALLOWANCE: Tobacco, 40 cigarettes *or* 0.25 lb tobacco. Wine and/or Spirits, 0.25 bottle of spirits. Master — 200 cigarettes and one opened bottle of spirit.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	23276	Japan	22721
China (People's Republic)	26797	Lebanon	22351
		Liberia	22322
Cuba	—	Malagasy	25850
Denmark	25021	Netherlands	25317
France	22477	Nigeria	22444
Gambia	25191	Norway	22070
Germany Fed. Rep.	22511	Sweden	22070
Ghana	23237	Switzerland	23322
Greece	23087	United Arab Republic	23244
Guinea	23080	United Kingdom	23961
India	—	United States	26481
Italy	23895	U.S.S.R.	23991
Ivory Coast	23983	United Nations (UNDP)	25311

REPAIRS: All repairs if spares supplied.

DRY DOCKS: No dry docks in Freetown. Slipway of 600 tons capacity.

REPATRIATION: Can be arranged.

AIRPORT: By bus and ferry to Lungi Airport, 1 hour journey. Served by regular airlines.

TIME: GMT throughout year.

HOLIDAYS: Several religious and anniversary holidays. Port works every day except Good Friday and Christmas Day.

POLICE/AMBULANCE/FIRE: For all emergencies dial 009.

TELEPHONES: Not available for placing on board.

GENERAL: Always confirm time of entering harbour with the Aberdeen Hill Signal Station to ensure turn for berthing. Draft should be indicated.

SERVICES: Tank cleaning. Tank and hull scaling.

SHORE LEAVE: Allowed.

DELAYS: Berthing, loading or discharging — up to 1 day. Bunkering — up to 12 hours.
AUTHORITY: Sierra Leone Ports Authority.

AGENT: Sierra Leone National Shipping Company, PO Box 935, Freetown, Sierra Leone. Tel. 5637. Telex 273. Cables "Leoneship Freetown".

PEPEL: 08.34 N. 13.04 W.

IMPORTANT: SEE "AUTHORITY"
On Sierra Leone River, 15 miles upstream from Freetown. Approach Channel between Freetown anchorage and Pepel is fully buoyed. No night navigation.
DOCUMENTS: See "Freetown".
PILOTAGE: Private pilotage undertaken by mining Company's Pilots who board Freetown anchorage, 48 hours ETA required, cable "Mags Freetown Sierra Leone", giving ETA Fairway buoy, quantity water/fuel required, asking free pratique, and if Pilot required to Freetown anchorage.
ANCHORAGE: See "Freetown".
RESTRICTIONS: Draft only, decided at discretion of berthing master. Entry daylight hours only. Channel between Pepel and Freetown is now deepened so that depth in channel is 38 ft. plus height of tide. According official tide tables, range of high tides is approximately 7 ft. to 11 ft. above Admiralty Chart Datum.
MAX. SIZE: Length 840 ft., beam 128 ft., depth water 38 ft. plus height of tide which ranges from 7 to 11 ft. above Chart Datum. September to December additional draft restrictions due channel silting.
HEALTH: See Freetown. 48 hours advance warning for free pratique.
TUGS: Not used.
BERTHING: Milton Margai Pier only. Loading up to 3,000 t.p.h. according to size of vessel.

New dolphin mooring system installed to permit handling larger ships. Depth alongside 45 ft.

Shiploader max. boom height when in horizontal position is 71 ft. above Chart Datum, with max. outreach 87 ft. from berthing line. Loading rate now increased to 4,000 t.p.h.

Under the new conditions, limiting dimensions for ships (which must be equipped with satisfactory mooring equipment): Length overall 840 ft. Moulded breadth 128 ft.

Allowance must be made for safe navigation, permissible sailing draft of all ships will, as at present, remain absolutely at discretion of Berthing Master at Pepel or his deputy. It is possible that yearly during the months of September to December an additional draft allowance will have to be imposed by reason of seasonal silting of the channel, but it is intended to carry out annual maintenance dredging.

Company will be prepared to consider acceptance of ships having dimensions in excess to those above but only after specific approval of fully detailed plans of each ship concerned and, in any event, not in excess of dimensions Length overall 870 ft. Moulded breadth 136 ft. Moulded depth 73 ft.

Berthing displacement 63,000 tons on an even keel ballast draft of 23 ft. forward and aft on berthing.
STEVEDORES: Available.
FRESH WATER: Available, 48 hours notice required.
FUEL: Limited supplies available, 48 hours notice required.
GENERAL: See Freetown for all general information.
TIME: GMT throughout year.
TELEPHONES: None available.
SHORE LEAVE: Not allowed. Customs and Immigration regulations prohibit any member of crew from disembarking at jetty or other works.
DELAYS: First come first served.
AUTHORITY: The Sierra Leone Development Company Limited (In Liquidation), P.O. Box 491, Freetown, Republic of Sierra Leone. Telephone Freetown 24139.

(The Sierra Leone Development Co., Ltd. went into voluntary liquidation on the 31st October, 1975. A Care and Maintenance Party is stationed at the Port of Pepel maintaining the shiploading plant in operational condition).

At the time of liquidation, the conditions above existed.
AGENTS: Mining & General Services Ltd., PO Box 68, Freetown. Tel. Freetown 24427; Telex Freetown 3226. Cables "Mags" Freetown.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Singapore

SINGAPORE (incl. Jurong, Pulau Bukom, Pulau Ayer Chawan, Sembawang and Tanjong Penjuru):

01.16 N. 103.50 E. **(See Plan)**

DOCUMENTS:
6 Ship's Passenger Lists.
5 Crew Lists.
5 Cargo Manifests.

Customs Declaration of duty free liquor and tobacco Form (C and E 117) to be furnished by Master to Customs boarding officers. Master, mate, or authorised officer required to furnish information asked for by Officer i/c of Customs Boarding Party for Boarding Officer's Report (this only required if ship is to be searched).

Immigration: 4 copies Crew List and 2 copies each of Disembarking and Through-passenger Lists on arrival. At departure, 2 copies Crew List and 2 copies Passenger List.

Declaration regarding presence on board of any stowaway, unauthorised person and/or repatriate.

PSA: All vessels: General Declaration on arrival or departure.

Port Health: Entry Declaration. Deratisation or Exemption Certificate. Vaccination Certificate requirements. Smallpox: from all countries, except children under 1 year of age if they arrive from a non-infected area or under 6 months of age if they arrive from an infected area.

Crew Lists. Passenger List.

PSA (The Port of Singapore Authority): Arms and Explosives, and Dangerous Goods and Petroleum Declaration.

TRAFFIC LANES:

Inwards only

1. *The Sisters Fairway* is the navigable water bounded by the line drawn from Beacon 15 (Terembu Selegi) to the Northern extremity of Pulau Tekukor, thence from the Southern extremity of Pulau Tekukor to the Northern extremity of West St. John's Island to position Lat. 01° 12′ 33″ N., Long. 103° 50′ 30″ E., thence to Beacon 15 (Terembu Selegi).

2. *The Middle Channel* is the navigable water bounded by the line drawn from the charted position of Sisters Buoy to position Lat. 01° 12′ 09″ N., Long. 103° 49′ 19″ E., thence to position Lat. 01° 12′ 16″ N., Long. 103° 49′ 41″ E., thence to position Lat. 01° 13′ 09″ N., Long. 103° 48′ 41″ E., thence to the charted position of Sisters Buoy.

Outwards only

3. *The Jong Fairway* is the navigable water bounded by the line drawn from the charted position of Sisters Buoy to position Lat. 01° 12′ 09″ N., Long. 103° 49′ 19″ E., thence to Beacon 45, thence to Pulau Jong Triangulation Station, thence to the charted position of Sisters Buoy. Only those vessels which are inward bound and owing to their draft and other considerations preclude the safe use of the above mentioned *inward channels* may use the Jong Fairway.

Eastbound and Westbound

4. *The Southern Fairway* is the navigable water bounded by the lines drawn from Beacon No. 45 to the Southern extremity of West St. John's Island, thence to Peak Island Light Beacon, thence with Beacon No. 39 in transit with Peak Island Light Beacon to the Southern port limit, thence Westwards along the port limit until Beacon No. 45 bears 313°, thence along that line to Beacon No. 45. The Southern Fairway is to be considered sub-divided by a median line extending from the Western limit to the Eastern limit of the fairway.

The Southern Fairway is designated for the passage of vessels as follows:

(a) Vessels from sea East/Eastern sector of the port proceeding to the Western sector to keep Northwards of the median line:

(b) Vessels from the Western sector of the port bound for the Eastern sector to keep Southwards of the median line;

(c) Vessels from the Western sector of the port bound for the sea East to keep Southwards of the median line and to proceed beyond the Easternmost limit of the Southern Fairway. Vessels after having proceeded beyond the Easternmost limits of this Fairway shall enter Main Straits only when it is safe and practicable to do so.

Vessels proceeding from/to the following areas need not follow the Southern Fairway but may proceed as stated:

(a) Vessels from sea Westbound for the Western sector of the port via the Middle Channel or Sisters Channel may cross the Southern Fairway when it is safe and practicable to do so.

(b) Vessels from the Western sector of the port bound for sea West may cross the Southern Fairway and on reaching the port limit enter the Main Straits when it is safe and practicable to do so.

PILOTAGE: Compulsory in Keppel Harbour, including East Lagoon, the Western sector and Sembawang from Johore Shoal Buoy to the Causeway. Request for Pilot must be made not less than 6 hours before arrival. Confirmations of arrival and amendment of ETA must be further notified to "Singapore Port Operations" not less than 2 hours before arrival. Telegraphic Address: PORTMASTER SINGAPORE. VHF Singapore Port Operations Channel 20 or 12.

Pilot Boarding and Disembarkation Grounds:

(a) *Eastern Boarding Ground:* 2.5 miles East of Pulau Sekijang Pelepah (St. John's Island Lighthouse).

(b) *Western Boarding Ground:* 1 mile S.W. of Sultan Shoal Lighthouse;

(c) *Southern Boarding Ground:* 1 mile S.W. of Beacon 45 (used only by special arrangement); and

(d) *East Johore Straits Boarding Ground:* S.E. of Johore Shoal Buoy in position 01° 18′ 00″ N., 104° 05′ 30″ E.

ANCHORAGES: Masters are required to notify "Singapore Port Operations" on Channel 12, their final anchoring positions giving bearings and distances from the following positions: Fullerton Lighthouse (Eastern sector), Tg Rimau Light (Beacon 47a) – (Western sector), Sultan Shoal Lighthouse – Jurong and Special Purpose Anchorage. Ships changing their location within port limits are also required to report their new positions. Ships leaving should report their departure time prior to leaving.

Orders for Pilots will be declined to vessels in the anchorages which have not reported their positions.

MAX. SIZE: Length, no restrictions. Breadth, no restrictions. Draft, Keppel Harbour 33 ft. at zero tide; Empire Dock 28 ft. at zero tide; Jurong Wharves being dredged to 38 ft. at zero tide.

Oil Installations: see "Tankers".

CLEARANCE: The Master of any vessel entering Singapore may apply for radio pratique to the Port Health Office through his local Agent, not less than 12 hours or more than 24 hours prior to arrival in Singapore (exceptions allowed).

All applications should be accompanied by answers to the Port Health Questionnaire.

Free Radio Pratique will not be granted in the following cases:

(a) Vessels with a case or suspected case of infectious disease on board.

(b) Vessels with a dead body on board.

(c) Vessel which has visited plague-infected ports during the current voyage.

(d) Passenger vessels, other than those approved by Public Health Officer.

The provisional pratique by radio is a quarantine clearance by the Port Health Officer on duty. The clearance permits a vessel to proceed directly to berths or working anchorages and begin normal business activities without the inspection of the Port Health Officer.

The granting of radio pratique clears the vessel only as far as the Port Health Officer is concerned, and it neither exempts the vessel from the requirements of other government agencies prior to commencing operations, nor a vessel from quarantine inspection and other control measures, subsequently deemed necessary by the Port Health Officer.

Vessels wishing to communicate with the Port Health Officer should do so on VHF Channel 14.

All ships other than gazetted mail ships, arriving within 5 days of departure from a smallpox infected port, or from a plague infected territory, should await health clearance at Quarantine Anchorage displaying appropriate signals.

All ships with suspected infectious disease on board should radio information to Port Health Officer and await clearance at Quarantine Anchorages. All vessels from infected ports upon arrival are required to anchor in Eastern Quarantine Anchorage (alternatively Western Quarantine Anchorage during the N.E. monsoon, approx. December to March), unless Health and Immigration exemption have previously been granted. Vessels from non-infected ports can obtain free pratique. Vessels from infected ports must fly "Q" flag for Port Health. Vessels must also fly pennants 2 over 5 (alternatively 3 over 4 when there are passengers aboard) for immigration.

Corresponding night lights red over white for Port Health and 2 green for Immigration. Once vessel has been cleared by Port Health and/or Immigration she must proceed to allotted berth/anchorage. On sailing, unless exemption granted, vessels must return to Principal Anchorage for Immigration Clearance; 2 hours notice required of departure.

The Port Master, Port of Singapore Authority has issued the following regulations regarding vessels requesting Immigration and Port Health Clearance:

(1) All Masters, Owners and Agents are reminded that vessels when requesting Immigration and Port Health Clearance must anchor in the designated Immigration and Quarantine Anchorage and exhibit the appropriate signals.

(2) The Senior Health Officer has advised that delays have occurred due to ships not anchoring at the designated anchorage or not displaying quarantine signals.

(3) Failure to comply with the above may result in action being taken against the vessels.

RADIO: Medium range (HF) telephone service is available continuously and normally provides satisfactory communication up to a range of about 800 miles. Ships wishing to contact Singapore radio may do so on any of the following carrier frequencies:

Station	*Call sign*	*Frequency kHz Coast*	*Ship*	*Hours*	*Remarks*
Singapore Radio	9VG4	2182	2182	24	Call, reply and Safety
	9VG40	4434.9	4136.9		
	9VG8	6204	6204		
	9VG5	2760	2527	24	Working
	9VG38	4364.7	4066.1		
	9VG43	8751.2	8217.2		

After establishing contact, the call will be booked and both stations will change to one of the following Frequencies prior to connection with the Subscriber:

Station	*Call sign*	*Frequency kHz Coast*	*Ship*
Singapore Radio	9VG39	4377.4	4078.8
	9VG44	8757.6	8223.6
	9VG45	8799.2	8265.2

VHF:

Station	Hours of watch	Channel	Functions
Singapore Radio	24	16	Distress, Safety and Calling Frequency
Singapore Port Operations	24	12	Reporting ETA's, anchored positions, departures, etc.
Singapore Port Operations	24	20	Pilotage Services other than East Johore Straits
Bukom Operations	24	19	Berthing/unberthing at Pulau Bukom and Shell SBM
Esso Operations	24	5	Berthing/unberthing at Pulau Ayer Chawan and Esso SBM
Jurong Control	24	21	Berthing/unberthing in Jurong wharves
Sembawang Control	24	21	Pilotage services and berthing/unberthing in East Johore Straits within Singapore port limits
Immigration/ Port Health	24	14	Immigration & Port Health Clearances
Waterboats	24	18	Supply of fresh water to vessels at anchor
Public Correspondence	24	24	For connection to Singapore Telephone Exchange
Public Correspondence	24	25	For connection to Singapore Telephone Exchange
Public Correspondence	24	26	For connection to Singapore Telephone Exchange
Public Correspondence	24	28	For connection to Singapore Telephone Exchange

TUGS: PSA operates 10 tugs – 3 of 3,000 b.h.p., 6 of 1,100 b.h.p., and 1 of 650 b.h.p. Shell operates 2 tugs approximately 1,500 b.h.p. A number of privately owned salvage tugs make the port their base.

Tugs join anywhere in port limits by pre-arrangement with Pilots. Normally ship's line used. All PSA and Shell tugs carry tow ropes for use if required. PSA charge for use of tow rope.

BERTHING: Vessel's Agents should submit to Authority a Schedule "A" (Application for Berth) giving overall length, maximum draft alongside, ETA and ETD of, and Schedule "B" listing out dangerous cargo on board vessel at least 48 hours before berth required.

CARGO HANDLING FACILITIES: *Keppel Wharves:* Vessels working only general cargo will normally be berthed at the Keppel Wharves. This is the largest of the six gateways of Port of Singapore Authority, having marginal wharves of 4.8 km. that are capable of accommodating 31 vessels at one time. There are well-ventilated transit sheds and warehouses totalling 158,472 sq.m., and 83,336 sq.m. of concrete hardstanding for open storage.

East Lagoon Container Port: Length of main berth 914 m., depth 13.4 m. at zero tide. Able to handle three third-generation vessels at one time. Four container quay cranes of 35 tonnes lifting capacity available. Feeder berth length 213 m., draft 13.4 m. for coastal vessels and a cross berth of length 213 m., draft 10.4 m. There are also three freight stations covering an area of 21,000 sq.m. for consolidation and unstuffing of containers. The stacking yard of approximately 14 hectares can accommodate 8,000 containers (20 ft. equivalents).

Bunkering facilities available. Bunker fuel pumped at the rate of 1,000 tonnes per hour through 18 in. (4.6 dm.) diameter mains. There are 11 outlets along the quay with 10 in. (2.5 dm.) tap-offs. Marine diesel and fresh water also available.

Sembawang Port: The Port of Singapore Authority operates five berths, at the Sembawang Port, situated North of Singapore. The length of the berths totals 823 m. with minimum depth of 10.4 m. at zero tide covered storage space available totals 23,000 sq.m. The Port is geared towards handling of low-value, high volume homogeneous cargoes like bulk sawn timber and logs.

Jurong Port: The Port as a bulk-handling facility to serve the Jurong Industrial Estate. The marginal wharves have five berths. Total length 914.4 m. and depth 1.6 m. at zero tide. In addition, there is a 384 m. wharf with minimum depth of 4.9 m. for coastal shipping. There are 23,132 sq.m. of covered storage and 70,931 sq.m. of open storage space.

The terminal has facilities for the discharge of grain (by elevator), sugar, fertilizers, cement, clinker, sulphur, etc. Shore bulk-handling cranes are used.

The equipment includes a kangaroo crane conveyor, unloading capacity of 304 tonnes per hour.

Two gantry type unloader cranes each with capacity of 457 tonnes per hour.

An iron ore hopper/conveyor loading system with a capacity of 304 tonnes per hour.

Grain silos with capacities up to 20,320 tonnes (20,000 tons).

Bulk grain suction – conveyor unloading system with discharge rate of 203 tonnes per hour and loading rate of 101 tonnes per hour.

Pasir Panjang Wharves: 680 m. of wharves with minimum depth of 2 m. which can accommodate 20 lighters, six LASH (Lighters-Aboard Ship) barges, and seven coastal vessels at any one time. There are four large modern transit sheds covering 38,000 sq.m. and some 240,000 sq.m. of covered storage space.

Telok Ayer Basin: This gateway caters for coastal vessels and lighters/barges. There are 640 m. of wharves for coastal vessels and more than 963 m. of basin area for lighter/barges. The finger pier provides another 384 m. of wharves for coastal shipping. However, with land reclamation carrying on at this place, five berths have been immobilized.

STEVEDORES: Labour should be ordered by 0900 hrs. for 2nd shift (1500 to 2300 hrs.) on same day and by 1300 hrs. for 1st shift (0700 to 1500 hrs.) for next day, by 1100 hrs. for 3rd shift (2300 to 0500 hrs.) on same day.

No work is performed during meal hours, 1100–1200 hrs. and 1830–1930 hrs.

MEDICAL: When infectious disease not suspected, permission will be granted by Port Health Officer to Agent to take doctor on board and remove the case, if necessary, to hospital. Preferably as much notice as possible. Several hospitals, General hospital, Gleneagles, Mt. Alvernia to name a few. Cholera, smallpox, plague, etc., are not endemic in Singapore.

TANKERS: Bunkering and discharge facilities available at Eastern and Western petroleum anchorages or installations at Pulau Bukom. Pulau Ayer Chawan, Tanjong Penjuru, Tanjong Berlayer, Jurong and Pulau Merlimau.

PSA operates a Slop and Reception Treatment Centre at Pulau Sebarok with facilities for the discharge of slops from crude oil, black oil, white oil, tank cleaning and ballast water.

Smoking not permitted during period tanker alongside PSA wharves. Grades permitted for discharge along PSA wharves: (a) marine diesel oil, (b) fuel oil.

Shell

Pulau Bukum – 10 berths and conventional buoy mooring.

Berth	Draft (m.)	Max. length (m.)	Max. displacement (tons)	Remarks
1	9.75	173.7	33,000	Continuous Jetty
2	9.75	91.4	33,000	
3	10.95	82.3	33,000	
4	12.19	189.0	43,000	
5	12.50	193.6	45,000	
6	14.63	243.8	92,000	
7	12.34	185.9	65,000	
8	12.95	230.1	65,000	
9	13.10	198.1	33,000	
10	15.54	243.8	84,000	Min. length acceptable 172.2 m.
SBM	22.36	—	352,990	

Esso

Refinery on an island Pulau Ayer Chawan 2.4 km. South of Jurong Industrial Complex. Refining capacity of 231,000 barrels per day. Lubricant plant 5,000 barrels per day. The jetty has an overall length of 982.1 m. and consists of 4 loading and bunkering berths.

Berth 1	length 82.4 m.	draft 7.6 m.
Berth 2	length 189.1 m.	draft 10.7 m.
Berth 3	length 225.7 m.	draft 12.8 m.
Berth 4	length 250.1 m.	draft 15.9 m.

Caltex

Operates berths (No. 1 and No. 2) at Tanjong Penjuru which can accommodate vessels alongside up to 13.71 m. max. draft. No. 1 Berth (4 breasting dolphins) capable of handling vessels of any size. No. 2 Berth (4 breasting dolphins) can handle any vessels exceeding 91.4 m. flat sides, up to 32,000 tons displacement and length not exceeding 182.8 m.

Mobil

Provides 4 berths 713 m. long for vessels up to 85,000 d.w.t.

Berth 1	14.3 m. LWOST
Berth 2	12.8 m. LWOST
Berth 3	6.7 m. LWOST
Berth 4	6.1 m. LWOST

B.P. Refinery

Refinery with 3 berths situated at Pasir Panjang. Small jetty inside harbour known as Jetty No. 2 can receive small vessels up to 1,000 tonnes as water depth only 6.1 m. below ACD.

No. 1 Jetty at S.W. side of Tanjong Berlayer can accommodate vessels up to 33,000 tons at off-shore mooring where dredged channel 10.97 m. below ACD. Berthing cannot be effected for 43 days of year due strong tidal currents.

At Jetty No. 1A which is Northwards extension from Jetty No. 1 trunkway, vessels up to 5,000 tonnes can be berthed; water depth 7.62 m. below ACD. Simultaneous mooring of vessels at Jetties No. 1 and 1A not allowed as floating hose used to connect Jetty No. 1 to ship at mooring buoys.

Singapore Petroleum

Provides 3 berths for bunkering and other services on Pulau Marlimau, an island off the S.W. coast of Singapore. The marine berth can accommodate vessels up to 90,000 d.w.t. and 14.3 m. draft, refining capacity 65,000 barrels per day.

DENSITY: Usually between 1019 and 1022 unaffected by tide or temperature variations. Variation due to periodic heavy run-off of rain water.

FRESH WATER: Fresh water available at any point of PSA's wharves. PSA also has a fleet of 9 waterboats to supply fresh water to ships anchored within the port limits.

FUEL: All grades available alongside PSA wharves and ex installation, otherwise by barge. Marine diesel oil 40 sec. to 100 sec. Heavy fuel oil 700 sec. to 1,000 sec. Thinned fuel 433 sec. to 450 sec. Blended fuel 200 sec. to 430 sec.

FIRE PRECAUTIONS: Normal precautions with respect to cargo vessels, vessels under repair, etc. Fire boats available. Oil companies apply own regulations at installations.

GANGWAY/DECK WATCHMEN: Recommended, particularly in Roads. Agents normally arrange. Cost varies.

OPENING/CLOSING HATCHES: Conventional hatches by stevedores. Mechanical hatches usually by ship's crew.

CERTIFICATES: If dangerous drugs on board, an export authorisation from country of origin and an import authorisation from country to which drugs being conveyed should be available for sighting and endorsement.

All vessels	Certificate of Registry or Tonnage Certificate. International Load-line Certificate or equivalent.
Passenger ships	Passenger Safety Certificate issued under international Convention for Safety of Life at Sea 1960 or the Simla Rules 1931.
Cargo ships	Safety Equipment Certificate (if over 500 tons gross) or equivalent. Radiotelegraphy Certificate or Radiotelephony Certificate whichever is applicable.

CUSTOMS ALLOWANCE: Tobacco: for crew and transit adult passengers. First day of arrival 50 cigarettes or 15 cigars or other tobacco 60 gms.; and for each subsequent day to the maximum of 7 days. 25 cigarettes or 7 cigars or other tobacco 30 gms.

Wines: 1 bottle per day to maximum of 8 days. Spirits: 0.875 reputed quart (in opened bottles) on first day of arrival and 0.125 reputed quart per day for rest of 7 days.

CARGO GEAR: Possession of valid test certificates. At PSA wharves, if gear appears faulty, an inspection by competent Port Officer may be required.

IDENTIFICATION CARDS: Sect. 22 (1) (c) of Ordinance provides for issue of Seamen's Identification Card as set out in First Schedule to the Immigration Regs. 1966, but rarely issued nowadays. Normally accept passports, discharge books or any identification cards issued by Masters of vessels for purpose of granting shore leave to Crew members, provided these documents sufficiently identify person concerned

Gate Passes issued against crew list at wharves and installations. No passes required from roads, although some form of identification advisable.

CONSULS: Consuls, Embassies and High Commissions. Arab Republic of Egypt, Argentina, Australia, Austria, Bangladesh, Belgium, Brazil, Bulgaria, Burma, Canada, Czechoslovakia, Denmark, El Salvador, Finland, France, Democratic Republic of Germany, Federal Republic of Germany, Great Britain, Greece, Hungary, India, Indonesia, Iran, Ireland, Israel, Italy, Japan, Democratic People's Republic of Korea, Republic of Korea, Malaysia, Nepal, Netherlands, New Zealand, Norway, Pakistan, Philippines, Poland, Romania, Spain. Sri Lanka, Sweden, Switzerland, Thailand, Trinidad and Tobago, Turkey, Union of Soviet Socialist Republic, USA, Yugoslavia.

REPAIRS: All types of repairs (hull, engine and electrical including navigational aids) carried out. Facilities also available for repairs out afloat while vessel in anchorages.

DRY DOCKS: Several shipyards offering building, repairing and engineering facilities, for example:

Jurong: 2 dry docks: No. 1, length 270 m.; breadth, 40 m.; capacity 90,000 tons d.w.t. No. 2 length 350m.; breadth 56 m.; capacity 300,000 tons d.w.t. 1 floating dock length 86 m.; breadth 18 m.; lifting capacities 2,000 tons.

Keppel Shipyard: 6 dry docks, the largest length 270 m., beam 28 m., depth 10.1 m., can accommodate vessel up to 40,000 d.w.t.

Sembawang Shipyard: 400,000 d.w.t. super graving dock, 100,000 d.w.t. graving dock, 4 floating docks from 5,000 d.w.t. to 30,000 d.w.t. capacities. 1,330 m. of repair berth with 12 m. of water.

REPATRIATION: Ships' Agents responsible for repatriating seamen. Mercantile Marine Office undertakes repatriation of distressed British seamen on behalf of Board of Trade, United Kingdom, whenever necessary. Seamen who hold proper documents which ensure entry into their countries of origin, citizenship and destination are normally granted Special Passes after discharge for purpose of repatriation.

AIRPORT: 11.2 km. from city. Regular and frequent services to all parts of the world.

TIME: Singapore time, GMT plus 7.5 hours. No seasonal change.

HOLIDAYS: Work can be arranged on all 11 Public Holidays. New Year's Day; Chinese New Year; Hari Raya Haji; Good Friday; Labour Day (1st May); Vesak Day; National Day (9th August); Deepavail; Hari Raya Puasa; Christmas Day.

POLICE/AMBULANCE/FIRE: City Police 999; Fire/Ambulance only, 328111; Flag signal: CB3. VHF Channels 12 or 16. PSA Police 222; Fire 209 or 333; Ambulance 76021.

Police assistance at anchorage:

For your information we quote the contents of Port Circular No. 28/73 issued by the Port of Singapore Authority:

(1) In circumstances arising on board ships at anchor within port limits which require the assistance of Marine Police, ships suitably equipped with VHF radio-telephony in the 156-174 mHz frequency band are to communicate this requirement on Channel 12 to "Singapore Port Operations" which maintains a continuous listening watch.

(2) In order to facilitate and arrange for police assistance to the ship, the following information shall be transmitted by the ship when radio contact has been established on Channel 12:
  (a) Name of ship.
  (b) Location (from a reference point).
  (c) Brief description of incident.

(3) The ship making this request for police assistance shall also as soon as possible hoist up the appropriate flag signals by day and light signals by night. Day signal: International Code Hoist "CB3". Night signal: Red-Red-White (Red at top).

(4) The ship is required to sound on her whistle or siren at intervals of about 1 minute 3 long blasts so that the police on patrol duties and other ships in the vicinity are alerted.

(5) Adherence to the procedures described in the above will enable assistance being given to the ships in the quickest possible manner.

TELEPHONES: Available on board vessel at PSA wharves only.

GENERAL: Master of any vessel in territorial waters of Singapore shall obey any signal from a preventive vessel and any instruction from officers of Customs. Customs officers shall have free access to any part of vessel and have powers to mark, lock or seal any dutiable goods on import including sea stores.

SERVICES: Following additional services available: Cleaning and preparing ship's tanks. Cleaning, scaling and painting. Insulation. Interior decorating and furnishing. Refrigeration and air-conditioning. Chemical cleaning of boilers, etc. SCAMP underwater cleaning service.

Services of following Classification Societies available: Lloyds Register of Shipping. Det. Norske Veritas. American Bureau of Shipping. Bureau Veritas. Nippon Kaiji Kyokai. Germanischer Lloyd. Polski Register Stratkow. China Corporation Register of Shipping.

Compass adjusting and DF Calibration. Radar and Radio servicing depots.

SHORE LEAVE: No restriction on crews landing after Immigration and Health formalities have been satisfactorily completed. With rare exception (e.g. CPG Crew), all *bona fide* crew of a vessel allowed shore leave on strength of their passports, discharge books or identification cards.

The following circular was issued in May 1973 by the Singapore Port Authority.

"In line with the Government's decision that action should be taken to deal with the 'long-hair' problem as part of a campaign against undesirable alien influences, the Port of Singapore Authority would be most grateful for your co-operation in implementing this decision by advising all your employees, including ships' officers and Crew members, wishing to come ashore to be more tidy in their general appearance.

"To assist you to decide whether an individual's hair is long, the following definition of long hair may be used as a guide:
(i) Hair reaching below an ordinary shirt collar;
(ii) Hair covering the ears;
(iii) Hair falling across the forehead and touching the eyelashes."

POLLUTION: No oil or mixture containing oil shall be discharged into Singapore waters from any vessel. The Master or person in charge of the vessel committing such an offence shall be liable on conviction to a fine not less than 500 dollars and not exceeding 500,000 dollars or to imprisonment for a term not exceeding 2 years or to both such fine and imprisonment.

No refuse, garbage, waste matter, substance of a dangerous or obnoxious nature or trade effluent is to be discharged from any vessel into Singapore waters. The Master or the person in charge of the vessel committing such an offence shall be liable on conviction to a fine not exceeding 10,000 dollars or to imprisonment for a term not exceeding 2 years or to both such fine and imprisonment.

Any person who puts, throws, cast or deposits into Singapore waters, or causes to be put, thrown, cast or deposited there into, any oil mixture containing oil, refuse, garbage, waste matter, carcase, substance of a dangerous or obnoxious nature, or trade effluent, shall be guilty of an offence and shall be liable on conviction to a fine not exceeding 10,000 dollars or to imprisonment for a term not exceeding 2 years or both such fine and imprisonment.

If any oil or mixture containing oil is discharged into Singapore waters:

(a) for the purpose of securing the safety of the vessel or of preventing damage to the vessel or her cargo, or of saving life; or

(b) is found to be escaping, or to have escaped into Singapore waters from a vessel in consequence of damage to the vessel, or by reason of leakage, the Master or the person in charge of the vessel shall report the occurrences to the Director of Marine and the Port Master. Failure to do so shall be an offence and shall be liable on conviction to a fine not exceeding 5,000 dollars.

Slop Reception: The P.S.A. Slop Reception and Treatment Centre at Palau Sebarok has a total tank capacity of 62,000 cu.m. (395,000 barrels).

Berthing facilities consist of three piers – Piers 1 and 2 and the Barge Pier.

The depths of water alongside the piers are 7.6 m. (25 ft.), 12.8 m. (42 ft.) and 9.7 m. (32 ft.) at LWOST respectively.

The Centre can accommodate vessels up to an overall length of 259 m. (850 ft.) and a displacement of 51,000 tonnes (50,000 tons).

The average rate of discharge to the storage tanks through the Centre's 0.3 m. (12 in.) pipe-lines is 500 tonnes (490.2 tons) per hour at an operational pressure of 10.6 kg./sq.cm. (150 p.s.i.).

Communications: VHF Station Channel 2". Mobile Radiotelephone – Kapal 57.

Safety and security at the island is well provided and maintained by both the Authority's Police Force and Fire Brigade.
DELAYS: Normally none. Occasional congestion due to prolonged rainy weather or other abnormal conditions.
AUTHORITY: Port of Singapore Authority (PSA).
AGENT: Intrasea (Pte) Ltd., 234E Faber House, Orchard Road, Singapore 9. Tel. 2352611 Cables: Freight. Telex: RS 24010.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Society Islands

BORA BORA (Vaitape): 16.31 S. 151.45 W.

DOCUMENTS: All vessels arriving in French Polynesia must first call for clearance at Papeete, or at Uturoa, or at Taiohae. See "Papeete" for documents required.
PILOTAGE: There is no pilotage station at Bora Bora; a Pilot will be provided at Papeete. Vessels are requested to advise their Agents at least 15 days before arrival of their ETA, length and draft of ship. In addition, Masters should confirm their ETA to the Port Captain of Papeete at least 3 days before arrival. Telegraphic address is Capitaine de Port, Papeete.
ANCHORAGE: Vessels may anchor in the port roads in depths of 34-21 m. Good holding ground in sand and coral.
RESTRICTIONS: Night pilotage is impracticable due to the absence of lighted navigation marks.
MAX. SIZE: Lengths 220 m., beam 30 m., draft 9.60 m.
HEALTH: Vessel should ask for free pratique by radio message to Sante Maritime Papeete, via coast station Mahina. This message to be sent 24 hours before arrival.
RADIO: Mahina Radio, call sign FJA, operating 24 hours a day on 500, 2,182 and 8,230 Khz.
TUGS: No tugs available at Bora Bora.
BERTHING: One quay, 132 m. length, situated in Faanui Bay. Depth alongside 7.30 m. This quay was constructed during the 2nd World War and is in poor condition, only used by small warships and yachts. One other quay 40 m. long and with depth alongside 4 m. Situated at Vaitape. Used by barges.
MEDICAL: No doctor available, but there is a local infirmary.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCE: No restrictions for crew members, but all tobacco and alcohol must be declared. Crew men going ashore may not take more than 2 packets of cigarettes.
AIRPORT: Situated 7 kms. from Vaitape, only inter-island services.
TIME: GMT minus 10 hours. No change during the year.
HOLIDAYS: See "Papeete".
SHORE LEAVE: Allowed.
AUTHORITY: Chef de Post, Bora Bora.

PAPEETE: 17.33 S. 149.34 W. (See Plan)

DOCUMENTS:
Required by Port Health:
Maritime Declaration of Health (form provided by the Pilot).
Required by Police:
Crew List.
List of Passengers Disembarking.
List of Passengers in Transit.
Required by Customs (2 copies of each):
Manifest of Cargo for Discharge.
Provisions List.
Mail List.
Crew Personal Effect List.
Bonded Stores List.
Ship's Spares List.
Crew List.
List of Passengers Disembarking.
List of Passengers in Transit.
List of Animals Disembarking.
List of Animals in Transit.
Complete Cargo Manifest.
Required by Port Captain:
Entry Declaration (form supplied on arrival).
Crew List.
List of Passengers Disembarking.
List of Passengers In Transit.
PILOTAGE: Vessels are requested to advise their Agents at least 3 days before arrival giving their ETA, length and draft of the ship, amount of cargo for discharge and any other requirements. In addition, Masters must give their ETA 24 hours before arrival to Capitaine de Port, Papeete. Pilot station and pilot launches are equipped with VHF and may be contacted on Channel 16 when within 30 miles. Pilot launches have grey painted hull with a white band, with wheelhouse on the fore part. The pilot flag is described as the colours of code flag "W" upside-down. International code flag signals may be used to call Pilot. Pilot boards about 1.5 miles from the entrance channel. There is no anchorage outside the port for ships awaiting a Pilot.

Pilotage is effected from 0500 to 2200 hrs. for entering vessels. For departing vessels, pilotage available up to 2400 hrs.
ANCHORAGE: Vessels up to 170 metres length can anchor in the port roads in depths of 18-25 metres. Good holding ground in mud.
MAX. SIZE: Length 245 m., beam 30 m., draft 10 m.
HEALTH: Vessels should ask for free pratique by radio to Sante Maritime Papeete, via Coast Station Mahina Radio. This message should be sent 24 hours before arrival. Pratique is automatic for vessels coming from another Polynesian port.
RADIO: Mahina Radio, call sign FJA, operating 24 hours per day on 500, 2,182 and 8,230 kHz.
VHF: The Port Captain's Office is equipped with VHF. Watches are kept on Channel 16 when a ship is expected.
TUGS: Tugs join ships as soon as they are in the entrance channel. Generally, tow-lines are not required, as tugs push the vessels only. There are three tugs available up to 1,200 h.p. belonging to the Port Authority, and in addition, there are two naval tugs up to 700 h.p. which may assist if required.
BERTHING: Passenger Quay: 233 m. length, two berths, depth alongside 9 m.

Cargo Quay: 450 m. length, depth alongside 10.50 m.
STEVEDORES: Cargo information should be confirmed to the Agents with ETA 48 hours before arrival.
MEDICAL: Advance notice required if medical attendance needed on board. Two hospitals available. Passengers disembarking must present a valid vaccination certificate.
TANKERS: One tanker berth, 105 m. long. Max. allowed draft 9.60 m. Discharging hoses are: Mobil Oil 8 in., Standard Oil 6 in.
FRESH WATER: Available from pipe-lines on all quays. Loading rate is 50 t.p.h. at passenger and cargo quays and 30 t.p.h. at the tanker berth.
FUEL: Diesel available subject to one week's notice.
DEVELOPMENTS: Construction of a new quay for passenger vessels up to 300 m. length.

Dredging harbour entrance to widen channel to 160 m. width 12.50 m. depth.

A quay is to be constructed in the fishing harbour, length 100 m., depth 6 m.

A Container Quay is to be constructed, length 200 m., depth 12 m. (1977-78).
GANGWAY/DECK WATCHMEN: Services of shore watchmen are necessary.
OPENING/CLOSING HATCHES: Hatches opened and closed by crew if they are of mechanical type, otherwise the stevedores will perform this operation.
CUSTOMS ALLOWANCE: No restrictions for crew members but all tobacco and alcohol must be declared. Crew members going ashore must not take more than two packets of cigarettes. Passengers disembarking may take 200 cigarettes or 50 cigars or 400 grammes of tobacco and one bottle of alcohol.
CONSULS: The following countries maintain representatives at Papeete:
Austria
Belgium
Chile
Denmark
Italy
Finland
Netherlands
Norway
Sweden
REPAIRS: Woodwork, electrical and welding repairs can be effected. There are two floating docks for vessels up to 3,800 tons.
REPATRIATION: Can be effected.
AIRPORT: Tahiti — Faaa Airport is situated 6 kms. from the port. Regular international flights.
HOLIDAYS: 1st January, Easter Monday, 1st May, Ascension Day, Whit Monday, 14th July, 15th August, 1st November, 11th November, 25th December. No work is carried out on Sundays or on 1st May. All other holidays can be worked on double overtime rates.
TIME: GMT minus 10 hours. No alterations during the year.
POLICE/FIRE/AMBULANCE: Police 17; Fire 18; Ambulance 2 96 74.
TELEPHONES: Can be installed on board vessels at all quays.
SHORE LEAVE: Allowed without restriction.
AUTHORITY: Capitaine de Port.

Solomon Islands

GIZO: 08.05 S. 156.52 E.

Gizo is the copra and cocoa receiving centre for Western Solomons. Situated on Gizo Island West of New Georgia. Entrance to harbour is beaconed and a jetty with depth alongside of 9 ft. Sheltered anchorage available in 16 fathoms. The British Solomons Trading Company Ltd. provides stevedores and conducts a lighterage handling and warehousing service to Importers and Exporters.

HONIARA: 09.25 S. 159.58 E. (See Plan)

DOCUMENTS:

Special Documents

Store List, Form C1.
Crew's Store List, Form C2.
List of Unmanifested Cargo, Form C3.
Ship's Report Inward, Form C4.
Entry Outwards/Content Ship, Form C13.

Legalised Documents

None.

Advance Documents

None.

Landing Cards

Finally landing passengers need special l.c.

Health Officer

1 Transit Passenger Manifest.
1 Landing Passenger Manifest.
1 Crew List.
1 Maritime Declaration of Health.
1 Rhinocerus Beetle Free Certificate from Suva.
Deratisation Certificate.
Health Certificate.

Immigration

1 Transit Passenger Manifest.
1 Landing Passenger Manifest.
1 Crew List.

Customs

1 Transit Passenger Manifest.
1 Landing Passenger Manifest.
1 Crew List.
2 Store Lists, Form C1.
2 Crew Store Lists, Form C2.
2 Ship's Reports Inwards, Form C4.
2 Lists of Unmanifested Cargo, Form C3.
2 Entry Outwards/Content Ship, Form C13.

Agents

1 Transit Passenger Manifest.
1 Landing Passenger Manifest.
1 Crew List.

PILOTAGE: 24 hours notice ETA stating number of passengers, dangerous cargo, etc., to Harbour Master, Honiara, via Honiara Radio. Usual signals. Pilot boards from launch about 0.75 mile N.E. Pelope Shoal. Vessels normally berthed port side to. Pilot uses port gangway in calm weather.

ANCHORAGES: East of Port Main Leading Lights. F1. white and fixed green, in about 20 fathoms; coral bottom.

Local boats are available for transporting crew from anchorage to the shore. The landing stage is at Joanna Jetty on the East side of the main pier at Point Cruz. Height above water level is 2 ft. at high tide and 4 ft. at low tide.

APPROACHES: Approaches free from dangers provided vessels keep at least 2 cables off Point Cruz Beacon, identified by quick flashing red light. On foreshore in front of Shell Oil Storage Tanks is beacon with fixed green light, and above on Vavaya Ridge is white light flashes every 5 seconds from Tower on radio station building. When in line these 2 lights give correct approach to anchorage in 20 fathoms on, or East of, the line. Prevailing winds during S.E. season blow from N.E'ly direction sometimes reaching force 4 to 5 in early afternoon. During N.W. season direction and force variable generally between North and West up to force 4 and occasionally force 5.

RESTRICTIONS: Berthing in daylight hours only – departure any time.

MAX. SIZE: New Wharf, up to 650 ft. long and max. 29 ft. draft. Old Wharf, up to 200 ft. long and max. 13 ft. draft. Tankers, mooring at buoys, 600 ft. long and 27 ft. 6 in. draft.

HEALTH: Pratique can be obtained by radio. Cable Port Health. Suspect vessels should inform Health Authorities and Harbour Master by radio for doctor to board on arrival.

Cable to Quarantine Officer Honiara between 12 and 4 hours before arrival the following message: "Request Radio pratique negative answers all health questions maritime declaration of health Master." Normally, the P & T Radio Officer may grant pratique immediately whilst he is in radio contact with the ship. After arrival the Health Officer will check for rhinocerus beetle and will clear.

RADIO: Radio Honiara VQJ (Vee Kiu Jay). Watch continuous. kHz 6204, kHz 2182, kc/s 500. GMT Schedule 0020–0030 transmits 11560 kHz receives 8 or 16 mHz.

TUGS: There is a small 100 h.p. tugboat assisting with mooring when necessary.

BERTHING: At Point Cruz, berth length 235 ft., depth alongside 30 ft. Vessel berths port side alongside.

STEVEDORES: At least 24 hours notice, usually 3 gangs, indicate any extra gangs required. To facilitate quick turn around advisable have cargo in middle holds evenly distributed not at extreme end or massed in one hold only.

MEDICAL: Notice should be given in advance if medical attendance required on board. Smallpox vaccination required by all arriving on ship. Inoculations available at clinic on Fridays only. Limited hospital facilities available.

Cholera: required if arriving from infected area. Vaccination certificates are checked individually by those passengers permanently disembarking.

For all other passengers and the crew ship's doctor must provide a statement advising that all passengers and crew comply with the health regulations and vaccinations required.

In case some passengers have for health reasons not been vaccinated, a letter from their doctor giving reason why no vaccination given must be produced. Passengers will be allowed to go ashore.

Central Hospital, tel. 09–61.
Emergency and Ambulance, tel. 09–33
Doctors, tel. 09–44
Dentist, tel. 09–43

All medical facilities are provided from the Hospital. One private doctor available: Dr. J. Higgs, tel. 566.

TANKERS: Tanker buoys, 8 in. pipe-line, max. draft 32 ft. New Wharf, 4 in. pipe-line, max. draft 27 ft. 6 in. Old Wharf, 4 in. pipe-line, (ADO), max. draft 13 ft.

DENSITY/TIDE: Approx. 1025. Tidal range about 3 ft.

FRESH WATER: At wharf by hoses. 40 t.p.h.

FUEL: Diesel and gas oil available. 48 hours notice, butane gas.

FIRE PRECAUTIONS: Normal fire precautions, with gang standing by with fire pump.

GANGWAY/DECK WATCHMEN: Watchmen to be recommended. Customs provide a preventive office for duty at a charge.

OPENING/CLOSING HATCHES: Stevedores assist crew. Crew to rig gear.

CERTIFICATES: Certificate of Registry.

CUSTOM ALLOWANCE: 200 cigarettes or 0.5 lb. tobacco per crew member. 3 quart bottles of beer per crew member.

IDENTIFICATION CARDS: Required.

CONSULS: Australian.

REPAIRS: Limited facilities only.

DRY DOCKS: Nil.

REPATRIATION: Facilities available.

AIRPORT: Situated approximately 10 miles from the wharf. TAA flights 3 times per week from Sydney via New Guinea, and Air Pacific have two flights a week from Suva via New Hebrides. One flight from Port Moresby.

TIME: GMT plus 11 hours all year round.

HOLIDAYS: Cargo work can be arranged on all holidays except Christmas Day and Easter period.

POLICE/AMBULANCE/FIRE: Emergency phone numbers: Police 666; Ambulance 933; Fire 299.

SERVICES: Labour can be hired for assistance with painting and cleaning. Other services not normally available. 24 hours notice required.

SHORE LEAVE: Permitted.

VISAS: Transit passengers: not required. Disembarking passengers: require visa for a stay over 48 hours. Visa can be obtained from nearest British Consul.

LANDING CARDS: Only permanently disembarking passengers need special Landing Cards which can be obtained from Immigration Officer on arrival.

WEATHER: Cyclone season December to April, winds N.W. to variable, strength 0–5. From April to November winds are from N.E., strength 4–5.

DELAYS: Nil, except when other ships being worked.

AGENT: E. V. Lawson Pty Ltd., Box 3, Honiara, British Solomon Islands. Tel. 644 Telegraphic Address: EVLAS.

YANDINA: 09.04 S. 159.14 E.

Yandina is situated in Russell Islands and is copra export port for Lever's Pacific Plantations Pty Ltd. A concrete and steel wharf on South side of entrance with 175 ft. base and depth approximately 25 ft. alongside.

Sheltered anchorage for vessels of up to 500 ft. in length, available in Renard Sound. Lever's Pacific Plantations Pty Ltd. provide stevedores and conduct handling and warehousing service to importers and exporters.

Somali Democratic Republic

BERBERA: 10.26 N. 45.01 E.

DOCUMENTS:

Health Certificate.
Crew List.
Passenger List.
Provision List.
Ship's Register.

PILOTAGE: Vessels await Pilot on the outer anchorage 5-10 cables S.W. of Tamara lighthouse. In case of stormy weather and rough sea, it is permitted to wait for Pilot on the inner anchorage. Pilotage for all ships for berthing, unberthing and shifting is compulsory. The Pilot will board arriving vessels only after having received written request from the Agent.

ANCHORAGE: Outer anchorage 5-10 cables S.W. from Tamara lighthouse. Inner anchorage limited by the line between 10° 26′ 16″ N. 45° 00′ 14″ E. and 10° 26′ 26″ N. 45° 00′ 40″ E. and between perpendiculars from the ends of this line towards Cape of Tamara.

RESTRICTIONS: All ships should anchor in such a position that with any wind they will not impinge on the leading light line, or to the South of this line, or in the vicinity of the deep water pier.

MAX. SIZE: Draft 28 ft., length/breadth no restrictions.

HEALTH: Until free pratique is received nobody except Pilot is to board or to leave the ship.

RADIO: Cable Agents giving ETA, draft, length and cargo via port radio station – 6 OY (SIX OU WAI) call and reply in the frequency 500 kc, working 450 kc. Working hours from 0700 to 1700 hrs. local time. Traffic list 3 times a day at 0800, 1200 and 1600 hrs.

TUGS: Use ship's lines. There is one tug of 300 h.p. and one of 700 h.p. Mooring launches available.

BERTHING: Depth at pier 9.8 m. length of pier 360 m.

Transhipment of general cargo is allowed to be loaded and discharged at Berbera with exemption of Harbour Tax and Warehouse Dues. Only handling charges are levied according to port tariff.

CRANES: 2 electic portal cranes, capacity 5 tons. 4 mobile cranes, capacity 50 tons, 25 tons, 16 tons and 5 tons.

STEVEDORES: Stevedore gangs are ordered by the port, all necessary gear supplied by the Port Authority including heavy lift handling gear. Work can be arranged on official holidays on overtime basis.

General cargo for transhipment at Berbera does not incur harbour tax and warehouse fees, only handling charges are levied.

TANKERS: Discharge on two mooring buoys, Shell Company has Russian, American and English standard connecting hoses – draft 28 ft. Max. size 18,000 tons. Depth 9.8 m.

DENSITY: From 36.00% to 37.00%.

FRESH WATER: Supplied only alongside pier. No water barge.

Shipmasters Report: Available in good quantities except from June to September, when usually none available for ships.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: On liners normally by crew, with the assistance of stevedores, otherwise according to charter party.

CUSTOMS ALLOWANCE: Each crew member is allowed 100 cigarettes or 100 grammes tobacco and one bottle of any beverage.

CONSULS: Not available.

REPAIRS: Port management has well-equipped mechanical workshop which is able to carry out minor repairs for ships.

HOLIDAYS: Muslim Edd-Al-Duha (say between 15th and 20th of Febuary); Muslim New Year (about 21st-23rd March); African Solidarity Day (15th April); Labour Day (1st May); Prophet Mohammed's Birthday (22nd May); Independance Day, Northern Somalia (26th June); Independence Day of the Somali Democratic Republic (1st July); National Flag Day (12th October); United Nations Day (24th October); Human Rights Day (10th December); Revolutionary Day (21st October).

TELEPHONE NUMBERS: Port Manager, No. 42; Harbour Master/Pilot, No. 58; Senior Port Officer, No. 21; Customs, No. 38 and 12; Port Radio Station, No. 41; Workshop, No. 53; Main Gate, No. 50.

AUTHORITY: Somali Ports Authority.

CHISIMAIO (or Kismayu): 00.22 S. 42.34 E.

DOCUMENTS:

6 Lists of Crew.
2 Stores Lists.
2 Lists of Articles owned or in possession of Master, officers and crew (alcohol, cigarettes, cigars, tobacco, radios, cameras, binoculars).
1 Cargo Manifest (must be made out in accordance with original B/L issued. In the column "Consignees" the name of the party to be notified must be mentioned complete with full postal address. Weight should be specified in kilos and measurement in cu.m.). 6 copies to be sent in advance unfreighted; 2 copies to be sent in advance freighted; 2 copies to be sent by ship's box.
1 Copy not negotiable of B/L for each B/L issued.
2 Transit Cargo (total numbers of packages and total weight for each destination).
6 Lists of Passengers to be Disembarked.
2 Lists of Passengers in Transit.
1 Health Document will be prepared at the arrival of the Vessel in port, on special local form.

PILOTAGE: Pilotage is compulsory. Thirty-six hours before arrival a cable must reach the Agent with vessel's ETA. The Agent will inform the Pilot who will pick up the vessel in approx. position 0° 20′ S., 42° 34′ E., two miles S.E. of Fairway buoy. Pilot boat is a tug which is used while berthing.

ANCHORAGES: In the port basin, from 27 to 30 ft. deep, excellent holding ground.

RESTRICTIONS: Entrance channel about 200 m. wide, marked by buoys. Entrance may be effected during daylight hours only. Port closed from 1800 to 0600 hours.

MAX. SIZE: Port consists of two L-shaped quays, one 340 m. length the other 280 m. Max. draft 28 ft. at lowest low tide.

HEALTH: Pratique granted after port Authorities, including doctor, board vessel. Any suspected contagious illness aboard to be reported immediately to the doctor at the arrival. Vessel calling from other Somali ports subject same procedure.

RADIO: Use Mombasa and/or Aden Radio. Mogadiscio Radio does not keep a 24 hours service.

TUGS: Tug, one only, takes the Pilot aboard and after joins vessel whilst berthing and sailing. Ship's lines used.

BERTHING: No specific requirement to berth in the port. Vessel entering into port basin after 1745 hrs. will berth next at 0630 hrs. Vessel must sail before 1730 hrs. otherwise sailing will be postponed to next day at 0630 hrs. No vessel permitted berth and/or sail without Pilot.

STEVEDORES: Vessel must give accurate ETA at least 36 hours in advance to enable Agent order necessary gangs. Average loading/unloading rates per gang, per hour;

(a) General cargo, 17 to 20 tons.
(b) Cargo in bags, 22 to 25 tons.

No shore facilities, all cargo to be loaded and unloaded with ship's gear on dock or pontoons.

MEDICAL: No advance notice required for medical attention. Hospital facilities available, but specialised treatment and surgery is not. Smallpox, yellow fever and cholera vaccination certificates inspected on arrival.

FRESH WATER: Available at wharf, rate 15/16 t.p.h.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Gangway watchmen service carried out by the Customs Police. Food on vessel's account; no other charges. Deck watchmen not used.

OPENING/CLOSING HATCHES: Normally carried out by stevedores with the help of the crew. Vessel's crew may, if required by the vessel, do so. Crew may close the hatches prior to sailing.

CUSTOMS ALLOWANCE: 200 cigarettes, or 0.5 lb. tobacco or 0.5 lb. cigars. One bottle spirits opened. Bond sealed but can be reopened upon application. Cigarettes and spirits trafficking between alongside and between vessel and shore strictly prohibited. It should be noted that tea, coffee and sugar are sealed in bond in addition to the usual items of spirits, cigarettes, tobacco and cigars.

IDENTIFICATION CARDS: Not required.

CONSULS: Italian Consul only. No telephone.

REPAIRS: Repairs only by vessel's own facilities.

REPATRIATION: Air communication via Mogadiscio.

AIRPORT: About 6 km. from the port. Two local flights weekly to Mogadiscio only.

TIME: GMT plus 3 hours.

HOLIDAYS: Port is completely closed on 1st day of Arafa, 1st day of Idd El Fitr, 1st July (Independence Day). On all other public holidays and on Friday (local Sabbath) work performed subject premium rates of pay.

TELEPHONES: No possibility for placing telephones on board.

GENERAL: Vessels should not dispose any waste into harbour or on to quays, lower lifeboats, or use radio station without prior permission from authority.

SHORE LEAVE: No restrictions.

REGULATIONS: Banana vessels are given priority.

AUTHORITY: Somali Port Trust.

AGENT: Sica, F. Boearo and Siglio S.p.A. Shipping Agency, P.O. Box 42, Chisimaio. Cable address: "Dogliani" or "Sica Boeio."

MOGADISCIO: 02.02 N. 45.21 E.

DOCUMENTS:

2 Lists of Crew.
2 Stores Lists.
2 Lists Articles owned or in possession of Master, officers and crew (alcohol, cigarettes, cigars, tobacco, radios, cameras, binoculars).
Cargo Manifest (must be made out in accordance with original B/L issued. In the column "Consignees" the name of the party to be notified must be mentioned complete with full postal address. Weight should be specified in Kilos and measurement in cu. m.). 6 copies to be sent in advance unfreighted; 2 copies to be sent in advance freighted; 2 copies to be sent by ship's box.
Copy not negotiable of B/L for each B/L issued.
2 Lists Transit Cargo (total numbers of package and total weight for each destination).
6 Lists of Passengers to be Disembarked.
2 Lists of Passengers in Transit.
1 Health Document will be prepared at the arrival of the vessel in port, on special local form.

PILOTAGE: The Pilot will board arriving vessels only after having received written request from the Agent.

ANCHORAGE: About 0.5 mile off-shore in depths up to 45 ft. in open roadstead. Because of occasional heavy swell, max. recommended draft 31 ft.

HEALTH: Pratique granted after Port Authorities, including doctor, board vessel. Any suspected contagious illness aboard to be reported immediately to the doctor at the arrival. Vessel calling from other Somali ports, subject same procedure.

RADIO: Use Mombasa and/or Aden Radio. Mogadiscio Radio does not keep 24 hours watch.

BERTHING: Cargo vessels work cargo to lighters at the anchorage.

TANKERS: One berth available for tankers up to 30 ft. draft.

FRESH WATER: Not available.

FUEL: Not available.

STEVEDORES: Vessel to give accurate ETA at least 24 hours in advance to enable Agent order necessary gangs. No shore facilities; all cargo to be loaded and unloaded with ship's gear.

MEDICAL: No advance notice for medical attention required at vessel's arrrival. Hospital facilities available, but specialised treatment and surgery is not. Smallpox vaccinations and yellow fever Certificates inspected on arrival.

GANGWAY/DECK WATCHMEN: Gangway watchmen service carried out by the Custom Police; food on vessel's account.

OPENING/CLOSING HATCHES: Normally carried out by stevedores with the help of the crew. Vessel's crew may, if required by the vessel, do so. Crew may close the hatches prior to sailing.

CUSTOMS ALLOWANCE: 200 cigarettes, or 5 lb. tobacco or 0.5lb. cigars. One bottle spirits opened. Bond sealed but can be reopened upon application. Cigarettes and spirits trafficking alongside and between vessel and shore strictly prohibited. It should be noted that tea, coffee and sugar are sealed in bond in addition to the usual items of spirits, cigarettes, tobacco and cigars.

AIRPORT: Situated 8 km. from the port. Regular international flights.

TIME: GMT plus 3 hours all year round.

HOLIDAYS: Muslim Edd-Al-Duha (say between 15th and 20th of Febuary); Muslim New Year (about 21st-23rd March); African Solidarity Day (15th April); Labour Day (1st May); Prophet Mohamed's Birthday (22nd May); Independence Day, Northern Somalia (26th June); Independence Day of the Somali Democratic Republic (1st July); National Flag Day (12th October); United Nations Day (24th October); Human Rights Day (10th December); Revolutionary Day (21st October).

DEVELOPMENTS: A new deep-water harbour is under construction at Mogadiscio, expected to be ready 1976.

AUTHORITY: Harbour Master.

NOTES

Please also advise Shipping Guides (Services) Ltd.

South Africa

CAPETOWN (Table Bay): 33.56 S. 18.26 E.

(See Plan)

PORT LIMITS: Westwards by a straight line between Green Point and Robben Island lighthouses, and Northwards by a straight line from Robben Island lighthouse East (true) to the Eastern shore of Table Bay, thence Southwards along high water mark, so as to include the foreshore to the Castle, thence back to Green Point lighthouse.

DOCUMENTS:

Customs:
Form DA.1, Report Inwards/Outwards for Ships.
Form DA.3, Certificate of Clearance for Ships.
Form DA.4, Transire – for a destination in the R.S.A.
Form DA.5, List of Sealable Goods on board ship.
Ships Crew List (Customs Department).
Livestock Form (Customs Department).
Post Office:
P.160, Notification of Departure of Vessel.
P1/27, Certificate of Departure of Vessel.
P1/149, Ship's Mail Declaration.
P.21, Post Office Certificate.
Port Health:
Maritime Declaration of Health.
Crew List with last vaccination dates.
Deratisation Certificate.
Port Authority:
T.958, Report of Arrival.
T.962, Departure/Shifting Notification.
Ship's Manifest.

PILOTAGE: Compulsory. One hour advance notice to be given to the Port Captain through VHF radio, call sign Port Operations, on Channel 16, working Channel 12. Pilot boat fitted with multi-channel VHF. Motor pilot boat, black hull, white housing. Pilot taken aboard at port entrance.

HELICOPTER SERVICE: Available for mail and small items of stores for vessels not wishing to enter harbour.

LAUNCH SERVICE: For vessels not wishing to enter harbour, Agent may arrange launch service for mail, stores, etc. In this case service only permissible in area North and West of position at least 5 miles due West of Robben Island.

ENTRY RESTRICTIONS: Vessels not permitted to enter unless Agents have been appointed. Oil tankers and ships carrying explosives or dangerous goods restricted to daylight hours.

MAX. SIZE: Passenger and dry cargo vessels: max. length up to 1,000 ft. overall; draft 36 ft. Tankers: max. length 820 ft. overall; draft 43 ft. (tidal).

HEALTH: Pratique granted at first port of entry in South Africa. Pratique message 24 hours prior to arrival to "Port Health" at port of entry. If radio pratique not granted "Q" flag to be flown until ship has been cleared. Valid certificates must be held for smallpox and yellow fever. Ships from Eastern ports must also have valid certificates for cholera and typhoid.

RADIO: Capetown Radio, call sign ZSC.

TUGS: Join vessel approximately 0.25 mile from harbour entrance. Tug's wires used at no extra charge.

BERTHING:

Wharfage	*Length (m.)*	*Depth at LWOST* *Max. (m.)*	*Depth at LWOST* *Min. (m.)*	*Cranes (electric)* *No.*	*Cranes (electric)* *Lifting capacity (tons)*
Victoria Basin					
No. 1 Jetty	158.5	—	6.0	—	
(being reconstructed)	146.3	—	5.4	—	
No. 2 Jetty	195.1	—	9.1	10	4
	195.1	—	10.0		
Collier Jetty	208.5	6.4	5.6	—	
	212.4	9.8	5.3		
South Arm (Berths 1, 2, 3, 4)	600.5	—	8.2	1 18 4	15 4 3
Elbow	161.5	—	9.6	6	4
No. 4 Quay	29.0 18.3	—	3.0	—	
No. 5 Quay	94.5	—	4.3	—	
No. 6 Quay	183.8	—	6.7	6	4
No. 7 Quay	192.0	—	9.9	6 1	4 15
East Pier	239.6	—	10.0	7	4
Cross Berth	137.2	—	4.4	—	
Fish Quay	91.1	—	2.4	—	
Alfred Basin					
West Quay	225.9	—	5.9	2	4
North Quay	134.1	—	6.1	2	4
East Quay, No. 1 Berth	100.6	—	3.9	—	
East Quay, No. 2 Berth	70.7	—	4.1	—	
East Quay, No. 3 Berth	64.0	—	4.0	—	
East Quay, No. 4 Berth	54.9 39.6	—	4.0	—	
South Quay	45.7	—	4.3	—	
Duncan Dock					
Berth "A"	274.3	—	10.9	10 1	4 15
Berth "B"	243.8	—	11.2		
Berth "C"	213.4	10.7	10.3	21	4
Berth "D"	185.0	9.8	9.1		
Berth "E"	225.6	—	10.6		
Berth "F"	249.9	—	10.6		
Berth "G"	249.9	—	10.6	3	15
Berth "H"	318.5	12.0	—	46	4
Berth "J"	249.9	—	10.6		
Berth "K"	249.9	—	10.3		
Berth "L"	246.3	—	9.4		
Berth "M", N.W. Side	217.9	6.7	5.7		
	43.9	6.1	5.7		
Repair Pier, N.E. Side	13.7	10.7	6.1	1	15
	457.8	—	10.2		
Repair Pier, S.W. Side	13.7	9.2	6.1		
	457.8	—	10.4		
Graving Dock Landing Wharf:	274.3	—	10.1	—	
N.E. Side	274.3	—	14.0	—	
S.W. Side	274.3	—	11.8	—	
	274.3	—	13.0	—	
No. 1 Eastern Mole	259.1	—	12.7	—	
No. 2 Eastern Mole	259.1	—	13.2		

New basin under construction adjacent to Duncan Dock will provide additional 7 deep-sea berths including 2 berths fully equipped for containers. Completion date 1977.

CRANE: *Floating crane:* Lifts 60 tons at 24.4 m. radius.

A new floating crane, capacity 120 tons, expected to be operational by mid-1977.

BULK HANDLING FACILITIES: *Grain Elevator:* 1 terminal grain elevator of 27,220 tons storage capacity, with loading conveyors to the Collier Jetty. Continuous intake capacity of elevator, 750 t.p.h.; shipping capacity, 1,000 t.p.h.

MEDICAL: Unrestricted hospital facilities. Medical assistance must be arranged through Agents.

TANKERS: Diameter of line 8 in. 2 Tanker berths, max. length 820 ft., max. draft 43 ft. (tidal). Slop tank available for oily ballast from tankers back-loading white oil.

DENSITY: 1025.

FRESH WATER: Delivery by hose ex-wharf hydrants. 50 t.p.h.

FUEL: 48 hours notice required. All grades of fuel available.

DEVELOPMENTS: An outer harbour is to be constructed initially providing 8 berths for dry cargo ships with a depth alongside of 42 ft. at LWOST.

GANGWAY/DECK WATCHMEN: Ship's Agent makes necessary arrangements.

OPENING/CLOSING HATCHES: Mechanical hatches opened/ closed by crew. Other types of hatches by stevedores.

CERTIFICATES: Safety Certificates in respect of construction and gear.
Radio Certificate.
Load Line Certificate.
Deratisation Certificate.
Certificate of competent officers (passenger ships only).

CUSTOMS ALLOWANCE: 200 cigarettes per man. Officers allowed 1 bottle spirits.

CARGO GEAR: All cargo handling equipment must be in good condition and certificates available for inspection.

IDENTIFICATION CARDS: Required, otherwise National Identity Cards, if available.

CONSULS:

Argentine
Australia
Austria
Belgium
Brazil
Canada
Chile
Denmark
Finland
France
Germany
Greece
Italy
Japan
Mexico
Netherlands
Norway
Panama
Peru
Portugal
Spain
Sweden
Switzerland
United Kingdom
U.S.A.
Uruguay

REPAIRS: All types of repairs can be undertaken.

DRY DOCKS:

Sturrock Graving Dock: Situated at S.E. end of Duncan Dock:
Dimensions— Overall docking length 360.0 m.
Length on keel blocks (first to last keel block) 338.3 m.
Length on bottom (dock floor) 350.4 m.
Width at coping 47.5 m.
Width at entrance top 45.1 m.
Maximum width at bottom 38.4 m.
Depth on entrance sill, HWOST 13.7 m.
Depth on inner sill, HWOST 15.1 m.

A docking length of 369.6 m. can be obtained by placing the caisson in the emergency stop at the entrance.

The dock can be divided into 2 compartments of either 132.5 m. and 216.1 m. or 205.7 m., and 142.9 m. respectively.

One 50 ton and one 10 ton electric crane on 7.6 m. gauge track, two 5 ton electric cranes on 4.9 m. gauge track and one 4 ton electric crane on 4.9 m. gauge track are available.

The dock can be emptied in 4 hours.

A landing wharf 548.6 m. in length is provided on the port side of the graving dock to facilitate the dry-docking of ships.

A repair pier 457.8 m. in length with a depth along both sides of 10.7 m. at LWOST is provided off M berth. One 15 ton electric crane on 9.1 m. gauge track is available.

Robinson Graving Dock: Situated in Alfred Basin:

Dimensions—	Overall docking length	161.2 m.
	Length on keel blocks (first to last keel block)	142.6 m.
	Length on bottom	152.4 m.
	Width at coping	27.4 m.
	Width at entrance top	20.7 m.
	Maximum width at bottom	17.2 m.
	Depth on entrance sill, HWOST	8.3 m.
	Depth on inner sill, HWOST	7.9 m.

Three 4 ton electric cranes on 4.1 m. gauge track and one 15 ton electric crane, on 4.1 m. gauge track are available.

The dock can be emptied in 3 hours.

Floating Dock No. 2:

Dimensions—	Extreme length	62.8 m.
	Length on bottom	61.0 m.
	Length on keel blocks	58.2 m.
	Extreme width	19.2 m.
	Width at entrance	13.7 m.
	Height of keel blocks	1.2 m.
	Draft on keel blocks, HWOST	5.6 m.
	Lifting capacity	1,016 tons

A 4 ton electric crane is mounted on a side wall of the dock.

Syncrolift Situated in Alfred Basin:

Dimensions—	Lifting capacity	1,750 tons
	Maximum length of vessel	61 m.
	Maximum width of vessel	15 m.

Repairing facilities are available for 1×15 m., 1×30 m. and 2×61 m. vessels provided the maximum light displacement of the vessels does not exceed 1,750 tons.

Slipways:

There are 4 boat slips for yachts and small craft.

REPATRIATION: All facilities available.

1. *Vessels docking*
   - *(a)* Any personnel arriving to join a vessel at Capetown should possess a valid travel document and a brief letter of introduction. Entry Permits can be extended if the vessel is late in arriving.
   - *(b)* Application to spend time (longer than 48 hours) in South Africa prior to repatriation should be made to the local immigration authorities.
2. *Vessels calling off Port Limits*
   - *(a)* The same requirements apply as for 1(a) with the exception of personnel who have entered the country from a vessel calling off Port Limits.
   - *(b)* The following applies to all personnel disembarking from vessels calling off Port Limits.
     - (i) Repatriation must be made within 48 hours from time of offsigning.
     - (ii) In order to comply with local immigration authorities the agency requires the following details, for each individual, at least 72 hours before disembarkation:
       - *(a)* Full name and nationality.
       - *(b)* Rank and, if Technician, name of employers.
       - *(c)* Passport number, place and date of issue.
       - *(d)* Place and date of birth.
       - *(e)* Destination and class of travel.
       - *(f)* If air ticket held on board, full details of routing.
       - *(g)* Reasons for disembarkation.

In the case of personnel transferring from one company vessel to another, the same conditions apply except the maximum time permitted for such transfer is 78 hours. If they have not joined the vessel within this period, repatriation must be arranged forthwith.

There are no difficulties for any personnel disembarking for medical reasons.

AIRPORT: D.F. Malan Airport – 15 miles from harbour. Daily flights to Johannesburg connecting with overseas flights by regular airlines.

TIME: GMT plus 2 hours.

HOLIDAYS: New Year's Day (1st January); Good Friday, Easter Monday, Ascension Day (date varies); Republic Day (31st May); Settlers' Day (1st Monday in September); Kruger Day (10th October); Day of the Covenant (16th December); Christmas Day (25th December); Boxing Day (26th December). Cargo is not worked on Christmas Day and New Year's Day.

POLICE/AMBULANCE/FIRE: Police, 38-3471; Ambulance, 51-5151; Fire, 438-2978 or 438-3431.

TELEPHONES: Telephones can be supplied at all berths. Arrange through Agents.

SHORE LEAVE: Allowed.

SHIPMASTER'S REPORT: Off limits launch (and helicopter) service.

Port, Immigration, Customs and Health Authorities have made it clear that this service is a privilege and not a right. It is therefore of the utmost importance that the regulations are strictly adhered to.

The Agent must apply to the Port Captain for permission to service the vessel and the following details must be submitted. Name of vessel, time and date of arrival, draft, where from, where to, stores required and other reasons for call.

Launch is only allowed to be alongside vessel for 1 hour maximum otherwise vessel will have to enter port limits and incur port dues. Tariff R.15.00 per half hour, minimum R60.00.

If personnel embarking, Immigration Authorities require name of vessel, tonnage, whether ballast or loaded and names of persons embarking. If persons disembarking then full names, dates and places of birth, nationality, passport or discharge book number and expiry date, whether South African visa held and comprehensive reason for leaving vessel, arrangements made for departure from South Africa (usually 24/48 hours allowed), and flight number. This does not apply to medical cases. Guarantee from Agent accepting full responsibility and liability regarding maintenance and repatriation expenses. Persons disembarking must report immediately to Passport Control. Failure to report or leave South Africa on the booked flight is an offence and in addition to any fine or imprisonment the Owners will be refused any further off limits service for *any of their vessels*.

Port health require application for radio pratique 48/24 hours before arrival. Customs require all bonded stores loaded to be signed for and ship's stamp applied. Stores or spares being landed must have prior notification to Agent and an accompanying letter giving full description and disposal instructions.

Agents require 168, 96, 48, 24, and 12 hours' notices followed by any amendment to ETA. Stores requirements should be sent at least 96 hours before arrival. Three copies of Crew List to be sent ashore with launch (or helicopter).

Services operate 24 hours per day and usual rendezvous position is 5 miles West of Green Point lighthouse for launch (and 12 miles West for helicopter). Launch can carry up to 30 tons stores (and helicopter up to 2,000 lb.). Vessels should not anchor but provide a good lee and have derrick rigged. Contact should be made with the launch (or helicopter) one to two hours before arrival rendezvous point using Channel 16.

AUTHORITY: South African Railways, Port Captain, Table Bay Harbour.

AGENT: Freight Services Ships Agency Co., 2nd Floor Cape Town Centre, Heerengracht, POB 702, Cape Town. Tel: 45-4011. Telex: 5-7614. Cables: Seafreight Cape Town.

DURBAN (Port Natal): 29.53 S. 31.02 E. (See Plan)

PORT LIMITS: The area of sea bounded by: (1) to the North, a line drawn from the coast in position: 28° 48′ 42″ S. 31° 02′ 32″ E. in a 090° (True) direction to position 29° 48′ 42″ S. 31° 7′ 30″ E.; (2) to the South, a line drawn from the coast in position; 29° 54′ 06″ S. 31° 02′ 30″ E. in a 090° (True) direction to position 29° 54′ 06″ S. 31° 7′ 30″ E.; (3) to the East, a line joining the seaward positions in (1) and (2).

DOCUMENTS:

Customs:

Form DA.1, Report Inwards/Outwards for Ships.
Form DA.3, Certificate of Clearance for Ships.
Form DA.4, Transire – for a destination in the R.S.A.
Form DA.5, List of Sealable Goods on Board Ship.
Ships Crew List (Customs Department).
Livestock Form (Customs Department).

Post Office:

P.160, Notification of Departure of Vessel.
P1/27, Certificate of Departure of Vessel.
P1/149, Ship Mail Declaration.
P.21, Post Office Certificate.

Port Health:

Maritime Declaration of Health.
Crew List with last vaccination dates.
Deratisation Certificate.

Port Authority:

T.958, Report of Arrival.
T.962, Departure/Shifting Notification.
Ship's Manifest.

PILOTAGE: Compulsory. 1 hour advance notice to be given to Port Captain through VHF radio – Port Operation – calling Channel 16, working Channel 12. Call Pilot by Aldis lamp if necessary. Pilot boats fitted with multi-channel VHF. Motor pilot boat – black hull, white housing. "Pilot-Loods" painted in black on housing. Steam pilot boat – black hull, brown housing and yellow funnel. Pilot taken aboard at outer anchorage.

RESTRICTIONS: Vessels not permitted to enter unless Agents have been appointed. Oil tankers and ships carrying explosives or dangerous goods restricted to daytime hours. The depth of the inner and outer channels is 12.8 m. at LWOST.

MAX. SIZE: The draft permitted is 40 ft. (12.10 m.) The length of 800 ft. is also exceeded with the Port Captain's approval.

HEALTH: Pratique granted at first port in South Africa. Pratique message 24 hours prior to arrival to "Port Health" at port of entry. If radio pratique not granted "Q" flag to be flown until ship has been cleared. Valid certificates must be held for smallpox and yellow fever. Ships from Eastern ports must also have valid certificates for cholera and typhoid. *Shipmaster's Report:* Valid Yellow Fever Certificate not required.

RADIO: Durban Radio – ZSD.

TUGS: 8 first-class tugs available. Join vessels in entrance channel. Tug's wires used at no extra charge.

BERTHING:

Wharfage	*Length* (m.)	*Depth at LWOST* *Max.* (m.)	*Depth at LWOST* *Min.* (m.)	*Cranes (electric)* *No.*	*Cranes (electric)* *Lifting capacity* (tons)
Point and "T" Jetty					
A to C Berths	775	11.7	9.1	23	4
				1	*81
D to H Berths	1,024	9.1	7.0	35	4
L and M Berths	651	12.2	11.0	17	4
				2	15
N Berth	262	12.2	12.2	6	4
O and P Berths	620	12.2	11.0	14	4
				3	7.5
				1	15
Q and R Berths	366	11.0	11.0	11	4
A Berth Extension (Tug Berth)	62	9.1	9.1	—	
Repair Quay (Shop 17)	183	6.7	6.7	1	10
Pier No. 1					
Berth 101	229	12.8	12.8	4	4
				2	7.5
Berth 102	213	12.8	12.8	4	4
				2	7.5
Berth 103	235	12.8	12.8	4	4
				2	7.5
Berth 104	351	12.8	12.8	4	4
				2	7.5
				1	15
Berth 105	235	12.8	12.8	4	4
				2	7.5
Berth 106	213	12.8	12.8	4	4
				2	7.5
Berth 107	238	12.8	12.8	4	4
				2	7.5
Cross Berth					
Berths 108 and 109	545	12.8	12.8	—	
Bluff Berths					
Berth 1	148	9.1	9.1	—	
Berth 2	177	10.4	10.4	—	
Berth 3	180	9.1	9.1	—	
Berth 4	238	10.7	10.7	—	
Dolphins Berths—Island View					
Berth 1	213	12.8	12.8	—	
Berths 2 and 3 (167.5 m each)	335	10.7	10.7	—	
Berth 4	186	10.7	10.7	—	
Berths 5 and 6 (186 m. each)	372	11.0	10.7	—	
Berth 7	229	12.8	12.8	—	
Berth 8	229	12.8	12.8	—	
Berth 9	244	12.8	12.8	—	
Salisbury Island					
Berths 1 and 2 (213 m. each)	427	9.1	7.6	1	3
Harbour Craft Quay	276	12.8	9.1	—	
Harbour Craft Quay (works foreman)	103	6.1	6.1	—	
Maydon Wharf (Congella)					
Berth 1	152	9.9	9.9	—	
Berth 2	152	9.9	9.9	—	
Berth 3	152	9.9	9.9	—	
Berth 4	152	9.9	9.9	—	
Berth 5	201	9.9	9.9	—	
Berth 6	198	9.9	9.9	6	4
Berth 7	198	9.9	9.9	5	4
				1	4
Berth 8	165	9.9	9.9	—	
Berth 9	160	9.9	9.9	4	3
				1	4
Berth 10	283	10.7	9.9	8	4
Berth 11	160	9.9	9.9	1	15
Berth 12	275	6.1	6.1	11	4
Berth 13	175	9.9	9.9	—	
Berth 14	175	9.9	9.9	—	
Berth 15	213	9.9	9.9	—	
Graving Dock Return Wall	79	11.3	6.1	—	
Repair Quay	155	6.1	6.1	2	3
				1	15
Fish Wharf	152	6.1	6.1	—	
Ship-repair Jetty	413	8.5	—	1	10

*81 ton crane can move at right angles to quay only.

CRANES: *Floating Cranes:* 2, lifting capacities of 25 tons and 40 tons, respectively.

Mobile Cranes: Diesel-electric road cranes: One 6.5 tons, four 12.5 tons, four 15/35 tons, one 15/43 and one 33-ton crane. Two 25-ton side-loaders (for container handling).

BULK HANDLING FACILITIES: *Grain elevator:* 1 terminal elevator of 38,100 tons storage capacity, with shipping gallery. Intake capacity of elevator, 1,000 t.p.h.; shipping capacity 1,271 t.p.h.

Privately owned facilities:

(1) Manganese Ore Loading Facilities. Electrical conveyor plant at Congella. Shipping capacity 318 t.p.h.

(2) Sugar Terminal. At Maydon Wharf. Storage capacity of 520,000 tons and shipping rate of 711 tons to 762 t.p.h.

(3) Alumina Handling Facilities. At the Crossberth. Storage capacity of 33,000 tons and conveyor system with discharge rate of 300 t.p.h. Max. size 45,000 d.w.t., max. draft 38 ft.

(4) Bulk Soda-Ash Facilities. At Maydon Wharf. Storage capacity of 20,865 tons and conveyor system with discharge rate of 91 tons to 136 t.p.h.

Bulk-loading Facilities: Electrically-driven appliances for the loading of coal, pig iron, manganese ore, iron ore, etc., are provided at the Bluff. There are 3 dumpers with capacity of 1220 tons, 711 tons and 1,220 t.p.h., respectively. 2 belt loaders capable of loading at the rate of 610 t.p.h. and 3 bucket transporters with an aggregate capacity of 1,220 t.p.h. are available. The overhead storage bins have a capacity of 10,160 tons, while concrete bins are provided for ground storage with the following capacities:

1. Anthracite throughout–64,630 tons.
2. Mixture of anthracite and pig iron: Anthracite–48,000 tons.
   Pig iron–43,345 tons.

Anthracite Storage Facilities: Concrete ground storage bins of 18,290 tons capacity at Salisbury Island.

STEVEDORES: Stevedoring undertaken by private enterprise stevedores appointed by ship's Agent.

MEDICAL: Unrestricted hospital facilities. Medical assistance must be arranged through Agents.

TANKERS: Off-shore Single Buoy mooring suitable for tankers up to 200,000 tons situated in position 30° 0′ 30″ S., 30° 58′ 29″ E.

Mooring Master boards in position 2 miles East of SBM. Rope messengers should be available on forecastle, and manifold prepared to connect two 16-in. hoses ASA 150 flanges. Stores launch can be arranged for up to 30 tons stores, provided that vessels anchor outside port and territorial limits. No bunkers, no fresh water, and no shore leave for vessels at single buoy mooring.

In harbour 4 tanker berths, for vessels of max. length 800 ft., max. draft 38ft. Slop tanks available. Crude discharge through 10in, hoses, white oil 8 in. hoses, loading products through 8 in. hoses.

Additional Crude Oil Discharge Berth with depth alongside of 42 ft. under construction, but maximum permissible draft 38 ft.

DENSITY: 1025.

FRESH WATER: Delivery by hose ex-wharf hydrants. Rate of delivery 100 t.p.h.

FUEL: All grades of fuel available. 48 hours notice required. Fuel may be obtained alongside berths or by barge. No barging outside harbour area.

OPENING/CLOSING HATCHES: Mechanical hatches opened/closed by crew. Other types of hatches by stevedores.

CERTIFICATES:

Safety Certificates in respect of construction and gear.
Radio Certificate.
Load-line Certificate.
Deratisation Certificate.
Certificate of competent officers (passenger ships only).

CUSTOMS ALLOWANCE: The following are allowed for Master, officers and crew respectively: Tobacco in any form, 8 oz., 6 oz., 4 oz. Spirits: 26.7 fl. oz., 26.7 fl. oz., nil. Wine: 106.6 fl. oz. each. Beer: 106.6. fl oz., 106.6 fl. oz., nil.

CARGO GEAR: All cargo handling equipment must be in good condition and certificates available for inspection.

IDENTIFICATION CARDS: Required, otherwise National Identity Cards, if available.

CONSULS:

Austria	tel. 69512	Netherlands	tel. 20387
Belgium	,, 25968	Norway	,, 21694
Chile	356171	Panama	20653
Denmark	,, 20731	Portugal	,, 22603
Finland	21694	Sweden	66591
France	20181	Switzerland	,, 21130
Germany	,, 29474	Thailand	,, 20731
Greece	,, 25086	U.K.	313131
Italy	,, 64107	U.S.A.	,, 28388
Japan	,, 78517		

REPAIRS: All types of repairs can be undertaken.

DRY DOCKS: *Prince Edward Graving Dock:*

Dimensions—	Overall docking length	352.044 m.
	Length on keel blocks	327.660 m.
	Length on bottom	352.044 m.
	Width at coping	42.215 m.
	Width at entrance top	33.528 m.
	Maximum width at bottom	33.528 m.
	Depth on entrance sill HWOST	12.497 m.
	Depth on inner sill HWOST	13.106 m.

A docking length of 364.44 m. can be obtained by placing the caisson in the emergency stop at the entrance.

The dock can be divided into 2 compartments:
Outer 206.906 m. and inner 138.684 m.

One 25 ton electric crane with 27.342 m. radius and one 10 ton crane on 7.925 m. gauge track and one 10 ton and two 5 ton electric cranes on 4.572 m. gauge tracks are available. The dock can be emptied in 4 hours.

Floating Dock No. 3:

Dimensions—	Extreme length	106.680 m.
	Length on bottom	106.680 m.
	Length on keel blocks	104.546 m.
	Extreme width	26.822 m.
	Width at entrance	19.482 m.
	Height on keel blocks	1.219 m.
	Draft on keel blocks, HWOST	5.334 m.
	Lifting capacity	3.629 tons
	Crane	4 tons

REPATRIATION: All facilities available.
AIRPORT: Louis Botha Airport – 15 miles from harbour. Daily flights to Johannesburg connecting with overseas flights by regular airlines.
TIME: GMT plus 2 hours.
HOLIDAYS: New Year's Day (1st January); Good Friday, Easter Monday, Ascension Day (date varies); Republic Day (31st May); Settlers' Day (1st Monday in September); Kruger Day (10th October); Day of the Covenant (16th December); Christmas Day (25th December); Boxing Day (26th December). Cargo is not worked on Christmas day and Good Friday.
POLICE/AMBULANCE/FIRE: Police, 310-2716 or 887; Ambulance, 62333 or 310-2104; Fire, 310-2104 or 62333.
TELEPHONES: Telephones can be supplied at all berths. Arrange through Agents.
GENERAL: A copy of the Regulations for the Republic of South Africa and of South West Africa supplied gratis to Masters on arrival.
SERVICES: Tank-cleaning facilities, compass adjustments and repairs to all electronic gear can be undertaken.
SHORE LEAVE: Allowed.
AUTHORITY: South African Railways, Port Captain, Durban.

AGENT: Freight Services Ships Agency Company Limited, 17th Floor – Durban Bay House, 333 Smith Street, P.O. Box 1020, Durban; Tel. No. 318174/80; Telex: 6–2540; Cables: Seafreight Durban.

EAST LONDON: 33.02 S. 27.55 E. (See Plan)

PORT LIMITS: These are defined in the "Regulations for the Harbours of the Republic of South Africa" as follows:

The area of the sea bounded by a line drawn from the Nahoon Point in position 32° 59′ 50″ S. 27° 57′ 07.5″ E. in a 114° direction for 1 sea mile to a position 33° 00′ 13.9″ S. 27° 58′ 12.8″ E. thence in a 216.5° direction to a position 33° 03′ 14.46″ S. 27° 55′ 37.18″ E. and thence in a position 295° direction to the coast in position 33° 02′ 36″ S. 27° 53′ 57″ E. (All bearings are true.).

For Harbour Revenue purposes, a vessel "arrives" when it passes into the harbour proper.

DOCUMENTS:
Customs:
- Form DA.1, Report Inward/Outward for Ships.
- Form DA.3, Certificate of Clearance for Ships.
- Form DA.4, Transire – for a destination in the R.S.A.
- DA.5, List of Sealable Goods on board ship.
- Ships Crew List (Customs Department).
- Livestock Form (Customs Department).

Post Office:
- P.160, Notification of Departure of Vessel.
- P1/27, Certificate of Departure of Vessel.
- P1/149, Ship's Mail Declaration.
- P.21, Post Office Certificate.

Port Health:
- Maritime Declaration of health.
- Crew List with last vaccination dates.
- Deratisation Certificate.

Port Authority:
- T.958, Report of Arrival.
- T.962, Departure/Shifting Notification.
- Ship's Manifest.

PILOTAGE: Compulsory. One hour advance notice to be given to Port Captain through VHF radio – Port Operation – calling Channel 16, working Channel 12. Pilot boats fitted with multi-channel VHF. Motor pilot boat – black hull, white housing "Pilot-Loods" painted in black on housing. Steam pilot boat – black hull, brown housing and yellow funnel. Pilot taken aboard at outer anchorage.
RESTRICTIONS: Vessels not permitted to enter unless Agents have been appointed.

Port operates from: 0600 to 2200 hrs. Mondays to Fridays 0600 to 1300 hrs. Saturdays 0600 to 1900 hrs. Sundays. Tankers are handled in daylight only.
MAX. SIZE: Tankers: max. length 670 ft. overall, draft 32 ft. 6 in.

Passenger and dry cargo vessels: max. length 800 ft. overall, draft 32 ft. 6 in.
HEALTH: Pratique granted at first port of entry in South Africa. Pratique message 24 hours prior to arrival to "Port Health" at port of entry. If radio pratique not granted "Q" flag to be flown until ship has been cleared. Valid certificates must be held for smallpox and yellow fever. Ships from Eastern ports must also have valid certificates for cholera and typhoid.
RADIO: East London Radio, call sign ZSA.
TUGS: Two tugs available. Join vessel in entrance channel. Tug's wires used at no extra charge.

BERTHING:

Wharfage	Length (m.)	Depth at LWOST (m.)	No.	Cranes (electric) Lifting capacity (ton: 1,000 kg)
East Bank				
Fish Wharf	109.7	6.1	—	
No. 2 Quay (C Berth)	205.7	10.7	—	
No. 3 Quay	359.7	9.8	1 9	15 tons 4 tons
No. 4 Quay (Hely-Hutchinson)	132.0	8.5	1 3	5 tons 4 tons
No. 5 Quay	83.8	10.7		
No. 6 Quay	505.9	10.7	2 14	15 tons 4 tons
Repair Quay	109.7	9.1	—	
West Bank				
West Quay	457.2	8.5	1 11	20 tons 4 tons
Slipway Wharf	80.2	4.6	—	
New Commercial Berths (S and T Berths)	388.1	10.7	—	
Oil Tanker Berth	259.1	10.7	—	

*Containers handled at "S" Berth.

CARGO HANDLING FACILITIES: One berth equipped for bulk loading of maize. One berth equipped for discharging bulk petroleum products. All other berths for general cargo. Grain elevator: Storage capacity 75,986 tons; loading rate 1,633 t.p.h. through 4 spouts.
MEDICAL: Unrestricted hospital facilities. Medical assistance must be arranged through Agents.
TANKERS: One tanker berth suitable for vessels of 670 ft. length with maximum draft 32 ft. 6in. Diameter of hoses, 12 in.
DENSITY: 1025.
FRESH WATER: Delivery by hose ex-wharf hydrants. Rate of delivery 60 t.p.h.
FUEL: 48 hours notice required. All grades of fuel available.
OPENING/CLOSING HATCHES: Mechanical hatches opened/closed by crew. Other types of hatches by stevedores.
CERTIFICATES:
- Safety Certificates in respect of construction and gear.
- Radio Certificate.
- Load-line Certificate.
- Deratisation Certificate.
- Certificate of Competent Officers (passenger ships only).

CUSTOMS ALLOWANCE: 200 cigarettes or 5 lb. tobacco. Officers only allowed 1 bottle spirits.
CARGO GEAR: All cargo handling equipment must be in good condition and certificates available for inspection.
IDENTIFICATION CARDS: Required, otherwise National Identity Cards, if available.
CONSULS:

Belgium
Denmark
France
Germany
Italy
Netherlands
Norway
Portugal
Sweden

REPAIRS: All types of repairs can be undertaken.
DRY DOCKS: *Princess Elizabeth Graving Dock:*

Dimensions—	Overall docking length	198.5 m.
	Length on keel blocks	193.1 m.
	Length on bottom	198.5 m.
	Width at coping	31.2 m.
	Width at entrance top	27.2 m.
	Maximum width at sill level	22.9 m.
	Depth on entrance sill, HWOST	10.2 m.
	Depth on inner sill, HWOST	10.2 m.

A docking length of 209.2 m. can be obtained by placing the caisson in the emergency stop at the entrance.

Two 15-ton and one 5-ton electric cranes on 4.9 m. gauge track are available.

The dock can be emptied in 4 hours.

Slipway:

Extreme length	222.5 m.
Length of cradle	63.4 m.
Draft on keel blocks, HWOST:	
Forward end	3.5 m.
Aft end	6.7 m.
Capacity	610 tons

REPATRIATION: All facilities available.
AIRPORT: Ben Schoeman Airport – 6 miles from harbour. Daily flights to Johannesburg connecting with overseas flights by regular airlines.
TIME: GMT plus 2 hours.
HOLIDAYS: See "Durban".
POLICE/AMBULANCE/FIRE: Police 2–5555; Ambulance 2–1212; Fire 2–1212. Sea Rescue Service 22555.
TELEPHONES: Telephones can be supplied at all berths. Arrange through Agents.
SHORE LEAVE: Allowed.
AUTHORITY: South African Railways. Port Captain, East London.

AGENT: Freight Services Ships Agency Company Limited, 2nd Floor Union Arcade Building, Cnr. Union & Buffalo Streets, P.O. Box 2, East London; Tel. No. 26787/8; Telex: 75–761; Cables: Seafreight East London.

MOSSEL BAY: 34.10 S.22.10 E. (See Plan)

PORT LIMITS: Within a line drawn from Cape St. Blaize lighthouse to the mouth of the Little Brak River, thence along the highwater mark so as to include the foreshore between these points, together with Seal Island, the estuary of the Little Brak River as far as the tide flows.

DOCUMENTS: Refer to "Durban".

PILOTAGE: Compulsory. 1 hour advance notice to be given to Port Captain through VHF radio. Port operation calling Channel 16, Working Channel 12. Motor pilot boat – black hull, white housing "Pilot-Loods" painted in black on housing. International pilotage signals used. Pilot boards about 2 miles North of Cape St. Blaize Light.

ANCHORAGE: Open anchorage, depth 8 fathoms about 1 mile E.S.E. of Seal Island.

RESTRICTIONS: Vessels not permitted to enter unless Agents have been appointed. No night berthing for tankers.

MAX. SIZE: Anchorage: no restrictions. Tankers: up to 32,000 d.w.t.

HEALTH: Pratique granted at first port of entry in South Africa. Pratique message 24 hours prior to arrival to "Port Health" at port of entry. If radio pratique not granted "Q" flag to be flown until ship has been cleared.

Valid certificates must be held for smallpox and yellow fever. Ships from Eastern ports must also have valid certificates for cholera and typhoid.

RADIO: Cape Town Radio, ZSC. Port Elizabeth Radio, ZSQ.

TUGS: 1 tug of 300 h.p. available.

BERTHING:

Wharfage	Dimensions Length (m.)	Cope Level above LWOST (m.)	Depth at LWOST Max. (m.)	Depth at LWOST Min. (m.)	Cranes (electric) No.	Cranes (electric) Lifting capacity (tons)
No. 1 Jetty (2 sides) each	107	5.6	4.6	3.0	1	2
*Low Level Wharf	61	2.6	1.7	1.7		
*No. 1 Quay	44	4.4	1.7	1.7		
*No. 2 Quay	50	4.4	2.7	2.7		
No. 3 Quay	213	3.5	6.7	5.5	1	4
No. 4 Quay	274	3.7	7.3	7.3	2	4

*Suitable for small fishing craft only.

TANKERS: Conventional buoy mooring designed for 32,000 d.w.t. vessels up to 670 ft. length. Situated offshore at Voorbaai. No slop facilities.

Vessels use both anchors (approx. 9 shackles on each). There are 5 mooring buoys which are kept underwater when not in use. Vessels should have 10 full coils of rope. They should be well ballasted at all times as there is very little warning of strong winds which may suddenly come up.

DENSITY: S.G. 1025.

FRESH WATER: Not available.

FUEL: Not available.

MEDICAL: Cape St. Blaize lighthouse on 24-hour watch. Requests for medical assistance passed through lighthouse to Harbour Master and Pilot.

Hospital facilities available. Vessels in port should arrange medical facilities through Agent.

CUSTOMS ALLOWANCE: 200 cigarettes for each man. No alcohol.

CARGO GEAR: All cargo handling equipment must be in good condition and certificates available for inspection.

IDENTIFICATION CARDS: Required. Otherwise National Identity Cards, if available.

REPAIRS: Only minor repairs can be undertaken.

TIME: GMT plus 2 hours.

HOLIDAYS: New Year's Day (1st Jan.); Van Riebeeck Day (6th April); Good Friday, Easter Monday, Ascension Day (dates vary); Republic Day (31st May); Family Day (2nd Monday in July); Settler's Day (1st Monday in September); Kruger Day (10th October); Day of the Covenant (16th December); Christmas Day (25th December); Boxing Day (26th December). Cargo is not worked on Christmas Day and Good Friday.

SHORE LEAVE: Allowed.

AUTHORITY: South African Railways. Port Captain, Mossel Bay.

AGENT: See "Durban".

PORT ELIZABETH: (Algoa Bay): 33.58 S. 25.37 E. (See Plan)

PORT LIMITS: Bounded on the Southward by a line drawn from Cape Recife, East (true) to a point in the Indian Ocean, distant 1,609 m. on the Northward by a line drawn from the extreme point of the East bank of the Zwartkops River, East (true) distant 1,609 m.; on the Eastward by a line drawn between these 2 points, and shall embrace the foreshore between high and low water marks from Cape Recife lighthouse to the aforesaid line at East bank of the Zwartkops River, including that portion of the said river which lies on the seaward side of the bridge carrying the railway line to Alicedale.

DOCUMENTS: *Customs*

Form DA.1 Report Inwards/Outwards for ships.
Form DA.3 Certificate of clearance for ships.
Form DA.4 Transire – for a destination in the R.S.A.
Form DA.5 List of sealable goods on board ship.
Ships Crew List (Customs Department).
Livestock Form (Customs Department).

Post Office

P.160 Notification of departure of vessel.
P1/27 Certificate of departure of vessel.
P1/149 Ship mail declaration.
P.21 Post Office Certificate.

Port Health

Maritime Declaration of Health.
Crew List with last vaccination dates.
Deratisation Certificate.

Port Authority

T.958 Report of Arrival.
T.962 A Departure/Shifting Notification.
Ship's Manifest.

PILOTAGE: Compulsory. 1 hour advance notice to be given to Port Captain through VHF radio. Port operation calling Channel 16, working Channel 12. Pilot boats fitted with multi-channel VHF. Motor pilot boat – black hull, white housing "Pilot-Loods" painted in black – Black hull, brown housing and yellow funnel.

Pilot taken aboard at outer anchorage.

RESTRICTIONS: Vessels not permitted to enter unless Agents have been appointed.

Dry-cargo ships 0600 to 2200 hrs. Pilot must be aboard by 2030 hrs.

MAX. SIZE:

	Max. length	*Draft*
Passenger and dry-cargo vessels	Unlimited	34' 6"
Tankers	667 ft. overall	32'
Ore carriers	825 ft. overall	38 ft. (tidal)

HEALTH: Pratique granted at first port of entry in South Africa. Pratique message 24 hours prior to arrival to "Port Health" at port of entry. If radio pratique not granted "Q" flag to be flown until ship has been cleared.

Valid certificates must be held for smallpox and yellow fever. Ships from Eastern ports must also have valid certificates for cholera and typhoid.

RADIO: Port Elizabeth Radio. Call sign ZSQ.

TUGS: 3 tugs available, fitted with VHF. Tugs join between anchorage and harbour entrance. Tug's wires used at no extra charge.

BERTHING:

Wharfage	Dimensions Length (m.)	Dimensions Cope level (m.)	Depth at LWOST Max. (m.)	Depth at LWOST Min. (m.)	Cranes (electric) No.	Cranes (electric) Lifting capacity (tons)
Charl Malan Quay	1,086	5.2	11.0	11.0	4 33	15 4
No. 2 Quay	519	5.2	11.0	11.0	1 13	15 4
North Jetty	240	5.2	6.1	3.0		
Trawler Quay	136	3.4	5.5	5.5		
Fish Wharf	101	3.4	4.0	0.9		
No. 3 Quay	576	5.2	10.0	5.5	16 1	4 15
Tanker Berth	242	3.7–4.6	9.9	9.9		
Ore Berth	360	5.2	12.2	12.2	1	4

In 1977 1 berth at Charl Malan Quay will be fully equipped for containers.

BULK HANDLING FACILITIES: *Ore Loading Plant:* Storage capacity approx. 460,000 tons. Rated loading capacity 1,360 t.p.h. Ore loaders:

Maximum reach from quay face	19.35 m.
Extreme elevated height of loaders above HWOST	13.92 m.

MEDICAL: Unrestricted hospital facilities. Medical assistance must be arranged through Agent.

TANKERS: Diameter of line 8 in. Max. length 667 ft. Max. draft 32 ft.

DENSITY: S.G. 1025.

FRESH WATER: Delivery by hose ex wharf hydrants. 160 t.p.h.

FUEL: 48 hours notice required. Bunker fuel and gas oil available at oil tanker berth and ore berth.

CUSTOMS ALLOWANCE: 200 cigarettes per man. Only officers allowed 1 bottle spirits.

CARGO GEAR: All cargo handling equipment must be in good condition and certificates available for inspection.

IDENTIFICATION CARDS: Required. Otherwise National Identity Cards, if available.

CONSULS:

Belgium	Tel. 46561	Netherlands	Tel. 21986
Denmark	,, 21958	Norway	,, 21614
Germany	,, 49711	Peru	,, 23213
Greece	,, 25634	Portugal	,, 48451
France	,, 41684	Sweden	,, 21414
Italy	,, 45125	U.K.	,, 22319

REPAIRS: Minor deck and engine room repairs.

REPATRIATION: All facilities available.

AIRPORT: Airport 2 miles from harbour. Daily flights to Johannesburg connecting with overseas flights by regular airlines.

TIME: GMT plus 2 hours.
HOLIDAYS: New Year's Day (1st January); Van Riebeeck Day (6th April); Good Friday, Easter Monday, Ascension Day (dates vary); Republic Day (31st May); Family Day (2nd Monday in July); Settlers' Day (1st Monday in September); Kruger Day (10th October); Day of the Covenant (16th December); Christmas Day (25th December); Boxing Day (26th December). Cargo is not worked on Christmas Day and Good Friday.
POLICE/AMBULANCE/FIRE: Police 50-2781; Ambulance 2-2222; Fire 2-1111.
TELEPHONES: Telephones can be supplied at all berths. Arrange through Agents.
SHORE LEAVE: Allowed.
DEVELOPMENTS: *Charl Malan Quay* is being converted for containerisation. Berths 6 and 7 are currently out of commission. The project will be operational in March 1979 and completed by March 1980.
North Jetty is under re-construction into a roll-on/roll-off berth for car ferries.
St. Croix: Ore loading facility for large bulk carriers to be constructed, completion expected 1978.
AUTHORITY: South African Railways. Port Captain, Port Elizabeth.

AGENT: Freight Services Ships Agency Company Limited, 3rd Floor African Eagle Centre, 162 Main Street, P.O. Box 1108, Port Elizabeth. Tel. No. 523620/4. Telex: 74–7181. Cables: Seafreight Port Elizabeth.

RICHARDS BAY: 28.48 S. 32.06 E. (See Plan)

LOCATION: The port is located some 200 km. North of Durban. Mid point of the bay is approximately 28° 48′ S. and 32° 02′ E.
DOCUMENTS: The following documents should be prepared and ready on berthing:
Port Health:
1 Maritime Declaration of Health.
1 Vaccination List.
1 Crew List.
1 Valid Derat Certificate.
Immigration:
3 Crew Lists.
Customs:
2 Crew Lists.
1 Ship's Stores List.
1 Crew Declaration of Bonded Stores, etc.
Agents:
2 Crew Lists.
Loading Certificate.
Safety Radio Certificate
Safety Equipment Certificate.
Customs: All vessels using the port, will be subject to Customs Inspection and must obtain a Customs Clearance.
PILOTAGE: Pilotage is compulsory and Pilots are provided by the Marine Department of South African Railways and Harbours.

Boarding points are determined by the Pilot, but generally speaking will be within an area approximately 3 km. East of the Harbour Entrance.

At the present time vessels can only enter and leave during daylight. Later this position will be reviewed to consider a 24 hour service.
ANCHORAGE: 3 to 5 miles off Port but not opposite Entrance (precise area not yet demarcated).
Quality of Bottom: Sandy.
Note: Anchorage is similar to Durban and in high S.W. winds anchorage is safe, but in high N.E. winds caution should be exercised.
MAX. SIZE:
LOA Max. 314 m. Beam max. 47.25 m. Draft max. 17 m. D.W. Limit max. 150,000 d.w.t.
Note: SAR have laid down temporary instructions on vessel size. Because the Port is new, shiphandling experience in various weather conditions needs to be gained. This the reason for the following limitations.
July 1976 – March 1977: Max. d.w. – 100,000 tonnes.
From April 1977: Max. d.w. – 150,000 tonnes.
Minimum Ballasted Condition on Entry:

Length	*Draft – Fore*	*Draft – Aft*
600 ft.	20 ft.	24 ft.
700 ft.	25 ft.	28 ft.
800 ft.	26 ft.	30 ft.
900 ft.	27 ft.	32 ft.
over 900 ft.	28 ft.	34 ft.

HEALTH: Radio Pratique can be obtained by cabling Port Health – Durban using the standard international procedure for working. See "Radio".
RADIO: *Arrival Advice:*
To "Porthealth Richardsbay" – direct through Durban Radio – 24 to 48 hours prior arrival – advising ETA, last port, date sailed, number of crew, full inoculation/vaccination status, and state of health of crew, and requesting Radio Pratique. Porthealth will cable vessel directly, either granting pratique or requesting further details. These messages are free of charge.

To "Portcaptain Richardsbay" – direct through Durban Radio – 48 hours prior arrival, advising ETA, draft, freeboard and reason for call at Richards Bay.
VHF: Vessels can communicate with Port Control, on Channel 16 VHF during daylight hours only. When at anchor, listening watch should be kept to receive berthing instructions.
TUGS: Tug attendance is compulsory.
Tugs are owned and operated by South African Railways and Harbours and consist of the following:

1. Voigth Schneider	4,200 h.p. Bollard Pull 43 tons.
2. Diesel Electric	2,270 h.p. Bollard Pull 30 tons.

BERTHING: Line boats are provided by the Harbour Authorities, as are berthing gangs.

Coal Terminal:
Berths No's 301 & 302. Owned and operated by the Richards Bay Coal Terminal Company (Pty) Limited, and is used solely for the export of South African Steam Coal.

Length	700 m.
Depth	19 m.
Quality of bottom	Sandy to hard
Density of sea water	Between 1000/1025 (Fresh to salt)
Height of quay above HWOST	3.2 m.

Shiploaders: Two. (Dimensions apply to one machine)

Loading capacity (nominal)	6,500 m/t.p.h.
Loading capacity (average)	3,500 m/t.p.h.
Loading capacity of Trimmer	3,000 m/t.p.h.
Working Range of Boom	15° up to 15° down
Height of Boom above HWOST with Loader in best working position	21.0 m.
Height of Boom above HWOST with Loader at max. working elevation	21.6 m.

Clean Cargo Berth:
On the North side of the harbour 1,300 m. of quay wall is being constructed. The first 250 m. of this quay, berth 703, was opened on 1st October 1976, the next 250 m., berth 702, will be opened about mid January 1977 and the balance, berths 701 and 609 in June 1977. Depth at berths 703 and 702 will be – 19 m. and the balance at – 12.8 m. All of these berths have adequate back up areas, railway tracks etc. but it is not intended to provide warehousing and cranes at this stage.

Berth 703 will be provided with a pipe-line to load bulk phosphoric acid ex-storage tanks.
MEDICAL:
Hospital: There is a modern and well equipped hospital at Empageni. (Approx. 25 km. from the berth).
Doctor/Dentist: Usual port services available on 24 hour basis.
FRESH WATER: Fresh water is available at the berth. Rate approx. 25 t.p.h.
FUEL: Heavy and Medium Fuel Oil. Diesel Oil and Gasoil are available by pipe-line at the berths 301 and 302 only. Bunkering can take place concurrently with loading.

Stems for bunkers should be placed with normal bunker suppliers who will arrange delivery through the Bunker Supply Company at Richards Bay.
REPAIRS: Written approval must be obtained from the Port Authorities, via the Agents for vessel to immobilise engines to carry out repairs. Repairs may be carried out at the berth.
CUSTOMS ALLOWANCE: Customs, on vessels berthing, allow each member of the crew 200 cigarettes. They normally allow also 1 part bottle spirits and 8 cans (or dumpy bottles) of beer to each officer. No alcohol allowed for rated crew members except in the case of vessels belonging to countries where provision is made for wine in the statutory list of rations.
AIRPORT: There is an airport at Richards Bay 26 km from the Coal Berth, and there are 2 flights per day to Durban, where international connections can be made.
HOLIDAYS: *Local Holidays:*
New Year's Day, 1st January; Good Friday; Easter Monday; Ascension Day; Republic Day, 31st May; Settler's Day, 6th September; Kruger Day, 10th October; Day of the Covenant, 16th December; Christmas Day, 25th December; Family Day, 26th December.

Where such a holiday falls on a Sunday, the Monday following becomes a Public Holiday.
POLLUTION: The Port Authorities demand that no vessel using the port shall discharge any garbage, refuse, vegetable or food matter, deck cleanings polluted bilge water, oil or rubbish of any description in the vicinity of or in the port of Richards Bay.

Heavy penalties will be imposed for breach of the regulations.

Vessels arriving in Ballast must have clean ballast on board, as deballasting takes place alongside the berth. Dirty ballast pumped into the harbour will incur heavy penalties for pollution.
TELEPHONES: Telephones are available at the berth. Application for the service should be made through the Agents in advance.

All telephone calls made will be charged to the vessel's account.

Caution: With direct dialling available internationally it is strongly recommended that telephones are placed in the custody of a responsible officer to avoid abuse.
SHORE LEAVE: There are no restrictions on shore leave for crew. Entertainment in the Richards Bay area is very limited. Durban, 2.5 hours drive away, however, can offer very much more.
DEVELOPMENTS: The above embraces stage 1 of the Richards Bay Harbour Development plan, later stages will include further berths, repair facilities etc. Extension of the town and surrounding areas is taking place rapidly together with large scale industrial and commercial developments.
GENERAL: The harbour and the quays are owned by South African Railways and Harbours.

Provisions: Stores and provisions can be obtained through Ships Chandlers. At present all the Chandlers are situated in Durban but will supply to Richards Bay on request.

Game Parks: National Parks Board Game Reserves (Hluhluwe and Umfolosi) are within easy reach of Richards Bay by car.

Car Hire: Cars can be hired, through the Agents at reasonable cost to officers and responsible crew members only. An International Driving Licence is required to make use of this service.

Navigational Aids: Lighthouse (500,000 candlepower) to be constructed North of the harbour at position 28° 48′ S., 32° 06′ E.

Leading lights – Front 28° 47′ 24.725″ S., 32° 02′ 44.711″ E.

Breakwater tip lights (2 flashes per 5 secs.) South light Red, North light White.

Tides: Tidal change between HWOST and LWOST is approximately 2 m.

Prevailing Winds: South Westerly; North Easterly.

AUTHORITY: South African Railways, Port Captain, Richards Bay.

AGENT: Freight Services Ships Agency Company Limited, P.O. Box 247, Richards Bay. 3900. Telephone 5225, 5319. Telex: 6–0434. Cables: Baybulk.

SALDANHA BAY: 33.02 S. 17.58 E. (See Plan)

DOCUMENTS: *Port Health:*

1 Maritime Declaration of Health.
1 Vaccination List.
1 Crew List.
1 Valid De-ratting Exemption Certificate.

Immigration:

3 Crew Lists only.

Customs:

1 Crew List
1 Ship's Stores List.
1 Crew Declaration.

Agents:

2 Crew List.

Customs: Arrangements have been made with Customs that loading shall commence before Customs Entry is completed. Customs will normally board on arrival for the purpose of checking and sealing Bonded stores, etc.

Immigration: On arrival at the port, any vessel which is not cleared by Immigration shall show the 'I' flag. No persons may disembark or embark without the express permission of the Immigration Officers until such time as Immigration formalities have been completed.

PILOTAGE: Pilotage is compulsory at Saldanha Bay, and will be undertaken by fully qualified Master Mariners employed by the South African Railways and Harbours.

Pilots will normally board vessels in a vicinity between North Head and South Head.

APPROACHES: The navigational channel will be dredged to 23.25 m. below chart datum, and 275 m. wide on each side of the jetty. The exit from the jetty will be 24.00 m. below chart datum, with a min. width of 375 m.

HEALTH: Vessels requesting free pratique should cable Port Health, Cape Town, via Cape Town Radio (ZSC) at least 24 hours before arrival. There is no charge for messages addressed to Port Health. When free pratique cannot be granted, then the vessel will be required to show the 'Q' flag on arrival and will be boarded by Port Health Inspectors at the anchorage in Saldanha Bay.

RADIO: Saldanha Bay will be served by Cape Town Radio (ZSC).

Arrival: Vessels calling at Saldanha Bay to load ore will be required to send their ETA 96 hours prior to arrival, stating the approx. tonnage of ore required, the type of ore and the loading programme. Further messages will be required to be sent at 48 hours and 24 hours prior to arrival, updating the ETA. These ETA's are to be sent via Cape Town Radio (ZSC) addressed to Iscor Harbour Control and also to the Agent.

Vessels calling at Saldanha Bay after leaving Cape Town will be required to send by telex their ETA 24 hours before the expected time of arrival at Saldanha Bay, together with their final tonnages of cargo required, type of ore and loading programmes.

With the final 24 hour ETA the Master will be required to provide the draft forward and aft, and the de-ballasting time required on arrival. If there is any change to this programme a further message should be despatched as soon as possible after any such change is known.

48 hours prior to arrival, in addition to the updated ETA, the vessel must indicate her requirements, i.e. fuel, fresh water, other services to Iscor Harbour Control and the Agents. Final advice of loading programme:

1. Quantity
2. Grading
3. Sequence

to be provided at least 24 hours before Notice of Readiness is given. Failure to provide this information may result in a delay of 12 hours before loading commences. Vessels are to request docking instructions from Iscor Harbour Control 6 hours before arrival. Instructions will be given promptly and concisely.

Vessels will be loaded in regular turn subject to cargo availability and Charter Party Lay Days, providing they berth with hatches open and are ready for loading in all respects.

VHF: *Port Control:* Saldanha Bay Port Control will be equipped with VHF and contact can be made direct using Channels 16, 14, 12.

Tugs: The tugs will operate with VHF Channels 16, 8, 6, and radio telephone.

TUGS: There are two tugs presently on order for Iscor, and will be operated by Safmarine. Each tug will be propelled by Voith Schneider gear, and will be of 4,000 h.p. In January, 1977 one further tug, to be built in Durban, will be delivered.

BERTHING: The jetty construction is of the caisson type, spanned with a deck construction between the caissons. The total jetty length will be 727 m. and the total mooring length available will be 650 m. at a depth of 23.22 m. below chart datum. Vessels can be accommodated on both sides of the jetty and the jetty will be equipped with adequate quick release hooks and fenders.

The design of the jetty makes provision for the mooring of 350,000 d.w.t. loaded vessels with a max. theoretical approach speed of 18 cm./sec. In practice, the approach speed of a vessel will be limited to between 10 and 12 cm./sec. as a maximum. The approach speed and relative position of a vessel to the jetty will be measured by docking sonar equipment, suitably positioned on the jetty and information will be relayed to the pilot by means of light indication, radio and a portable instrument.

In the initial stages, vessels will be loaded from the jetty simultaneously with construction work. The programme for this will be in accordance with details below.

Iscor Ore Loading Jetty: Completion Phases:

Phase number	*1*	*2*	*3*
Period	*26 September 1976 to 14 October 1976*	*15 October 1976 to 28 February 1977*	*1 March 1977 to some future date still to be determined*
Maximum vessel L.O.A. – metres	275	300(2)	350
Vessel's maximum allowable draft loaded – metres	East 18.0	East 19.5	East 19.5 West 18.0
Depth of water at berth metres below chart datum(3)	East 20.6	East 22.0(4)	East 22.0(4) West 20.5(5)
Available side of jetty	East side only	East side only	Both sides, i.e. East and West
Number of shiploaders in operation (on berth side)	1 East	2 East	2 East or West
Maximum loading rate per shiploader – tons per operational hour	10,000	10,000	10,000
Average loading rate per shiploader – tons per operational hour	3,750	8,000	8,000(6)

(1) Restrictions are due to the fact that equipment will be in the process of construction, erection and commissioning.
(2) Depending upon the draft this can be increased to 310 m.
(3) Chart datum is M.L.W.S. minus 3 cm.
(4) Increase in depth beyond 22 m. will depend upon the success of experiments to determine the most economic method, and the time of execution will be related to the demand for availability of such greater depths.
(5) It is planned to restrict the depth to 20.5 m. subject to demand for any increase in depth.
(6) On one side of the berth at a time only.

Loading: Bulk ore loading will be effected by means of two luffing, slewing and travelling ship loaders, together capable of loading continuously at a rate of 8,000 t.p.h. average, at a peak rate of 10,000 t.p.h.

MEDICAL: *Hospitals:* There is a fully equipped hospital in Vredenberg, 13 km. from Saldanha Bay. Serious medical cases, however, will normally be referred to one of the hospitals in Cape Town.

Doctors: There are several doctors available in Saldanha Bay and nearby Vredenberg. To expedite appointments, however, and to arrange for attendance on board, Agents should be consulted.

Dentist: There are several dentists available in the area, and in order to expedite appointments, Agents should be consulted.

FRESH WATER: Fresh water will be delivered at the rate of 35 t.p.h., and at a cost of 25 cents per kilolitre. Application for the supply of water should be made to Iscor through the Agents.

FUEL: Bunkers, at the initial stages, will not be available ex the jetty.

CONSULS: There are no Consulates established in Saldanha Bay, but the following countries are represented at Cape Town:

Argentina
Australia
Austria
Belgium
Bolivia
Brazil
Canada
Chile
China (Taiwan)
Denmark
El Salvador
Finland
France
Germany
Greece
Holland
Italy
Japan
Monaco
Norway
Panama
Peru
Portugal
Rhodesia
Spain
Sweden
Switzerland
United Kingdom
U.S.A.
Uruguay

CUSTOMS ALLOWANCE: Customs normally allow 200 cigarettes per person. No alcohol allowed for crew but one part bottle and eight cans of beer allowed for each Officer on arrival. Re-issues are made every four days.

HOLIDAYS: The following are recognised Public Holidays in the Republic of South Africa:

New Year's Day, January 1st; Good Friday; Easter Monday; Ascension Day; Republic Day, May 31st; Settlers' Day, September 1st; Kruger Day, October 10th; Day of the Covenant, December 16th; Christmas Day, December 25th; Boxing Day, December 26th.

Should any of the abovementioned days fall on a Sunday, the following Monday is observed as a Public Holiday.

TELEPHONES: Telephone facilities will be made available from the jetty. In order to obtain a telephone, however, arrangements will have to be made by the Agents. In this respect we would point out that many foreign countries have direct dialling facilities with South Africa, and in all cases arrangements should be made for lockable telephones to be placed on board, and the use of that telephone placed under the control of the Master.

GENERAL: *Removal of Rubbish:* Arrangements are available for the removal of rubbish and can be made through the Agents.

Weather: The climate is temperate. Average high temperatures year round are 20°C (68°F) and average low temperatures are in the region of 11°C (52°F). Sea water temperatures average 16°C. Prevailing winds are S.S.W'ly. Rainfall figures are approximately 300 m.m. per annum. Saldanha Bay is a Winter rainfall area. Fog occurs generally in the March to August period. Currents – there are no sea or thermal currents in the harbour area. Tidal currents generally will not exceed 0.05 km./hr.

Currency: The standard unit is the Rand. One Rand divided into 100 cents. Exchange rates vary, but for practical purposes at the time of writing, one can use the figure of $1.15 equals R1.

Electricity: Can be made available ex jetty on application to Iscor via the Agents.

Compressed Air: Will be available ex quay on application to Iscor via the Agents.

Cranes: A mobile crane will be made available through Iscor via the Agents.

Ship Chandlers: All of the major ship chandlers in Cape Town will operate from Cape Town for the initial period until the volume of callers reaches a level which will warrant establishing stores etc., at Saldanha Bay. The transit time from Cape Town to Saldanha Bay is normally in the region of 2 hours. All orders for provisions should be submitted either direct to the ship chandlers or through the Agents. Price lists for Saldanha Bay will be made available from ship chandlers when required.

AGENT: See "Capetown".

WALVIS BAY (South West Africa): 22.57 S. 14.30 E. (See Plan)

PORT LIMITS:

The area bounded on the West by a line drawn from Pelican Point Lighthouse to a point North (true) for a distance of 4 km; on the North by a line from this point drawn East (true) to the mainland; together with the foreshore therein and the jetties, harbour works and harbour lands vested in the Government of the Republic of South Africa. For the purposes of calculating port charges a vessel is regarded as an "arrived ship" when it enters the dredged channel in Walvis Bay Harbour.

DOCUMENTS:

Customs:

Form DA. 1 – Report Inwards/Outwards for ships;
DA. 3 – Certificate of Clearance for ships;
DA. 4 – Transire – for a destination in R.S.A.;
DA. 5 – List of Sealable goods on board ship;
Ship's Crew List (Customs Department);
Livestock Form (Customs Department).

Post Office:

Form P. 160 – Notification of Departure of Vessel;
P. 1/27 – Certificate of Departure of Vessel;
P. 1/149 – Ships Mail Declaration;
P. 21 – Post Office Certificate.

Port Health:

Maritime Declaration of Health;
Crew List with last vaccination dates;
Deratisation Certificate.

Port authority:

Form T 958 – Report of Arrival;
T 962 – Departure/Shifting Notification;
T 942 – Clearance Certificate;
Ship's Manifest.

PILOTAGE: Pilotage is compulsory. The vessel's Master must radio his ETA to his local Agent, who completes form T.958 for submission to the Port Authority.

Channel 16 on VHF radio can be used to call the Port Control Office. Pilot boats are normally black with a white superstructure and have a yellow funnel with horizontal green stripes.

The Pilot boards at a point approximately 1 km. from the Fairway Buoy (entrance channel buoy) in the direction of the Bell Buoy (Pelican Point Spit Buoy).

The Pilot will inform the Master by means of the VHF on which side the pilot-boarding ladder and man ropes are required.

ANCHORAGE: Varying in depth from 9 – 14 m. at LWOST. Bottom – sand and silt. (Please also see "Africa Pilot" Vol. II).

RESTRICTIONS: The movement of Oil Tankers and vessels carrying explosives or dangerous goods are restricted to daytime hours. The maximum permissible draft is 9.33 m.

MAX. SIZE: Draft of vessels is the major restricting factor (9.33 m.). The maximum permissible length at the tanker berth is 198.12 m. (650 ft.).

HEALTH: Same procedures apply as at R.S.A. ports.

RADIO: Call sign ZSV. VHF radio in Port Captain's Office.

VHF: VHF Radio is used by Pilots and Channels 11, 12 and 13 are available.

RADAR: Radar is fitted to the harbour tugs and pilot boats. The Port Captain's Office is being provided with radar for port-operating purposes.

TUGS: Two first-class tugs equipped with radar, wireless telegraph and telephone direction-finding apparatus and salvage and fire-fighting appliances; and 2 Pilot boats.

Tugs normally join a vessel in the entrance channel and are secured by means of the tugs' wires. There is no charge levied for the use of the tugs' lines.

BERTHING:

		Depth at	Cranes	
Wharf	*Length*	*LWOST*	*No.*	*Capacity*
Berths 1, 2 & 3	487.68 m.	10.06 m.	3	3 tons
(Working Portion 457.2 m.)			7	4 tons
			1	7 tons
			1	15 tons
Berths 4–8	926.6 m.	10.67 m.	17	4 tons
			1	3 tons
			1	15 tons

BULK-LOADING FACILITIES:

(i) Travelling ore loader for handling zinc, lead and copper concentrates for export. (This appliance is privately owned).

(ii) Privately-owned Bulk Fishmeal Loader.

(iii) A fish-oil pipe-line at Berths 1, 2 and 3.

SPECIALISED CARGO-HANDLING FACILITIES: There are no Ro/Ro facilities available. At present containers are only handled by means of ships' gear. Liquid chemicals are handled in tank containers.

STEVEDORES: Stevedoring is undertaken by private enterprise and stevedores are appointed by Ships' Agents.

MEDICAL: Hospitals are available but prior arrangements have to be made with Agents for medical assistance.

TANKERS: See "Max. Size" and "Restrictions".

Tankers up to 192.12 m. in length can be accommodated. Depth alongside 10.06 m. at LWOST.

Storage and pumping facilities are privately owned.

DENSITY: 1026.

FRESH WATER: Available and delivered by hose ex-wharfside – hydrant at 15 t.p.h.

FUEL: Diesel fuel is available but heavy oil is only available if special arrangements are made with the local oil companies.

FIRE PRECAUTIONS: When berthed alongside a wharf or jetty, a ship having explosives or any other goods of a dangerous nature, the Master shall, if the Port Captain so directs, have a fireman in attendance, the cost whereof shall be borne by the Owner of the ship and the Master of any such ship shall also, at the expense of the Owner of the ship, adopt such other or further precautionary measures as the Port Captain may consider reasonably necessary for ensuring the safety of the harbour, the ship or the cargo.

CONSULS: Norwegian and Belgian Consulate.

REPAIRS: Undertaken by private enterprise on a small scale.

DRY DOCK: There are no dry-docks available at this port. A syncrolift with a lifting capacity of 2,000 tons, maximum permissible length of 80 m. and a depth of 10 m. is operated and owned by the Department of Sea Fisheries.

SURVEYORS: Available for various classification societies.

GANGWAY/DECK WATCHMEN: Arrangements have to be made with vessel's Agents to secure services of gangway/deck watchmen.

HATCHES: Arrangements have to be made with stevedores in connection with opening/closing of hatches.

CUSTOMS ALLOWANCE: As per Customs Tariffs.

CARGO GEAR: Loading/discharging of cargo is effected by means of shore cranes.

REPATRIATION: All facilities available.

AIRPORT: The nearest International Airport is at Windhoek 445 km. from Walvis Bay.

TIME: GMT plus 2 hours.

HOLIDAYS: New Year's Day (1st January); Good Friday; Easter Monday; Ascension Day; Republic Day (31st May); Settlers Day (first Monday in September); Day of Covenant (16th December); Christmas Day; Boxing Day (26th December).

Cargo is now worked on Saturdays, Christmas Day and Good Friday.

POLICE/AMBULANCE/FIRE: South African Police Tel. 2055; Ambulance Tel. 2309; Fire Department; Municipal: Tel. 3117; South African Railways: Tel. 8-200.

TELEPHONES: Arrangements have to be made with Post Office to have a telephone connected.

SERVICES: Tank-cleaning, compass adjustments and minor-repairs can be undertaken.

SHORE LEAVE: Allowed.

REGULATIONS: A copy of the Regulations for the Republic of South Africa and of South West Africa are supplied gratis to Masters on arrival.

DELAYS: Dependant on weather conditions.

DEVELOPMENTS: The reconstruction of the old quay has become a matter of urgency and the old reinforced concrete-piled structure of Berths 1, 2 and 3 is being rebuilt as a modern structure with a depth alongside of 12.80 m. at LWOST to allow for future deepening of the channel.

AUTHORITY: South African Railways and Harbours Administration, Port Captain, Walvis Bay.

AGENT: W. Woker Freight Services (Pty) Limited, 166 Third Street East, P.O. Box 4, Walvis Bay. Tel. 2211/8; Telex: 56-747; Cables: Freights Walvis Bay.

South Atlantic Islands

ASCENSION ISLAND, GEORGETOWN:
07.55 S. 14.20 W.

DOCUMENTS: Crew and Passenger lists, Health documents, Manifests and Bills of lading if discharging cargo.
PILOTAGE: No pilots are available and not required as it is an open anchorage. Require 48 hours notice of ETA. Ascension Radio operated by Cable & Wireless will reply.
RESTRICTIONS: None – but if vessel has not been here before it would be advisable to wait until daylight.
ANCHORAGE: Only 1 ship can anchor at a time. There is 14 fathoms of water in the anchorage and vessels of 28,705 tons have used this anchorage. The other anchorage used by tankers is at English Bay and there is a special berthing procedure which the Oil Company give to Captains of tankers.
HEALTH: Pratique should be requested when giving the ETA and will be granted by either Cable or VHF.
RADIO: If coming from the North via Freetown Radio, and from the South via Cape Town. VHF Channel 16 available.
TUGS: No tugs available.
BERTHING: Open anchorage only, no berthing alongside.
MEDICAL: Facilities available, if possible 48 hours notice required. There is a 12-bed hospital in Georgetown and a second for American personnel at the U.S.A.F. Base. Inoculation, vaccination and yellow-fever certificates not required. Other than Government personnel no one is allowed to land on Ascension without an entry permit.
TANKERS: Only 1 berth available at anytime.
FRESH WATER: None available.
FUEL: None available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Usually done by stevedores.
CONSULS: No Consulates. British Administrator attends to all requirements.
REPAIRS: Only minor repairs can be effected.
REPATRIATION: No facilities for crew changes. Repatriation can be arranged but only in the case where a person has been hospitalised. If a ship puts in with a medical case on board an M.O. will visit the ship. Fees paid to the Cable & Wireless representative. If the patient is hospitalised the Master must guarantee in writing that all hospital fees and the air fare to Antigua will be honoured by his shipping line Agent. As so few ships call at Ascension no hospitalised patients can be evacuated by sea. All patients received from ships are evacuated on M.A.C. flights to Antigua. These flights are run weekly.
AIRPORT: Airport 2 miles. U.S.A.F. No civil airlines call here.
TIME: Always GMT.
HOLIDAYS: Cargo vessels are discharged during public holidays – no night work.
GENERAL: There are no facilities for visitors on the island. Anchorage must be vacated when a mail vessel is due.
SHORE LEAVE: Not permitted.
AUTHORITY: The Administrator.

FALKLAND ISLANDS, PORT STANLEY:
51.50 S. 58.56 W.

PORT LIMITS: West of the line joining Mengeary Point and Cape Pembroke.
DOCUMENTS: Crew Lists, Passenger Lists, Customs, Health Documents, Manifests, Bills of Lading, Ship's Papers, Ship's Certificates.
PILOTAGE: Pilotage should be requested via Cable & Wireless Radio Station. 24 hours notice of arrival required. Frequency 2182.
ANCHORAGES: For large vessels, the anchorage is somewhat confined; except S. of Navy Point, where there is good swinging room in depths of from 8.2 m. to 10.4 m. (27 ft. to 34 ft.), it is necessary for a long vessel to moor. There is good anchorage N.N.E. of the cathedral, but, owing to the prevailing strong W. winds, a vessel may have some difficulty in turning, when leaving this position. The best time to leave is after 1800 hrs. or before 0800 hrs. as, unless there is a widespread area of bad weather over the islands, the wind, which is local, is seldom strong between these hours. The holding ground is good, and vessels have not dragged during winds of up to force 8, though a second anchor is often necessary.

The bottom of the harbour is stiff mud, which is very noisome and sticky; it is necessary to allow plenty of time for cable washing when weighing.

There are 3 mooring buoys off the S. and E. of the town; numerous hulks and lighters, none of which exhibits a riding light at night are moored in the vicinity.
RESTRICTIONS: No restrictions on entry.
RADIO: Cable & Wireless Ltd.
RADAR: No port radar service.
TUGS: No harbour tugs.
BERTHING: Falkland Islands Company jetty with a depth of 1.5 m. at its head. T shaped Head.
CRANES: 1 × 5-ton crane.
BULK CARGO FACILITIES: Nil, drummed cargoes only are handled.
STEVEDORES: 1 week's notice required. If Falkland Islands Company charter vessel (4 voyages a year) is being worked then stevedores will not be available until work on the charter vessel has been completed.
MEDICAL: Advance notice required.
TANKERS: Advance information should be sought.
ENSITY: Full salt water.
FRESH WATER: Available at night. Delivery by direct hose. Cost £1 per ton +33% of the cost of the labour involved.
FUEL: Fuel is available only by special arrangement with the Ministry of Defence. Grade 47 Cetane (viscosity cSt 100° F – 1.8; s.g. at 15° C – 0.840). Delivery by lighter and pump.
FIRE PRECAUTIONS: Normal safety requirements.
CONSULS: Norwegian, Uruguayan.
REPAIRS: Minor repairs to machinery.
DRY DOCKS: Nil.
SURVEYORS: Not available.
GANGWAY/DECK WATCHMEN: Recommended. Cost max. £1.50 per hour.
OPENING/CLOSING HATCHES: By ship's crew.
CUSTOMS ALLOWANCE: Quantity permitted by crew is one bottle of spirits, 200 cigarettes or 1 lb. of tobacco, 6 bottles of wine, 1 case (24 cans) beer.
CARGO GEAR: There is 1×5-ton crane. Ships gear may be used.
REPATRIATION: With a weekly Air Service repatriations could be arranged.
AIRPORT: 3 miles from Port. Feeder airlines connect with Comodoro Rivadavia, Argentina.
TIME: GMT minus 4 hours. Summer time from October to end of March.
HOLIDAYS: Cargo can be handled on the 10 public holidays.
POLICE/AMBULANCE/FIRE: Police – 95; Fire – Exchange; Ambulance – 54 (2 rings).
TELEPHONES: Connection possible at rate of £20 a year.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Seamans book sufficient.
REGULATIONS: No particular or unusual regulations.
DELAYS: Delays may be experienced if berthing alongside only commercial jetty if firms charter vessel is being handled. Four voyages a year: – turn around 1 week.
DEVELOPMENTS: No port developments under way.
AUTHORITY: Harbour Master.

ST. HELENA, JAMESTOWN: 15.56 S. 05.40 W.

DOCUMENTS:
3 copies of Crew List.
3 copies of Passenger List.
10 copies of Manifest.
1 Health form.
PILOTAGE: No official pilot. Agents sometimes hire a Pilot (retired Union Castle Captain) for ships requiring one.
ANCHORAGE: The harbour consists of an open roadstead with anchorages shown on charts.
MAX. SIZE: Any size vessel can anchor in the roadstead. Depth up to 20 fathoms.
HEALTH: Pratique will be granted by the boarding party or by telegram from Port Health Officer. If suspected disease or fever, the Port Health should be informed by telegram in advance of anchoring so that the necessary precautions can be taken.
RADIO: ETA message should be relayed through Cape Town Radio. Agents have VHF service.
TUGS: None. There are 3 towing launches (from 16 to 28 h.p.) for harbour use only.
BERTHING: Vessels anchor in 18–20 fathoms offshore, in open roadstead. There is deep water (sufficient for ocean-going vessels) right into the area where cargo lighters and other small craft are moored.
STEVEDORES: 48 hours notice required by Agent, also particulars of tonnage of cargo.
MEDICAL: Agent should be notified if medical attention required. A resident staff of three doctors, plus nursing staff, in a well-equipped modern hospital. The basic requirements for intending visitors is a certificate of vaccination against smallpox.
FRESH WATER: Delivered by floating pipeline at a rate of approximately 14 t.p.h.
FUEL: No stocks of marine fuel. Ordinary diesel oil is available in drums of 45 gallons (supplied ex South Africa) and only limited stocks for local needs are held.
OPENING/CLOSING HATCHES: Stevedores can do this, but preferable for crew to open on arrival so that work can start as soon as stevedores arrive on ship.
CERTIFICATES: Vaccination certificates required for all crew. Derating certificate should be valid.
CUSTOMS ALLOWANCE: No restrictions. Free use on board.
CARGO GEAR: All discharge carried out by vessels derricks into lighters. Agents provide own cargo nets, etc.
CONSULS: French Consul. Appointed representatives for Denmark and Norway.
REPAIRS: Small repairs can be carried out (welding or turning pipes, etc.).
REPATRIATION: No facilities for crew changes. Only for those left behind for hospitalisation.
AIRPORT: No airport on St. Helena.
TIME: GMT throughout the year.

HOLIDAYS: New Year's Day (1 January); Good Friday; Easter Monday; St. Helena Day (21 May); Whit Monday; Queen's Official Birthday; August Bank Holiday; Christmas Day (24 December); Boxing Day (25 December). Cargo work can be arranged except on Christmas holidays.

POLICE/FIRE/AMBULANCE: No telephone numbers. Must ring exchange.

SHORE LEAVE: Allowed. No restrictions provided vessel has free pratique.

DELAYS: No delays in berthing. Loading or discharge can be delayed by bad weather due to swell alongside wharf.

AUTHORITY: Harbour Master.

AGENT: Solomon and Company (St. Helena) Ltd., Jamestown, St. Helena. Cables: "Solomon St. Helena."

NOTES

Please also advise Shipping Guides (Services) Ltd.

Spain

AGUILAS and HORNILLO: 37.24 N. 01.35 W.

(See Plan)

DOCUMENTS: See "Almeria".
PILOTAGE: Hornillo port has no Pilot. The Pilot of port of Aguilas which is less than a mile from Hornillo, does pilotage services of both. To enter both ports Hornillo and Aguilas, anchor mile or a mile and half distance from entrance of Aguilas. Wait for Pilot with engine stopped. To call Pilot give three long blasts several times. Pilot's launch is small motor boat painted white, with letter "P" painted on both sides of boat. During night it carries white light on top of mast, and 8 ft. lower a red light, besides the usual lights.
RESTRICTIONS: It is not possible to enter Hornillo port during dark. Wait till dawn outside Aguilas.
MAX. SIZE: Length up to 110 m., draft about 22 ft.
HEALTH: See "Almeria".
TUGS: None in port. Not necessary for either port.
BERTHING: Aguilas port has a commercial quay with a berth area about 200 m. and depths of between 8–12 m. Hornillo port has a pier to handle minerals with berth area of 90 to 100 m. and depths between 6–10 m.
BULK HANDLING: Two conveyor belts each of 100 tons grain per hour capacity. May be used for other bulk cargoes.
STEVEDORES: Team of stevedores who belong to "Port Workers' Trade Unions" (Sindicato de Obreros Portuarios).
MEDICAL: Captain can send cables to consignee requiring this kind of service. There are a number of doctors and a hospital.
FRESH WATER: In Aguilas port are small supplies of water. It is supplied by the town hall by means of tank lorries.
FUEL: There are no supplies of fuel in either port.
GANGWAY/DECK WATCHMEN: Not necessary, usually this is done by crew.
OPENING/CLOSING HATCHES: Usually this is done by crew.
CONSULS: There is only Vice-Consul of Norway in Aguilas. Tel. 411035.
REPAIRS: No facilities.
REPATRIATION: Facilities for effecting crew changes exist. Repatriation can be done by train to Madrid and by plane from there.
TIME: GMT plus 1 hour.
HOLIDAYS: See "Almeria".
POLICE/AMBULANCE/FIRE: Ambulance and fire services can be requested from Port Authority. If the police services are required call to "Caseta de Vigilancia" of the Civil Guard in either port.
GENERAL: Hornillo port is used only for loading and discharge of minerals, and for this purpose a pier is provided with a railway. The nearest port of Aguilas, less than a mile distant on the West, is the commercial port, with a quay for loading/discharging and a crane of 10 tons capacity.
SHORE LEAVE: Crew members are allowed ashore.
AUTHORITY: Ayudante de Marina o Capitan del puerto (Port Authority or the Assistant) Aguilas.

ALGECIRAS: 36.07 N. 05.26 W.

(See Plan)

DOCUMENTS:
- Maritime Declaration of Health.
- 5 Crew Lists.
- 2 Manifests of Cargo for the Port.
- 2 Manifests of Cargo in Transit (if coming from Spanish port a Manifest is sent by the Customs officials of that port).
- 1 Bill of Lading of cargo for the port.
- 2 Ship's Stores Lists.
- 2 Lists of Crew Personal Effects.

If the vessel carries passengers the following are required:
- 8 Lists of Passengers Disembarking with baggage declaration for each passenger.
- 5 Lists of Passengers in Transit.
- 2 copies of Arrival Report.
- 1 Manifest of Vehicles belonging to Passengers Disembarking.

If the vessel is a tanker the following are required:
- Certificate of Quantity of Cargo.
- Certificate of Quality of Cargo (or Ballast Certificate).

PILOTAGE: Vessels entering the port call Pilot by international code signals, sound or light. Notice of ETA should be radioed to Agent 72, 48 and 24 hours before arrival. Pilots cannot be contacted by radio, and are ordered by Agents on the basis of Master's ETA.

Pilot boat is painted white with a letter "P" in black on both sides. By day they carry a blue flag with the letter "P" in white. By night they carry regulation pilot lights. The pilot boarding zone is a circle of 0.5 mile radius with centre 1 mile East of the Northern breakwater head (red light).
ANCHORAGE: Vessels waiting for a Pilot may anchor North of the parallel of the Barranco beacon in depths of 30 m.
RESTRICTIONS: Vessels may enter by day or night.
MAX. SIZE: Puerto de Algeciras – no length restrictions, max. draft 29 ft. Refineria Gibraltar – maximum length 283 m. Draft up to 65 ft.
HEALTH: Free pratique is obtained automatically when authorities board on arrival and Maritime Declaration of Health is completed. In case of suspected disease or fever on board full details should be sent by radio to Sanidad Maritima, Algeciras, before arrival.
RADIO: Aranjuez Radio and Cadiz radio. Vessels proceeding to Refineria Gibraltar should announce their arrival by VHF to the Capitania of the port using Channel 16 for calling and Channel 13 for communication.
TUGS: Four tugs are available up to 1,500 h.p. and assist according to Pilot's directions. Ship's tow lines used.
STEVEDORES: Ordered by vessel's Agent on basis of Master's ETA.
MEDICAL: Doctors and hospital facilities available. International vaccination certificates only required if vessel is proceeding from an infected area.
TANKERS: Refineria Gibraltar – 5 berths for tankers up to 283 m. length, 2 of which can accept draft up to 65 ft. The other 3 berths can accept vessels up to 57 ft. draft. Loading/discharge lines are 12 in., 10 in., 8 in., 6 in. and 4 in. Refineria Gibraltar has 2 slop tanks each of 600 cu. m. capacity which can accept oily residues.
FRESH WATER: Available from all berths in Algeciras and at Refineria Gibraltar at a rate of 40 t.p.h. Can also be supplied by barge at the rate of 15 t.p.h.
FUEL: All grades can be supplied with 3 hours notice. Loading rate 250 t.p.h. for fuel and 150 t.p.h. for diesel and gas oil. Supply is effected by barge at all quays which are not connected by pipe-line.
DEVELOPMENTS: In Algeciras Commercial Port a new berth is under construction in the South part of the dock for vessels up to 9 m. draft. It is planned to dredge the whole commercial port to 10 m. depth.

A new container terminal has been inaugurated, total length of berth 498 m.
GANGWAY/DECK WATCHMEN: Not available from shore.
OPENING/CLOSING HATCHES: Opened and closed by ship's crew.
CUSTOMS ALLOWANCE: Max. quantity of tobacco permitted in ship's stores is 3 kilos per crew member and 2 kilos per passenger. The quantity that may be held out of bond is 40 grammes tobacco per person per day. Wine/Spirits. 1 decilitre per person per day may be held out of bond.
CONSULS:

Great Britain	tel. 67.14.50	Germany	tel. 67.22.37
Morocco	tel. 67.36.98	Denmark	tel. 67.27.95

Norway, Italy, France, all tel. 67.27.20.
REPAIRS: Small repairs afloat can be effected. No dry docks.
AIRPORT: Nearest is at Malaga, 120 kms. from Algeciras.
TIME: GMT plus 1 hour all the year round.
HOLIDAYS: New Year's Day, 6th January, 19th March, Maundy Thursday, Good Friday, Easter Saturday, 1st May, Ascension Day, Corpus Christi, 29th June, 18th July, 25th July, 15th August, 1st October, 12th October, 1st November, 8th December, 25th December.
POLICE/FIRE/AMBULANCE: *Algeciras:* Police, tel. 67.15.55; Fire, tel. 67.20.20; Ambulance, tel. 67.22.90. *Refineria Gibraltar:* Police, tel. 67.15.55; Fire, tel. 76.17.00; Ambulance, tel. 76.12.47.
SHORE LEAVE: Crew members are permitted to go ashore subject to police control.
AUTHORITY: Comandancia de Marina.

ALICANTE: 38.23 N. 0.28 W.

PORT LIMITS: The line drawn from Cabo de las Huertas and Cabo de Santa Pola.
DOCUMENTS:
- 3 Crew Lists.
- 6 Passenger Lists.
- 2 Manifests for Cargo, including cargo in transit as well as cargo for Alicante. Tobacco and Cargo Manifests to be visaed by Spanish Consulate in port of origin.
- 3 Stores Lists, for Customs.

For the Agent
- 4 Manifests of cargo destined for Alicante, with one copy of each Bill of Lading.

PILOTAGE: Pilotage service is permanent and Pilots are summoned by displaying international code flag "G", (same signal at night-time by light), or by sounding three long blasts on ship's whistle.

Pilot launch is a white-painted motor launch with a black letter "P" on both sides. The launch flies a black flag with white letter "P" by day, and shows usual pilot lights at night. The launch will meet arriving vessels about 1 mile from breakwater entrance in good weather.

In bad weather from the East, the launch goes out as far as the breakwater and meets vessel opposite the green light at the breakwater head. Pilot boards on the lee side, which is generally the port side.
ANCHORAGE: Vessels waiting to enter port may anchor at a distance of 0.5 mile East of the breakwater in depths of 16 m.
MAX. SIZE: Vessels of up to 225 m. length and 33 ft. draft can be berthed alongside. For tankers, max. draft. 29 ft.
HEALTH: Report in advance to Pilot if there is any problem. If situation is normal, then after ship berths the health inspector boards and quickly grants pratique. In the event of any suspected disease or fever on board the Pilot (without boarding) will show the anchorage area then Health Inspectors and Authorities will board and give necessary instructions.

Vessels entering after calling at another Spanish port have no problems obtaining pratique.
RADIO: Radio-telephone communication through Radio La Costera, Alicante, medium range approx. 220 miles and short range approx. 40 miles.

Port Radio station situated at the Western end of Muelle B, is equipped only to receive messages by R/T. Messages received by this station are passed to destinations within the port by telephone lines. VHF communication in operation.

TUGS: Only 1 tug available to assist berthing of 176 g.t. and 1295 h.p. Normally ship's lines used for connection with tug.

BERTHING: The breakwater extends in a S.W. direction and vessels berth within the breakwater. Max. depth being available at the outer end of the breakwater, decreasing in the N.E. direction.

Muelle 14: Extends along the length of the N.E./S.W. breakwater and depths vary alongside the berth from 11 m. at the S.W. end to 8 m. at the N.E. end. Depths in the outer port vary from 12 m. at the S.W. end to 9 m. at the N.E. end.

Muelle 12: Depth alongside 7.5 m., depth for the berth 9 m.

Muelle 10: Depths alongside the berth vary from 6 to 8.75 m.

Muelle 9: Depth alongside berth 8.75 m.

Muelle 7: Depth alongside berth 8.75 m.

Muelle 11: A combined tanker and dry cargo berth. Depth alongside berth 8.75 m.

STEVEDORES: Agents should be advised of ETA and shore cargo gear requirements.

Grain Discharge: effected by grabs normally at Muelle 11. Discharge 3 to 4 tons per gang per hour.

General Cargo: discharge about 10 tons per gang per hour.

Bagged Cargo: discharge about 150 tons per gang per hour.

MEDICAL: Many hospitals and medical services available.

TANKERS: Tankers discharge takes place at Muelle 11 (see "Berthing"). There is no refinery and the only products unloaded are fuel oil. diesel oil, gasoline and aviation spirit. There are 3 pipelines available for cargo discharge.

DENSITY: 1025.

FRESH WATER: Available from hydrants at the quays at the rate of 10 t.p.h., per hydrant.

FUEL: Supplied by Campsa. Vessels requiring fuel are requested to berth alongside Muelle 11 and will incur delays if that berth is already occupied. Maximum advance notice is essential. Owners of vessels requiring fuel are required to pay a bank deposit in foreign currency.

GANGWAY/DECK WATCHMEN: Agent normally arranges watchmen.

OPENING/CLOSING HATCHES: Normally opened by crew and closed by stevedores using cranes.

CUSTOMS ALLOWANCE: Total tobacco allowed on board, 3 kilos per crew member, 2 kilos per passenger. All must be declared in ship's provision list and any in excess of these amounts declared in a separate visaed manifest as tobacco in transit (see "Documents").

CARGO GEAR: All berths have cranes, varying from about 6 tons capacity. There is 1 heavy lift crane capacity 30 tons, and 1, capacity 10 tons.

REPAIRS: Only minor repairs available. If dry docking, or undertaking major repairs, vessels should proceed to Cartagena.

AIRPORT: About 8 km. distance from Alicante, and serviced by international flights.

IDENTIFICATION CARDS: Additional identification cards only required by crew members of communist-flag ships.

TIME: GMT plus 1 hour.

TELEPHONES: Telephones may be connected, provided sufficient notice is given, subject to payment of installation costs of about 7,500 Pts. plus the cost of calls.

AUTHORITY: Comandante Militar de Marina.

ALMERIA: 36.52 N. 02.30 W.

DOCUMENTS:

4 Crew Lists.

4 Passenger Lists or negative.

2 Cargo manifests of goods destined to Almeria, as well as other cargoes in transit.

Store List in duplicate, including tobacco, spirits, radios, etc., belonging to vessel.

Details list in duplicate of all personal effects of crew and passengers (tobacco, spirits, cameras, radios, etc.).

Note: Tobacco. In case vessel carries more than 3 kilos of tobacco per man, excess must be declared in a separate manifest, which must be visaed by a Spanish Consul. In absence of Consul, said document will have to be visaed by an Authority of former port of clearance. Otherwise, the vessel would be fined.

PILOTAGE: Is compulsory and service is permanent. Pilots board vessels by motor-boat in roads, near entrance formed by two breakwaters. This entrance is 287 m. wide. Pilot boats are painted white and letter "P" is painted in black on each bow. Also boats have a blue flag hoisted on mast, with letter "P" in white on both sides of flag. At night, boats have white light, under this light is a red light. When weather is bad vessels approach as close as possible to entrance so that Pilot can easily board the vessel.

ANCHORAGE: When harbour is congested, vessel can anchor at West Mole while waiting for berth.

MAX. SIZE: Only limitation is draft (max. 30 ft.).

HEALTH: Pratique is obtained immediately after berthing, when Health Officer boards vessel, In case of suspected disease or fever on board Master must send a radio message to Agents, in order that they advise the Health Officer. Following documents are required by Health Officer upon berthing: Maritime Declaration of Health, Deratisation Certificate, 1 Crew List.

RADIO: Nearest important radio stations are Cadiz-Radio and Palos-Radio.

TUGS: One available but not compulsory, is employed according to Master's requirements.

BERTHING: Prior to ship's arrival and in accordance with Master's ETA Agent attends port Authorities to procure a proper available berth. Commercial quays have a length of 500 m. with double sheds, 360 m. with single shed with max. depth 24–25 ft., and about 700 m. uncovered for goods in bulk with depth between 24–30 ft.

Iron Ore Berth: Max. size 38,000 d.w.t. Max. draft 11.0 m. 1 ship loader, rate 2,000 t.p.h.

STEVEDORES: It is necessary that Master sends ETA so that Agent can inform Receiver's stevedores accordingly and arrange for proper reception of cargo and berth. Timetable of shifts available at the port; Daytime, normal working hours, from 0800–1200 hrs. and 1400–1800 hrs. (1 shift), 0800–1400 hrs. (1 intensive shift), 1400–2000 hrs. (1 intensive shift). Night time, from 1800 to 2400 hrs.; Sundays and holidays, from 0900 to 1200 and 1400 to 1800 hrs.

MEDICAL: Medical facilities are available; only it would be appreciated for Master to send a radio message if a crew member is in need of urgent medical attention.

FRESH WATER: Always available. Deliveries from quay available at all berths, supplying about 30 t.p.h.

FUEL: Ordinary fuel oil and gas oil is available at local refinery of "Campsa". It is advisable that Shipowners stem bunkers through their own Contractors, with an ETA of 48 hours, so that the order can be received in time.

FIRE PRECAUTIONS: Tankers perform their operations at the berth of "Campsa" at East Pier, which has the necessary fire precautions. No special precautions at other piers.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: This work normally carried out by crew.

CERTIFICATES: Vessel should have the usual documents on board, but only the Safety Wireless, Safety Equipment and Deratisation Certificates are required by Authorities.

CUSTOMS ALLOWANCE: The quantity allowed per each crew member is 3 kilos tobacco. (See "Documents".) Wine and/or Spirits: Only one bottle for each crew member.

CARGO GEAR: All commercial piers are served by electric shore cranes able to lift 3/6 tons (18 cranes in total), and one crane with a lifting capacity of 15/25 tons situated on Pier Costa.

IDENTIFICATION CARDS: Not required.

CONSULATES:

Denmark, Alvarez de Castro 22	tel.	212245
Sweden, Alvarez de Castro 22	,,	212245
Belgium, Paseo Generalismo 151	,,	214455
Holland, Paseo Generalismo 151	,,	214455
Finland, Aguilar Martell 7	,,	215954
Italy, Paseo Generalismo 18	,,	215790
France, Avenida Vivar Tellez	,,	220050
Columbia, Navarro Rodrigo 18	,,	213171
Panamanian, Jaul 27	,,	220073

REPAIRS: All types deck and engine repairs available.

REPATRATIONS: Good facilities available.

AIRPORT: Airport is located about 6 km. from town, well served by regular airlines.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January; 6th January; 19th March; (St. Joseph) Good Thursday afternoon; Good Friday; 1st May (Labour Day); Corpus Christi; 29th June (St. Peter and St. Paul); 18th July (National Holiday); 15th August; (Ascension Day); 12th October; 1st November; 8th December; 25th December and 26th December (second Christmas Day).

POLICE/AMBULANCE/FIRE: Police 214081; Ambulance 215780; Fire 220044.

AGENT: Hijo De Alfredo Rodriguez, Ltda., Alvarez de Castro 22, PO Box No. 28. Telegrams "Calvache". Tel. 212245, 213306, 214475. Almeria.

AVILES: 43.35 N. 05.56 W. (See Plan)

DOCUMENTS:

3 Crew Lists.

2 Passenger Lists or a negative.

1 Cargo Manifest of goods destined for the port.

Another Manifest covering transit cargo.

2 Store Lists, including tobacco, cigars, cigarettes, coffee, spirits, radios, cameras, etc., in possession of crew. In all cases make and number of radios to be indicated.

Safety Wireless Certificate and Safety Equipment Certificate.

If vessel carries over 3 kilos tobacco per crew member, the excess to be declared in a separate manifest, which must be visaed by the Spanish Consul at the last port, otherwise vessel exposed to heavy fine.

PILOTAGE: Telegrams to be sent to Corporacion de Practicos, San Juan de Nieva – Aviles Tel. 563013 or 566856.

Send ETA 2 hours in advance, confirming by VHF when vessel some 10 miles off. Pilots listen continously on Channels 16 and 12. When vessel in sight of lookout, give preferably audible signals in accordance with International Code. Pilot craft are painted black with a white "P" on each side and cabin. They are equipped with VHF and listen out on Channel 12, having also available Channels 16, 14, and 6. When coming alongside a vessel they hoist the "H" flag. Normally they remain within the port, going out to vessels up to 1 mile from La Forcada.

ANCHORAGE: Outside the port vessels can use the sector between N.W. and W.N.W. of La Forcada and at a distance of 0.5 mile from it, in 15 to 25 m. depth and sandy bottom. There are no sheltered anchorages. When awaiting a berth, vessels must remain at anchorage with one or two anchors.

RESTRICTIONS: Entrance channel 90 m. wide, 1,000 m. long up to San Juan de Nieva Dock. Depth at low water from 6 to 9 m.

MAX. SIZE: Length 150 m., draft 9 m.

HEALTH: Yellow flag to be hoisted, and once Health Authority has boarded, and the Marine Health Certificate completed, provided this is negative, clearance is automatic. This also applies if vessel is arriving from another Spanish port.

Health documents required: Marine Health Declaration if coming from another country, but if from another Spanish port, the Health Clearance Document from that port suffices.

Deratting certificate, or exemption certificate.

If coming from country where epidemic is in force, certificates of vaccination for each crew member.

If sickness on board, patient will be examined immediately and decision taken as as to clearance or isolation.

RADIO: If the vessel has short wave radio, messages can be sent to Aviles, but via Aranjuez Radio, Cadiz Radio (EAC s/5), Teneriffe Radio (EAC 2/5) and Vigo Radio (EAF 2/5). If close to the coast, and medium wave radio is available, then messages can be sent to any of the other Spanish coastal stations. Messages sent purely with the telegraphic address "Pilots" are sent on by telephone to the Pilotage Authority.

TUGS: 5 tugs available up to 1,800 h.p.

BERTHING: 10 berths available.

Berth	*Length (m)*	*Depth (m)*
Raices	822.84	8.0
S. San Juan	300.00	6.0
W. San Juan	277.70	3.5
S.W. San Juan	90.25	2.0
New Fish Quay	303.00	5.0
Aviles Fish Quay	515.94	2.0–1.0
E. Ensidesa	300.00	9.0
E. and S. Ensidesa	715.00	7.0
S. Ensidesa	107.50	5.0
Endasa	132.84	7.0

CUSTOMS ALLOWANCE: Normally Customs permit 200 cigarettes or 3 kg of tobacco per man out of bond. Additional quantities needed on the stay of ship in port. 1 bottle of spirit per man.

DRY DOCKS: 1 dock at Las Canteres, owned by Entrecanales Y Tavora, length 50 m., width 9.50 m. Capacity 600 tons.

FRESH WATER: Supplies available in the San Juan de Nieva zone and at Ensidesa Quay in San Agustin Dock.

FUEL: Fuel and gas-oil can be supplied by barge at 200 t.p.h.

AIRPORT: Asturias Airport — 15 km. from the port under the control of the Aviles Customs Office at the airport.

TIME: GMT plus 1 hour, except during Summer when GMT plus 2 hours.

HOLIDAYS: Work can be arranged on 6th January, 19th March, 15th April (from 1400 hrs. onwards), 19th April, 28th August, 27th May, 29th June, 8th September, 12th October, 16th July (Mercantile Marine).

No work available on 1st January, 16th April, 1st May, 17th June, 1st November, 8th December, 25th December.

Important notes: The above dates refer to 1976 and does not show, since they fall on Sundays, 18th and 25th July when no work is available. It should be be borne in mind that these are movable holiday dates, and amongst those on which no work is available are Good Friday, Corpus Christi, and those when work can be arranged are Holy Thursday, Easter Monday, Ascension Day.

POLICE/AMBULANCE/FIRE: Police 561646 and 561174.

AUTHORITY: Junta del Puerto de Aviles.

BARCELONA: 41.25 N. 02.10 E. (See Plan)

DOCUMENTS:

(1) Manifest of Barcelona cargo: 1 set covering all loading ports; make sure that this manifest is in perfectly good order before ship's berthing, as Customs will board the vessel immediately and take it away as it is; thereafter any omission or excess of pages may lead to a fine. It is important that the Master has copies as Manifests mailed by Agents in loading ports sometimes arrive too late or not at all.

(2) Manifest of Transit Cargo: 2 sets (same recommendations as above).

(3) 3 Crew Lists.

(4) 1 Negative of Passengers.

(5) 2 sets of Bills of Lading of the Barcelona cargo.

(6) 2 Provisions Lists.

Of items (3), (4) and (6) above several copies will be required for distribution among various authorities, therefore it would be well for the Master to have at least 3 copies of each ready at hand on arrival. Tobacco allowed per crew member is 3 kg.

All tobacco in excess of the 3 kg. allowed by the Spanish authorities should be manifested and signed by the Spanish Consul at the last port of call before Spain. If there is no Spanish Consul at the last port before calling at Spain, then the consulate of a country friendly to Spain or the port authorities could carry out the same formality. The same procedure must be followed when the vessel loads a cargo of tobacco for discharge in Spanish ports, or when the tobacco cargo is loaded in transit.

If any item of cargo manifested for Barcelona should be discharged in error at any other port in the ship's itinerary before arrival at Spain, there would be a fine imposed here for shortage of goods if no advice of such shortage is given before arrival.

PILOTAGE: Pilot boats painted black, with letter "P" in white on each bow. Telegraphic address: "Pilot Station-Barcelona". Required notice of ETA 24 hours before arrival. Signals to be made by vessels requiring Pilot: the letter "G" in sound and/or light.

Pilot boats have no radar and are reluctant to venture more than just outside port entrance in poor visibility. Pilots give priority to vessels nearest port entrance. Pilotage is compulsory and the service is permanent. In case of port congestion vessels remain at anchor at the roads.

ANCHORAGES: In the Outer port for small vessels only, with depths over 50 ft. Also at the roads 0.5 miles away from breakwaters where vessels usually remain at anchor.

MAX. SIZE: Only limitation is draft: max. 39 ft.

HEALTH: Pratique obtained immediately after berthing, when Health Officer boards vessel. In case of suspected disease or fever on board Master must send a message to Agent, to advise Health Office. Following documents are required by Health Officer upon berthing; Maritime Declaration of Health, Deratisation Certificate, 1 Crew List.

RADIO: Aranjuez Radio, call sign EAD.

VHF: Barcelona Radio can be contacted on VHF Channel 16, 3 hours before arrival and Channel 26 for long distance calls.

TUGS: Tugs join vessel at entrance of port. Usually use ship's lines; if tug's lines used usual charge 10% of official tariff. It is normal for 2 tugs to be used for vessels from 5,000 to 15,000 g.r.t.

10 tugs available, from 800 h.p. to 1,800 h.p.

BERTHING: Commercial quay, length 12,100 m. and depths min. 8 m. max. 14 m. dependent location. Depth alongside Grain Elevator in Pier Contradique is 37 ft. Pier Barcelona, berths for transoceanic maritime passenger traffic, depths 26 ft. and 31 ft. Shore fenders keep vessel about 1 m. off quay.

CARGO-HANDLING FACILITIES: For unloading grain, there is a silo with a 65,000 ton storage capacity, provided with 4 suction pumps capable of unloading vessels at a rate of 400 t.p.h. and loading rail or road trucks at the rate of 200 t.p.h.

Liquid methane reception and gasification plant with a storage capacity for 249,000 cu. m. of liquid gas. Potash reception and loading plant with mechanical loading bridges which can load up to 450 t.p.h. of this product.

General cargo handling is fully mechanised and, apart from the pier cranes, there are fork-lift trucks, truck cranes and a palletisation process.

A container wharf with a berthing frontage of 365 increasing to 1,115 m., 14 m. water depth, 9.8 acres surface area, with a capacity for 1,250 20-ft. containers. 2 cranes available at 50 tons and reach of 35 m. There will be a terminal with berthing space for 6 ferries for operating a roll-on/roll-off service.

TANKERS: There are 6 berths for oil tankers, max. size 60,000 d.w.t., discharge rate 1,000 t.p.h., depth alongside 12 m. (2), 11 m. (2), 8.5 m. (2). Diameter of loading lines 4 in. and 8 in., diameter of discharge lines 10 in., 12 in. and some of 18 in.

There is 1 natural liquid gas berth, depth alongside 12 m.

There are 5 berths for inflammable liquids, asphalt, vegetable oil and tallow, depth alongside 12 m.

STEVEDORES: *(a)* Daytime, normal working hours, from 0800–1200 and 1400–1800 hrs. (1 shift); *(b)* 0800–1400 and 1400–2000 hrs. (2 "intensive" shifts). Night-time, from 2000–0200 and 0200–0800 hrs. (2 intensive night shifts). Extra costs are involved for intensive shifts. Nightwork is paid on an overtime basis. Average rates for discharge of grains in bulk are about 7,500/8,000 tons per day of 24 consecutive hours; for general cargo a rate of 100 tons within normal working hours.

MEDICAL: All medical facilities are available; it would be appreciated for the Master to advise in advance if crew member is in need of urgent medical attention. Contact Barcelona Radio in an emergency.

FRESH WATER: All piers have water available by shore pipes or by barge. Rate of delivery about 16/20 t.p.h. Rate 150 t.p.h. by barge.

FUEL: Fuel oil and gas oil available at "Campsa", installation. It is advisable that Shipowners stem bunkers through their own contractors, with advance notice of 48 hours. Delivery either by barge, or at the bunkering pier of "Campsa". Bunker barges allowed alongside vessel during cargo-handling.

DEVELOPMENTS: Lengthening under construction of breakwater Dique del Este, and pier Contradique. A wharf for 6 berths for tankers only, plus 4 berths for vessels loading/unloading crudes in bulk with a depth of 39 ft. Dry dock planned for vessels up to 215 m. length and 40,000 tons.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally carried out by crew, except in liner vessels which is contracted for by stevedores.

CERTIFICATES: Vessels should have all usual certificates aboard but only the Safety Wireless. Safety Equipment and Deratisation Certificates are required by authorities.

CUSTOMS ALLOWANCE: Quantity allowed for each crew member is 200 cigarettes and 1 bottle wine/spirits.

CARGO GEAR:

57	Quay cranes up to	3 tons
55	,, ,, ,,	6 tons
6	,, ,, ,,	10 tons
8	,, ,, ,,	15 tons
141	Mobile cranes 1–50 tons	
3	Floating cranes up to 160 tons	

IDENTIFICATION CARDS: Not required.

CONSULS:

Argentina	Tel: 317-58-82	India	Tel: 239-78-06
Austria	,, 236-35-44	Indonesia	,, 317-19-00
Belgium	,, 218-07-58	Italy	,, 215-16-54
Bolivia	,, 250-73-24	Japan	,, 310-20-97
Brazil	,, 301-49-00	Korea (Rep.	,, 203-82-50
Cambodia	,, 247-42-67	Liberia	,, 213-81-50
Chile	,, 318-85-86	Libya	,, 228-11-04
Colombia	,, 254-02-48	Madagascar	,, 309-12-58
Costa Rica	,, 245-74-04	Monaco	,, 227-74-16
Cuba	,, 318-19-36	Morocco	,, 215-34-70
Denmark	,, 310-20-91	Netherlands	,, 217-33-58
Dominican Republic	,, 228-39-10	Nicaragua	,, 227-92-30
Ecuador	,, 217-34-84	Norway	,, 215-00-94
Eire	,, 250-04-48	Pakistan	,, 257-42-30
El Salvador	,, 245-02-64	Panama	,, 318-69-83
Ethiopia	,, 257-47-06	Paraguay	,, 239-32-02
Finland	,, 310-41-36	Peru	,, 230-12-42
France	,, 317-81-50	Portugal	,, 318-81-50
Gabon	,, 227-66-27	Senegal	,, 217-86-00
Germany, Fed. Rep.	,, 218-47-50	South Africa	,, 318-42-58
Great Britain	,, 239-08-04	Sweden	,, 318-93-66
Consul General, G.B.	,, 239-08-04	Switzerland	,, 250-05-00
Greece	,, 246-22-90	Thailand	,, 301-43-44
Guatemala	,, 230-77-91	Turkey	,, 215-20-09
Haiti	,, 213-81-50	Uruguay	,, 317-41-83
Honduras	,, 302-00-00	U.S.A	,, 319-95-50
Iceland	,, 250-03-93	Venezuela	,, 215-01-12

REPAIRS: All types deck and engine.

DRY DOCKS: 1 floating dock, length 111 m., lifting power 6,000 tons; belonging to Port Management.

SURVEYORS: Lloyd's; 2410400. A.B.S.; 2399275. N.V.; 3192906 and 2463164.

REPATRIATION: Good facilities available.

AIRPORT: Located about 7 km. from town, well served by regular airlines.

TIME: always GMT plus 1 hour.

HOLIDAYS: 1st January; 6th January, The Three Kings; 19th March, St. Joseph; Good Thursday, after 1400 hrs.; Good Friday; Resurrection Day; 1st May, Labour Day; Ascension Day; Whit Monday; Corpus Christi; 24th June, local holiday; 29th June, St. Peter and St. Paul; 18th July, National Holiday; 25th July, St. James; 15th August; 24th September, local holiday; 12th October; 1st November; 8th December; 25th December and 26th December, second Christmas Day.

POLICE/AMBULANCE/FIRE: Police 091; Harbour Police 3026367; Ambulance 3171717 (Also 24 hour medical service); Fire 080 and 2535353 (080 is best).

TELEPHONES: Only at Terminal Station.

SERVICES: Carpenters, lashing, hatch and tank cleaning all available.

AUTHORITY: Junta del Puerto de Barcelona.

BILBAO: 43.17 N. 02.55 W. (See Plan)

DOCUMENTS:

3 Cargo Manifests.
2 Negative Passengers.
3 Crew Lists.
2 Stores Lists.
2 Crew Personal Effects Lists.

The maximum quantity of tobacco and/or cigarettes allowed per crew member, Master included, is 3 kilos. Any surplus must be separated and manifested as cargo in transit and the manifest duly visaed by a Spanish Consular Representative at the loading port. Should there be no Spanish Consular Representative of a friendly nation, Port Authority (Custom House) or Chamber of Commerce in the sailing port. In case a vessel carrying an excess amount of tobacco or cigarettes and not in possession of a Manifest duly visaed by the competent Authority is diverted at sea to a Spanish port while on voyage to another, the Master should cable to the Administratcr de Aduanas of Bilbao, notifying the diversion and the excess of tobacco manifested without offical visa. On arrival the Master should submit the Manifest and other documents to the Custom Authorities.

PILOTAGE: Pilotage is compulsory for vessels entering and leaving Bilbao Port. Pilot will board incoming deep laden or ballast tankers within a radius of 2 miles from the new Punta Lucero Light. The Pilot ladder for boarding is usually rigged off port side. If the Pilot is unable to board on account of bad weather, the Pilot boat will display the signal "follow in my wake" and lead the vessel into sheltered harbour.

Pilots keep on watch 24 hours on Channel 12.

ANCHORAGE: Good anchorage in Outer Harbour inside old breakwaters. Depths of LW about 28-33 ft. Also anchorage outside old breakwaters, between Santurce Breakwater and New Lucero Breakwater, lightening operations sometimes performed when weather good. The recommended anchorage zone for deep-laden vessels is 1.3 miles S.W. of Punta Galea Lighthouse in 12 fathoms, sand.

RESTRICTIONS: None, except when draft exceeds 13-14 ft. and proceeding to berths inside river, which case must await tide. See "Max. Size".

MAX. SIZE: No restrictions length or breadth. Max. advisable draft 30-31 ft. Tankers: Largest vessel entered 323,087 d.w.t. Length 347.94 m. Draft 23 m.

HEALTH: If proceeding direct to berth, pratique obtained immediately after berthing. Otherwise, at anchorage on arrival. Cases suspected disease or fever on board, Master must radio Agent, to advise Health Office. On berthing Health Authorities require Health Declaration, Derat Certificate and Crew List.

RADIO: Cabo Mayor Radio.

TUGS: No tugs required for entering port, only for berthing or shifting inside river. Ship's lines used, the tug employed according Pilot's advice. 28 tugs available, 125 h.p.-4,000 h.p.

BERTHING: Canal de Duesto 26 ft. alongside. Tankers: Vesels will berth day and night, but vessels deep laden must be on Pilot station 2 hours before HW. Mooring lines should be of polypropylene or fibre, etc.; if wires are used they should have a fibre pennant. For average weather conditions 18 mooring lines are recommended, 5 head ropes, 5 stern, 4 breasts and 4 springs.

Operated by the Port Authority:

General Cargo:

800 m. of berthing with depth of more than 12.0 m.
1,633 m. of berthing with depth between 8 m. and 10.0 m.
362 m. of berthing with depth between 6 m. and 8 m.
1,798 m. of berthing with depth betweem 4 m. and 6 m.

Bulk Cargo:

543 m. of berthing with depth of more than 12.0 m.
1,372 m. of berthing with depth between 6 m. and 8 m.
121 m. of berthing with depth between 4 m. and 6 m.

Containers:

250 m. of berthing with depth of more than 12.0 m.
500 m. of berthing with depth between 8 m. and 10 m.

Passenger:

180 m. of berthing with depth between 10 m. and 12. m.

There are also 2 Ro/Ro ramps available.

CRANES: Gantry Type: 4 with over 12 tons capacity, 9 of 12 tons capacity, 36 of 6 ton capacity, 62 of 3 tons capacity.

Mobile type: 20 mobile cranes with capacity from 3.5 tons to 100 tons.

Floating Cranes: 10 floating cranes with capacity up to 400 tons.

STEVEDORES: Very important send advance messages giving ETA. Agent then informs Shippers or Receivers' stevedores. Official working hours Monday/Saturday 0800–1200;1400–1800 hrs.

MEDICAL: Medical service must be arranged by the Agent. In emergency send cable in advance to Agent.

TANKERS: "Campsa" have private berths at Santurce and Zorrosa. Cargo manifest must be visaed by Spanish Consul, or in absence of Consul by Authority at loading port. Petronor Terminal is located at Santurce, at the entrance of Abra Bilbao. There is a pier of 645 m. with 2 berths, No. 1 (West) and No. 2 (East). Both berths are fitted with good rubber fenders. The pier is dredged to 14 m. in LW. For crude vessels to discharge, there are 4 booster pumps on the jetty, reaching a rate of about 1,000 LT per hour.

The West berth is equipped with a bank of 5 metallic arms, 2–12 in. for unloading crude oil/ballast-deballasting/loading fuel oil; 2–8 in. for loading white products and 1–6 in. for bunkering.

The East berth is equipped with a bank of 4 metallic arms; 2–12 in., 1–8 in. for loading white products, 1–6 for bunkering.

Masters are requested to advise "Petronorbilbao" by cable on departure and 72 hours in advance and if any changes in the vessel's ETA additional advice is required. Petronor Terminal keeps watch 24 hours on VHF Channels 16 and 12.

Two new oil berths in operation, depth 32 m. and 19 m.

DENSITY: 1025.

FRESH WATER: Always available. Delivery by tugs. Minimum 10 tons.

FUEL: Ordinary fuel oil and gas oil available at local "Campsa" refinery. Advisable that Shipowners stem bunkers 48 hours prior arrival. Delivery by barges, or at the bunkering pier. Bunkers available at Petronor. Advise Agent in advance.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally by crew, except in liner vessels, when contracted by stevedores.

CERTIFICATES: Have usual documents on board, but only Safety Radio, Safety Equipment and Deratisation Certificates required by authorities.

CUSTOMS ALLOWANCE: Normally, Customs permit 200 cigarettes, and 1 bottle wine/spirits per man.

CARGO GEAR: Usually shore cranes employed in loading or discharging but if require lightening then ship's derricks used as only 1 floating crane is available.

IDENTIFICATION CARDS: Not required.

CONSULS:

Argentina
Austria
Belgium
Bolivia
Brazil
Colombia
Costa Rica
Chile
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Greece
Guatemala
Haiti
Italy
Liberia
Nicaragua
Norway
Paraguay
Peru
Portugal
Sweden
Uruguay
U.S.A.
United Kingdom
Venezuela
W. Germany

REPAIRS: Good repair facilities, and several important shipyards.

DRY DOCKS: 5 graving docks. Biggest: length 166 m., breadth: 20 m. (naval shipyard).

REPATRIATION: Good facilities.

AIRPORT: About 10 km. from town. Regular services to Madrid and Barcelona. Also direct flights London and Paris.

TIME: GMT plus 1 hour (permanent).

HOLIDAYS: 1st January; 6th January; 19th March (St. Joseph); Good Thursday afternoon; Good Friday; 1st May (Labour Day); Ascension Day; Corpus Christi; 29th June (St. Peter and St. Paul); 18th July (National Holiday); 31st July (local holiday); 15th August; 12th October; 1st November; 25th December.

POLICE/AMBULANCE/FIRE: Police 091; Ambulance (hospital) 41.87.00; Fire 21.30.00.
AUTHORITY: El Comandante Militar de Marina de Bilbao.

CADIZ: 36.30 N. 06.20 W. (See Plan)

DOCUMENTS:
Entrance Declaration.
Health Declaration.
List of Crew on Arrival.
List of Crew on Departure.
List of Passengers on Arrival (if applicable).
List of Passengers on Departure (if applicable).

All vessels must be represented by a local Agent who will be responsible for completing the required Customs, Health and Port Authorities documentation.

PILOTAGE: International Code Signals used to call Pilot. Pilot can be contacted by VHF or through telegraphic address. "Practicos Cadiz". 6 to 8 hours notice of ETA preferred.

Pilots operate a steam launch and a diesel launch both painted black with yellow funnel on which letter "P" is painted in white on both sides. Pilot boat does not remain at station but comes out when ordered. Pilot boards in an area between the Rota light and San Sebastian light. In case of bad weather the Pilot will board nearer Los Cochinos shore and meanwhile signal instructions to the vessel until the Pilot is able to board.

ANCHORAGE: Vessels waiting for a Pilot may anchor in any safe position according to draft and weather conditions. Tankers or deep draft vessels may anchor West of the Diamante buoy in 16-18 m. depth where the Pilot boards at first opportunity.

RESTRICTIONS: Entry is restricted only by the depth of the entrance channel, maximum safe draft 30 ft.

HEALTH: Master should radio, not more than 50 hours and not less than 5 hours before arrival, the following information to the port authority: name and nationality of ship, date and time of arrival, last port of call, number of passengers and crew aboard, if doctor on board and details of any sickness noted on voyage. Message to be addressed to "Sanidad Maritima Cadiz". International code quarantine signals to be shown on arrival when free pratique will be given provided health situation is satisfactory.

TUGS: Normally join vessel off the berths. 7 tugs available, up to 1,500 h.p.

BERTHING:
Mole No. 1. 220 m. length, depth alongside 10 m. L.W.
Mole No. 2. 460 m. length, depth alongside 10 m. L.W.
Mole No. 3. 440 m. length, depth alongside 10 m. L.W.
Generalisimo Franco Mole: 365 m. length, depth alongside 10 m.
Muelle Armamento: 200 m. length, depth alongside 9.50 m.
Muelle Embacadura: 110 m. length, depth alongside 9.50 m.

TANKERS: 3 Tanker berths for vessels up to 27 ft. draft at the piers in the Zona Franca, operated by Campsa. Hoses: Fuel oil 10 in., gas oil 8 in., gasoline 8 in. No slop discharge facilities.

International Terminals Corp. Berth, length 170 m., depth 9.5 m.

FUEL: Fuel, gas oil and several types of marine diesel can be supplied.

REPAIRS: There are 3 shipyards – Astilleros Espanoles SA, at Cadiz and Matagorda. Empresa Nacional Bazan-Carraca, and several workshops of Auxiliar de la Construccion Naval. All types of repairs can be effected.

DRY DOCKS: Largest is 245 m. long, 57 m. wide. In addition Astilleros Espanoles have 2 floating docks, 1 of 231 m. length, 24 m. breadth, lifting capacity 39,400 tons, and the other 100 m. length, 17.54 m. breadth lifting capacity 4,500 tons.

At Matagorda, there is a dry dock of 150.97 m. length, 19 m. width, and 6.23 m. max. draft.

OPENING/CLOSING HATCHES: This work is normally effected by the stevedores.

CONSULS: Argentina, Belgium, Bolivia, Colombia, Denmark, France, Germany, Greece, Italy, Liberia, Netherlands, Norway, Sweden and Finland, Portugal, Venezuela.

CUSTOMS ALLOWANCE: Max. of 3 kilos of tobacco for each person on board. All to be declared. Wine or spirits, 1 decilitre per man per day.

AIRPORT: Nearest at Seville, about 150 kms. away. Daily flights to Madrid, Barcelona and overseas.

TIME: GMT plus 1 hour all the year round.

TELEPHONES: Connection to vessels can be arranged by Agents.

SHORE LEAVE: Crew are permitted to go ashore subject to police control.

DEVELOPMENTS: Astilleros Espanoles is building a new dry dock to accommodate vessels up to 400,000 tons.

AUTHORITY: Comandante Militar de Marina.

CARTAGENA: 37.35 N. 00.59 W. (See Plan)

DOCUMENTS:
6 copies of the Crew List.
6 copies of the Passenger List, or 2 negative copies as the case may be.
2 sets copies Manifests covering cargo destined to Cartagena and carried in transit.
Store Provision List, in duplicate, including items such as: tobacco, spirits, radios, coffee, tea, bunkers, and any other items belonging to the vessel.
2 copies of all Personal Effects Lists, from passengers and ship's crew.

The amount of cigarettes allowed for each member of crew/passenger is 3 kilos; any amount over has to be manifested as tobacco in transit, and this manifest must be visaed by a Spanish Consul in the last loading/discharging port. If there is no Spanish Consul in the port of call before Cartagena, the Master is requested to send a cable to: Direccion General de Aduanas, Madrid, quoting as follows: "m.v.' . . .' coming from . . . order to proceed to Cartagena tobacco manifest unlegalised = Master".

This cable is to be inserted in the radio log-book, and copy of same to be delivered to local Customs Authorities when boarding the vessel.

PILOTAGE: Compulsory. Position of Pilot station 37° 34.6′ N. 0° 59′ W. Position with green light of Dique de Curra bearing 000°, and the white light of Las Losas bearing 090°. This is the position at which the Pilot normally boards.

Vessels bound for Escombreras wait for Pilot in position 37° 34.2′ N., 0° 59′ W., with green light of Dique de Curra bearing 000° and the green light of Dique Bastarreche bearing 090°.

Pilot launch is a motor-boat with cabin, about 9 m. long, white hull, red below water line, black letter "P" painted on both sides.

When bad weather prohibits Pilot boarding in the above position, vessel may be required to embark Pilot inside the harbour breakwaters.

Vessels call Pilot in daytime by code flag "G", or by sounding 3 prolonged blasts on the whistle.

At night, Pilot may be called by flashing code signal "PT", or by 3 prolonged blasts on whistle.

Radio messages, with ETA, may be sent direct to Practicos Cartagena with 24 hours' notice, and confirmed 12 hours before arrival, messages should include vessel's seawater draft and, if calling for the first time, vessel's length overall. Pilot station equipped with VHF.

APPROACHES: Escombreras bank with datum depth of 9.5 m. situated West of Escombreras Island, extends from 200 to 400 m. West of the Eastern tip of the island. This bank is unmarked.

Area of underwater obstructions exists between the coast, the meridian of Santa Ana buoy, and the parallel of Las Losas beacon.

There is a zone used for submarine exercises which is marked on the charts. Occasionally, naval divers carry out exercises in the vicinity of the port entrance. These are accompanied by naval vessels showing appropriate signals.

Ships bound for Escombreras, to enter the port, should steer for a point situated at the intersection of the N.S. line of the red light at the extremity of Curra Pier, and the E.W. line through the green light at the extremity of the Bastarreche Pier, at which point, approximately, the Pilot boards the vessel.

The least recorded depth in the entrance to the port is 25 m. The approaches to the port of Escombreras do not present any difficulties.

ANCHORAGE: Vessels anchored within the port limits should not carry out repairs affecting main engines as the possibility of sudden storms in Winter may make it necessary to move to a sheltered anchorage North of Cabo Tinoso, or to put to sea.

Vessels under 29 ft. 6 in. draft may anchor inside the breakwater provided they do not obstruct other vessels' movements.

Anchorage for larger vessels in Cartagena Roads, approx. position 37° 35′ N., 0° 59′ 30″ W. in depths of 40 m.

Anchorage for tankers off Escombreras in approx. position 37° 34′ N., 0° 58′ 23″ W., in depths of 42 m.

MAX. SIZE: No length limitations. For Cartagena max. draft 31 ft. 6 in. For Escombreras max. draft 68 ft.

HEALTH: Free pratique is immediately obtained when vessels berth any time from sunrise to sunset. Port Health Officers, require Maritime Health Declaration, Deratisation Certificate, and copy of crew and passenger lists.

RADIO: Cabo Palos Radio, Aranjuez Radio, and/or Gibraltar Radio.

TUGS: 3 tug-boats 500–1,000 h.p. with fire-fighting capabilities. All 3 tugs on duty 24 hours duly equipped, with 2 shifts of crew.

Tugs join vessels in vicinity of port entrance, vessel's lines normally used.

The tugs available to assist berthing tankers in Escombreras are all diesel tugs, equipped with fire-fighting equipment. 5 tugs available of up to 2,400 h.p.

BERTHING: Total length of general cargo quays 679 m. Depth alongside 8–10 m. Solid bulk materials: total length of berthing 717 m. Depth alongside 8–10 m.

CRANES:

No.	*Capacity*	*Type*
7	3–20 tons	Electric Gantry
2	3 tons	Mobile-Diesel
1	6 tons	Mobile-Diesel
2	25 tons	Mobile-Diesel
1	90 tons	Mobile-Diesel

STEVEDORES: In the case of a vessel calling at Cartagena at night time, Sundays or holidays, it is important that Master cable 24 hours in advance to advise his ETA in order that Agents are able to arrange stevedores' operations. Gangs can be called on as follows: on weekly working days 0800 and 1330 hrs. On Sundays/holidays 0800 hrs. (with prior advice to Union by 1200 hrs. on Saturdays or day preceding holidays). The official working hours are: Monday/Saturday 0800 to 1200 and 1330 to 1730 hrs. – Sundays/holidays: from 0800 to 1400 hrs.

MEDICAL: Medical services rendered as soon as requested but, in case of emergency, Master required to send urgent cable in advance.

TANKERS: These vessels call at port of Escombreras 2 miles away from Cartagena port, this port owned by Refineria de Petroleos de Escombreras S.A. Slop discharge facilities available at Escombreras.

For ships of 250,000 d.w.t Berth Number 7, of recent construction, consists of 4 dolphins, in a line parallel to Bastarreche Pier. Between the first and third dolphin is situated a loading platform with loading/discharging lines. The centre of this platform is situated at a distance of 230 m. from the head of Bastarreche Pier, bearing 140°.

The least depth in Berth No. 7 is 21.45 m. or 70 ft. 4 in. at the extreme South of the berth. The rest of the area has a depth of between 24 to 28 m.

The maximum length foreseen for tankers of 250,000 tons d.w.t. is 250 m. or, 1,145 ft., since the total length of the berth is 430 m.

The maximum allowable draft is 21 m. or 68 ft. 1 in.

Shore lines for crude oil are 1 of 40 in. diameter and 3,500 m. length, and another of 24 in. diameter and 3,500 m. length.

The Woodfield hose-handling gantry has four 16-in. hoses of which the 2 outside hoses should be used for loading bunkers as well as for discharging. Connecting flanges of 16 in. diameter, type 150 ASA.

Fresh water can be supplied by pipe-line at all berths at a rate of 45 t.p.h.

Only vessels up to about 100,000 d.w.t. may be berthed at night.

8 berths suitable for tankers from 29 ft. 6 in. to 43 ft. draft.

2 berths for LPG carriers up to 29 ft. 6 in. draft.

FUEL: At Cartagena, only gas oil available from tank trucks. At Escombreras all grades of fuel available subject to advance notice given.

FRESH WATER: Available from quay by hose connections, only on working days. On Sundays/holidays notification to be required before 1400 hrs. preceding day.

FIRE PRECAUTIONS: The port area has its own Fire Department under supervision of Port Director. Although there is no water-borne equipment available, tug "Brio" will assist as required as well as Cartagena City Fire Department.

DEVELOPMENTS: There is a big programme to increase berthing-places by building new piers close to breakwaters, available for 3 vessels.

CONSULS: The following countries are represented in Cartagena:

Finland
France
Sweden
Panama
Peru
Italy
Denmark
Greece
Norway
Holland
Belgium

GANGWAY/DECK WATCHMEN: Not compulsory, only used when required by Master under Immigration Police Supervision.

OPENING/CLOSING HATCHES: Usually by ship's crew.

CUSTOMS ALLOWANCE: 200 cigarettes per each crew member, out of bond. The excess to be declared as cargo in transit. Wine and/or spirit: 1 bottle for each crew member or passenger.

CREW IDENTIFICATION CARDS: Not required.

REPAIRS: There are very good repair facilities. A private shipyard "Empresa Nacional Bazan" and 2 other private repair shops.

DRY DOCKS: 1 dry dock can accept vessels of 566 ft. length and 73 ft. beam. 2 floating docks for vessels up to 333 ft. in length.

REPATRIATION: All facilities available.

AIRPORT: San Janvier airport situated 27 miles from Cartagena with daily service to Madrid, Barcelona and Almeria.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January; 6th January; 19th March (St. Joseph); Good Thursday from 1400 hrs.; Good Friday; 1st May (Labour Day); Ascension Day; Corpus Christi; 29th June (St. Peter and St. Paul); 18th July (National holiday); 15th August; 12th October; 1st November (All Saints' Day); 25th December.

POLICE/AMBULANCE/FIRE: Police tel. 501456. Ambulance 503470; Red Cross 510727; Fire Department 501111; Port Fire Department 503100.

AUTHORITY: Capitan de Navio, Comandante Militas de Marina de Cartagena, Comandancia de Marina.

CASTELLON DE LA PLANA: 39.58 N. 00.01 W. (See Plan)

DOCUMENTS:

- Manifest of Castellon cargo: 1 set covering all loading ports; make sure that this manifest is in perfectly good order before ship's berthing, as the Customs will board the vessel immediately and take it away as it is; thereafter any omission or excess of pages may lead to a fine.
- Manifest of the Transit cargo: 2 sets (the same recommendations as above).
- 3 Crew Lists.
- 2 Negative of Passengers.
- 2 sets of Bills of Lading of Castellon cargo.
- 2 Provisions Lists.
- 2 Manifests of personal effects.

PILOTAGE: Compulsory, and service is permanent. Pilots board vessels by a cutter in roads near entrance formed by the 2 breakwaters.

Pilot cutters are painted white and have the letter "P" in black on each bow. Cutters have a blue flag, with letter "P" in white. Signals to be made by vessels requiring Pilot: 3 long blasts. Telegraphic address: "Practicos, Comandancia Marina, Castellon".

ANCHORAGE: Vessels can remain at anchor at the roads. Recommended anchorage: 0.5 mile East of lighthouse in depth of 12 m.

RESTRICTIONS: Max. draft 22 ft. for vessels of about 110–120 m. length. For vessels of more 120 m., to 140 m. length, max. draft is 20-21 ft.

HEALTH: Pratique obtained immediately after berthing, when Health Officer boards vessel. In case of suspected disease or fever on board Master must radio Agent to advise the Health Office. Following documents are required by the Health Officer upon berthing: Maritime Declaration of Health, Deratisation Certificate, 1 Crew List.

RADIO: Aranjuez Radio, call sign EAD, 36–48 hours prior arrival nearest radio station is El Grao Radio, call sign EAV.

TUGS: Tugs join vessels at entrance of port. Vessels of more than 100 m. length normally use 1 or 2 tugs. Ship's ropes used.

STEVEDORES: Very important that Master sends in advance short radio notice regarding vessel's ETA so Agent can inform Shippers or Receivers' stevedores accordingly. Official working hours of port are: Monday/Saturday 0830–1230 and 1400–1800 hrs.

MEDICAL: All kinds of medical services can be arranged. In case a crew member needs medical attendance urgently, it is advisable that Master sends a radio message in advance.

TANKERS: "Campsa" berth in Muelle Serrano Lloberes.

Esso Petroleos Espanoles, S.A. Refinery Terminal. Breasting Island; Lat. 39° 56′ 7″ N. Long. 00° 01′ 6″ E. for tankers with unlimited length. Depth of water in the berth is about 12.5 m. (41 ft.).

Vessels berth heading either E. or W. The Breasting Island is built on piles. A central platform about 70 m. (230 ft.) long and 15 m. (49 ft.) wide will accommodate the loading arms and the island services. 2 mooring dolphins are located at about 128 m. (420 ft.) from the centre of the platform. They are linked with the main platform by a walkway. The platform elevation from the sea level is an average of 6.8 m. (22 ft.).

Both sides of the Breasting Island central platform and the Eastern dolphin are provided with a resilient fendering system. No fendering system is installed on the Western dolphin. Vessels can be docked at both sides of the Breasting Island.

2 "swamped" breasting wires are anchored about 200 m. (640 ft.) off both sides of the Breasting Island. Quick-release hooks are provided on the platform corners and on both mooring dolphins.

Hoses: 2 loading arms of 10″–150 lbs/ASA and two 8″ loading arms 150 lbs/ASA.

Any vessel from 3,000 d.w.t. through 37,000 d.w.t. can be accepted at the Breasting Island having a deepest draft of 37 ft. 6 in.

Sea berth: For crude oil cargoes with submarine pipe-line: Lat. 39° 56′ 4″ N. Long. 00° 02′ 7″ E. Unlimited length.

Depth of water in the berth is about 25 m. (82 ft.). Vessels berth heading 075/080 true using both anchors forward, with about 280 m. (900 ft.) of chain out on each anchor and 2 swamped mooring legs if it is necessary.

The stern is secured to 5 Iamgar buoys equipped with 2 release hooks on each. These buoys have flashing lights.

1 navigational range consisting of 2 lighted buoys, is used to proceed to the sea berth and drop the anchors.

Any vessel from 27,000 d.w.t. to 165,000 d.w.t. can be accepted in the sea berth.

Bunkering available. Water available by barge. Provisions available. Pilotage compulsory – Esso Pilots. Tugs: 2 tugs compulsory.

BALLAST: All ballast must be discharged to shore tanks, no exception will be made to this rule. A total of 17,000 cu. m. (110,000 bbls) can be received by the Refinery ballast tanks.

FRESH WATER: All piers have water available by shore pipes. The rate of delivery is about 8–9 t.p.h.

FUEL: Available with 5 days notice and subject to "Campsa" berthing availability.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Vessels should have usual documents on board, but only the Safety Wireless, Safety Equipment and Deratisation Certificates are required by authorities.

CUSTOMS ALLOWANCE: Normally, Customs permit 200 cigarettes per man out of bond and 1 bottle of spirit per man.

CARGO GEAR: All commercial piers served by electric shore cranes able to lift 3, 6 and 8–9 tons.

IDENTIFICATION CARDS: Not required.

CONSULS Italian, postal address Plaza Huerto Sogueros, 2-3 -2 , tel. 212288; France, Plaza Borull, 9, 220180; Sweden, Maestro Ripolles, 28, 220053; Norway, Trinidad 85, 224511.

REPAIRS: Work shop for small repairs.

REPATRIATION: Good facilities exist.

AIRPORT: Valencia, 70 km. away.

TIME: Always GMT plus 1 hour.

HOLIDAYS: 1st January; 6th January; 19th March, St. Joseph; Good Thursday after 1400 hrs.; Good Friday; 1st May, Labour Day; Ascension Day; Corpus Christi; 14th June, local holiday; 29th June, St. Peter and St. Paul; 18th July, National holiday; 25th July, St. James; 15th August; 12th October; 1st November; 8th December; 25th December; and 2 or 3 local holidays more, variable.

POLICE/AMBULANCE/FIRE: Police: tel. 220516; Ambulance 213944; Fire 221222.

AGENT: Geronimo Mallach Paches, General Aranda, 22, Castellon De La Plana. Telegrams "Gemapa". Tel. 220061, 220064, 222806, 221830 (Shipbroker and Stevedore.) Telex; 65541-Gemap-E.

CASTRO-URDIALES: 43.24 N. 03.14 W.

DOCUMENTS:

3 Cargo Manifests. 1 visaed by the consular authority.
3 Cargo Manifests for other ports if the vessel has called at and loaded in other ports.
3 Ballast Manifests (if the vessel has arrived in ballast).
5 Passenger Lists (if passengers are carried).
5 Captain's Certificates to the effect of "No Passengers" if no passengers are carried.
5 Crew Lists.
5 Stores Lists.
5 Crew's Store Lists – cameras, radios, spirits, cigarettes, etc.
Health Certificate.
Certificate of Derating and fumigation against insects.
4 Bills of Lading.
International Freeboard Certificate.
International Safety Certificate.
International Radio Certificate.
Certificate of Stowage of cargo.

PILOTAGE: *To request pilotage:* 1. Advise the arrival of the vessel 24 hours in advance. 2. Hoist flag G of the International Flag Code. 3. Anchor within the pilotage limits of the port.

Port pilotage limits: Coastal zone comprised between the Onton meridian and that of the Punta del Rabanal at one mile from the coast. The Pilot goes out to a limit of one mile outside the port. There are no means of radio communication with the pilot boat or pilot station. ETA to be given 24 hours in advance. Sound signals to summon the Pilot – 3 long blasts. In the event of bad weather, the Pilot does not proceed to sea, and the vessel must enter the port and anchor in the bay.

Anchorage to await Pilot: In the mouth of the port at 1 mile distant. The pilot boat carries a blue flag with the white letter "P" upon it. The pilot boat is blue and is a small motor-launch.

ANCHORAGES: The best anchorage is 045°–800 m. from the green coloured beacon of the breakwater at the port entrance, in a depth of 12 m.

RESTRICTIONS: There are no entry restrictions. Vessels with a draft greater than 6 m. cannot enter the port.

MAX. SIZE: Length 105 m., draft 5 m., depth at the entrance 9.14 m.

HEALTH: The Health Official boards the veseel as soon as it is berthed alongside. In the event of suspected illness or fever, advise Agent by radio and anchor near the port until the Health Doctor authorises entry.

RADIO: The best radio station to pass the ETA telegram to consignees or Agents is Santander radio station call sign "EAS". Frequency 500 kHz.

TUGS: None available.

BERTHING: Irrespective of tide. The S.E. pier has a total length of 980 ft., of which 500 ft. forms the commercial wharf, mainly for coasters sundry cargoes. No cranes. Fresh water supply. Depth 17 ft. at low water.

Iron ore loading tips: Along open coast adjoining Castro-Urdiales are several cantilever piers connected with the Iron Ore Mines, partly sheltered in creeks or small coves. All vessels bound to load iron ore there should clear and apply at Port of Castro Urdiales. Steamers cannot remain at these berths during rough weather but may find good anchorage in roads, or immediate shelter at the port of Castro-Urdiales, or better at Bilbao Harbour 9 miles East.

The Iron Ore Loading berths (no length limit) are as follows:

Name	*Situation*	*Approx. ebbtide draft*	*Loading rate per working hour*
Dicido	1 mile E.	21 ft.	800 tons
Saltacaballo	1.5 miles E.	22 ft.	800 tons
Onton	2 miles E.	21 ft.	1,000 tons

STEVEDORES: Ordered by Agent or Shipper. No ETA to stevedores necessary.

MEDICAL: It is not necessary for Agent to receive advance notice that medical attention is required. In the port there is a corps of doctors and 1 of them is always on duty for any emergency. Futhermore, there is a permanent Spanish Red Cross service with ambulances to transport any patient to a large hospital centre. There is also a hospital in this town.

In the case of serious illness, patients are taken by ambulance to the Cruces Medical Aid Centre (province of Vizcaya-Bilbao) 18 k. from Castro Urdiales.

International Vaccination Certificates are required.

DENSITY: 1016.

FRESH WATER: Water may be taken on board at the San Luis Quay (also known as the Ocharan Mazas Quay). By means of hoses and at a rate of delivery of about 40 t.p.h.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Carried out by Crew.

CERTIFICATES: Safety Wireless, Safety Equipment, and Deratisation generally inspected.

CUSTOMS ALLOWANCE: Normally 200 cigarettes per man. For longer stay, new allotment out of bond obtainable. Wine/and/or Spirit: 1 bottle per man.

CARGO GEAR: At the small commercial wharf ship's derricks are used. At the iron ore loading berths along the coast with Cantilever Piers, conveyor belt employed with spout at the tip.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: Limited.

REPATRIATION: Crew changes and repatriation can be effected, bearing in mind that any consular negotiation must be made in Bilbao, since there are no Consulates in this port.

AIRPORT: Nearest Sondica (Bilbao) 40 km. by road.

TIME: Always GMT plus 1 hour.

HOLIDAYS: Sundays; 1st January; 19th March (Saint Joseph); April, Holy Thursday and Friday (variable each year); 1st, 23rd May; 13th and 29th June; 18th and 25th July; 15th August; 12th October; 1st November; 25th December. On holidays, work may proceed if requested.

POLICE/AMBULANCE/FIRE: Police C.G. Tel. 861146; Ambulance Red Cross 861147 and 861191; Hospital 860196; Fire 861294.

TELEPHONES: No arrangements for placing telephones on board.

SHORE LEAVE: Crew allowed ashore.

DELAYS: The only delays that can normally be expected are those due to bad weather.

AUTHORITY: Military Marine Adjutant – Port Captain.

AGENT: J. Ibanez, Castro-Urdiales, Muelle 6. Tel. office 860193, home 861176. Telegraphic address "Ibanez".

CEUTA: 32.54 N. 05.17 W.

DOCUMENTS:

Health Declaration.
2 Cargo Manifests.
2 Stores Lists.
4 Crew Lists.
5 Passenger Lists.

PILOTAGE: Radio Agent advising ETA 24 hours in advance. International code signals used to call Pilot, or give 3 long blasts. Sound signal used day and night. Pilot boards within one mile of the breakwater. Pilotage compulsory.

ANCHORAGE: N. W. of the harbour in depths from 10 to 12 fathoms, at about 2.25 cables off breakwater but vessels should leave this anchorage with strong winds from E. or W. The bottom off the N. W. side of Muelle de Poniente is mostly rocky. The existence of submarine cables is marked by a hemispherical buoy painted in white, moored at about 3.25 cables bearing 74° from the red light at the head of Muelle de Levante. No light is exhibited. For this reason, anchorage is prohibited to the North of a line extending from the root of Muelle de Levante bearing 298° to position of the buoy already mentioned.

MAX. SIZE: Length, 220 m. Max. draft, 33 ft. 6 in.

HEALTH: Pratique obtained immediately after berthing when vessel boarded by health officials.

RADIO: Tangier, or Cadiz Radio.

TUGS: Usually 2 available of 1,200 h.p. Tugs use ship's lines.

BERTHING: West Mole 5 berths for vessels up to 33 ft. 6 in. draft. East Mole: 2 berths for vessels up to 31 ft. draft. Dato wharf, 2 berths, up to 20 ft. draft.

STEVEDORES: Accurate advance notice of ETA necessary to order gangs required. Gangs are ordered at 0730, and 1630 hrs. For Sundays and holidays, gangs ordered before 1730 hrs. previous day. Average cargo handling rates: General cargo, 7 tons per gang/hour; bagged cargo, 10 tons per gang/hour; drums, 13 tons per gang/hour. Overtime from 2000 hrs., Sundays and holidays, 40% surcharge.

MEDICAL: Advance notice by radio preferred. Hospital facilities available.

DENSITY: About 3.64%.

FRESH WATER: Available, but may be some restriction in Summer months.

FUEL: All grades available, to be ordered in advance.

GANGWAY/DECK WATCHMEN: Available but not essential.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCE: Maximum 3 kilos tobacco for each crew member. Normal daily consumption of wine and spirits allowed.

IDENTIFICATION CARDS: Not required.

CONSULS:

Great Britain,	Tel. 512522	Denmark,	Tel. 512254
France	,, 512521	Italy	,, 511053
Belgium	,, 512521	Netherlands	,, 511408
Sweden	,, 511801	Norway	,, 511700

REPAIRS: Only minor repairs can be effected. Slipways for vessels up to 500 tons.

REPATRIATION: All facilities available.

Seamen's Books, in lieu of passports, accepted by Spanish Immigration Authority for Seamen of the following nationalities only:

Belgium, Federal Republic of Germany, France, Greece, Holland, Italy, Ireland, Luxembourg and Portugal.

Seamen of other nationalities will require valid passports and it is advisable to check with Agent regarding visas required in some cases.

AIRPORT: Nearest international airports at Tangier, 100 km. away, and at Malaga, 137 km. away.

TIME: GMT plus 1 hour in Winter, GMT plus 2 hours in Summer.

HOLIDAYS: New Year's Day, 6th January, 19th March, Holy Thursday (afternoon), Good Friday, 1st May, Ascension Day, Corpus Christi, 29th June, 18th July, 25th July, 5th August, 15th August, 12th October, 1st November, 8th December, Christmas Day. All holidays may be worked by voluntary labour.

POLICE/FIRE/AMBULANCE: Police, tel. 513324; Fire, tel. 513333; Ambulance, tel. 514509.

TELEPHONES: No arrangements for placing telephones on board.

AUTHORITY: Harbour Master.

AGENT: Ybarrola, Depositos de Aceite Combustible, S.A. Avenida de Espana, 11. PO Box 46, Ceuta. Tel. 511800. Cables, Ybarrola Ceuta. Telex: 78026.

CORUNNA: 43.23 N. 08.22 W. (See Plan)

DOCUMENTS:
3 Crew Lists.
2 Passenger Lists or a negative.
1 Cargo Manifest of goods destined for the port.
Another Manifest covering Transit Cargo.
2 Store Lists, including tobacco, cigars, cigarettes, coffee, spirits, radios, cameras, etc., in possession of crew. In all cases make and number of radios to be indicated.
Safety Wireless Certificate and Safety Equipment Certificate.

If vessel carries over 3 kilos tobacco per man, the excess to be declared in separate manifest, which must be visaed by Spanish Consul at the last port, otherwise vessel is exposed to heavy fine.

PILOTAGE: Compulsory. International code signals used to call Pilot.

RESTRICTIONS: No restrictions on night manoeuvres.

MAX. SIZE: Length and beam not restricted. Cargo vessels 32 ft. draft for berthing.

Tankers: Largest tanker to enter 111,423 d.w.t. Draft on arrival and departure; Forward 15.24 m. Aft. 15.54 m. Depth alongside 16.0 m.

HEALTH: If vessels proceed directly to berth, pratique can be obtained immediately after berthing. Otherwise, at anchorage at vessel's arrival.

If vessel has sickness on board of a contagious nature Master should advise Health Authorities by radio, and they will examine patients immediately upon arrival, to enable vessel to be granted free pratique.

TUGS: 4 Available up to 1,050 h.p.

BERTHING:

Berth	*Length (m)*	*Depth (m)*
Mendez Nunez	50	6.0
,, ,,	225	8.0
Bateria	150	8.0
,,	67	5.5
Calvo Sotelo Norte	20	7.0
,, ,, ,,	200	10.0
Calvo Sotelo Sur	200	10.0
,, ,, ,,	200	10.0
San Diego	650	10.0
Espigon Oeste	150	6.0
Espigon Este	50	5.0
,, ,,	150	3.0

CRANES: 22 electric cranes, capacity 3–45 tons, outreach 10–22 m. 2 diesel-electric mobile cranes, capacity 1.5–6.0 tons, outreach 8.0–2.5 m. 1 locomotive crane, capacity 5 tons.

BULK HANDLING FACILITIES: *Private Storage Facilities:*

Cement:	3 silos each of 800 tons capacity.
	4 silos each of 1,000 tons capacity.
Aluminium:	3 silos each of 3,000 tons capacity
	1 silo capacity 4,000 tons.
Fertilizer:	2 tanks each of 7,500 tons capacity.
Unspecified Oils:	2 silos each of 1,000 tons capacity.
	2 silos each of 500 tons capacity
	1 silo capacity 600 tons.
	1 silo capacity 350 tons.
	6 silos each of 500 tons capacity.

TANKERS: 2 berths, depth 13.0 m. for tankers of 45,000 d.w.t. and 60,000 d.w.t.

1 pier, depth 16.0 m. Berthing for 1 tanker of 120,000 d.w.t. and the other 65,000 d.w.t.

Storage facilities:

Campsa: 6 tanks of 3,500 cu.m. each and 3 tanks of 2,500 cu.m. each.

Petroliber; 18 tanks with capacities from 2,500 cu.m. to 35.000 cu.m. Total capacity 220,000 cu.m.

Facilities for reception of dirty ballast.

FRESH WATER: Can be supplied by pipe-line at most berths rate 30-150 t.p.h. or by barge at rate of 150 t.p.h.

FUEL: Can be supplied by pipe-line at most berths. No barges.

CUSTOMS ALLOWANCE: Normally Customs permit 200 cigarettes per man out of bond. Additional quantities needed depend on the stay of ship in port. 1 bottle of spirits per man.

REPAIRS: Minor repairs can be effected in shore work shops.

AIRPORT: Nearest international airport at Santiago de Compostella 60 km. away.

TIME: Always GMT plus 1 hour.

HOLIDAYS: Work can be arranged on following holidays. New Year's Day (January 1st full day); Epiphany (January 6th full day); January 7th (full day); St. Joseph (March 19th full day); Easter Thursday (half day); Easter Friday (full day); St. Joseph Artizan (May 1st full day); St. Peter (June 29th full day); Labour Day (July 18th full day); July 16th (full day); Patron Saint of Spain (July 25th full day); Ascencion Day (August 15th full day); Corpus Christi (full day); Holiday of Hispanisicm (October 12th full day); All Saints' (November 1st full day); Immaculate Conception (December 8th full day); Christmas Day (December 25th full day).

AUTHORITY: Junta de Obras Y Servicios del Puerto.

FERROL:
3.28 N. 08.16 W.

DOCUMENTS:
3 Crew Lists.
2 Passenger Lists or a negative.
1 Cargo Manifest of goods destined for the port.
Another Manifest covering transit cargo.
2 Store Lists, including tobacco, cigars, cigarettes, coffee, spirits, radios, cameras, etc., in possession of crew. In all cases make and number of radios to be indicated.
Safety Wireless Certificate and Safety Equipment Certificate.

If vessel carries over 3 kilos tobacco per man, the excess to be declared in a separate manifest, which must be visaed by Spanish Consul at the last port, otherwise vessel is exposed to heavy fine.

PILOTAGE: Compulsory. International code signals used to call Pilots. Pilots board off Cape Priorino.

MAX. SIZE: Cargo vessels up to 32 ft. draft. Tankers up to 35 ft. draft.

HEALTH: If vessel proceeds directly to berth, pratique can be obtained immediately after berthing. Otherwise, at anchorage at vessels arrival. If vessel has sickness on board of a contagious nature Masters should advise Health Authorities by radio, and they will examine patients immediately upon arrival, to enable vessel to be granted free pratique.

TUGS: Available up to 1,250 h.p. Also salvage tug normally stationed at Ferrol.

BERTHING: Depth alongside quays 25–32 ft.

TANKERS: Campsa Oil Terminal, 3 berths, can accommodate tankers up to 656 ft. length and 35 ft. draft. Facilities available for discharging slops ashore.

FRESH WATER: Can be supplied from the quays.

FUEL: All grades available at the oil berths.

REPAIRS: All ships' repairs can be effected.

DRY DOCKS: 5 dry docks for building and repairing Naval and merchant ships. Largest dry dock length 1,020 ft., width 155 ft. for vessels up to 80,000 d.w.t.

CUSTOMS ALLOWANCE: Normally Customs permit 200 cigarettes per man out of bond. Additional quantities needed depend on the stay of ship in port. One bottle of spirits per man.

AIRPORT: Alevedro Airport (La Coruna), two services a day to Madrid. Labacolla Airport (Compostela), regular services to Oviedo, Santander, Bilbao, San Sebastian, Barcelona, and Madrid.

TIME: Always GMT plus 1 hour.

HOLIDAYS: Work can be arranged on following holidays. New Year's Day (January 1 full day); Epiphany (January 6 full day); January 7 (full day); Saint Joseph (March 19 full day); Easter (two days); St. Joseph Artisan (May 1 full day); St. Peter & St. Paul (June 29 full day); Labour Day (July 13 full day); July 16th (full day); Patron Saint of Spain (July 25 full day); Assumption Day (August 15 full day); Martyrs' Day (August 30 full day); Holiday of Hispanicism (October 12 full day); All Saints (November 1 full day); Christmas Day (December 25 full day).

AUTHORITY: Junta del Puerto, Comandancia de Marina.

GIJON-MUSEL: 43.33 N. 05.39 W.

DOCUMENTS:
3 Crew Lists.
2 Passenger Lists or a negative.
1 Cargo Manifest of goods destined for the port.
Another Manifest covering transit cargo.
2 Store Lists, including tobacco, cigars, cigarettes, coffee, spirits, radios, cameras, etc., in possession of crew. In all cases make and number of radios to be indicated.
Safety Wireless Certificate and Safety Equipment Certificate.

If vessel carries over 3 kilos tobacco per man, the excess to be declared in a separate manifest, which must be visaed by Spanish Consul at the last port, otherwise vessel is exposed to heavy fine.

RESTRICTIONS: Approaches to Musel are open deep water with low-water depths greater than 19 m. The Puerto Local is approached through a channel 150 m. long, 15 m. wide, with a depth of 4 m. low water.

MAX. SIZE: Musel; length 200 m., draft 11 m. Puerto Local; length 60 m., draft 4.6 m.

HEALTH: If the vessel proceeds directly to berth, pratique can be obtained immediately after berthing. Otherwise, at anchorage at vessel's arrival.

If vessel has sickness on board of a contagious nature Master should advise Health Authorities by radio, and they will examine patients immediately upon arrival, to enable vessel to be granted free pratique.

TUGS: 3 tugs available up to 1,000 h.p.

BERTHING: *Musel.*

North Breakwater	No. 1	length	627 m.	depth alongside	14 m.
	(Ore discharge facilities, rate 1,500 t.p.h.)				
	No. 2	,,	107 m.	,,	12-14 m.
	No. 3	,,	328 m.	,,	7.5–9.5 m.
Ribera	No. 1	,,	288 m.	,,	6.5–7.5 m.
	No. 2	,,	109 m.	,,	7.5–9.0 m.
	No. 3	,,	156 m.	,,	7.5–9.0 m.
Espigon I	North berth	length	220 m.	depth alongside	8–10.5 m.
	South berth	,,	314 m.	,,	9.5–10.5 m.
	Coal Quay	,,	220 m.	,,	8.5 m.
Espigon II	North berth	,,	503 m.	,,	8–12.5 m.
	South berth	,,	160 m.	,,	8–12.5 m.

Puerto Local Depth alongside berths less than 4 m.

TANKERS: 1 tanker berth owned by Campsa accommodating tankers of 600 ft. length and maximum draft 29 ft. 6 in.

CUSTOMS ALLOWANCE: Normally Customs permit 200 cigarettes per man out of bond. Additional quantities needed depend on the stay of ship in port. One bottle of spirit per man.

DRY DOCKS: 3 companies own a total of 6 dry docks at Gijon, the largest of which is 170 m. length, 27.40 m. wide, for vessels up to 26,000 tons.

FRESH WATER: Supplied from the quays at the rate of 20 t.p.h.

FUEL: Can be supplied from the quays at variable rates up to 200 t.p.h.

TIME: Always GMT plus 1 hour.

HOLIDAYS: New Year's Day (full day); Epiphany (January 6th, full day); St. Joseph (March 19th, full day); Easter Thursday (half day); Easter Friday (full day); St. Joseph (May 1st, full day); Ascension Day (full day); Corpus Christi (full day); St. Peter and Paul (June 29th, full day); National Holiday (July 18th, full day); Patron Saint of Spain (July 25th, full day); Assumption Day (August 15th, full day); Provincial Holiday (September 8th, full day); Holiday of Hispanicism (October 12th full day); All Saints (November 2nd full day); Immaculate Conception (December 8th, full day).

AUTHORITY: Junta del Puerto Gijon.

HUELVA: 37.16 N. 06.55 W. (See Plan)

DOCUMENTS:

3 Crew Lists.

2 Passenger Lists or a negative.

1 Cargo Manifest of goods destined to Huelva.

Another Manifest covering transit cargo.

2 Store Lists, including tobacco, cigars, cigarettes, coffee, spirits, radios, cameras, etc., in possession of crew. In all cases make and number of radios to be indicated.

Safety Wireless Certificate and Safety Equipment Certificate.

If vessel carries over 3 kilos tobacco per man, the excess to be declared in a separate manifest, which must be visaed by the Spanish Consul at the last port, otherwise vessel is exposed to heavy fine.

PILOTAGE: Compulsory. Services from middle to high tide, depending on draft of vessel on arrival or departure. Pilot's motorboat painted white. Letter "P" in black at both bows. Agent must be in close contact with Pilot Office. Pilots are informed by Agent of ETA at bar. In rough weather Pilots will not be available for entries or sailings. Depths of water depend on location, ranging from 15 ft. to 30 ft. in high tide. Pilot station equipped with VHF Channel 16.

Telegraphic address of Pilots – "Practicos–Huelva", 24 hours notice of ETA required.

At night the regulation lights are exhibited. Contact must be made by VHF to take Pilot on board. Regulation ladder required.

In the event of bad weather the Pilot will board at Cascajera.

MAX. SIZE: Max. length for entry to Cascajera, 200 m. Max. length for entry from Punta del Sebo to Tharsis Quay, 180 m. Max. draft, permitted 28 ft. 05 in. up to 32 ft. 05 in. depending on the tide.

The entry to port is always subject to tides and maximum sizes of vessels able to proceed to inner quay berths will depend upon the berth and the tidal constant.

For max. sizes of tankers, see below.

HEALTH: As long as Captains of vessels notify Medical Office by cable that there are no sick on board and that the ship proceeds from an area free from contagious diseases as specified by the International Sanitary Regulations, free pratique will be granted to the vessel, although this does not eliminate all the sanitary measures specified in the Exterior Sanitary Regulations in force.

Notice should be given en-route towards the Port of Huelva and sufficiently in advance to permit the free pratique to be granted.

When there is any sickness on board, no operation will be carried out until the vessel or its personnel have been inspected by the Medical Authorities.

The granting of free pratique does not signify that the Yellow Flag may be lowered. This will be done once the Medical Authorities have carried out their inspection or are in possession of the Maritime Health Declaration Form signed by the Captain.

RADIO: Local coastal radio station Huelva-Radio. Working frequency: 1700 kc/s. on VHF. Listens out permanently on 2182 kc/s. and Channel 16.

Hours of service 24 hours (continuous).

National and International Radio traffic – radio conversation, radio-telegrams, advice to navigators.

TUGS: Only used inside harbour. Ship's lines employed, 4 tugs available. Number required to assist vessels at the discretion of the Pilot in charge.

BERTHING: Mineral loading quay – 435 m. mooring length and 12 m. depth of water at LWST. Has two loaders of 1,200 t.p.h. each.

Jetty belonging to "Energia e Industrias Aragonesas S.A. for movement of liquid and solid bulk cargo. Has 150 m. mooring, with 8 m. depth of water at LWST. For movement of solids, a gantry crane of 6 tonnes is available, together with three tubes for liquids.

Extension of the Fosforico Espanol S.A. jetty consisting of fitting out liquid quay for movement of solid bulk cargo. Has a 7 ft. depth of water, 3×15 tonnes gantry cranes and pipes for conveyance of phosphoric and sulphuric acids.

"Reina Sofia Quay" of the Union Explosivos Rio Tinto S.A. for the movement of liquid bulk cargoes, is 500 m. long and 8 m. draft at LWST. Has two berths for vessels up to 6,000 d.w.t., one berth for vessels up to 3,000 d.w.t. and two berths for lighters and tugs.

STEVEDORES: 48 hours advice to Agent necessary to engage labour.

MEDICAL: Agent must give at least 24 hours advance notice where medical aid is required. There is a provincial hospital. Vaccination certificates against fevers and cholera are issued by the Provincial Health Authority.

TANKERS: Rio Gulf de Petroleos operate a SBM tanker-mooring 7 miles offshore, about 20 miles distant from Huelva. Mooring is suitable for vessels 900 ft. long with draft up to 70 ft. salt water. Mooring 66 ft. is used for discharging only. Discharge rate is about 1,300 t.p.h. through two 12 in. lines and a 30 in. submarine line.

Within Huelva port, Rio Gulf have 2 tanker berths, and Campsa have 1. The 2 berths at the "Torre Arenillas" quay permit a draft of 12 m. at low water but the max. length permitted at the oil quay is 200 m.

Berth No. 1 (North) loading/discharging:

LPG	8 in. line
Gasoline	10 in. ,,
Naphtha	10 in. ,,
Diesel	10 in. ,,
Fuel oil	10 in. and 12 in. lines

Berth No. 2 (South) loading/discharging:

Benzine	8 in. line
Cyclohexan	8 in. ,,
Gasoline	10 in. ,,
Diesel	10 in. ,,
Distillates	10 in. ,,
Fuel oil	10 in. and 12 in. lines

Residues: there is a receiving station near the oil quay for tank residues, together with a product separator. Connection lines are 10 in.

Product	*S.G.*	*A.P.I.*
Propane	0.507	—
Butane	0.573	—
Gasoline 85-Ron	0.693	72.68
Gasoline 96-Ron	0.735	61.02
Campsa G.O.	0.832	38.57
R.D. 2494	0.789	47.84
Industrial F.O.	0.945	18.24

DENSITY: Water at this port is salt water. Fresh water, in quantity of 1 in. to 7.5 in., only present in heavy rainy weather.

FRESH WATER: The supply of drinking water is made at the Eastern (Levante) quay at the rate of 20 t.p.h. per vessel. This can also be provided by means of tugs at a rate of 50 and 30 t.p.h.

FUEL: Fuel oil and diesel available in main port. Not available at offshore tanker terminal.

DEVELOPMENTS: Projects are in being to increase depth of water down to 35 ft. for tankers using the Rio Gulf berths, but this implies dredging of bar and channel, a distance of 8–9 miles; it is not known when the project will be completed.

Sand Retention Mole: Once the access road to the mole has been finished which runs through the islands of Cacuta and Slates (right bank of the rivermouth) with a length of 11.5 kms., the construction of the mole proper, 12 kms. long, will start, as far as the last of buoys 1 and 2 at the port entrance. In this way, after a deepening programme of drafts in the access channel, these will be stable with 10.5 m. of water at LWST.

Ingeniero Juan Gonzalo Quay: At the end of 1976, quay will be finished with 902 m. length and 11.5 m. depth of water. It will be used for bulk and general cargo.

GANGWAY/DECK WATCHMEN: The employment is at the discretion of Masters, who are free to either employ or do without any watchmen.

OPENING/CLOSING HATCHES: Normally effected by crew, liner vessels excepted.

CERTIFICATES: Safety Wireless, Safety Equipment and Deratisation Certificates should be at hand for production if requested.

CUSTOMS ALLOWANCE: 200–300 cigarettes per man out of bond. If necessary permit may be obtained from Customs Authorities to open bond and provide crew with fresh supplies, if stay in port justifies procedure. Wine and/or Spirit Allowances: Two bottles per man.

IDENTIFICATION CARDS: Not necessary.

CONSULS:

Belgium
Denmark
Finland
France
Germany
Greece
Holland
Italy
Norway
Panama
Portugal
Sweden

REPAIRS: Any kind in engine room, and hull above water.

DRY DOCKS: Only one small dry dock available for vessels up to 3,500 g.r.t.

REPATRIATION: No difficulty in this respect.

AIRPORT: The nearest is at Seville – San Pablo. a distance of 100 km. from Huelva.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January; 6th January; 20th January; 19th March; Thursday preceding Good Friday as from 1400 hrs. Good Friday; 1st May; Corpus Christi; 29th June; 18th July; 3rd August; 15th August; 1st October; 12th October; 1st November; 8th December; 25th December.

Permit to work on any of the mentioned holidays (1st January Good Friday and 25th December excepted) can be obtained, but sufficient reasons must be given to justify permission.

POLICE/AMBULANCE/FIRE: Police and Civil Guard 215175, 213136; Fire-brigade 214421; Customs 215174.

SHORE LEAVE: Permitted.

TELEPHONES: No arrangements exist, for the time being, to place telephones on board vessels.

AUTHORITY: Marine Military Commandant.

IBIZA: 38.54 N. 01.28 E. (See Plan)

DOCUMENTS: *Passenger Liners:*
5 Crew Lists (Customs, Comandancia de Marina, Health, Police and Consignee).
6 Passenger Lists (Customs, Police, Guardia Civil, Obras del Puerto, Health and Consignee).
2 Lists of Crew and passengers personal effects (Customs).
2 Store Lists (Customs).
Health Certificate (Health Department).
2 Cargo Manifest, if any. (Customs).
2 Negative Cargo manifest, if no cargo.
Cargo Ships:
5 Crew Lists.
2 Lists of Crew personal effects.
2 Store Lists.
Health Certificate.
2 Cargo Manifests.

PILOTAGE: Pilotage compulsory. No ships allowed to go further than imaginary line between Botafoch lighthouse and Isla Negra del Este, without a Pilot. Advisable to give 24 hours notice of ETA. Shortly VHF will be installed in Pilot station and boats. Pilot's boat is of the canoe type with white sides and letter "P" in black on both sides. Vessels requiring a Pilot must give three long whistles. By night flash morse "G".

Pilot will board between Botafoch lighthouse and Isla Negra del Este. In bad weather vessel should follow Pilot's canoe till he is able to board.

ANCHORAGES: Anchorage area situated inside imaginary line: Botafoch-Negra del Este with depths of 40 to 50 ft. Pilot required to anchor.

MAX. SIZE: Max. length for berthing, 135 m. Maximum draft 21 ft.

HEALTH: Report in advance to pilot if there is any problem. If situation is normal, then, after ship berths the health inspector boards and quickly grants pratique. In event of any suspected disease or fever on board, the Pilot (without boarding), will show the anchorage area, then health inspectors and authorities will board, and give necessary instructions.

Vessels entering after calling at another Spanish port have no problems obtaining pratique.

TUGS: Not available.

STEVEDORES: Available, ETA required 24 hours in advance.

MEDICAL: Civil hospital, military hospital, and 3 private clinics available.

TANKERS: Load/discharge lines 10 in. and 8 in. No facilities for discharging residues. 1 berth. Max. draft of the ship is 21 ft.

FRESH WATER: Available at the quays. 9 m.t.p.h.

FUEL: Available. Notice required 24 hours.

FIRE PRECAUTIONS: Tankers should have a rope over bows, at water level while the ship is berthed.

DEVELOPMENTS: Increasing depths in the port to 7 m. It has also been approved to enlarge berthing quays to 220 m. and 7 m. depth, and build a fishing dock.

GANGWAY/DECK WATCHMEN: Performed by crew.

OPENING/CLOSING HATCHES: There are no fixed rules on this matter: it varies according to the circumstances.

CUSTOMS ALLOWANCE: Quantity permitted for each crew member to be held out of bond: 1,000 cigarettes and 100 cigars. 2 litres of alcohol (whisky, cognac, etc.).

IDENTIFICATION CARDS: Required.

REPAIRS: There are good work shops and engineers but with limited possibilities. There is a shipbuilder's yard where they build and repair yachts and canoes.

REPATRIATION: Facilities for effecting crew changes and arranging any necessary repatriations.

AIRPORT: 8 km. away, served by scheduled flights daily.

TIME: GMT plus 1 hour.

HOLIDAYS: Cargo work can be arranged on the official holidays with an extra charge of 40% to the workmen.

New Year; Epiphany (6th January); Saint Joseph (19th March); Maundy Thursday: half-day (the evening); Good Friday; Ascension of our Lord (40 days after Resurrection); Saint Joseph the Artisan (1st May); The Holy Heart (last Friday of June); Exaltation to work (18th July); Santiago, Lord of Spain (25th July); Our Lady of the Snows, Lord of Ibiza (5th August); Ascent of Blessed Virgin Mary to Heaven (15th August); Feast of the Hispanicism (12th October); All Saint's Day (1st November); Festival of the Immaculate Conception (8th December); Christmas Day (25th December).

Although not yet official there will be introduced as a holiday Easter Monday and 26th December.

POLICE/AMBULANCE/FIRE: Police 301131; Ambulance 301214; Fire telephone call to the Comandancia de Marina, tel. 301190.

SERVICES: Compass adjusting.

SHORE LEAVE: Crew members are allowed ashore.

AUTHORITY: Comandante de Marina de Ibiza, Comandancia de Marina.

MAHON: Minorca, 39.52 N. 04.18 E.

DOCUMENTS: *Health Department:*
Health Document.
Crew List.
Passenger List.
Disinfect and Deratisation Certificates.
Port Authorities:
Crew, Passenger List.
Ship characteristics and other details.
Cargo.
Indication of previous Port and destination.
Muster Roll, to be produced.
Customs:
Cargo Manifest.
Bill of Lading.
Crew List and Passenger List.

Also the Captain will produce, if required, Log book and passports of crew.

PILOTAGE: Compulsory to take Pilot in entry, departure and any movements within port. On approaching port, during day, ships will hoist flag corresponding to International Code "I need a Pilot". By night, by means of lights, according to International Code.

During day Pilot's boat is recognised by a square blue flag with letter "P" (painted white) in centre of flag. Pilotage area comprises all the estuary, from inside port to outside Capes of La Mola and San Carlos.

ANCHORAGES: Inside are good anchorages, for instance Cala Llorga and Plana de Cala Figuera.

MAX. SIZE: Unlimited length and width, but draft is limited to commercial port, 25 ft.; and to anchorage, 43 ft.

HEALTH: Hoist correct flags of International Signals Code to indicate health situation of ship. Before pilot boards, he should ask for health situation. If ship suspected, he will lead it to Lazareto anchorage and once anchored Pilot will report by means of Port Authority to Health Department. Port is provided with service of disinfection and means to kill rats.

Ships coming from Middle East and East Africa should carry certificate of anticholeric vaccination, antivariolic, antimarilic and antityphus. Also from North Africa and South America. All others only antivariolic and antityphus.

BERTHING: Allocated in South of port, in front of Naval Station. The commercial berth is 216 m. long, 25 ft. depth. Berth of Cala Figuera only for oil, limit of draft 25 ft.

STEVEDORES: Stevedores available. Loading/discharge rates 200 metric tons per day. They should be notified before 08.00 hrs., those ships that berth first having preference or priority.

MEDICAL: In case of accident or illness of any member of crew medical assistance and hospitalisation will be in civil hospital.

FRESH WATER: 1 supply in Cala Figuera, 2 in Maritime Club and 3 in Commercial berth. The minimum supply is 2 metric tons.

FUEL: Available from Campsa at Cala Figuera.

DEVELOPMENT: Scheme to increase Commercial Quay by another 60 m., towards the West.

OPENING/CLOSING HATCHES: Carried out by crew.

IDENTIFICATION CARDS: Not required.

CONSULS: Italy: Tel. 363393; France: Tel. 363889; Netherlands: Tel. 362703.

REPAIRS: Small repairs available.

DRY DOCKS: Military floating dock of 2,000 metric tons.

AIRPORT: Mahon, 5 km. distance, with daily flights to Peninsula.

TIME: GMT plus 1 hour.

HOLIDAYS: Work can be arranged on holidays, provided workmen are paid extra.

POLICE/AMBULANCE/FIRE: Police 363564; Hospital 360003; Airport firemen 351193.

TELEPHONES: No facilities available.

AUTHORITY: Capitan de Navio, Comandante Militar de Marina de Menorca.

MALAGA: 36.43 N. 04.23 W. (See Plan)

DOCUMENTS:
5 Crew Lists.
5 Passenger Lists or Negative.
1 Cargo Manifest of goods destined to Malaga, as well as of other cargoes in transit.
Store List in duplicate, including tobacco, spirits, radios, etc., belonging to vessel.

Details list in duplicate of all personal effects of the crew and Passengers (tobacco, spirits, cameras, radios, etc.). For vessels bigger than 499 g.r.t., Safety Equipment Certificate.

Note: Tobacco; In case vessel carries more than 3 kilos of tobacco per man, the excess must be declared in a separate manifest, which must be visaed by Spanish Consul. In absence of Consul, said document will have to be visaed by an Authority or Consul of a friendly nation at the former port clearance. Otherwise, vessel may be severely fined.

PILOTAGE: Pilotage is compulsory and service is permanent. Pilots board vessel by cutter in roads, near entrance formed by 2 breakwaters. Pilot cutters are painted white and have letter "P" in black on each bow. Cutters have a blue flag hoisted on mast, with the letter "P" in white, at both sides of flag. At night, cutters have white light, and under this light, red one. Entrance between breakwaters is 320 m. wide and easily accessible. When weather in the roads is bad, which seldom happens, vessels approach as close as possible to entrance in order that Pilot can board easily.

ANCHORAGE: Vessels can anchor outside of breakwaters, in roads in depths of 60 – 70 ft. Anchoring is prohibited in vicinity of tanker moorings, the Pilot will advise best position. Weather is bad occasionally when East wind blows, during Winter.

MAX. SIZE: No restrictions in respect of length or breadth. Max. advisable draft to enter port is 31-32 ft.

The tanker sealine berth can accept vessels up to 300,000 d.w.t.

Largest vessels to enter port: Passenger ship "Oriana" length 245 m. Draft on entering and leaving 9.14 m. Tanker, 49,581 d.w.t. length 225 m. draft 12.48 m.

Largest tanker at buoy mooring 239,786 d.w.t., length 334 m. Draft on entering and leaving 19.81 m.

HEALTH: If vessels proceed directly to berth, pratique can be obtained immediately after berthing. In case of any suspected disease or fever on board, Master must radio to Agents, in order that they can advise Health Office.

RADIO: Nearest important radio station is Cadiz, or Gibraltar and Aranjuez. Master's messages should be received at least 24 hours before arrival.

TUGS: Ship's lines are used, tug-boats are employed according to Pilot's advice, and upon request. 8 tugs available, 450 h.p.–2,250 h.p.

BERTHING: Pilots will advise Masters whether vessel has a free berth or not. Also if she has to anchor in roads. Further particulars can also be obtained from Pilot.

Berth No.	*Length (m.)*	*Depth (m.)*	*Remarks*
1	350	9.4	General cargo, Bulk and Passengers.
	99	8.0	General
2	483	10.5	General Cargo, Bulk and Passengers
3	181	8.0	Passenger Quay
	140	7.0	Passenger Quay
4	477	8.0	General cargo, Bulk and Passengers.
5	101	6.5	Armament
6	215	10.0	Bulk solids and Bulk liquids.
	300	8.0	Petroleum
7	145	9.4	Fish
8	128	5.0	Storage
	135	5.0	Fish

SPECIALISED CARGO-HANDLING FACILITIES: Quay No. 2 includes 15,000 tons silo for grain, loading and discharging capacity 200 t.p.h.

Quay No. 6 can handle all cargo in bulk. Also 3 ton forklifts and a Hyster 620 capable of handling containers up to 26 tons. There are regular car ferries for passengers and cargo, roll-on/roll-off plying daily with Tangiers and weekly with Genoa, Marseilles and Casablanca, all of them direct. For butane gas a special pier built outside the port Westward, along the beach in front of the depot. For LPG and chemicals the inner side of the Western breakwater can be used, though loading and unloading has to be done into tank trucks. 20 ft. containers can be handled with a Hyster forklift with appropriate spreader, eventually 30 ft. containers too.

CRANES: 27 quay cranes with capacity up to 15 tons and 1 mobile crane with capacity of up to 8 tons.

STEVEDORES: It is important that Master sends advance message regarding the vessel's ETA. Agents can inform Shippers or Receivers' stevedores accordingly, to arrange operations properly. Official working hours of port are: Monday/Saturday 0800 – 1200, 1400 – 1800 hrs.

MEDICAL: Any kind of medical service can be arranged. In case a crew member needs medical attendance urgently, it is advisable that the Master radio in advance.

TANKERS: Petroleum handled at Quay Nos. 6 and 7. Depths 8 m. and 9.4 m. respectively. Also at the New Tanker berth, depth alongside 13.50 m. (see "Max. Size").

Quays No. 5, 6 and 7: Operator: Demagrisa. Crude oil discharge pipe-line – 250 t.p.h. Refined oil discharge pipe-line – 300 t.p.h.

Playa Misericordia: Operator: Calvo Sotelo. Sea-line for discharging tankers up to 250,000 d.w.t. Max. discharge rate 6,000 t.p.h. through 2×30 in. pipe-lines.

Operator: Butano. Sea-line for butane which also handles propane. Max. discharge rate 300 t.p.h.

Quays Nos. 6 and 7: Operator: Anomiaco Espanol SA. 4 lines for naphtha discharge. Rate 210 t.p.h.

Operator: Calvo Sotelo. 4 discharge lines for oil. Rate 1,500 t.p.h.

Tanker Quay: Operator: Calvo Sotelo. Crude oil pipe-line, diameter 24 ins. with 2 discharge arms and 1 spare. Discharge capacity 2,000–2,500 t.p.h.

Quay Nos. 6 and 7: Operator: Campsa. 4 pipe-lines available, 2×10 in., 1×12 in. and 1×14 in. maximum pumping rate 800 t.p.h.

DENSITY: 1025.

FRESH WATER: Always available. Deliveries are performed directly from the quay, rate 20–200 t.p.h. or occasionally by tugs. Minimum tonnage, 17 tons, occasionally supplies by tank-barge.

FUEL: Ordinary fuel oil and gas oil are available at local refinery of "Campsa". It is advisable that Shipowners contract bunkers through their own contractors, with anticipation of 48 hours, so that order can be received in time. Delivery can be performed at bunkering pier at a rate of 60 t.p.h. or by car tankers.

FIRE PRECAUTIONS: Tankers perform their operations at the private berths of "Campsa" which have necessary fire precautions.

DEVELOPMENTS: An extensive plan to increase facilities of port, and for building new piers. Other important work being effected at breakwater, to erect new piers for large passenger ships.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: This work effected normally by crew, except in liner vessels, which is contracted by stevedores.

CERTIFICATES: Vessels should have the usual documents on board, but only Safety Wireless, Safety Equipment and Deratisation Certificates are required by authorities.

CUSTOMS ALLOWANCE: Normally, customs permit 200 cigarettes per man out of bond. 1 bottle of spirit for each crew member.

CARGO GEAR: Usually shore cranes of 2-3-6-15 tons lifting power employed in loading or discharging operations, if vessels require any lightening then vessel derricks are employed, as only 1 floating crane is available at the port of 25 tons and 15 m. height.

IDENTIFICATION CARDS: Not required.

CONSULS: Practically all countries have consulates at Malaga.

REPAIRS: Facilities of a limited nature.

DRY DOCKS: There is a floating dock for vessels up to 2,000 tons.

REPATRIATION: Good facilities.

AIRPORT: The airport is about 8 km. from town. Daily services with Madrid, Barcelona, Seville, Valencia, Tangier and Melilla. Also direct flights to London, Paris, Amsterdam, Brussels, Frankfurt, Stockholm, Helsinki, Geneva, Zurich, Nice.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January; 6th January; St. Joseph (19th March); Good Thursday afternoon; Good Friday; Labour Day (1st May); Ascension Day; Corpus Christi; St. Peter and St. Paul (29th June); National Holiday (18th July); 25th July; 15th August; 12th October; 1st November; 8th and 25th December.

POLICE/AMBULANCE/FIRE: Police, Tel. 211302; Ambulance, Tel. 275250; Fire, Tel. 234567.

AUTHORITY: Junta del Puerto de Malaga.

MOTRIL: 36.43 N. 03.30 W. (See Plan)

DOCUMENTS:

Health Certificate.
5 Passenger Manifests (1 Health, 2 Customs, 1 Police, 1 Agent).
4 Crew Manifests (1 Health, 2 Customs, 1 Agent).
2 Store Lists (for Customs).

PILOTAGE: Arranged by Agent basis ETA given 24 hours in advance. Pilot boat distinguished by painted "P". Night pilotage possible approx. 40% extra. Vessels await Pilot just outside port. Pilot compulsory for all foreign vessels and Spanish vessels arriving from abroad. Pilot should be requested when 1 mile from the port by means of international signals.

ANCHORAGE: Area near port. The roads to the East of the port have very little depth. The sea is rough in this area and vessels can run the serious risk of beaching. The best location for anchorage is outside the port 0.25 miles from the port entrance, in 14 to 15 m. of water, mud bottom.

RESTRICTIONS: None, vessels may enter day or night.

MAX. SIZE: Maximum draft 23 ft. Length maximum 150 m.

HEALTH: Free pratique given on board.

RADIO: Telegraph office, no radio.

TUGS: Available. One tug 500 h.p.

CARGO-HANDLING FACILITIES: Berths equipped with shore cranes, 6-ton capacity, for handling bulk cargoes (grain, ore, fertilisers, etc.).

STEVEDORES: No ETA advice necessary. Agents arrange gangs. Work normal hours except holidays.

MEDICAL: No advance notice required. All facilities available.

TANKERS: Vessel about 8,000 tons. No special requirements.

DENSITY: Normal Mediterranean.

FRESH WATER: Available.

FUEL: Available from Malaga.

GANGWAY/DECK WATCHMEN: Agent arranges.

OPENING/CLOSING HATCHES: Crew open and close hatches.

CUSTOMS ALLOWANCE: Tobacco: About 100 cigarettes per man. Wine and or spirit. None.

IDENTIFICATION CARDS: Not necessary.

CONSULS: None in Motril. The nearest Granada or Malaga.

REPAIRS: No repairs possible.

REPATRIATION: Facilities available.

AIRPORT: The nearest airports Malaga 105 km. Granada 75 km.

TIME: Local time GMT plus 1 hour.

HOLIDAYS: see "Malaga."

POLICE/AMBULANCE/FIRE: Police 601221; Ambulance 600200; Fire 600200.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Crew members are allowed ashore.

AUTHORITY: Harbour Master.

AGENT: Munoz Chapuli, Iribane y Garvayo Asociados S.A., Port Avenue, POB 55, Motril (Granada). Tel. 600627. Cables: Muirigar Motril.

PALAMOS: 41.50 N. 03.08 E.

DOCUMENTS:

3 Crew Lists.
1 Passenger List or negative.
Manifest of goods destination Palamos and in transit.

Store List in duplicate, including tobacco, spirits, radios, etc., belonging to vessel.

Detailed list in duplicate of all personal effects of crew and passengers (Tobacco, spirits, camera, radios, etc.).

Tobacco – any excess over 3 kilos per person must be stated on a separate manifest duly visaed by Spanish Consul.

If on inspection differences are found in more or less, articles removed and heavy fine imposed.

PILOTAGE: Pilotage is compulsory and service is permanent. Often no berths available between 2400 and 0600 hrs. owing to port occupied by fishing boats. Pilot is informed by Agent of vessels ETA given 24 hours in advance. When vessels approach the breakwater, Pilot will board. Pilot boat is white with a black "P" painted on the side.

BERTHING: Depth of water in centre of harbour 42-52 ft. Commercial Wharf length: North 689 ft., depth 18-26 ft. South 246 ft., depth 15-24 ft. Pier Wharf or breakwater: not available for commercial traffic. Length 2,100 ft.

RESTRICTIONS: None but for draft. Vessels carrying dangerous cargo should get authorisation for berthing prior to arrival of the ship.

MAX. SIZE: No restrictions in respect of length. The maximum advisable draft for berthing is 24 ft. stern, 20 ft. bow.

HEALTH: Pratique is obtained immediately after berthing. In case of suspected disease or fever on board the Master must radio to Agent in order inform Health Office in time.

RADIO: Radio Costera of Barcelona.

TUGS: None but Barcelona's tugs could be hired should the vessel's size make it necessary.

STEVEDORES: Information about ETA time is advisable to get gangs ready.

MEDICAL: Any kind of medical services can be arranged if information received in time.

FRESH WATER: Plentiful supply of water by means of hoses from the pier to vessel.

FUEL: Can be supplied if required.

DEVELOPMENTS: Steps are being taken to get the breakwater in condition to berth tankers and liners.

GANGWAY/DECK WATCHMEN: It is not compulsory but advisable at night.

OPENING/CLOSING HATCHES: Normally opened/closed by the crew, otherwise according to Charter Party.

CERTIFICATES: Usual documents on board. Safety Wireless, Safety Equipment, Deratisation and Registered Tonnage Certificates are the only ones required by the Authorities.

CUSTOMS ALLOWANCE: Crew : 3 kilos tobacco per person. Passengers: 2 kilos per person. Any excess on this amount must be declared on a separate Manifest as in transit. Wine and/or Spirit: only 1 bottle per man. Any excess, must be declared on a separate Manifest as cargo in transit and stowed apart from the tobacco and spirits carried under the Provisions List. This Manifest must be visaed by the Spanish Consul at the last port of call. Any infringement of this regulation will subject the vessel to the immediate imposition of heavy fines and confiscation of the excess tobacco.

IDENTIFICATION CARDS: Not required.

CONSULS:

France	Tel. 314472	Portugal	Tel. 320148
Denmark	,, 314400	Sweden	,, 320850
Italy	,, 320200		

REPAIRS: Only small ones.

REPATRIATION: Good facilities exist.

AIRPORT: Gerona Airport situated at 40 km. distance and half an hour time by car from Palamos. Regular flight services with Madrid, Barcelona, Palma Mallorca, London, and all over the world with transhipment at Madrid and/or Barcelona.

TIME: Always GMT plus 1 hour.

HOLIDAYS: New Year's Day (1st January); The Three Wise Men (6th January); St. Joseph (19th March); Good Thursday – afternoon only; Good Friday; Easter Monday; Whit Monday; Labour Day (1st May); Ascension Day; Corpus Christi; Main Holiday (24th June); St. Peter and St. Paul (29th June); National Holiday (18th July); St. James (25th July); Our Lady's Assumption (15th August); Columbus Day (12th October); All Saints Day (1st November); Immaculate Conception (8th December); Christmas Day (25th December); Second Christmas Day (26th December).

POLICE/AMBULANCE/FIRE: Police 31 41 87; Ambulance 31 43 50; Fire 31 43 50.

AUTHORITY: Captain of the Port.

PALMA, Majorca: 39.34 N. 02.38 E.

PILOTAGE: Compulsory. Order through Agent.

ANCHORAGE; In outer harbour in depths up to 13 m.

RESTRICTIONS: Depth in harbour entrance up to 15 m.

TUGS: Available if required.

VHF: The Spanish Telephone Company has established a station for ship-to-shore communications.

BERTHING: Quays at Puerto Pi with 12 m. depth alongside. Quays at Puerto de Palma with up to 10 m. depth alongside.

FUEL: Supplied at the quays, rate 150 t.p.h.

FRESH WATER: Available at the quays.

AIRPORT: Palma Airport well connected with the Peninsula (mainland) and with foreign airports.

PASAJES: 43.21 N. 01.54 W. (See Plan)

PORT LIMITS: In this port a vessel is considered to be an "arrived ship" (subject to C/P Terms) when the Pilot leaves the vessel once she is inside the harbour. Can be on the roads awaiting for berth or alongside the quay. The laytime will commence when the Master has delivered in writing the notice of readiness.

DOCUMENTS:

4 Crew Lists.
2 Passenger Lists or negative.
2 Cargo Manifests with an individual copy of each Bill of Lading for parcels to be discharged at port of Pasajes.
Copy of Manifest covering other cargo on board in transit for other ports.
Stores List in duplicate, including tobacco, cigarettes, spirits, radios, etc., belonging to the vessel.
Detailed Crew's Stores List, in duplicate, of all personal effects pertaining to crew and passengers (tobacco, cigarettes, spirits, cameras, radios, arms, etc.).

For vessels exceeding 499 tons g.r.t. Safety Manifest Certificate; Safety Equipment Certificate, Deratisation Certificate should be on board ready for production.

PILOTAGE: Pilot service is compulsory and permanent. Pilots board vessel in an area about 1.5 miles out from leading lights of port entrance. The telegraphic address is: Corporacion Practicos, Pasajes. Notice should be given 24 hours before arrival; generally Agents keep Pilots informed of vessel's time of arrival when they are advised by Masters. VHF service in operation.

Pilots' cutter is painted in naval-grey with letter "P" painted in white on both sides of bridge; flag with letter "P" in white, is hoisted on cutters' mast.

International pilot signals are used by Pilots, by means of Aldis lamps, when approaching vessel at night. International light and sound signals to be made by vessel when requiring Pilot.

In event of bad weather Pilots cannot board vessel at usual 1–1.5 miles location. Then vessel has to wait for instructions (VHF or radio) for entering port.

With respect to boarding and safety measures the international safety regulations are to be carried out.

ANCHORAGES: A limited number of vessels may anchor in roads inside the port, in good shelter. Depth in area of anchorage is 25–30 ft.

RESTRICTIONS: The entrance channel has a length of 1,200 m., breadth 80–120 m. and a depth of 20 m. LWS. Vessels over 130 m. length must enter at high water and in daylight.

MAX. SIZE: 170 m. length and 28 ft. draft. When dredging works are completed in the entrance channel, the port will be able to accept vessels of up to 180 m. length and 30 ft. draft.

HEALTH: If vessels proceed directly to berth pratique can be obtained immediately upon berthing. If vessels anchored in bay, pratique can be obtained after anchoring. In case of any suspected disease or fever on board, the Master must advise the Agents, by radio, in order they inform the Sanitary Authorities in advance.

RADIO: Nearest Radio Station is Cabo Mayor Radio. Messages by radio-telephone can be transmitted via Radio Arcachon (France). Notice of ETA should be sent to Agent 24 hours before arrival.

TUGS: No tug-boats required for vessels of normal steering when entering port. Tug-boats are required for berthing or shifting to and/or from quays Muelle De Ancho, Muelle De Molinao, Muelle De Capuchinos for vessels from 80 m. length on. Ship's lines are used and tug-boats are employed according to Pilot's advice.

11 tugs available, the largest being 800 and 1,250 h.p. respectively.

BERTHING: Berths are appointed by Port Authorities after notice of arrival and information regarding cargo given by Agent. Pilots inform Masters of location of berth appointed, if any. No tidal difficulties for berthing or shifting inside the port.

Berths belonging to Port Authority.

Name	*Length* (m.)	*Depth* (m.)
Ancho	305.40	10.00
Molinao	348.60	10.00
Capuchinos	298.30	10.00
Petroleos	159.50	10.00
Lezo. 1	298.40	10.00
Lezo. 2	163.20	10.00
Transatlantic	234.10	8.00
Avanzado (North)	63.60	6.00
Avanzado (East)	114.60	6.00
Avanzado (West)	120.30	6.00
Petrol Basin	50.00	6.00
Herrera	422.80	5.00
Reloj	240.00	5.00

CARGO HANDLING: Berth equipped for containers with two cranes of 12 tons. A new quay under construction for roll-on/roll-off traffic. There are two berths for discharging through pipe-line; tallow, codfish-oil, etc.

Whenever a vessel arrives with inflammable products, such as gas, propane, etc., the quay where vessel is discharging is fenced off.

CRANES:

No.	*Capacity* (metric)
8	3 tons
13	3.5–6 tons
13	6 tons
1	6–10 tons
7	12 tons
2	30 tons

STEVEDORES: ETA advice should be received by Agent 24 hours before arrival in order arrange loading/unloading operations with stevedores. The official working time in the port is: Monday/Saturday 0800 to 1200 hrs. and 1330 to 1730 hrs.

MEDICAL: Any kind of medical assistance is available. In case urgent surgical or medical assistance required on vessel's arrival, Agent should be informed in plenty of time to make the necessary arrangements.

No particular inoculations required or vaccination/fever certificates to be produced unless epidemic at last or recently visited ports.

TANKERS: Slop discharge to shore possible under agreement. Oil/tallow/asphalt-carriers berth alongside quays with 30 ft. of water. Diameter of discharge shore-lines are 6 in. and 8 in.

FRESH WATER: Fresh water available at all wharves. Rate of delivery 70 cu/m. per hour.

FUEL: Fuel supplied at Ancho, Molinao, Capuchinos and Petroleos Wharves by CAMPSA. Rate 100 t.p.h. Owners should stem the bunkers with CAMPSA 48 hours before delivery.

FIRE PRECUATIONS: No specific precautions required unless the vessel carries inflammable cargo. Special harbour fire-fighting corps.

DEVELOPMENTS: Extensive developments respecting the construction of new quays and amelioration of the entrance channel are actually under way. The works in the entrance channel will permit a draft and length increase.

GANGWAY/DECK WATCHMEN: Not compulsory. Shore watchmen available.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: To be produced if required, specially Safety Wireless, Safety Equipment and Deratisation Certificates.

CUSTOMS ALLOWANCE: In case the vessel carries more than 3 kilos tobacco per crew member and more than 2 kilos per passenger, the excess must be declared in a separate Manifest which must be legalised by the Spanish Consular Authorities. In absence of Spanish Consular Authorities that Manifest will have to be legalised by an Authority of last port of clearance wherefrom the vessel proceeds. Prudent, limited amount of spirits allowed per man.

IDENTIFICATION CARDS: Not required.

CONSULS: Consulates/Vice-Consulates at San Sebastian and/or Pasajes:

Argentina
Belgium
Brazil
Columbia
Costa Rica
Chile
Denmark
El Salvador
Finland
France
Germany
Great Britain
Greece
Italy
Netherlands
Norway
Panama
Paraguay
Peru
Portugal
Sweden

REPAIRS: Repair shops and shipyards available, where repairs or overhauls may be carried out.

DRY DOCKS: One floating dock 66.27 m. long. 23.25 m. wide, 9.125 m. draft. with lifting power of 1,900 tons. 2 slipways (1 for vessels of up to 1,000 tons – one for vessels of up to 300 tons).

REPATRIATION: Good facilities for repatriation.

AIRPORT: Airport of Fuenterrabia is situated at 15 km. from Pasajes. Regular daily services with Madrid and Barcelona.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January; 6th January; 19th March; Maunday Thursday (afternoon); Good Friday; 1st May; Ascension Day; Corpus Christi; 29th June; 7th July; 18th July; 25th July; 31st July; 15th August; 12th October; 1st November; 8th December; 25th December.

POLICE/AMBULANCE/FIRE: Police 351841; Ambulance 414148; Fire from 0800 to 1930 hrs. tel. 351400, from 1930 to 0800 hrs. tel. 352391; Red Cross (local) 351032; Hospital, San Sebastian, 423632.

TELEPHONES: No possibility of placing telephones on board.

SERVICES: Divers, compass adjusting.

SHORE LEAVE: Crew allowed to land immediately upon arrival.

AGENT: Sobrinos De. M. Camara Y Compania, Telegrams "Camara". Tel. 357045, 357046 and 357047. Telex 36241.

(Shipbrokers, Customs/Forwarding Agents, Chartering Agents, Lloyd's Sub-Agents.)

RIBADEO: 43.33 N. 07.05 W.

DOCUMENTS:

Manifest of Cargo, including cargo in transit.
3 Crew Lists.
2 Passenger Lists or negative.
2 Stores Lists.

If vessel carries over 3 kilos tobacco per man, the excess to be declared in a separate manifest which must be visaed by Spanish Consul at last port, otherwise is exposed to heavy fine.

PILOTAGE: Prior advice of ETA required by Pilot, who boards at the mouth of the river at the time advised by Agent. Pilot boat is white-painted motor launch, carrying international pilot signals.

In case of bad weather, Pilot will instruct vessel by signals to proceed to anchorage or to berth.

The Pilot always boards on the lee side, in the latitude of Isla Pancha.

ANCHORAGE: At Ensenada de Arneo, approx. position 43° 33′ N. 7° 01.6′ W. in depth of 9 m. LW.

RESTRICTIONS: Vessels enter night and day, limited only by draft and state of tide.

MAX. SIZE: Length and beam not limited. Max. draft 15 ft.

HEALTH: Pratique given on arrival on production of clean Bill of Health. International quarantine signals to be used. Port Authorities to be advised if any case of suspected disease or fever on board.

RADIO: Messages may be routed through coastal stations at Vigo, La Coruna or Gijon.

TUGS: None available.

STEVEDORES: Stevedores services operated only by Servicio de Trabajadores Portuarios.

BERTHING: Vessels may berth at the mole at any time, or state of tide, according to draft.

MEDICAL: There are 2 clinics and 1 hospital locally. Advance notice not essential.

DENSITY: 1025.

FRESH WATER: Water connections exist along the length of the mole. Rate, 20 t.p.h.

FUEL: There is a gas oil supply for small vessels, rate 5 t.p.h.

GANGWAY/DECK WATCHMEN: None required.

OPENING/CLOSING HATCHES: Performed by crew.

CUSTOMS ALLOWANCE: 200 cigarettes and 1 bottle wine/spirits per man.

CONSULS: Nearest at La Coruna.

REPAIRS: Minor mechanical repairs can be effected. Slipway for vessels up to 200 tons.

AIRPORT: Nearest at La Coruna, 150 km. away, or Aviles, 165 km. away, with regular services to Madrid.

TIME: GMT plus 1 hour all year round.

POLICE/AMBULANCE/FIRE: Tel. Ribadeo 110650.

AUTHORITY: Ayudante Militar de Marina.

ROSAS: 42.14 N. 03.10 E.

DOCUMENTS:

Crew List.
Passenger List.
(1 of each) Ship's Papers.

PILOTAGE: No Pilots in this port.

ANCHORAGE: Bay of Rosas is anchorage area.

MAX. SIZE: Draft in Commercial Port is 4 m., which berths cargo ships of about 1,000 metric tons of net register.

HEALTH: Once ship is anchored in the bay it requires pratique by means of signals, and by raising the yellow health flag. When vessel entering after calling at another port in the same country, this procedure is not required; Health Inspector boards at the quay side.

RADIO: No radio station in the port, but can contact Coastal Radio Station of Barcelona (1730 kc/s. 173.4 m.), power 150 W.

TUGS: None.

BERTHING: Advisable during daylight only.

MEDICAL: Port Health Doctor available. Hospitals 18 km. distance.

FRESH WATER: Available at Commercial Port at rate of 8 to 10 metric t.p.h.

FUEL: None available.

POLICE/AMBULANCE/FIRE: Police Service 25-62-72; Ambulance Service 24-21-20; Fire Service 24-10-00.

AUTHORITY: Ayudante Militar de Marina de Rosas.

SAGUNTO: 39.42 N. 00.14 W. (See Plan)

PORT LIMITS: The East/West line through the point of Cape Escollera de Levante.

DOCUMENTS:

2 copies Entrance Manifest.
4 copies Crew List.
Passenger List disembarking at this port.
Passenger List in transit.

Refer to "Barcelona" for other important information concerning Documentation.

PILOTAGE: Port is privately owned, and Pilots employed by Altos Hornos de Viscaya S.A. As Pilots are employed in Consignees office no separate ETA is necessary. They are sent out to meet vessels as required. Pilot boat is not fitted with radar or VHF. Boat displays signals in accordance with international regulations.

ANCHORAGE: From 155° to 170° from the Cape Canet Lighthouse in 17 m. of water.

RESTRICTIONS: Delays may be caused by berth being occupied. Larger vessels may be delayed by bad weather (the Levante), as dredged channel is narrow.

MAX. SIZE: Draft 29 ft. 5 in. No other limitations.

HEALTH: Pratique can be arranged at any time by Consignees.

RADIO: Cadiz Radio-EAC, Cabo Palos Radio-EAP and Valencia Radio EAV.

TUGS: Normally join vessel either in anchorage or 0.5 mile from entrance. Ship's lines are used. Tugs should be ordered in ETA message also mentioning vessels length and cargo.

BERTHING: Subject to berth occupation and to berthing priority that Altos Hornos gives to different cargoes. Overnight berthing is allowed, in cases of emegency, or for ship safety.

CRANES: 10 at 6 tons on the coal quay, 4 at 20 tons, 4 and 60 tons and a 250 ton winch on the new quay.

STEVEDORES: Employed by consignees.

MEDICAL: Medical assistance should be ordered in advance. All kinds of medical assistance available. One hospital owned by Altos Hornos.

TANKERS: No facilities.

DENSITY: Salt water.

FRESH WATER: Available.

FUEL: None available.

FIRE PRECAUTIONS: Fire service organised by Altos Hornos.

GANGWAY/DECK WATCHMEN: Usually by crew. The Civil Guard keep watch on all ships for contraband.

OPENING/CLOSING HATCHES: Effected by ship's crew.

DEVELOPMENTS: Port to be expanded during the next five years to accommodate 300,000 tonners, at specialised cargo handling facilities.

An ore loading pier is in course of construction for Sierra Menera (approx. 1,700 m. long). Max. draft 48 ft.

CUSTOMS ALLOWANCE: 200 cigarettes only. One bottle spirits per man but bottle should be opened. Spanish spirits allowed; one bottle per man. No control of Spanish wines.

IDENTIFICATION CARDS: Passport only.

CONSULS: Nearest at Valencia.

REPAIRS: Small repairs possible.

REPATRIATION: Facilities for effecting crew changes and arranging repatriation.

AIRPORT: Manises Valencia, 40 km away.

TIME: GMT plus 1 hour.

HOLIDAYS: On religious festivals or Sundays no cargo work can be arranged. These are as follows: Our Lady of the Marine (16th July) no cargo work; National Festivity (18th July) no work; National Festivity (25th July) no work; Hispanic Festivity (12th October) no work; Maunday Thursday, work can be done till 1400 hours; Good Friday, no work.

TELEPHONES: None on board. Telephones placed in Boat house and Pilots' office.

SHORE LEAVE: Crew members allowed ashore.

AUTHORITY: Ayudante Militar de Marina.

SAN FELIU DE GUIXOLS (Gerona): 41.46 N. 03.01 E.

GENERAL: Refer to Palamos for all general information.

PILOTAGE: Pilotage is compulsory. Service between 0700 to 2400 hrs.

ANCHORAGE: Vessels arriving after midnight or due to port congestion are anchored outside the breakwater.

MAX. SIZE: The maximum advisable draft for berthing is 22 ft. and up to 115 m. length.

TUGS: No tugs available.

BERTHING: Due to the fact that a few vessels can work at the same time, it is advisable to know as soon as possible the ETA for berthing arrangements.

Commercial Wharf.	Length 108 m.	Depth 22 ft.
Breakwater	Length 116 m.	Depth 22 ft.

A pier for coasting vessels with a maximum draft of 18 ft.

MEDICAL: Any kind of medical services can be obtained in San Feliu or Gerona hospital.

FRESH WATER: By means of hoses from the pier.

FUEL: Can be supplied in small quantities.

CARGO GEAR: Commercial pier is served by an electric crane able to lift up to 6 tons. Normally vessels derricks are used.

SANTANDER: 43.28 N. 03.49 W.

PORT LIMITS: Between Cabo Menor and Punta Galizano.

DOCUMENTS:

5 crew lists.

7 passenger lists, or 3 negative.

3 cargo manifests of the goods destined to the port of Santander, two sets of manifests for cargoes in transit.

Store list in triplicate, including tobacco, spirits, radios, etc., belonging to the vessel.

Detailed list in triplicate of all personal effects of crew and passengers (tobacco, spirits, cameras, souvenirs, radios, etc.).

For vessels exceeding 499 g.r.t: Safety wireless certificate and Safety equipment certificate.

Legalisation required for manifests covering tobacco and tobacco products. This legalisation to be effected at the port prior to the first Spanish port of call.

Master and each member of crew of vessel can carry for his own consumption up to 3 kilos of tobacco in whatever form, and, if passengers are carried, up to 2 kilos per passenger, all of which must be declared in provisions list (1 kilo of tobacco = 1,000 cigarettes = 100 cigars). If Masters carry greater quantity than stated above, it cannot be manifested as tobacco for consumption on board, but must be included in Consular Manifest as being in transit, and as such must be separated in the holds from other cargo and hatches or lockers will be sealed by Customs until ship leaves Spanish waters. This Consular Manifest has to be legalised by a Spanish Consul. In the absence of Consul, said document will have to be visaed by an Authority of the former port of clearance. Otherwise, vessel would be severely fined.

PILOTAGE: Compulsory and service is permanent. Pilots board vessel by a cutter at the road, near the entrance off Mouro Island. Pilot cutters are painted white and have the letter "P" in black, on each bow. Cutters have blue flag with letter "P" in white, at both sides of flag. At night cutters have a white light, under this a red one. VHF available.

ANCHORAGES: The harbour consists of a large bay which provides good anchorage.

RESTRICTIONS: Entrance is well marked and there is no bar. Depth at entrance is at max. (dependent on tides) 33 ft.

MAX. SIZE: No restriction in respect of length or breadth, the maximum advisable draft to enter port is 33 ft.

HEALTH: If the vessel proceeds directly to berth, pratique can be obtained immediately after berthing. Otherwise, at anchorage at vessel's arrival.

If vessel has sickness on board of a contagious nature Masters should advise Health Authorities by radio, and they will examine patients immediately upon arrival, to enable vessel to be granted free pratique. If vessel has to be fumigated or deratised a charge is made.

RADIO: Nearest important radio station is Cabo Mayor Radio, and it is advisable that messages received at least 24 hours before arrival.

TUGS: No tug-boats required for entering the port, only for berthing or shifting when in port. Ship's lines are used, and tug-boats are employed according to Pilot's advice.

BERTHING:	*Length*	*Depth*
Calderon quay	650 ft.	12 ft.
Maura/Albareda quay	423 ft.	12 ft.
Bloques quay	3,940 ft.	30 ft.
Anaos quay		32 ft.
Maliano quay		27 ft.
Maliano quay North Section	1,500 ft.	32 ft.
Campsa quays	900 ft.	24–28 ft.
Nueva Montana quay	350 ft.	18 ft.

All depths of water quoted above correspond to LWOST and 13–14 ft. should be added for depths at HWOST. Bottom is generally soft.

Calatrava Wharf: for discharge of chemicals. Depth alongside 34 ft. with overall length limitation of 980 ft. Up River, at Astillero, beyond the harbour area, there is one spout called Orconera Tip for loading iron ore. Vessels up to 260–270 ft. length are allowed with a maximum draft, fully loaded, of 19 ft. Loaded vessels can only sail from that place at high water. A modern installation for dismantling and scrapping vessels is operating up river, on the way to Astillero.

CARGO-HANDLING FACILITIES: There are berths for handling bulk cargoes, grain, ore, coal, etc. There are also berths for handling bulk liquids, chemicals. Berth available for roll-on/roll-off traffic.

STEVEDORES: It is very important that Masters send advance notice regarding vessel's ETA. With this notice, Agents can inform Shippers or Receivers' stevedores accordingly. Official working hours of port, are: Monday/Saturday: 0800–1200 hrs.; 1400–1800 hrs.

MEDICAL: Any kind of medical services can be arranged.

TANKERS: "Campsa" (Spanish State Monopoly) has private berths. Installation is served by two identical concrete wharves situated in Nueva Montana Basin, berthing space of which is 500 ft. with a depth alongside of 29 ft. New wharf under construction for tankers up to 35,000 d.w.t.

DENSITY: Sea water.

FRESH WATER: Always available. Supply is performed by tug-boats and from shore connections at various quays.

FUEL: Ordinary fuel, diesel and gas oil are available at "Campsa". Advisable that shipowners stem bunkers through their own Contractors, with an anticipation (at least) of 48 hours. Delivery can be performed either by tank-trucks or at bunkering pier.

DEVELOPMENTS: The entrance channel is to be deepened and widened.

GANGWAY/DECK WATCHMEN: Not compulsory but available upon request.

OPENING/CLOSING HATCHES: Effected normally by crew, except in liner vessels, which is contracted by stevedores.

CERTIFICATES: Vessels should have the usual documents on board, but only the safety Wireless, Safety Equipment and Deratisation Certificates are required by Authorities.

CUSTOMS ALLOWANCE: Normally, Customs permit 200 cigarettes per man out of bond. Additional quantities needed depend on the stay of ship in port. One bottle of spirit per man.

CARGO GEAR: Shore cranes are usually employed in loading/discharging operations.

1	fixed electric crane on	Maura concrete quay	30 t.
4	movable electric cranes on	Maura quay	3–6 t.
9	,, ,, ,, ,,	Bloques quay	3–6 t.
11	,, ,, ,, ,,	Maliano quay	3–6 t.
4	,, ,, ,, ,,	Maliano N. quay	6 t.
5	,, ,, ,, ,,	Maliano N. quay	12 t.
2	,, ,, (grain)	Maliano N. quay	250 t.p.h.
2	,, ,, ,, ,,	N. Montana quay	3–6 t.

Also movable motor cranes, mechanical shovels and similar, available.

IDENTIFICATION CARDS: not required.

CONSULS:

Germany
Beligum
Bolivia
Colombia
Costa Rica
Chile
Denmark
Ecuador
Finland
France
Greece
Haiti
Honduras
Italy
Monaco
Norway
Great Britain
Panama
Peru
Portugal
Dominican Rep.
Sweden
Guatemala

Note. Acting as Consul of those countries with no Consular Representation: Valentin Lavin del Noval, Dominican Consul.

REPAIRS: Good repair facilities with various shipyards at port. All types of deck, engine, etc., repairs are possible.

DRY DOCKS: Three dry docks, one of which is within the harbour area and the other at Astillero (beyond the harbour area). Dimensions are:

Extreme length	405 ft.	434 ft.	722 ft.
Breadth at entrance	58 ft.	54 ft.	105 ft.
Depth on sill (high water)	23.7 ft.	20 ft.	38 ft.

REPATRIATION: No difficulties.

AIRPORT: About 4 miles from town. There are regular services with Madrid and Barcelona. Also charter flights to U.K. and other European countries.

TIME: Always GMT plus 1 hour.

HOLIDAYS:

January 1 New Year's Day	Full day Work can be arranged
January 6 Epiphany	,, ,,
March 19 Saint Joseph	,, ,,
Holy Thursday – Half day (from noon)	,, ,,
Good Friday	,, ,,
May 1 Saint Joseph Artisan	,, ,,
Ascension Day	,, ,,
Corpus Christi	,, ,,
June 29 Saint Peter & Saint Paul	,, ,,
Labour Day	,, ,,
July 25 Patron Saint of Spain	,, ,,
August 15 Assumption Day	,, ,,
August 26 Anniversary of Santander Liberation	,, ,,
August 30 Martyrs' Day	,, ,,
September 15 Virgin La Bien Aparecida, Patron of Santander, Full day, work can be arranged	
Oct. 12 Holiday of Hispanicism	Full day Work can be arranged
November 1 All Saints	,, ,,
December 25 Christmas Day	,, ,,

POLICE/AMBULANCE/FIRE: Police 222543; Civil Security Guards 232004; Hospital, Casa de Socorro 221214, Valdecilla 231400; Fire 231662; Ambulance Cruz Roja 270235.

TELEPHONES: On very special instances, can be arranged.

SERVICES: Available for tank cleaning, washings, compass adjusting, hull cleaning whilst floating, radio installation repairs, etc.

SHORE LEAVE: Crew allowed ashore at any time.

AGENT: Modesto Pineiro y Compania, S.R.C. PO Box 14, Paseo de Pereda, num. 27, Santander.

Telegrams "Pineiro-Santander". Tel. 273600. Telex 35832. (P & I Club representatives, Shipbrokers, stevedores and chartering Agents, Lloyd's Sub-agents. Greek, Netherlands and Peruvian Consulates.)

SEVILLE: 37.25 N. 06.00 W.

DOCUMENTS:

3 Crew Lists.

3 Passenger Lists.

2 Cargo Manifest, including cargo for discharge and in transit.

Declaration of Health.

2 Lists of Provisions and Stores.

2 Copies of Bills of Lading.

If vessel carries over 3 kilos tobacco per man the excess to be declared in a separate manifest which must be visaed by Spanish Consul at last port, otherwise is exposed to heavy fine.

PILOTAGE: *At the Bar:* Vessels may commence to enter and leave the river 1.5 hours after low water. Bar Pilots are stationed a Chipiona and come out to board vessels when requested, 2 miles North of Chipiona Lighthouse.

Pilot motor launches about 9 m. long, painted white with black "P" on sides. They carry regulation lights and signals day and night.

River Pilots: Vessels should radio their ETA at least 24 hours in advance to "Practicos Sevilla". River Pilots are stationed at the pier at Bonanza, 36.48 N. 06.20 W. Sound signal to call Pilot is 3 long blasts. Pilot boards from white-painted launch marked by black letter "P" and carrying regulation signals. Pilots require means of embarkation in accordance with International Conventions.

ANCHORAGE: At Bonanza, in depth of 20 ft. below chart datum.

RESTRICTIONS: Navigation in the river above Bonanza is prohibited at night to vessels of more than 115 m. length, and 18 ft. draft, and to tankers or vessels with dangerous cargoes.

Draft is controlled by height of tide and this should be ascertained by Owners or Agents in advance for the probable date of entry.

MAX. SIZE: Length 185 m., beam 24 m., max. draft about 24 ft. dependent on height of tide. Tankers are required to have an additional 1 ft. keel clearance.

HEALTH: Pratique is obtained on arrival at Bonanza, on presentation of International Health Certificates.

RADIO: Coastal stations of Cadiz, EAC, or Aranjuez, EAD 3.

TUGS: Normally join vessel in the anteport. Ship's tow line is used.

BRIDGES: Vessels berthing at Delicias Quay must pass through the Alfonso XIII drawbridge. May be opened at any time of day.

STEVEDORES: 24 hours notice should be given by Agents and confirmed 12 hours before vessels arrival.

MEDICAL: All medical and hospital facilities available.

TANKERS: There are 2 berths, depth alongside 20 ft.

At Quay No. 2, hoses 8-in. diameter.

At Quay No. 3, hoses 8 and 10-in. diameter.

DENSITY: Fresh water. The tide has no influence at Seville.

FUEL: All grades available.

GANGWAY/DECK WATCHMEN: Not considered necessary. All quays are watched by the Guardia Civil.

OPENING/CLOSING HATCHES: Performed by ship's crew.

CUSTOMS ALLOWANCE: 3 kilos tobacco per crew man, and 2 kilos per passenger; this includes tobacco in bonded stores. No restriction on wines/spirits.

IDENTIFICATION CARDS: Not required.

CONSULS: The following countries are represented at Seville:

Belgium
Bolivia
Colombia
Cuba
Chile
Denmark
Dominican Republic
Germany, Fed. Rep.
Great Britain
Greece
Honduras
Italy
Liberia
Nicaragua
Netherlands
Panama
Peru
Portugal
Sweden
Uruguay
Venezuela
United States

REPAIRS: All types of repairs can be effected.

DRY DOCK: Astilleros Espanoles S.A. have 1 dock, length 149 m., breadth 25 m.

REPATRIATION: All facilities available.

AIRPORT: Situated 12 km. away, regular daily flights to Madrid, Barcelona, other parts of Spain. Some transatlantic flights.

TIME: GMT plus 1 hour, all year round.

HOLIDAYS: 1st January; 6th January; 19th March; Maundy Thursday; Good Friday; 1st May; Ascension Day; Corpus Christi; 29th June; 12th October; 1st November; 8th December; 25th December. All holidays may be worked with overtime.

POLICE/AMBULANCE/FIRE: Police: 091; Fire Brigade: 232123; Ambulance: 231945.

TELEPHONES: Can be installed on board if requested 10 days in advance.

SHORE LEAVE: No restrictions.

SERVICES: Fresh provisions and stores available, refuse collection, correction of compasses.

AUTHORITY: Comandancia Militar de Marina.

SOLLER: Majorca, 39.47 N. 02.46 E.

DOCUMENTS: See "Bilbao".

PILOTAGE: None available. 2 intermittent lights situated on the Mola indicate the Entry Channel.

MAX. SIZE: Advisable length and draft 60 and 4.50 m. respectively.

TUGS: None available.

MEDICAL: It is advisable to give advance notice if medical attention is required. There are no hospitals. Medical service is available 5 km. from the port.

FRESH WATER: Not available at the quay.

FUEL: None available. If required the order should be placed to Campsa through the Agent.

GANGWAY/DECK WATCHMEN: Crew do this operation.

OPENING/CLOSING HATCHES: Crew.

IDENTIFICATION CARDS: It is advisable to have these available.

CONSULS: None.

REPAIRS: No facilities exist.

AIRPORT: The airport is situated 40 km. away; the island is well connected with the Peninsula (mainland) and with foreign airports.

TIME: GMT plus 1 hour.

SHORE LEAVE: Allowed.

AUTHORITY: Jefe Encargo del Despacho de Buques, Oficianas del Destacamento de la Comandancia Militar de Marina en Soller.

TARRAGONA: 41.06 N. 01.17 E.

DOCUMENTS: Cargo Manifest of all goods in ship, stating any foreign port from where those goods come. This procedure should always be done in the first Spanish port.

In first Spanish port ship should produce an Itinerary Manifest; and those ships which carry goods to discharge should produce this Manifest in those ports in which they will discharge the goods.

Supplies Certificate for those ships not having any goods to discharge in any Spanish port, or who have previously been in other Spanish port.

Register of the Supplies and Equipment in ship.

Register of the Crew's Belongings, if the ship comes directly from a foreign port.

Passenger List (if there are passengers). Negative Passenger List (if there are no passengers).

Crew List.

Health Certificate, if the ship comes from another Spanish port.

PILOTAGE: Every ship upon arrival should note following signals: During day, hoist flag letter "G" of International Signals Code. Acoustics signal, three long whistles. During the night, flash signal letter "G" of code or the letters "PT". Cable Address: Practicos Puerto Tarragona. VHF station Channels 16, 14, 12 and 9.

Pilot boats: White colour with letter "P" painted on both sides. Lights: according to International Regulations. Pilotage area begins at a max. distance of 2 miles from port entrance. Ships awaiting for Pilot anchor in the Rada and East of the lighthouse. If weather does not allow, Pilot will meet ship at port entrance. Ladder for Pilot to be placed at leeward side.

ANCHORAGE: The West limit is marked by imaginary line running N./S. at the end of the breakwater. East limit is marked by imaginary line between the Paseo de Sta. Clara with the cathedral tower. Depths in Rada are 16 m. and 30 m.; quite good for anchoring (mud and sand).

RESTRICTIONS: No restrictions to enter port during day or night. No tides.

MAX. SIZE: Max. length 260 m., max. draft 38 ft. 06 in. Outside port the plant of Pantalan de Assesa, 1 mile West of lighthouse, allows berth of tankers up to 30,000 tons d.w.t. Enpetrol, 60,000 d.w.t.

HEALTH: Hospitals and clinics available. There is a doctor service in health department of port, which is authorised to vaccinate, and give certificates against yellow fever authorised by the OMS.
RADIO: No radio station.
TUGS: Six tugs. Tugs join vessel outside port. Ship's lines are used.
BERTHING: All berths are made of stone with rubber protection every 20 m. in the port. In Pantalan de Assesa and Pantalan Enpetrol, quays over iron pillars and berth is on the platform.
STEVEDORES: Advisable to report ETA, in order to have all the necessary equipment and necessary number of workmen required for operations. If there are not enough cranes at a given time, own ship equipment is used.

General Cargo: Estimated speed of 80–100 tons per person in a working day of 8 hours, except in particular cases due to the nature of the cargo.

Cargo in Bulk: Speed varies according to the nature of the goods. For instance:

Minerals: 500–800 tons per person in a working day of 8 hours.
Grains: 400–600 tons per person in a working day of 8 hours.
Goods in bags: 150–200 tons per person in a working day of 8 hours.

GANGWAY/DECK WATCHMEN: Not compulsory, if Master requires them he is provided with specialised staff for this purpose.
OPENING/CLOSING HATCHES: Although this work is normally carried out by crew it can be done as well by the stevedores if required at extra charge.
TANKERS: Outside the port there is berthing for oil carriers at Pantalan of Assesa, Pantalan Enpetrol and monobuoy for large tankers.

Storage of residues: There is a plant for slop (residue) discharge facilities connected with all platforms of the Pantalan and plant of residues disposal is available to all vessels.

There are 3 platforms to berth with the following drafts: Platform "A" – 38 ft. Platform "B" – 29 ft. Platform "C" – 23 ft. In inner port there are berths to discharge refined goods available to the tankers of the Compania Arrendataria of the Oil Monopoly.

Pantalan Enpetrol with 3 platforms; Platform 80S – 49 ft. Platform 35T – 49 ft. Platform 35S – 43 ft.

FRESH WATER: Supply of fresh water by means of an underground pipe in all the commercial quays of the port.
FUEL: Available. The grade of viscosity available is below 20 E. to 50 C. Request of this supply should be done with 24 hours notice through the Commercial Agent of Campsa.
DEVELOPMENTS: Building of quay in Levante Dock, with a length of 550 m. and 12 m. draft, with a probable extension of another 300 m. of quay with 14 m. draft. The draft in the port will then be 12.70 m. and in the entrance channel 13.40 m.
CUSTOMS ALLOWANCES: It is permitted to have a packet of tobacco per person per day. Unlimited allowance with national drinks.
CREW IDENTIFICATION CARDS: Not required.
CONSULS: Various available.
REPAIRS: Small repairs available.
DRY DOCKS: None.
REPATRIATION: Facilities exist.
AIRPORT: The town of Reus 12 km. distance has a military airport that is also used for charter flights and regular flights to Madrid.
TIME: GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Police 20–11–29; Ambulance at local hospitals; Fire 20–19–50.
SHORE LEAVE: Allowed.
AUTHORITY: Capitan del Puerto en Comandancia Militar de Marina.

TORREVIEJA: 37.58 N. 00.40. W.

DOCUMENTS:
2 Crew Lists.
Customs Documents.
Health Declaration.
Manifests.
Bills of Lading are done by Agents.

PILOTAGE: Requested by Agent. Permanent service. White-painted boat with letter "P" on sides. Pilot goes out of port as far as 1 mile.
ANCHORAGE: Outside, 0.5 mile off lighthouse of Eastern quay. Inside, according to Pilot's judgement.
MAX. SIZE: Unlimited length and breadth; limiting draft 27 ft.
RADIO: Alicante Coastal Radio.
TUGS: None available.
BERTHING: West quay is 220 m. long with a depth of 10 m. used only for loading salt, 200-400 metric t.p.h.
STEVEDORES: Available, employed by the consignees.
MEDICAL: Hospital situated 45 km. distance. Medical services and Emergency Clinic in port.
DENSITY: 1034.
FRESH WATER: Available at the quay. Price 50 pesetas per metric ton.
FUEL: None available.
GANGWAY/DECK WATCHMEN: If required can be contracted.
OPENING/CLOSING HATCHES: Carried out by crew.
CUSTOMS ALLOWANCE: 200 cigarettes. 2 bottles of wine.
IDENTIFICATION CARDS: Not necessary but convenient.
CONSULS: Sweden Vice-Consul 101; Norway, Denmark and Liberia Vice-Consul 135.
REPAIRS: Small repairs in engines, electrical, etc.
REPATRIATION: There are no problems in this respect.
AIRPORT: 30 km. distant at Alicante. Regular flights to Madrid.
TIME: GMT plus 1 hour.
HOLIDAYS: See Huelva.
POLICE/AMBULANCE/FIRE: Police tel. 99, Ambulance and Fire tel. 83.
TELEPHONES: There are no connections on board. 1 on the quay.
SHORE LEAVE: No restrictions.
AUTHORITY: Ayudante Militar de Marina and Captain of the Port.

VALENCIA: 39.27 N. 00.19 W. (See Plan)

DOCUMENTS:
3 Crew Lists.
2 Passenger Lists or a negative.
1 Cargo Manifest of goods destined for the port.
Another manifest covering transit cargo.
2 Store Lists, including tobacco, cigars, cigarettes, coffee, spirits, radios, cameras, etc., in possession of crew. In all cases make and number of radios to be indicated.
Safety Wireless Certificate and Safety Equipment Certificate.

If vessel carries over 3 kilos tobacco per man, the excess to be declared in a separate manifest, which must be visaed by Spanish Consul at the last port, otherwise vessel is exposed to heavy fine.
PILOTAGE: Pilotage is compulsory for this port. The pilot launch is painted black with a letter "P" painted in white on the sides.
ANCHORAGE: There is a good anchorage outside the port, vessels are required to keep the entrance channel clear.
RESTRICTIONS: Entrance to the port faces S.S.E. and is 260 m. wide, with a low water depth of 12 m.
MAX. SIZE: Length 250 m. draft 11 m. Vessels with greater draft or length have berthed in the Port.
HEALTH: If the vessels proceed directly to berth, pratique can be obtained immediately after berthing. Otherwise, at anchorage at vessel's arrival.

If vessel has sickness on board of a contagious nature Master should advise Health Authorities by radio, and they will examine patients immediately upon arrival, to enable vessel to be granted free pratique.
RADIO: Coastal radio station with international frequencies 1580 kHz.
TUGS: Not compulsory for entering port. 10 tugs available up to 1,800 h.p. Two tugs normally used for berthing and unberthing.
BERTHING: Quays operated by Port Authority:

Name	*Length* m.	*Depth* m.	*Use*
Levante	953.14	9.00	Bulk and general cargo
Transversal of Outer Levante	148.00	7.00	General cargo
Transversal of Outer Poniente	205.90	7.00	General cargo
Poniente Quay – Section 1	186.40	9.00	General cargo & bulk
Poniente Quay – Section 2	160.00	11.00	Logs and bulk cargo
Turia Pier, extension North, Section 1.	62.00	9.00	Containers
Turia Pier, extension North, Section 2.	219.00	11.00	Containers
Turia Pier Head	151.00	11.00	Bulk cargo
Turia Pier, extension South, Section 1	166.50	9.00	Bulk cargo, oil products
Turia Pier, extension South, Section 2	219.00	11.00	Bulk cargo, oil products
Turia	402.00	9.14	Wood & oil products
South	600.00	14.00	General cargo & bulk
Inner Levante Transversal	184.60	7.00	General cargo
Customs	387.00	7.00	General cargo
Landing Quay	255.75	7.00	General cargo & passengers
Station	356.00	7.00	General cargo
Nazareth	175.00	7.00	General cargo
Inner Poniente Transversal	212.25	7.00	General cargo

CARGO-HANDLING FACILITIES: Grain, coal, fertilisers, etc., in bulk are handled at Espigon del Turia and Muelle del Turia. Also at Muelle del Turia is a chemical-handling installation, depth alongside 9.25 m.

Containers: Two berths at the Turia pier, North side, with crane of 30 metric tons capacity, also, and using conventional means, they are discharged at the Western quay.

There are two work-points for roll-on/roll-off vessels at the Eastern transversal quay and the Western transversal quay.
CRANES: 2 floating cranes, capacity 60 and 80 tons.

The Port Authority operate 51 gantry cranes with capacity of 3 tons to 12 tons. Mobile cranes are also available.
TANKERS: *Pipe-lines:* The port areas equipped for oil traffic are connected to the C.A.M.P.S.A. plant by means of a network of 5 pipe-lines, starting at the Turia pier and quay, and ending at the plant itself. These pipe-lines are 1×10 in. diameter with a capacity of 300 cu.m./hr., and another of 8 in. and 250 cu.m./hr. for movement of fuel-oil.

2×8 in. diameter and 250 cu.m./hr. for gas-oil. There are also means of delivery of aviation paraffin by means of 1 pipe-line 6 in. diameter at the rate of 120 cu.m./hr. Also see "Berthing".
MEDICAL: All medical services available in the port and in the city.
REPAIRS: All types of hull and machinery repairs can be effected.
FLOATING DOCK: 1 floating dock available, owned by Union Naval de Levante. Interior length 143 m., interior width 24.60 m. Lifting capacity 8,000 tons.
CUSTOMS ALLOWANCE: Normally Customs permit 200 cigarettes

per man out of bond. Additional quantities needed depend on the stay of ship in port. One bottle of spirit per man.

FRESH WATER: Available at all main berths at the rate of 30 t.p.h.

FUEL: Campsa can supply by pipelines at the Turia berths, at the rate of 100–280 t.p.h.

TIME: Always GMT plus 1 hour.

AIRPORT: Situated at Manises, 10 km. away from the port.

CONSULS: The following countries are represented in Valencia:

West Germany
Argentina
Belgium
Bolivia
Brazil
Colombia
Costa Rica
Chile
Denmark
Dominican Republic
Ecuador

U.S.A.
El Salvador
Finland
France
Great Britain
Greece
Guatemala
Honduras
Iceland
Italy

Nicaragua
Norway
Netherlands
Panama
Portugal
Sweden
Switzerland
Uruguay
Venezuela
Yugoslavia

POLICE/AMBULANCE/FIRE: Police 091; Fire 271234; Ambulance 230304.

HOLIDAYS: Work can be arranged on following holidays. New Year's Day (January 1 full day); Epiphany (January 6 full day); Saint Joseph (March 19 full day); Easter (two days); Saint Joseph Artisan (May 1 full day); Saint Peter & St. Paul (June 29 full day); Labour Day (July 13 full day); Patron Saint of Spain (July 25 full day); Assumption Day (August 15 full day); Martyrs' Day (August 30 full day); Holiday of Hispanicism (October 12 full day); All Saints (November 1 full day); Christmas Day (December 25 full day).

DEVELOPMENTS: The entrance channel is to be dredged to 15 m. Two 6 ton and one 30 ton crane under construction. Installation of 6×12 ton cranes in planned.

AUTHORITY: Direccion del Puerto de Valencia.

VIGO: 42.14 N. 08.40 W. (See Plan)

DOCUMENTS:

Maritime Declaration of Health.
Crew List.
Passenger List.
Manifest of Cargo for the Port.
Manifest of Cargo in Transit.
Ship's Stores List.
Crew's Personal Effects List.
Ship's Particulars Declaration.

Note: Tobacco. In case the vessel carries more than 3 kilos of tobacco per man, the excess must be declared in a separate manifest, which must be visaed by a Spanish consul. in the absence of the Consul, said document will have to be visaed by an authority of the former port of clearance. Otherwise the vessel would be severely fined.

PILOTAGE: Pilotage at Vigo is compulsory and the service permanent day and night. Pilots board in axuiliary motor-boats with a letter "P" in white at both sides of the hull and a blue flag with the letter "P" in white, near the entrance of the harbour, in the zone included inside Punta Lameda-Cabo Vicos on the channel of the South entrance and inside Punta Caballo-Subrido, on the channel of the North, both situated to the West of the harbour. At night the pilot boats have a white light visible around the horizon and under this light another red one, also visible around the horizon. International code signals used to call Pilot, or four long blasts on the whistle. Pilot station situated at Transatlanticos Pier 3 Pilot boats normally on station on a line connecting Borneira and Transatlanticos Pier.

ANCHORAGE: Several suitable anchorages in the Vigo river, naturally sheltered, in depths of more than 35 m. The main anchorage opposite the port on the South side of the "Ria" has depths of 15–25 m.

MAX. SIZE: No limitation for length and beam, unlimited deep water approaches.

HEALTH: If vessels proceed directly to the berth, pratique can be obtained immediately after berthing. Otherwise, at the anchorage on vessel's arrival. In case of suspected disease or fever on board, the Master must send a radio message to the Agent in order that they advise the Health Office.

RADIO: The nearest Radio Station is Vigo Radio, situated in the limits of Vigo port.

TUGS: No tug-boats are required for entering the port. Only used for berthing ships from 120 m. length upwards according to Pilot's advice. At Vigo there are 2 modern tugs of 1,000 h.p. each. Tugs join vessel off the berth. Tug's line used at no extra charge.

BERTHING: The commercial piers to load or unload have a depth of up to 36 ft. and the Transatlantic Pier, depth of about 40 ft. at LW. The tide difference between high water and low water is about 3.5 m.

At Rande, in the lower harbour, there are very modern special loading installations for mineral ore, at an average rate of 2,000 t.p.h. The depth alongside this installation is 36 ft. LW.

Containers are handled at Muelle de Arenal by cranes of 15 and 20 tons capacity. Depth alongside 11 m.

Roll-on/roll-off traffic berths, depth 6 m., situated inside Transatlantic Pier.

TANKERS: Tankers berth at a pier depth alongside 11 m. at low water. Tankers up to 300 m. length acceptable. Inner berth suitable for vessels of less than 100 m. length with a draft of 6 m. Discharge lines 12 in., 10 in. and two of 8 in. diameter.

STEVEDORES: It is very important that Masters send advance notice regarding the vessel's ETA. With this notice, Agents can inform Shipper's or Receivers' stevedores accordingly, so that they arrange operations properly. The official working hours of the port are Monday/Friday 0830–1230 hrs. – 1400–1800 hrs. Saturday 0830–1230 hrs.

MEDICAL: Doctors and hospital facilities available. Advance notice preferred in urgent cases.

DENSITY: Average 1026.

FRESH WATER: Available from the quays at the rate of 50–80 t.p.h. Can also be supplied by tugs at 500 t.p.h.

FUEL: Available from the Oil Pier or delivered by barge. 24 hours notice of requirements recommended.

DEVELOPMENTS: Bulk carrier berth under construction suitable for vessels up to 300 m. length and 16 m. draft.

GANGWAY/DECK WATCHMEN: Available from shore if required.

OPENING/CLOSING HATCHES: Opening may be done by crew to avoid delays. Closing hatches usually performed by crew.

CUSTOMS ALLOWANCE: 200–250 cigarettes or three kilos of tobacco and 2 bottles spirits may be held out of bond for each person. Wine not restricted.

IDENTIFICATION CARDS: Shore passes are provided by the Agent.

CONSULS: Practically all countries have consulates at Vigo.

REPAIRS: All types of deck and engine repairs are possible.

FLOATING DOCKS: One floating dock available: length 128 m., breadth 22.40 m.

REPATRIATION: Crew changes and repatriation can be arranged without difficulty.

AIRPORT: Local airport, situated 8 kms. from the port, has at least 1 daily flight to Madrid. International airport of Santiago de Compostela is 100 km. away.

TIME: GMT plus 1 hour all the year round.

HOLIDAYS: 1st January; 6th January; 19th March (St. Joseph); Good Thursday afternoon; Good Friday; 28th March (local holiday, Reconquest Day); 1st May (Labour Day); Ascension Day; Corpus Christi; 29th June (St. Peter and St. Paul); 18th July (National Holiday); 25th July (St. James' Day); 15th August; 12th October; 1st November; 25th December.

POLICE/FIRE/AMBULANCE: Police, tel. 21.00.00; Fire, tel. 21.20.00; Ambulance, tel. 21.25.09.

TELEPHONES: No arrangement for connecting on board.

SHORE LEAVE: Allowed without restriction.

AUTHORITY: Director del Puerto, Junta del Puerto y Ria de Vigo.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Spanish Sahara

EL AAIUN: 27.04 N. 13.28 W.

LOCATION: Lighthouse at phosphate terminal in position 27° 03′ 55″ N. 13° 27′ 45″ W.

DOCUMENTS: See "Villa Cisneros".

APPROACHES: There is a light located at the end of the bulk phosphate terminal in position 27° 03.9′ N. 13° 27.7′ W. at the top of mineral silos, at a height of 180 ft. 1 flash every 5 seconds, range 10 miles.

There is also a fixed green light located at the Northern part of the terminal, range 10 miles, and a fixed red light at the Southern part of the terminal, range 10 miles.

The phosphate terminal installations give a good radar target at a distance of 25 miles. Vessels approaching from the North should keep 10 miles off the coast until the pier is bearing 090° and then steer towards the pier.

At nights the installation lights are always visible and with a clear atmosphere can be seen from 25 miles off the coast.

PILOTAGE: Compulsory. Pilot boards about 0.75 miles off the pier head.

ANCHORAGES: Good anchorages can be found in 10 fathoms of water. When waiting for the Pilot it is recommended to anchor 0.75 miles Westward of the pier. No shelter in strong winds. Service of powerful auxiliary boats is available when standing at anchor.

MAX. SIZE: Depth 17.5 m. at LWL at the phosphate terminal berth, and 9.5 m. LWS at the berth for general cargo ships, located at the middle of the pier.

HEALTH: Valid smallpox, yellow fever and cholera certificates are required. Otherwise, usual clearance.

RADIO: Via Tenerife Radio on HF, call sign EAT. Via Las Palmas Radio on MF, call sign EAL.

There is no coast radio station in Spanish Sahara for communication with El Aaiun. VHF radio communication is being placed at the phosphate terminal to work in future on Channels 12 and 16.

Ships calling at the terminal are required to send ETA cables 72, 48 and 24 hours prior arrival to "Cargadero Fosbucraa el Aaiun" and "Fosbucraa Madrid".

TUGS: 2,000 h.p. tugs are called from Las Palmas to assist whenever the ship requires their service. Assistance has to be requested by Master or Owner 60 hours prior arrival.

BERTHING: Aaiun Mineral Terminal located approx. 6.5 miles South of El Aaiun City.

The terminal head is in a North-South direction. Vessels are moored alongside dolphins that cover the three loading stations for 100,000, 40,000 and 20,000 tons d.w.t. ships. The loading pier has a height above water of 50 ft. and the dolphins approx. 20 ft.

Facilities consist of modern equipment available for handling phosphate in bulk at a loading rate of 4,000 t.p.h. in 2 of the stations, and 2,000 t.p.h. at the 3rd. The phosphate is loaded by means of moveable loading machines with telescopic spouts to permit perfect trimming.

Facilities at the general cargo berth available for vessels up to 8,000 tons d.w.t. are 2 cranes of 6 tons each, and 1 derrick of 150 tons capacity.

No gangway to be rigged at this terminal. Communication from ship-to-shore is by means of elevator from the loading machines.

AIRPORT: Aaiun (30 km. from harbour)).

REPAIRS: No repairs can be effected at this port.

BUNKERS: No bunkers available.

PROVISIONS: Provisions may be obtained if requested by vessel 48 hours prior arrival.

OPERATORS: Fosfatos de Bucraa S.A. (Fosbucraa), Boix y Morer 6, Madrid 3. Cables: "Fosbucraa Madrid". Telex: 27356. Tel.: 2-33-36-00.

VILLA CISNEROS: 23.42 N. 15.55 W.

DOCUMENTS: *Foreign Vessels*

Crew List.
Health Pratique.
Passenger List.
Cargo Manifest.

Spanish Vessels, in addition to the above:

Safety Equipment Certificate.
Radio Safety Certificate.
Seaworthiness Certificate.

PILOTAGE: Pilot is necessary to cross the bar and for river navigation. Pilot joins at anchorage. Pilotage compulsory for all vessels over 50 grt. Contact Pilot by radio-telephone, via Puerto de Villa Cisneros Radio operating on 2182 and 2626 kHz. from 0800 to 1300 hrs. and from 1500 to 2000 hrs. GMT.

ANCHORAGE: In depths of more than 10 m. about 0.6 mile East of the breakwater head. This situation is well protected from swell from the S.W. but open to winds from the N.E. which are frequently strong creating difficult conditions for very small vessels. There are no mooring buoys.

Vessels loading trans-shipment cargo anchor in position with Punta Galera Light bearing 030° T, 1.2 miles off. The prevailing winds blow mostly from the North up to force 3 with a long low swell mostly from a N.W'ly direction.

MAX. SIZE: Length 100 m., beam 12 m., draft 5 m.

HEALTH: Masters are required to complete a health certificate for the Comandancia declaring that the vessel has not called at any infected ports.

TUGS: None available, only one small launch which may assist.

BERTHING: Breakwater of 750 m. length extends towards the S.E., berths alongside the last 200 m., 1 concrete pier for small vessels, 3 small jetties enclosing 2 docks, can be used by vessels of medium size.

STEVEDORES: Employed by Port Authority and engaged by ship's Agent.

MEDICAL: Hospital available for any kind of medical attention; doctors and ambulance service available.

TANKERS: Moor at jetty No. 2. Pipelines 4 in. diameter.

FRESH WATER: On the quays are 3 hydrants, capacity 3 t.p.h. and 4 of 2 t.p.h.

FUEL: Atlas Company can supply fuel subject to advance notice.

OPENING/CLOSING HATCHES: Opened and closed by crew.

CUSTOMS ALLOWANCE: Crew are allowed to take only sufficient tobacco ashore for their own consumption. It is not permitted to take alcohol ashore.

IDENTIFICATION CARDS: Seamen going ashore must taken an identity card or a shore pass, issued by the Master.

CONSULS: No local representation.

REPAIRS: Only facilities for very minor repairs.

REPATRIATION: Can be arranged provided that documentation is in order.

AIRPORTS: Situated 1 km from the port. Iberia Airlines have 5 flights per week. In case of emergency, military aircraft may be used.

TIME: GMT is used all year round.

HOLIDAYS: 1st January; 6th January; Maundy Thursday; Good Friday; Corpus Christi; Ascension Day; 29th June; 16th, 18th and 25th July; 15th August; 12th October; 1st November; 25th December.

Mohammedan Holidays: Aid el Queber (2 days); Aid el Mulud (1 day); Aid el Seguer (2 days).

POLICE/FIRE/AMBULANCE: Police Station situated 100 m. from the quays. Fire: tel. 18. Ambulance: tel. 17.

SHORE LEAVE: Allowed without restriction

AUTHORITY: El Comandante, Militar de Marina.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Sri Lanka

COLOMBO: 06.56 N. 79.50 E. (See Plan)

DOCUMENTS:

5 each of Crew and Passenger Lists.
8 Manifests.
1 Arrival Report for Pilot.
1 Master's Declaration for Immigration, and same for Police.
2 Private Property Lists of officers and crew for Customs.
2 copies of Preliminary Report by Master for Customs.
1 Maritime Declaration of Health for Port Health Officer.
1 Master's Declaration of Cargo for Quarantine Department.

PILOTAGE: Vessels approaching port apply for Pilot by flying the G flag by day or two red lights at night. They can, in addition, flash the pilot station or use VHF Channel 16. The telegraphic address of pilot station is "Pilot Station Port Commission Colombo" and a provisional ETA 24 hours ahead is advisable with corrections thereafter. However, these are best channelled through the vessel's Agent. Pilot boat is a wooden motor launch with the word "Pilot" on its side. It flies the H flag by day or red and white lights by night according to the international code. The Pilot boards within an area of about 1 mile of the harbour entrance. Advice of where to anchor can be obtained from the Pilot by VHF or signal light.

ANCHORAGES: The usual anchorage off port is within 3 miles of the harbour mouth where up to 14 fathoms of water is available. 18 fathoms of water is available within 6 miles.

RESTRICTIONS: Entry may take place at all hours of the day and night but it is unusual for the Pilot to board vessel between midnight and 0400 hours.

MAX. SIZE: For entering harbour, max. draft 36 ft. and a length of 800 ft. is permissible. Beam is not critical. There is no appreciable rise and fall of tide.

Tankers' max. dimensions for berthing alongside: length 750 ft., draft 34 ft.

HEALTH: The vessel entering port must fly the Q flag until boarded by the Port Health Officer to grant pratique. Pratique may be granted by radio if there is a doctor on board provided the ship is not calling from a port in India. A radio message should be sent within 24 hours of the vessel's ETA in the following terms "Last port — no quarantinable disease on board – Doctor on board" and the Port Health Officer will reply to the Agent confirming pratique being granted by radio. Pratique is automatic if the vessel enters after calling at another port in Sri Lanka. If any quarantinable disease on board double Q flags must be hoisted prior to entering harbour.

RADIO: "Colombo Radio" with a call sign 4PB is the usual channel for communicating with Colombo.

The pilot station is presently available on VHF Channel 16 and the Port (Cargo) Corporation on VHF Channel 11.

TUGS: Tugs normally join the vessel at the harbour mouth and use their own lines.

BERTHING: There are no specific requirements relating to berthing space but early advice of draft is most advisable.

STEVEDORES: The stevedores at Colombo are the Port (Cargo) Corporation, a nationalised concern having the monopoly of stevedoring and lighterage. ETA at least 24 hours in advance if possible. Gangs for the day shift which commences at 0730 hours must be ordered by 0700 hours and gangs for the evening shift, commencing at 1630 hours, by 1600 hours. This excludes the Poya Day on which only the day shift is worked, and gangs must be ordered by 0930 hours on the previous day.

MEDICAL: Although advance notice of medical assistance required is helpful, particularly when port stay is limited, it is not essential. Comprehensive hospital facilities are available either in private nursing homes or the Government hospitals. The following inoculations are required: Smallpox and cholera, yellow fever if calling from ports in East Africa and Mozambique.

TANKERS: There are 3 tanker berths, one for importing crude oil suitable for tankers of 750 ft. length, max. draft 34 ft. One berth for white oil tankers with max. draft 33 ft. One berth for fuel oil imports for vessels with a max. draft of 31 ft., and this same berth is used for exports when permissible draft is 33 ft.

The diameter of discharge lines;
Crude oil, 24 in., giving capacity 1,000 tons per hour.
White oil, 10 in., capacity 250 tons per hour.
Gasoline, 10 in., capacity 170 tons per hour.
Furnace oil, 14 in., capacity 500 tons per hour.
Naphtha, 12.75 in., capacity 450 tons per hour.

Pumping will not be commenced after nightfall. No residue discharge facilities are available.

DENSITY: 1025.

FRESH WATER: Fresh water is readily available by barge. The rate of delivery is approx. 40 t.p.h. The water is of good quality.

FUEL: Furnace diesel and gas oil available. Advance notice of at least 24 hours is advisable as the bunker requirements of the port often exceed the ability of the oil companies to supply immediately. Supplies are by barges which can pump at 300 t.p.h.

DEVELOPMENTS: One new alongside dry-cargo berth with a draft of 37 ft. should be ready early 1977. New tanker terminal with draft of 40 ft. expected to be operational in 1979.

GANGWAY/DECK WATCHMEN: Watchmen are available and are to be recommended unless members of the crew are available to provide this service.

OPENING/CLOSING HATCHES: This work is normally carried out by the stevedores except in the case of McGregor or similar hatch covers which they will not handle.

CERTIFICATES: Register showing vessels name, port of registry, gross and net tonnages and owner. Safety Equipment Certificates quadrennial and annual, Ship's Articles (British) and clearance from previous port and deratisation Certificate.

CUSTOMS ALLOWANCE: Cigarettes 25 per man per day. Tobacco 1 oz. per man per day. Snuff 1 oz. per man per day. Spirits 0.25 bot. per man per day. Wine 1 bot. per man per day. Beer 2 bots. per man per day.

IDENTIFICATION CARDS: These are not essential but the crew is expected to carry some form of identification with a photograph on it when they leave the vessel.

CONSULS:

Belgium
Burma
China
Czechoslovakia
Denmark
Egypt
France
Germany
Greece
Indonesia
Italy
Japan
Maldives
Netherlands
Philippines
Poland
Rumania
Thailand
Switzerland
U.S.A.
U.S.S.R.
Yugoslavia

REPAIRS: Most main engine and boiler repairs and minor hull repairs can be effected.

DRY DOCKS: No. 1 – 700 ft.×85 ft.×32 ft. over blocks – Max. size 675 ft. LOA. 80 ft. breadth – Deepest draft 29 ft.

No. 2 – 350 ft.×54 ft.×22 ft. over blocks.
No. 3 – 400 ft.×54 ft.×18 ft. over blocks.
Owners and Operators – Colombo Dockyard Limited.

A dry dock of 65,000 d.w.t. complete with workshop facilities is planned for operation by late 1981.

REPATRIATION: There is no difficulty in arranging repatriation and crew change.

AIRPORT: It is 18 miles to the international airport which is served by regular airlines.

TIME: Sri Lanka standard time is 5.5 hours in advance of GMT, and no alterations are made during the year.

HOLIDAYS: Cargo work can normally be arranged on all except the following holidays:

1st January; Sinhalese & Tamil New Year 1 day in April; 1st May; Wesak Full Moon in May; Republic Day 22nd May; 26th September; Christmas Day.

POLICE/AMBULANCE/FIRE: Harbour Police tel. 21075; Ambulance 20428; Ambulance launch: Exhibit A.L. flags; Port Fire Brigade 32331.

TELEPHONES: None are available for placing on board.

GENERAL: Ships should not discharge oil within territorial waters, dispose any waste into harbour or on to quays, immobilise main engines without prior permission, use radio for transmission in harbour. Ships should hoist national flag during daylight hours.

SHORE LEAVE: There is no restriction on crew members being allowed ashore but advised to carry passport or other identification.

DELAYS: Delays for vessels working cargo are seldom over 24 hours. However, it is very unusual for vessels calling for bunkers, fresh water, stores, etc., to be delayed for more than a few hours.

AUTHORITY: Colombo Port Commission.

AGENT: Aitken, Spence & Co. Ltd., Lloyd's Building, Sir Baron Jayatilaka Mawatha, PO Box 5, Colombo 1. Tel. 27861-7 (7 lines). Telex 1142, Cable Address 'Aitken Colombo.'

GALLE: 06.01 N. 80.14 E.

PORT LIMITS: To the Eastward Unawatuna Point, to the Westward Gindurah Point, to the Southward the usual sea league from the line between these points.

DOCUMENTS: Pilot brings on board:

Arrival Report and Maritime Declaration of Health.

Port Health Officer boards vessel after berthing and collects Crew List, Passenger List, Maritime Declaration of Health. Examines crew, passengers and International Certificates of Vaccination.

Customs. Manifests, Bonded List, Passenger List, Cargo List, List of Currency, Port Declaration.

Immigration. 3 Crew Lists.

PILOTAGE: Apply for Pilots via local Agents. Send ETA not more than 24 hours prior arrival via Colombo Radio. Vessels telegraph direct to Master Attendant, Galle, via Colombo Radio. Vessels advised listen-in on Channel 16, VHF.

Pilot launch about 60 ft. long with white hull carrying word "Pilot". Pilot launch proceeds to vessels from Master Attendant's Office and Pilot will board about 0.25 mile to South of bell buoy. Vessels should anchor until pilot launch arrives and heave-up on approach of pilot launch; due to heavy swell prevalent *essential* vessels provide good lee for Pilot. Proper pilot ladder and two man ropes should be ready. Vessels anchoring should do so to the South or East of bell buoy. See "Anchorages".

ANCHORAGES: Best anchorage lies to Eastward of bell buoy where depth 9 fathoms. To Southward of bell buoy depth increases to 15 fathoms. Vessels should anchor about 0.5 mile from bell buoy.

RESTRICTIONS: Vessels should not proceed North of bell buoy. Entry prohibited after 1700 hrs. and may be delayed by bad weather. Generally a wind force of over 25 knots and a swell of over 4 ft. delays entry.

MAX. SIZE: N.E. Monsoon. 1 vessel of 500 ft. up to 30 ft. draft, 2 vessels of 500 ft. up to 26 ft. draft, 1 vessel of 450 ft. up to 23 ft. draft, 1 vessel of 350 ft. up to 20 ft. draft can be berthed at stream berths. S.W. Monsoon. 1 vessel of 475 ft. up to 25 ft. draft, 1 vessel of 450 ft. up to 21 ft. draft. 1 vessel of 350 ft., up to 18 ft. draft can be berthed at stream berths.

Two alongside berths available for vessels up to 350 ft. length and 18 ft. draft. 750 ft. of quay space available.

HEALTH: The International Declaration of Health, handed to Master by Pilot, must be completed and returned to Port Health Officer, who boards after berthing. PHO also requires 2 Crew Lists, synopsis of Vaccination Certificates, Deratisation Certificate and examines Certificate of Vaccination.

RADIO: Colombo Radio.

TUGS: At present only one tug of 250 h.p. available throughout year. If sufficient notice given (over 24 hrs.) an additional tug could be sent from Colombo (only available during N.E. Monsoon). Tug meets vessel at berth, tugs lines used. Charges for tugs included in port (pilotage) charges irrespective of ownership of towing lines.

BERTHING: Vessel berthing in stream lies to both anchors and picks up 4 to 6 mooring lines from buoys aft. To pick up mooring lines, vessel should have ready at stream two messenger wires of 2.5 in. diameter and 60 fathoms length.

STEVEDORES: All stevedoring carried out by Government Corporation. Gangs, lighters etc. are all arranged by Port (Cargo) Corporation. 16 lighters of approx. 15 dwt capacity available for working vessels in stream berths.

MEDICAL: Vessels arriving in Galle and requiring medical attention should cable Agent and Port Health–Galle at least 12 hrs. in advance.

DENSITY: 1025.

FRESH WATER: In cases of emergency up to 20 tons fresh water could be supplied daily in stream in 400 gallon tanks conveyed by lighters. Alongside main quay up to 50 tons per night could be supplied by Bowser.

FUEL: Bunkering Division of Ceylon Petroleum Corporation, Kolonnawa (off Colombo) can service vessels with small quantities of fuel. 5 days prior notice required.

DEVELOPMENTS: Building of breakwater and all dredging operations stopped indefinitely.

Dredging main quay to 30 ft. deep, and channels to 33 ft. depth.

GANGWAY/DECK WATCHMEN: Ceylon police station two policemen aboard every vessel in harbour. For vessels berthed alongside policemen stationed aboard through day. For stream vessels policemen stationed only during hours when cargo worked.

OPENING/CLOSING HATCHES: Shore labour, but there is no objection to hatches being opened prior to labour boarding.

CUSTOMS ALLOWANCE: Present allowance 200 cigarettes per week, 2 bottles beer per day. Others proportionately.

CONSULS: All consular officers in Colombo, 72 miles away, 2 hours by train, 2.5 hours by road.

REPAIRS: No repairs possible as Galle open to S.W., essential that vessels have engines ready at all times. No shutdown permitted.

REPATRIATION: Sub-collector of Customs acts as Shipping Master and will sign on/off properly authorised crew changes.

AIRPORT: Colombo.

TIME: Standard Time GMT plus 5.5 hours.

HOLIDAYS: Non-working days in the port (dates variable yearly): Sinhala and Tamil New Year in April; Good Friday, 1st May; Wesak Full Moon in May; 22nd May; 26th September; Christmas Day.

POLICE/FIRE/AMBULANCE: Harbour Police 3222; Ambulance 2261. No fire brigade available.

TELEPHONES: No telephones available aboard.

SHORE LEAVE: Crew allowed ashore.

AUTHORITY: Assistant Master Attendant, Master Attendant's Office.

AGENT: Clark, Spence & Co. Ltd., PO Box 11, "Clan House", 24 Church Street, Fort, Galle. Tel. 2083 (after hours 2392). Cables Spence, Galle, Lloyd's and Steamship Agents.

TRINCOMALEE: 08.36 N. 81.15 E.

DOCUMENTS:

International Maritime Declaration of Health.
6 copies Crew List.
6 copies Passenger List.
Smallpox Vaccination Certificates are compulsory.
Cholera or Yellow Fever Certificates required if vessel is arriving from an infected port.

PILOTAGE: No means of communication between Pilot Station and vessels calling at port. Vessels should indicate ETA through Colombo Radio, either to Agent or direct to Deputy Master Attendant, Trincomalee, at least 24 hours before arrival. No night pilotage. Pilot boards incoming vessels between hours of 0600 and 1800 hrs. about 2 cables Northward of Round Island (8° 30′ 48″ N. 81° 13′ 24″ E.). Vessels embarking Pilot should whenever possible lower an accommodation ladder; if this is not practicable should let down a pilot ladder and provide two man ropes not less than three inches in circumference. Vessels awaiting a Pilot should anchor 0.5 miles N.E. of Round Island light tower in depths from 11 to 13 fathoms.

Vessels arriving between 1800–2100 hrs. may be brought in at Deputy Master Attendants discretion if they come to anchorage 5 cables N.E. of Round Island.

ANCHORAGES: Trincomalee Harbour is the only entirely sheltered natural harbour in Sri Lanka. Good anchorage may be found in almost any part of harbour in good weather.

RESTRICTIONS: Vessels may enter during hours of daylight only. Range of tide is very small and does not restrict entry.

MAX. SIZE: Almost unlimited length and draft can be accommodated in anchorage. Only one berth which can accommodate up to 600 ft. length, and 32 ft. draft. This jetty used for discharging tankers and bunkering.

HEALTH: The Port Health Officer boards vessels after arrival at anchorage to grant pratique. Pratique automatic for vessels arriving from another port in Sri Lanka.

RADIO: All cables to Deputy Master Attendant, Agents, Receivers. etc., should be routed through Colombo Radio; call sign 4 PB.

Pilot carries a portable VHF set, Channel 16, with about 2 miles range.

TUGS: One tug attends when required. Tow-lines generally not used; but if required tug lines used.

STEVEDORES: Stevedoring operations have been nationalised and are carried out by the Port (Cargo) Corporation, Trincomalee.

TANKERS: One tanker berth at which vessels of 600 ft. length and 32 ft. draft are discharged.

DENSITY: Salt water.

FRESH WATER: Available, supplied by water lighters and from bunkering jetty.

FUEL: Marine heavy diesel and furnace oil can be supplied at 24 hours notice.

GANGWAY/DECK WATCHMEN: Watchmen are provided by the Port Tally and Security Services Corporation.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCE: Tobacco issued as required. Wine and/or Spirit issued as required.

IDENTIFICATION CARDS: Identity Cards or Passports are required to be carried by crew members ashore.

CONSULS: All Consular officers are in Colombo.

REPAIRS: Only minor repairs can be carried out.

REPATRIATION: Crew changes and repatriation can be effected.

AIRPORT: No International flights through Trincomalee. Internal service of Air Ceylon operates daily flights between Trincomalee and Colombo.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Dates of holidays are not fixed. Cargo work can generally be arranged on any holiday.

TELEPHONES: Police 308; Ambulance 448; Fire 335. There are no telephone connections for ships.

SHORE LEAVE: Allowed.

AUTHORITY: Deputy Master Attendant, Port Commission.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Sudan

PORT SUDAN: 19.37 N. 37.14 E.

DOCUMENTS:

Port Sudan Harbour Master's Declaration.
Sudan Customs Declaration.
Quarantine Form.
(All above forms to be filled by Master on arrival).
3 Crew Lists.
3 Passengers Lists.
1 Crew Declaration.
1 Dutiable Stores.
4 copies Manifest.
1 copy B/Lading.
1 Provisions List.

PILOTAGE: 24 hours notice ETA. VHF. Channel 16. Pilot boards South of South Wingate Beacon. Pilotage compulsory.

ANCHORAGES: Towartit Anchorage, approx. 8 km. S.E. of harbour.

RESTRICTIONS: No restrictions providing berth available.

MAX. SIZE: Length 850 ft. Max. draft at Oil Terminal 37 ft., other berths 34 ft. 6 in.

HEALTH: Radio pratique obtainable if message sent not more than 24 and not less than 8 hours before arrival to "Quarantine, Port Sudan", with following information: Name of ship and ETA; Name of Agent; Whether surgeon carried or not; Whether illness on board, if so, what illness; Port of departure and last port of call. On receipt the Quarantine Medical Officer will inform ship by wireless whether pratique is granted or not.

RADIO: Port Sudan Radio (call sign STP). Operates daily on High Frequency as follows: 8652 Mcs from 0400 hrs. to 1600 hrs. GMT; 4356 Mcs from 1600 hrs to 0400 hrs. GMT; 0500 kcs – continuous listening watch for first 10 minutes of every hour. Radiograms may be handed in at Port Sudan Post Office at all times and at Port Sudan Quays Post Office during office hours.

TUGS: About 1 mile from harbour entrance. Either ship's or tug's lines at Pilot's discretion.

BERTHING:

Berth	*Length*	*Depth* *Winter*	 *Summer*
Nos. 1 to 5 main berths	456 ft.	30 ft.	28/33 ft.
No. 5A	426 ft.	35 ft.	33 ft.
Nos. 6 & 7	606 ft.	35 ft.	33 ft.
Nos. 8 & 9	600 ft.	37 ft.	35 ft.
No. 15	642 ft.	37 ft.	36 ft.
No. 16	230 ft.	37 ft.	35 ft.
Nos. 17 & 18	908 ft.	39 ft.	37.5 ft.

CARGO HANDLING: Grain silo of 50,000 tons capacity situated at Berth No. 15. Heaviest lift normally acceptable is 30 tons; special arrangements necessary for heavier items.

Span of coal transporters is 420 ft.

TANKERS: At berth No. 16 vessels up to 600 ft. length can berth with overhang. Max. draft 34 ft. 6 in.

Berths 17 and 18 accommodate tankers up to 37 ft. draft. Berths connected by pipe-line to refinery 8 km. South of Port Sudan.

Used for discharging crude oil and loading refined products.

STEVEDORES: Require 24/48 hours advance notice of ETA and stowage of cargo. Rate of Discharge and Loading: General cargo, 5–10 tons per hook per hour. Bagged cargo, 15–20 tons per hook per hour.

Exports. Main exports, cotton, cottonseed, gum Arabic, oilcakes, MOP shells, trocas shells, senna, beans, domnuts, oilseed, hides, skins, salt, beeswax, durra, wheat bran, chick peas, karkadeh and castor seed.

Tea. Following exports should not be stowed with tea: castorseed, hides, linseed, edible oil, oilcake. Cottonseed may be stowed with tea with separation of 3 ft. but it is preferable to stow in separate compartment from tea.

Cotton. Gum should never be stowed with cotton.

Transhipment cargo. Is normally not accepted at Port Sudan without prior permission, except in very small quantities.

Weight. Deadweight of cargo is expressed per ton of 1,000 kilos.

MEDICAL: Advance notice advisable. Hospital facilities available. Crew and passengers must have International Health books valid.

DENSITY: 1025.

FRESH WATER: Available ex quay and ex barge.

FUEL: Marine Fuel oil (normally 1000 secs.); marine diesel oil (42/45 secs.); gas oil (35 secs.). 24/48 hours advance notice advisable. Name of suppliers is required.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Normally by stevedores.

CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes per person. Wine and/or Spirit, 2 bottles of different kinds per person. Only personal requirements may be taken ashore.

IDENTIFICATION CARDS: Not required.

CONSULS: UAR and Nigeria.

REPAIRS: Minor deck and engine repairs.

DRY DOCKS: None.

REPATRIATION: Not recommended. Formalities take 2/3 days.

AIRPORT: 3 miles away. Flights 4 days per week Port Sudan to Khartoum. 2 days per week Port Sudan to Cairo.

TIME: GMT plus 2 hours. In Summer, GMT plus 3 hours.

HOLIDAYS: The following government holidays for the year 1974 will be considered as port holidays. (The dates may vary in other years): 1st January (Independence Day, 1 day); 3-7th January (Kurban Bairam, 5 days); 24th January (Mohammedan New Year, 1 day); 3rd March (National Unity, 1 day); 5th April (Mulid el Nabi, 1 day); 15th April (Sham el Naseem, 1 day); 25th May (Revolution Day, 1 day); 12th October (Republic Day, 1 day); 16–19th October (Ramadan, Bairam, 4 days); 23–27th December (Kurban Bairam, 5 days); 25–27th December (Christmas, 3 days).

The port will not work on the following days: 1st January (Independence Day); 4th January (First Day Kurban Bairam); 24th January (Mohammedan New Year); 5th April (Mulid El Nabi); 25th May (Revolution Day); 17th October (First day of Ramadan Bairam); 24th December (First day of Kurban Bairam); 25th December (Christmas Day).

Overtime will be worked on all other days.

POLICE/AMBULANCE/FIRE: Police 4888; Ambulance 2400; Fire 5922.

TELEPHONES: No arrangements exist for placing telephones on board.

GENERAL: No foreign currency allowed ashore. Crew are permitted to go ashore with any amount Sudanese Currency.

AUTHORITY: Managing Director's Office, Sea Port Corporation.

AGENT: May Trading and Services Co., PO Box 17, Port Sudan. Telegraphic address: "Mayo" Portsudan. Telex: No. 6. Tel. (during office hours) 2437; 2029, 2389; after office hours 2652, 2040.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Surinam

MOENGO: 05.38 N. 54.25 W.

A bauxite mining town about 70 miles up the Cottica river, a tributary of the Commewijne river, which latter joins the Surinam river at Fort Nieuw Amsterdam.

DOCUMENTS/PILOTAGE/GENERAL INFORMATION: refer to "Paramaribo."

TUGS: Two tugs are available, the larger is 1,750 h.p.

MAX. SIZE: Ships of 525 ft. can be accommodated. Ore vessels call daily. Draft depends on bar draft Surinam river.

BERTHING: Moengo has two piers at which ore is loaded by a transporter at the rate of 800/1,000 t.p.h. One pier is 430 ft. long and has a depth of 24 ft. alongside. Both will accommodate ships of 525 ft. length. Tracks are laid on the 430 ft. pier and a 25 ton crane is available.

PROVISIONS: Not available.

FUEL: Small quantities can be supplied.

FRESH WATER: Small quantities can be supplied.

AIRPORT: About 5 km. from docks.

AUTHORITY: District Commissioner acts as Harbour Master.

AGENT: Alcoa Shipping Co.

NEW NICKERIE: 05.57 N. 56.59 W.

DOCUMENTS:

- 2 copies Crew List.
- 2 copies Passenger List.
- Customs Documents; Crew Declaration Lists; for instance, souvenirs, electric apparatus, etc.
- 2 copies Ship's Store Lists.
- 3 copies Manifests of Import.
- 3 copies Manifests of Export.
- 1 copy Transit Manifest.
- 2 copies Manifests of Coastal Cargo.
- Ship's Papers to be shown on request.

PILOTAGE: Pilotage is compulsory for the Nickerie River for ships bigger than 50 gross tons. There is always a pilot available; ETA to be sent 48 hours before arrival and 12 hours before arrival give necessary correction message to the Agent.

Ships can only enter the river at or about the time of high water.

The Pilot boards near the sea buoy (buoy No. 1). The pilot boat is a small wooden, grey and white painted vessel. The Pilot boat does not use the international red-white pilot lights at night. It is not possible to make radio telephone contact with the boat. There is a signal lamp on board.

Send ETA-message to Agent who will order the Pilot. Awaiting high water the vessel can anchor about 3 miles N.N.E. of the sea buoy.

ANCHORAGES: With a draft of 15 ft. the ship can safely anchor 3 miles N.N.E. of the sea buoy. It is not advisable to anchor in the Nickerie river for a long time, the river is too narrow.

MAX. SIZE: With springtide the max. draft must not exceed 14 ft. 9 in. and at neaptide 12 ft. The vessel has to use the high-inlet while passing the bar.

Max. permissible length of vessel is 130 m. (426 ft.). At low water ships are seated in the mud without consequence to hull, rudder or propeller alongside the wharf. There are berths for oil-carriers.

HEALTH: There is no pratique-procedure. Only in the event of any suspected disease or fever on board a doctor must be called.

RADIO: Send ETA cables to Paramaribo Radio. The pilot office at Nickerie has a radio telephone transmitter. Frequency 8233.9 kHz; listening hours 0700, 1200, 1800 hrs. local time. SSB and VHF equipment also used.

TUGS: No strong tugs available.

STEVEDORES: The Agent orders the gangs (maximum 3 gangs available).

MEDICAL: No advance notice required for medical treatment. There is one hospital in Nickerie with a surgeon.

TANKERS: There are three piers in Nickerie: Esso, Shell and Texaco pier. Maximum permitted draft 14 ft. 9 in. at springtide.

DENSITY: In the dry season the density on the river near New-Nickerie is 1015. In the rainy-season the density is 1005 near HW, and 100 near LW. These all depend upon springtide or neaptide.

FRESH WATER: Fresh water is available alongside the wharf of New-Nickerie. It is loaded from shore by hose.

FUEL: Small quantities of fuel available from Esso or Shell, also grease and petrol.

DEVELOPMENTS: In the future a bigger and deeper port will be built in the Corentyne river, about 20 miles up the river.

GANGWAY/DECK WATCHMEN: It is recommended to have a watchman during the night.

OPENING/CLOSING HATCHES: Patent hatches must be opened by the crew, other hatches by the stevedores.

CUSTOMS ALLOWANCE: Captain included: for every 72 hours staying in port: 15 cigars or 60 cigarettes or 30 cigarillos or 150 gm. tobacco plus 0.25 bottle spirits or 5 bottles beer or 1 bottle wine.

IDENTIFICATION CARDS: Not needed.

CONSULS: No consuls in Nickerie.

REPAIRS: Small engine repairs and shaft repairs and some welding repairs can be done.

REPATRIATION: Is possible via Paramaribo.

AIRPORT: The airport is 10 miles from the port of Nickerie. 2 times per day there is a flight to Paramaribo arranged by a local company, called S.L.M.

TIME: Local time is GMT minus 3.5 hours. No alteration in time.

HOLIDAYS: New Year's Day; Good Friday; Phagwa; Queen's Birthday (April 30); Ascension Day; Labour Day (May 1st); Day of Liberties (July 1st); Idul Fitre; Christmas Day and Boxing Day. On these days work can be done by paying overtime.

POLICE/AMBULANCE/FIRE: Police 356; Ambulance 241; Fire 333.

TELEPHONES: No arrangements can be made for a telephone connection on board.

SHORE LEAVE: Without reserve.

DELAYS: Delays in berthing: there are only 2 wharves with a total length of 700 ft. Banana ships have priority. Delays in loading and discharging: there are only 3 gangs of stevedores. These can be enlarged to 5 "small gangs".

AUTHORITY: District Commissioner acts as Harbour Master.

PARAMARIBO: 05.49 N. 55.09 W.

PORT LIMITS: The seaward boundaries of the port, within which a vessel is considered to be "arrived" is the entrance of the Surinam, Matowijne, Coppename, Corantijn and Nickerie rivers. Laytime commences to count after vessel has anchored or berthed. On the left bank of the Surinam river about 8 miles above New Amsterdam and 21 miles from light-vessel at river entrance.

DOCUMENTS:

- 5 Incoming Cargo Manifests (if any cargo), otherwise 3 copies.
- 1 Cargo Transit Manifest.
- 4 Outward-going Manifests.

These above-mentioned must be sent ahead to the Agent so that they can be translated into Dutch.

- 4 Crew Lists.
- 2 Store Lists.
- 2 Crew Declaration Lists.
- 6 Passenger Lists.

PILOTAGE: Compulsory. All ships are requested to amend their estimated time of arrival in local time, at least 12 hours in advance by special message through the wireless station to their Agents or to the Harbour Master. Arrival message should include draft of vessel and other requirements. 6 hours prior to arrival the ETA has to be confirmed and if necessary corrected. The Pilot will be dispatched after receiving the confirmed ETA. As there is no shipping but in the Surinam river, the Commenwijned river, the Cottica river and the Nickerie river, all Pilots except one for Nickerie are stationed at Paramaribo. Paramaribo Pilots board the vessels at the light-vessel of the Surinam river. All vessels have to stop off the light-vessel.

ANCHORAGE: Anchorage off town in 18–35 ft. of water at LWS. Government officials board vessels immediately on arrival for inward clearance. Vessels which are required to anchor off the port to wait for berths may be boarded at the anchorage.

RESTRICTIONS: Bar has min. depth of 14 ft. 5 in. Rise neap tide 6 ft. 7 in. spring tide 8 ft. 10 in. Due to the fact that the bar consists of mud, vessels regularly leave the port with drafts between 24 and 25 ft.

RADIO: There is a 24 hours radio telephone service at the Harbour Department on SSB and VHF. The coast station, PZN, also maintains a 24-hour radio telegraph (500 kc.) and telephone service in the 2182 kc. band. The lightvessel *Surinam River* is equipped with VHF Channel 12.

HEALTH: Port doctor will visit an arriving ship only if there is a case of contagious disease aboard, or if one of the preceding ports of call has been declared to harbour contagious disease. No bill of health is required. A ship with an infection on board must advise the Harbour Master by special message through the wireless station before arrival.

BERTHING: *O.G.E.M. wharf,* 120 ft. long least depth 18 ft. Oil/gas discharge for public undertakings.

B.E.M. wharf, 110 ft. long, least depth 18 ft. Private cement and gravel discharge wharf, Moorings 450 ft. apart.

Banana export pier, 297 ft. long, least depth 18 ft. Fresh water can be supplied.

New Oil terminal, Moorings 570 ft. apart. Least depth 18 ft.

Flour pier, 36 ft. long. Moorings 160 ft. apart. Least depth 16 ft. Only possible to discharge flour with a grain elevator.

Vensur Cement wharf, 180 ft. long, least depth 14 ft. Moorings 600 ft. apart.

New Wharf Ltd., 1,815 ft. long. Least depth 19 ft. at LWS. Fresh water can be supplied.

Belwaarde: 3 miles above Fort Nieuw Amsterdam on the right bank of the Surinam river. Length of pier: 279 ft., least depth 18–20 ft. Loading sugar.

Shell Oil Terminal: Moorings 540 ft. apart. Least depth at LWS 21 ft. exclusively for oil and gas.

MEDICAL: Excellent medical and dental attention is available to crew members of all vessels.

FRESH WATER: The water is of excellent quality. Available at most berths as mentioned above.

FUEL: Ship's bunkers are available in most ports of Surinam in limited quantities. Advice regarding quantities and specifications of oil should be given to Agent's representative immediately after docking.

CUSTOMS ALLOWANCE: 60 cigarettes or 15 cigars or 0.5 lb. of tobacco. One-fifth litre of spirits, one-third litre of wine, 2 litres of beer, for each crew member. All quantities in excess of the above, will be put under seal.

REPAIRS: No facilities for major ship repairs. Local workshops can do repairs of minor nature. There are two floating dry docks and one floating derrick owned and operated by the Surinam Drydock Co. Lifting capacities dry docks: 400–650 tons.

GANGWAY/DECK WATCHMEN: The customs board the vessel while riding at anchor or alongside one of the docks. All vessels are required to make a proper gangway available to the custom boarding officer.

The local authorities assign one or more custom guards to each vessel during its stay in port. The charges for guarding are for the account of the vessel. These officials must be provided with meals on board at regular meal hours, and rooms if necessary.

REPATRIATION: Under special circumstances vessels may sail without all crew members on board (sickness, etc.). The Master furnishes a letter to his Agent authorising him to accept responsibility for the missing seaman or seamen.

CONSULS:

U.S.A. Belgium Ecuador
Britain Denmark France
Norway Dominican Republic Austria
Venezuela West Germany Portugal
Brazil Indonesia Sweden
Guyana

TIME: Local time is 3.5 hours slow of GMT. Vessels are required to use local time in ETA messages and when dealing with Agents.

HOLIDAYS: 1st January; Good Friday; Easter Sunday; Queen's Birthday (April 30th); 1st May; 1st July (Freedom Day); 25th and 26th December; Holy Pagwha and Idul Fitre.

SHORE LEAVE: Under normal circumstances no restrictions are imposed by the Government Immigration Authorities on shore leave.

GENERAL: While alongside vessels must maintain engines and propulsion machinery in readiness to leave the pier under full power on short notice. No repairs are permitted which should interfere with this requirement. While alongside, oil tankers should have their offshore anchor out about 50 ft.

All vessels except ships of war, must furnish a statement, of the amount and character of explosives carried, also a certificate to show how they are stored and manner of packing.

Special anchorage areas are provided in the harbour for vessels with dangerous cargo.

All firearms and ammunition must be manifested on store lists and must remain in bond on board during vessel's entire stay in territorial waters of Surinam. Any violation of this regulation renders the vessel subject to fines and confiscation of firearms and ammunition.

BALLAST: Vessels must arrive with sufficient ballast to permit safe handling. All vessels should enter port with clean ballast water that may be pumped overboard while in the harbour, as it is prohibited to pump dirty ballast water or oil residue or sweepings into the harbour.

AUTHORITY: Harbour Master.

AGENT: Alcoa Steamship Co., PO Box 1842, Paramaribo. Tel. 72941. Cables: "Alcoaship Paramaribo"

PARANAM: 05.38 N. 55.05 W.

Located on left bank of the Suriname River about 40 miles from the entrance, consisting of bauxite mining, alumina refining and an aluminium smelter with facilities for shipping these commodities.

DOCUMENTS/PILOTAGE: and all General Information refer to "Paramaribo."

MAX. SIZE: Vessels up to 40,000 d.w.t. load to outer bar draft (approximately half load) and usually top off at Trinidad:

HEALTH: Health officer does not board unless there are quarantinable diseases aboard.

TUGS: Not generally available.

BERTHING: *General Dock:* Concrete pier of about 350 ft. mooring, 660 ft. apart. Least depth 30 ft. This dock used for loading bauxite or aluminium ingot and for discharging general cargo, oils, caustic and other raw materials,

Alumina Pier: Least depth 30 ft. length 680 ft. Used for loading alumina or discharging oils and caustic.

Equipment: 75 ton Gantry Crane on rails at General Dock.

Loading Capacity: Bauxite at General Dock: 1,500 t.p.h.
Alumina at Alumina Dock: 850 t.p.h. Loading by conveyor spout trimmed.

FUEL: Small quantities of light diesel No. 2 only in emergency.

FRESH WATER: Can be supplied.

REPAIRS: None can be effected.

AIRPORT: At Zanderij, 45 km. from dock.

AUTHORITY: District Commissioner officially acts as Harbourmaster but vessel movements, pilotage, etc. handled by Paramaribo Harbour Master's Office.

SMALKALDEN: 05.38 N. 55.05 W.

A bauxite mining town on the left bank of the Surinam river about 20 miles upstream from Paramaribo.

DOCUMENTS/PILOTAGE: and all General Information; refer to "Paramaribo".

TUGS: None available.

BERTHING: Wharf with length of 218 ft. Moorings, 535 ft. apart, least depth 30 ft. Ships can load to outer bar draft. Bauxite loaded by two conveyors with an average of 800 t.p.h.

DEVELOPMENTS: New wharf under construction capable of handling ore ships up to 40,000 tons deadweight. Moorings 680 ft. apart.

FUEL: None available.

FRESH WATER: Small quantities can be delivered by trucks.

REPAIRS: None.

AIRPORT: At Zanderij, 45 km. from dock.

AUTHORITY: District Commissioner acts as Harbour Master.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Sweden

AHUS: 55.56 N. 14.19 E. (See Plan)

DOCUMENTS: See "Stockholm".

PILOTAGE: Pilots meet vessels at Pallagrund. Telegraphic address: "Pilotstation, Ahus". Tel. 044-240027. VHF. Channel 16 call sign: "Pilot station, Ahus." Awaiting Pilot, anchor outside "Pallagrund". Depth 15–20 m. (Also see "Stockholm".)

ANCHORAGE: Anchorage forbidden in dredged entrance channel.

RESTRICTIONS: No special regulations.

MAX. SIZE: Max. length 160 m., max. draft 7.6 m.

HEALTH: No special regulations.

RADIO: Stockholm Radio (SDI) also VHF, Channel 16 and working Channel. Port radio: Ahus Port Radio keeps watch, Monday to Friday 0830 to 1600 hrs. on VHF Channel 16. Working Channel 11. At other times Ahus pilot station.

TUGS: Tugs only used in harbour basin, when turning.

BERTHING: Depth alongside (at MW) as follows:

Berth	*Length* (m.)	*Depth* (m.)
Wine Quay	100	4.2
No. 1–4	270	5.8
No. 5–17	740	7.2
No. 18–23	320	8.2

Depth allowance 0.6 m. A new quay of 165 m. will be completed East of Berth 23 in 1977 with a depth of 8.2 m.

STEVEDORES: Ahus Stuveri AB. Tel. 044–240038. Working hours: Monday to Friday 0700–1600 hrs. Meal breaks 0845–0900 hrs. and 1200–1245 hrs.

RADAR/VHF: Radar on pilot station. VHF call sign: Pilot station, Ahus. Channel 16.

FRESH WATER: Delivered from pipe-line.

FUEL: Available day and night.

FIRE PRECAUTIONS: No special regulations.

GANGWAY/DECK WATCHMEN: If wanted, watchmen available.

OPENING/CLOSING HATCHES: Normally by the crew.

CUSTOMS ALLOWANCE: See "Stockholm".

CARGO GEAR: 8 shore cranes, 5–12 tons. In 1977 another crane of 30 tons will be in use.

IDENTIFICATION CARDS: Crew list needed. No cards.

CONSULS: Danish Vice-Consul: Vasagatan 17B, 29153 Kristianstad. Tel. 044–114841. Norwegian Vice-Consul Mast. Bonggatan 2, 29154 Kristianstad. Tel. 044–115605.

REPAIRS: Minor repairs only.

DRY DOCKS: No dry dock. Nearest dry dock Solvesborg.

AIRPORT: Nearest airport about 10 miles away. Two flights per day.

TIME: GMT plus one hour. Permanent.

HOLIDAYS: See "Stockholm".

POLICE/AMBULANCE/FIRE: Police 242030; Ambulance 90000; Fire 90000.

TELEPHONES: Two public telephones on quays.

DEVELOPMENTS: See "Berthing".

AUTHORITY: Port of Ahus.

BROFJORDEN: 58.21 N. 11.25 E. (See Plan)

PORT LIMITS: Between "Stretudden" (crude oil berth) and the island "Rixo" in the Brofjord.

DOCUMENTS: Documents required for entry and clearance.

Certificate of Registry, Certificate of Tonnage, Derating Exemption Certificate, 3 Crew Lists, 1 Crew Manifest, 1 Declaration of Bonded Stores. Free pratique will be received via Customs on arrival berth. Oil Pollution Certificate.

PILOTAGE: Pilot station VHF Channel 16 around the clock. 16 for calling only, thereafter changing to 12. Call: Lysekils Pilots.

According to harbour regulations VLCC's are requested to give 72 hours ETA, and if any changes 48 and 24 hours ETA.

Product tankers are requested to give 48, if any changes 24 hours ETA.

Position where Pilot will board:

VLCC's	58° 13′ 05″ N.	11° 09′ 05″ E.
Product tankers	58° 15′ 01″ N.	11° 13′ 03″ E.

ANCHORAGES:

VLCC's	East Scaw, 57° 42′ N. 10° 49′ E. Water depth: 26 m. Holding ground: sand, good.

Only for Product tanker (up to 60,000 d.w.t.):

58° 20′ 03″ N.	water depth: 28 m.
11° 21′ 00″ E.	holding ground: clay, good
58° 19′ 07″ N.	water depth: 26 m.
11° 23′ 05″ E.	holding ground: clay, good

RESTRICTIONS: *For vessels of more than 100,000 d.w.t.* Berthing in daylight only.

Visibility min. 4 miles, wind force max. 12 m./sec. and current max. 1 knot at the outer buoys (Nos. 1 & 2).

MAX. SIZE: *Crude jetty:*

Deadweight:	350,000 tons.
Length overall:	No limit.
Beam restriction:	No limit.
Draft restriction:	25 m. (82 ft.)

Product jetty (No. 1 and 2):

Deadweight:	50,000 tons.
Length overall:	230 m. (754 ft.).
Beam restriction:	No limit.
Draft restriction:	14.4 m. (47 ft.).

Product jetty (Coaster berth No. 1):

Deadweight:	7,000 tons.
Length overall:	120 m. (394 ft.).
Beam restriction:	No limit.
Draft restriction:	8 m. (26 ft.).

HEALTH: No special papers required. Master informs by radio or on arrival.

RADIO: For ETA cables to Agent and Receivers call Gothenburg Radio.

VHF: VHF stations are installed at the pilot station, the pilot boat, the tug boats and at the Scanraff Harbour office.

When mooring: the Pilot, Harbour Master, mooring boats and the mooring gangs carry portable VHF sets. Channel 69 is usually used.

RADAR: At the pilot station two radar sets are installed for watching the entrance.

TUGS: *For VLCC's:* Tugs made fast after passage of Dynabrott and Brandskars flak light houses.

For Product tankers: Tugs made fast when passing Bubacka Buoy (opposite crude oil berth).

BERTHING:

Instruments:	SAMI-doppler and current meter at crude jetty.
Salinity:	18 – 34%
Current velocity:	0.2 – 0.9 knots at entrance.
Nature of bottom:	Clay.

The crude and product jetties are equipped with quick release hooks. The coaster berth has common bollards.

One Safety Tug-boat is always standing-by within the harbour area in case of emergency. When a Crude Carrier is alongside an additional Safety Tug-boat is standing by.

MEDICAL: Hospital available in Lysekil. No particular inoculations required.

TANKERS:

Crude Jetty:

Size:	*Flange rating*	*Service*
12 in.	150 lb ASA	Bunker "C"
16 in.	"	Crude oil.
16 in.	"	" "
16 in.	"	" "

Product Jetties:(Each Berth)

Size	*Flange rating*	*Service*
10 in.	150 lb ASA	Reg. gas.
10 in.	"	Prem. gas.
10 in.	"	Diesel, F.O. 1.
10 in.	"	" "
12 in.	"	F.O. 4, F.O. 5.
12 in.	"	" " Ballast, bunker

Coaster Berth:

Size	*Flange rating*	*Service*
6 in.	150 lb ASA	Prem. gas, reg. gas, naphtha.
6 in.	"	Diesel, F.O. 1.
8 in.	"	F.O. 4, F.O. 5 Ballast.
10 in.	"	Molten sulphur.

Max. discharge rate at Crude Jetty 15,000 cu.m. per hour. Max. pressure allowed 10 Kilos. Max. loading rate at Product Jetty 1,500 cu. m. per hour. Max. pressure allowed 10 Kilos.

Both Crude and Product jetty have 6 in. 150 lbs sanitary sewer and 4 in. 150 lbs potable water connections available which may be used by running hose from ship.

All arms are hydraulically operated except those at the Coaster jetty. No hoses are allowed for oil handling.

Ballast water can be discharged at Product and Coaster jetties.

FUEL: Bunker C only is available at Crude jetty. Bunker C and diesel oil are available at Product jetties and the Coaster jetty.

FIRE PRECAUTIONS: A special Fire Instruction will be given on board on arrival.

CONSULS: Denmark, Finland, Holland, Norway and Germany have consuls in Uddevalla, 40 km. from Scanraff.

REPAIRS: Uddevallavarvet and Skandiaverken. For hull and engine repairs, harbour and voyage service.

Pemco: For construction work, mechanical erection and repairs.

Andersson & Callenberg: For electrical installations.

Engine repairs must be reported to Port Captain for permission.

DRY DOCK: Gothenburg, capacity 250,000 tons.

SURVEYORS: Det Norske Veritas and Lloyds.

GANGWAY/DECK WATCHMEN: The crude oil jetty has gangway tower. But accommodation ladder is necessary in the product harbour.

Watchman is compulsory at the Crude jetty. In the Product jetties watchman is available on request.

CUSTOMS ALLOWANCE: 1 bottle spirit and 200 cigarettes or 200 grams tobacco.

REPATRIATION: Changing of crew and any necessary repatriation is possible.

AIRPORT: Nearest airport is Gothenburg, 100 km. South of Lysekil.

TIME: GMT plus 1 hour all the year round.

POLICE/AMBULANCE/FIRE: Dial 90 000 and ask for necessary service.

TELEPHONES: A telephone can be connected on board.

SERVICES: Compass adjusting is available.

SHORE LEAVE: Crew members are allowed ashore. No identification card or passes are needed.

REGULATIONS: The Harbour Regulations will be placed on board on arrival.

GENERAL: At the Crude jetty there is a refuse container to be lifted on board by means of the ship's gear. At the Product jetties are two containers, which will remain ashore. These containers are free of charge to the ships.

AUTHORITY: Scanraff.

GAVLE: 60.41 N. 17.11 E. (See Plan)

PORT LIMITS: A line from Utvalnas (approx. 60° 45.2′ N. 17° 21.4′ E.) over Bakharen to Langharen (approx. 60° 41.0′ N. 17° 17.5′ E.).

DOCUMENTS:

4 Crew Lists (for European vessels).
2 Crew Lists (for other vessels).
2 Manifests.
2 Bills of Lading.
1 Tobacco List.
1 Stores List.

Following documents supplied by Agent and signed by Master:

On arrival from foreign port:
1 Maritime Declaration of Health.
4 Report of Arrival (customs).
1 Declaration of Master (of persons on board).
1 Declaration of living animals (if any).

On arrival from any port:
1 Report of Arrival (Harbour Office).
1 Report of Receivers (Harbour Office).
1 Cargo List (or Manifest).
1 Transfer.

On departure to foreign port:
4 Report of Departure.
1 Declaration of Master (of persons on board).

On departure to any port:
1 Report of Shippers (Harbour Office).
1 Declaration by foreign Master.

PILOTAGE: *(a)* Sea Pilots: Pilot station: Bonan Telephone Nos. 991 10 and 992 20. Telegraphic address: Pilotstation, Gavle. 5 hours advance notice of ETA pilot station. Notice of ETA can be given over any Swedish coastal radio station or free of charge on VHF over any Swedish pilot station or Grundkallen lighthouse.

VHF: Channels 16: Calling and Safety } Pilot station and
13: Pilotage traffic } Pilot boats.

All pilot boats orange. International signals for calling pilot. Pilot boards: S.E. of Grasjalsbadan 60° 43′ N., 17° 27′ E., and on request South of Eggegrund Lighthouse, 60° 43′ N., 17° 34′ E. In case of bad weather closer to pilot station. Anchorages: Graberget roadstead N.E. of Bonan Lighthouse (approx. 60° 44.8′ N. 17° 20.5′ E.), about 350 m. (0.2 m.) from shore and in 18–21 m. (10–13 fathoms) deep. Open for Easterly winds. *(b)* Harbour Pilots: Available for moving within harbour area on application to Port Administration, Telephone Nos. 12 49 10 or 11 31 56 or by VHF to Gavle Port Radio, Channels 16, 14 and 13.

ANCHORAGES: See "Pilotage". Outer roadstead situated inside of Northern entrance and in red sector of Fredriksskans light. Outer roadstead well protected, depth of 15-11 metres (8–6 fathoms). Anchoring forbidden:

(a) In dredged channel between lights in Northern channel and to a point 800 m. (875 yds.) W.S.W. of Light No. 4.

(b) In white sector of Fredriksskans light E.N.E. within a distance of 2,000 m. (2,190 yds.) from same.

(c) In navigable channel from Fredriksskans Light to Gavle Dolphin Light.

(d) In Fredriksskans Harbour basins.

(e) In Gavle River from berth No. 18 to berth No. 10.

RESTRICTIONS: Two fairways lead to harbour. Northern fairway is 11, 1 m. (36 ft. 6 in.) deep and has bottom width of 60 m. (196 ft. 11 in.) Day-time: max. draft 10.6 m. (34 ft. 5 in.); max. length 210 m. (689 ft.); max. breadth 28 m. (91 ft. 10 in.). Night-time: max. draft 7.55 m. (24 ft. 5 in.); max. length 172 m. (565 ft.). Southern fairway (daylight only) permits draft of 3 m. (9 ft. 9 in.). All depths are referred to mean water level. Ships on way from outer roadstead or passing from Fredriksskans Harbour to Inner Harbour shall give way to vessels proceeding in opposite direction. This shall not apply to vessels with tow unless vessel approaching also has tow.

MAX. SIZE: Max. permissible draft (at mean water) as follows:

	Max. *m.*	*Draft* *ft. in.*	*Real depth* *m.*	*Allowance* *m.*
Fredriksskans Harbour				
Oil berth No. 21	10.5	34 05	10.9	0.4
				Max. length 210 m. (689 ft.)
Oil berth No. 1	7.45	24 05	7.8	0.35
				Max. length 200 m. (656 ft.)
Oil berth No. 2–3	5.3	17 05	5.5	0.2
Berth No. 4–8	7.45	24 05	7.8	0.35
Berth No. 9–14	9.0	29 06	9.4	0.4
Inner Harbour (River Gavle and Nyhamn)				
Berth No. 25–38	4.7	15 05	5.0	0.3
Berth No. 8–23			4.85	0.15
Korsnas Works				
Kastet Pier, North side, outer end. Length 77 m. (252 ft.) Kaster Pier, South side, outer end. Length 105 m. (344 ft.)	7.45	24 05	7.8	0.35
Kastet Pier, North side, inner end. Length 53 m. (174 ft.) Kastet Pier, South side, inner end, Length 45 m. (148 ft.)	6.3	20 08	6.6	0.3
Karskar				
Berth No. 105–106 Length 195 m. (640 ft.)	6. 6	21 08	6.9	0.3
Berth No. 107–108 Length 196 m. (640 ft.)	7.9	25 11	8.2	0.3
Berth No. 109 Length 90 m. (295 ft.)	4.7	15 05	4.9	0.2
Berth No. 110, South end. Length 35 m. (115 ft.)	4.7	15 05	4.9	0.2
Berth No. 110, North end. Length 75 m. (246 ft.)	6.1	20 00	6.4	0.3
Salt Pier				
Berth No. 111 Length 75 m. (246 ft.)	5.5	18 01	5.8	0.3
Berth No. 112 Length 80 m. (262 ft.)	6.5	21 04	6.8	0.3

HEALTH: Pratique always automatic. If any suspected disease or fever on board, notify ship's Agent.

RADIO: Stockholm Radio (SDH) or Harnosand Radio (SAH).

RADAR/VHF: No port radar service, but Bonan pilot station, Eggegrund Lighthouse, and one pilot cutter equipped with both radar and VHF and assists any ship approaching pilot station on request. After calling pilot station on VHF Channel 16, ships will be given assistance on Channel 13, 12, or 6.

TUGS: Join vessel outside Fredriksskans Lighthouse or outside Korsnas Works for berthing, and outside Northern entrance channel for passage through same. Ship's lines always used.

CARGO HANDLING: Container berth, max. draft 9 m. One crane with 30-ton capacity.

Roll-on/roll-off berth, max. draft 4.7 m.

STEVEDORES: 24 hours notice (if possible) order arrange gangs.

MEDICAL: Notice of medical attention to Agent as early as possible. All kinds of medical and hospital facilities available. Smallpox vaccination required on arrival from non-European ports. Other vaccinations necessary on arrival from diseased area. (Common for all Swedish ports.) Quarantine station established at Gavle with quarantine anchorage on outer roadstead.

TANKERS: *Tanker Berth No. 21*

Max. length 210 m. (689 ft.). Max. draft (M.W.) 10.5 m. (34 ft. 5 in.).
Manifold connection size (all grades) 200 mm. (8 in.).
Berth to Depot pipe-line size:

	mm.	in.
Heavy Fuel Oils	450	18
Gas Oil	400	16
Gasoline	350	14
Kerosene	250	10

Tanker Berth No. 1:

Max. length 200 m. (656 ft.). Max. draft (M.W.) 7.45 m. (24 ft. 5 in.).
Manifold connection size:

	mm.	in.
Fuel Oils	250	10
Gasoline	200	8
Kerosene	200	8

Berth to Depot pipe-line sizes:

	mm.	in.
Fuel Oils	350	14
Gasoline	300	12
Kerosene	250	10

Tanker Berth No. 2 and 3:

Max. length 125 m. (407 ft.). Max. draft (M.W.) 5.3 m. (17 ft. 5 in.).
Manifold connection size (all grades) 150 mm. (6 in.).
Berth to Depot pipe-line sizes (all grades) 150 mm. (6 in.).

Tanker Berth No. 105-106:

Max. length 195 m. (640 ft.). Max. draft (M.W.) 6.6 m. (21 ft. 8 in.).
Manifold connection size (all grades) 200 mm. (8 in.).
Berth to Depot pipe-line (all grades) 250 mm. (10 in.).

Tanker Berth 107-108:

Max. length 195 m. (640 ft.). Max. draft (M.W.) 7.9 m. (25 ft. 11 in.).
Manifold connection size (all grades) 200 mm. (8 in.).
Berth to depot pipe-line (all grades) 250 mm. (10 in.).

New Tanker Quay K201:

Max. length 210 m. (689 ft.). Max. draft 10.5 m. (34 ft. 5 in.).
Owned by Krangede A.B.

DENSITY: Fresh water.

FRESH WATER: Delivered from water posts at all quays in Fredriksskans Harbour. Inner Harbour, at Korsnas Works and on roads fresh water delivered by water boat.

FUEL: All kinds of fuel oils available either from pipelines at oil berths or by lorries at all other quays. Following viscosities (Redwood I) normally in stock: 35, 225, 650, 1500, and 3500 secs. Other viscosities can also be delivered. Notice of delivery is required day before.

DEVELOPMENTS: New shipping terminal for coal and coke where discharging capacity will be very high.

The Port of Gavle is at present negotiating with 2 forest industries concerning the building of a port terminal at Granudden which is situated opposite Fredriksskans Harbour. The terminal will comprise 350 m. of quay with a roll-on/roll-off berth, having max.draft for vessels: 9.0 m. for length of 150 m. adjacent to the Roll-on/Roll-off ramp and 10.5 m. for length of 200 m., 2 warehouses each having an area of 22,000 sq.m., as well as extensive storage space. The total terminal areas will be 150,000 sq.m. and it will have an annual maximum capacity of 1.2 million tons forest products. The terminal will have very good connections with both main roads and the railway system. The terminal is expected to come into operation during 1977.

GANGWAY/DECK WATCHMEN: Available, but not compulsory.

OPENING/CLOSING HATCHES: Can be done by either crew or stevedores. Only patent hatches have to be opened by crew.

CERTIFICATES:

Tonnage Certificate.
Derat Certificate (Not older than 6 months).
Certificate of Nationality (for Swedish ships only).

CUSTOMS ALLOWANCE: Tobacco: each crew member 200 cigarettes or 100 grammes of tobacco out of Bond.

Wine and spirit: Each crew member 1 bottle (75 centilitres) of spirit and moderate quantities of wine and beer out of bond. After a week in Sweden the same quantity may be taken out on request to Customs Office.

IDENTIFICATION CARDS: Not needed.

CONSULS:

Denmark
Finland
France
Great Britain
Netherlands
Norway
Portugal

REPAIRS: The former shipyard Gavle Varv carries out all types of deck and engine repairs along fitting-out quay 200 m. (656 ft.) long, with water depth 3.8 m. (12 ft. 6 in.) and with max. draft 3.65 m. (11 ft. 11 in.) at mean water. One 10-ton luffing crane. Another berth along South side of former slip-way with water depth 5.9 m. (19 ft. 7 in. and maximum draft 4.7 m. (15 ft. 5 in.) at mean water also available. Repairs can also be carried out in all parts of harbour.

DRY DOCKS: None.

REPATRIATION: Crew changes and repatriations arranged by Agent.

AIRPORT: Stockholm Airport (Arlanda) 145 km (90 miles) served by regular airlines. Rorberg airport 16 km. (10 miles). Regular traffic to Swedish airports.

TIME: GMT plus 1 hour. Permanent.

HOLIDAYS: New Year's Day (Jan. 1); Twelfth Day (Jan. 6); Good Friday; Easter Day; Easter Monday; First May (May 1); Whit Sunday; Whit Monday; Midsummer Day (Saturday nearest to June 24); All Saints' Day (first Saturday in Nov.); Christmas Day (Dec. 25); Boxing Day (Dec. 26).

POLICE/AMBULANCE/FIRE: Police 11 53 00; Ambulance 12 90 90; Fire 12 90 90. Emergency 90 000.

TELEPHONES: Fredriksskans and Inner Harbour: Telephones can be placed on board at all berths in Fredriksskans Harbour and at three berths in Inner Harbour. At Korsnas Works: Telephones can be placed on board at two berths in Karskar and one at Kastet Pier.

SERVICES: *(a)* Minor quantities of oil and other liquid residues can be discharged into tank lorries with special suction equipment (approx. 6 cu.m. = 210 cu.ft. per lorry). *(b)* Compass adjusting by licensed adjusters. *(c)* An area for compass adjusting is established on outer roadstead. *(d)* Speed trails can be made on measured mile between Eggegrund Lighthouse and island of Limo

DELAYS: Normally no delays in berthing, loading, discharging or bunkering.

AUTHORITY: Gavle Hamn (Gefle Port Authority).

GOTHENBURG: 57.42 N. 11.57 E. (See Plan)

DOCUMENTS:

3 Cargo Declarations (Imco model).
4 Crew Lists.
3 Passenger Lists.
2 Tobacco Lists (must be signed by each crew member).
1 Stores List.
1 Health Document.
Ship's Papers.
Nationality Certificate.
If stay more than 48 hours, Articles to Consulate.
Manifests, Bills of Lading.

PILOTAGE: Cable address: 404 47 Vinga. Vessels with VHF equipment may contact on international call frequencies 156.8 Mc/s. (Channel 16). Working frequencies for Sea Pilots 156.65 Mc/s. (Channel 13) and for Harbour Pilots 156.6 Mc/s. (Channel 12). Pilot station located at Vinga Lighthouse. Sound or light signal G towards Vinga lookout. Pilot boat located outside Trubaduren Lighthouse, where Pilot taken on board. Approved pilot ladder, if rail is high accommodation ladder, heaving line, and a man standing-by to receive Pilot. (Also see "Stockholm").

ANCHORAGE: At Rivo Fiord and Dana Fiord.

MAX. SIZE: Torshamnen, water depth 64 ft. 4 in. (19.6 m.). Tankers of 225,000 d.w.t. received. Skarvik Harbour, water depth 42 ft. (13 m.). Tankers up to 50,000 d.w.t. Skandia harbour, general cargo, container vessels, water depth up to 39 ft. (12 m.). General cargo harbours: for other cargo and passenger vessels 33 ft. (10 m.). Water depth at MWL. Tide of no importance.

HEALTH: The Master of every ship, whose voyage has touched lands outside Europe (excepting U.S.A., Canada, Azores, Canaries, Madeira and Morocco), and who within 28 days arrives at Gothenburg from a port in any such land, shall submit to Customs on demand a Declaration of Health for the ship in the prescribed form. If ship arrives within 14 days of calling at any such port she must not touch land until inspected by the Quarantine Medical Officer and permission to land granted. Master must be prepared to state whether all persons on board possess internationally valid evidence of inoculation for smallpox. Compulsory medical examination not required where a ship liable to inspection has undergone an approved Quarantine Inspection in either a Danish, a Norwegian or a Finnish port, and all questions in the Declaration of Health have been answered negatively. Exemption may also be granted to any other ship which would otherwise be liable for examination, if Master, pursuant to Article 21 of Quarantine Regulations for Sweden, has previously radioed all information regarding state of health on board to Health Authorities (radio-pratique). Telegraphic address: "Portsan, Gothenburg". Messages must be made not less than 4 hours prior to ETA. (Preferably, messages should not be made during night). Free-pratique messages should include: Name of the ship; estimated time and day of arrival; number of crew; number of passengers; information as to whether all persons on board possess valid certificates of vaccination for smallpox (issued within the last 3 years); names of the last two ports called at outside Europe, and dates of departure therefrom; replies to the 6 questions contained in Declaration of Health.

RADIO: Goteborgs Radio, call sign SAG.

TUGS: Tugs normally join vessel between the island Nya Alvsborg and Rya Nabbe. Vessels use their own lines. Tugs join at Dana Fiord for tankers bound for Torshamnen.

BERTHING: No restrictions at any time of day and night. VLCC's berth in daylight only.

BRIDGES: Alvsborg Bridge (suspension bridge) in Western part of city, clearance 147.5 ft. (45 m.). Gotaalv Bridge in centre of city, clearance 64 ft. (19.5 m.). Ships should give three long blasts with whistle for bridge to be opened. If opening not required they have to give one long and one short blast. It is possible to contact Gotaalv Bridge on frequency 156.80 Mc/s. (Channel 16). Working frequencies are 156.70 Mc/s. (Channel 14) and 156.60 Mc/s. (Channel 12).

STEVEDORES: Goteborgs Hamnarbetskontor provides dock workers.

CONTAINERS: The Skandia Harbour for container handling with 4 terminals including 14 berths and 9 ferry ramps. Depths up to 39 ft. 04 ins. (12 m.).

TANKERS: One berth for discharging of crude oil with draft of 62 ft. 6 in., and lines 12 in. and 16 in.

		Permitted draft	*Lines diameter*
Tors Harbour	1 berth for disch. crude oil.	52′ at MWL	12 & 16″
Skarvik Harbour	1 berth for disch. and loading.	40′6″ at MWL	10″
	4 berths for disch. and loading.	31′ at MWL	8″
Rya Harbour	4 berths for disch. and loading.	31′ at MWL	8″
In Oil Harbour	18 berths for coast-distribution.		

Reducing pieces available in Oil Harbours.

DENSITY: Average density 1030. Tide of no importance.

FRESH WATER: Available from quay or water boats.

FUEL: All grades available at short notice.

GANGWAY/DECK WATCHMEN: Watchmen accepted by Harbour and Fire Authorities on tankers and vessels loaded with explosives. On other vessels not necessary.

OPENING/CLOSING HATCHES: By crew or stevedores.

CUSTOMS ALLOWANCE: Tobacco, per week 200 cigarettes or 250 gram other tobaccos. Wine and/or Spirits, per week 1 bottle of spirits and 1 litre of wine, alternatively 2 litres of wine.

Require report latest 24 hours prior to arrival, and re-confirmation of arrival time latest 2 hours in advance.

CARGO GEAR: Certificates that equipment is approved.

IDENTIFICATION CARDS: Not necessary.

CONSULS:

The following countries are represented in Gothenburg:

Argentina
Austria
Barbados
Belgium
Bolivia
Brazil
Chile
Colombia
Costa Rica
Denmark
Dominican Republic
El Salvador
Fed. Rep. of Germany
Finland
France
Great Britain
Guatemala
Honduras
Iceland
Ireland
Italy
Ivory Coast
Japan
Lebanon
Liberia
Mauritania
Morocco
Mexico
Netherlands
Nicaragua
Norway
Pakistan
Panama
Paraguay
Peru
Portugal
Senegal
South Africa
Spain
Switzerland
Tunisia
Uruguay
U.S.S.R.
Venezuela
Yugoslavia

REPAIRS: All kinds of repairs possible.

DRY DOCKS: One dry-dock, 8 floating docks with lifting capacities up to 55,000 tons.

REPATRIATION: Excellent communications by air or by rail.

AIRPORT: Distance of Torslanda Airport 10–20 km. depending on where ship is berthed. Airport served by regular airlines.

HOLIDAYS: 1st January; 6th January; Good Friday; Easter Sunday; Easter Monday; 1st May; Ascension Day; Whitsun; Whit-Monday; Midsummer Day; All Saints' Day; Christmas Day and Boxing Day. No work in port on Sundays and holidays except in terminals for container and passenger traffic.
POLICE/AMBULANCE/FIRE: Tel. 90 000, ask for "Polislarm", "Ambulans", or "Brandlarm".
TELEPHONES: At all quays ships can be connected to telephone.
GENERAL: Seaman's Institute, Amerikagatan 2, open weekdays 1000 to 2000 hrs., Sundays 1400 to 2000 hrs.
SERVICES: Tank-cleaning equipment and facilities for discharge of tank-washings in the Skarvik Harbour and at a floating tank-cleaning arrangement adjacent to the Tor Harbour. Compass adjusting.
AUTHORITY: Port of Gothenburg.

HALLSTAVIK: 60.03 N. 18.35 E.

DOCUMENTS: 4 Crew Lists; other documents see "Stockholm".
PILOTAGE: Svartklubben Pilot Station. VHF Channel 16 and others. Radar at station and in boats. 5 hours notice prior to arrival. Phone: Hallstavik 0175/10006. Cable: "Pilotstation Hallstavik".
ANCHORAGE: Good and protected anchorage places available.
RESTRICTIONS: Tankers are navigated in daylight only.
MAX. SIZE: Draft not to exceed 23 ft.
HEALTH: No special action except for suspected disease. In case of disease contact Agent for information.
RADIO: Stockholm Radio.
STEVEDORES: Loading effected by factory. Ordinary working hours: 0630–1530, maximum 1 hour overtime. Saturdays no work.
MEDICAL: Medical attendance available day and night.
TANKERS: Max. draft 23 ft. Connection 6 in., pipe quay-cisterns is about 1,000 m., discharging rate about 200 t.p.h.
DENSITY: Practically fresh water.
FRESH WATER: Available from quay; rate 1 t.p.h.
FUEL: Delivered by lorries from Stockholm.
CONSULS: At Stockholm, 100 km. away.
REPAIRS: Minor repairs only.
OPENING/CLOSING HATCHES: Ship's crew.
CUSTOMS ALLOWANCE: 200 cigarettes and 1 bottle of spirits out of bond.
CARGO GEAR: Loading by ship's gear. 1 crane available for discharge of bulk cargoes.
AIRPORT: Stockholm Airport Arlanda, 75 km. away.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: Easter; Whitsuntide; Midsummer; Christmas and New Year's Day.
POLICE/AMBULANCE/FIRE: Alarm Tel. 90000.
GENERAL: Shippers: Holmens Bruk AB. Export about 250,000 tons of newsreel/year. Import about 130,000 tons of fuel oil. 2 ordinary loading quays and 1 roll-on/roll-off berth available.
AGENT: Hagbard Dennel AB, 740 73 Hargshamn. Telex: 7442. Tel.: 0173/20071. Cables: "Dennelab Hargshamn".

HALMSTAD: 56.40 N. 12.52 E.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
5 Manifests.
2 Bills of Lading and Ship's Papers.
PILOTAGE: Advance notice of ETA 5 hours before required. Pilot station and pilot boat equipped with VHF, Channels 16, 13, 6. Pilot boards by lightbuoy Halmstad Road (Fl. 3 secs.) Pos. 56° 38′ N. 12° 48′.9 E. (Also see "Stockholm".)
ANCHORAGES: Good holding ground in 30-40 ft. on road 1 to 2 miles S.E. of breakwater.
MAX. SIZE: Max. length 700 ft.; max. draft 29 ft. 06 in.
RADIO: Gothenburg Radio.
TUGS: Meet at Halmstad Road. Ship's lines used.
MEDICAL: Hospital facilities available.
TANKERS: Max. draft at oil berth 29 ft. 06 in. Diameter of discharge lines 8 and 10 in.
FRESH WATER: Fresh water available from berth 35 t.p.h.
FUEL: Viscosities available 1.2 englergrades/20°C. By arrangement ship's Agent.
GANGWAY/DECK WATCHMEN: Not necessary. Available if required.
OPENING/CLOSING HATCHES: Normally carried out by crew, but if carried out by stevedores cost charged to vessel.
SHIP CERTIFICATES: Bill of Measure, Nationality Certificate and Derat Certificate.
CUSTOMS ALLOWANCE: Tobacco/spirits, 1 bottle spirits, 1 bottle wine and 200 cigarettes free on board. Quantity over will be closed under Customs seal. No other restrictions.
IDENTIFICATION CARDS: Only needed in oil harbour.
CONSULS:
Danish Consulate, Te. 11 8600
Dutch Consulate, Tel. 11 8560
Norwegian Consulate, Tel. 11 8860
Finnish Consulate, Tel. 11 8700
German Consulate, Tel. 10 0910
REPAIRS: Shipyard carries out ship repairs.
DRY DOCKS: 2 slips.
REPATRIATION: Facilities exist for changing crew and repatriation.
AIRPORT: Halmstad Airport, 1 mile from town centre. 2 flights per day for Stockholm.
TIME: GMT plus 1 hour. No alterations.
HOLIDAYS: New Year's Day; Twelfth Day; Good Friday; Easter Day; Easter Monday; All Saints' Day; Christmas Day; Christmas Monday, Labour Day. No work can be arranged these days.
POLICE/AMBULANCE/FIRE: Tel. 90 000.
TELEPHONE: For placing a telephone on board cost is 42 crs., and 15 crs. a day for hire.
SHORE LEAVE: Crew members allowed ashore.
AUTHORITY: Halmstad Hamnforvaltning. VHF Channels 16 and 19.

HARGSHAMN: 60.10 N. 18.29 E.

The port is situated in the Archipelago of Oregrund, about 130 km. North of Stockholm and about 110 km. South of Gefle. Only ore products are exported, and the port is managed by the shippers, AB Dannemora Gruvor. It is a natural and well sheltered harbour, suitable for vessels up to about 25,000 d.w.t., bigger vessels are loaded with limited cargoes.
DOCUMENTS: ETA is to be given 48 and 24 hours in advance by cable or phone to Agent. On arrival a cargo-plan is to be given to the Agent or foreman, stating quantity required and loading-rotation of hatches, as well as estimated draft on sailing.
Tonnage Certificate (Certificate of Registry).
Certificate of Nationality.
Swedish Light Dues receipts for current year.
3 Crew Lists.
1 Crew Effects Declaration.
1 Ship's Stores Declaration.
PILOTAGE: It is not compulsory to engage a Pilot except for tankers and other vessels carrying dangerous cargoes. Entry without a Pilot is not recommended and should not be attempted without the most detailed local knowledge and previous experience of the port. Pilotage dues will only be charged if a Pilot is actually employed.

Pilot is embarked off Svartklubben lighthouse (60.09 N. 18.52 E.) and has to be ordered 5 hours before needed. Pilot can be ordered via the Agent, the Svartklubben Pilot station, phone: Hallstavik (0175) 100 06. Cable: Pilotstation Hallstavik or by VHF at any of the Swedish Pilot stations. Distance to Hargshamn is about 17 miles. For vessels arriving from ports in Gefle district, Pilot will board on request at Oregrund or North thereof, such request to be made as above.
RESTRICTIONS: Loaded vessels with draft over 23 ft. 6 in. at MWL are navigated in daylight and good visibility only.
MAX. SIZE: Max. draft allowed (at MWL in FW) 34 ft. (10.4 m.). Density of water: 1,006. Max. length about 575 ft. (175 m.). Max. breadth about 80 ft. (24.4 m.). The breadth limitations may be increased in the case of ore-carriers with side tanks. Max. distance water level to hatch coamings about 33 ft. (10 m.).
TUGS: A steam tug of 800 h.p. is available from Hallstavik, and is normally used to assist vessels over 9,000 d.w.t. on departure only. A small tug of 230 h.p. is available at the port.
BERTHING: There is an ore quay about 90 m. in length and depth alongside of 36 ft. The loading conveyor moves along the quay over a distance of 85 m., therefore only the biggest vessels have to shift during loading. Loading capacity 650–800 t.p.h. Stowage factor ore 17–18 cu. ft./ton.
STEVEDORES: Work is effected in 2 shifts: 0600–2200 hrs., Saturdays and days before holidays 0600–1200 hrs. Work on night shift and on Sundays/holidays can be arranged on request. However, on the following holidays work cannot be arranged: New Year's Day, Good Friday, Easter Eve, Easter Sunday, 1st May, Whitsun Eve after 1200 hrs., Whit Sunday, Midsummer holidays (last Friday/Sunday in June), All Saint's Day (1st Saturday in November), Christmas Eve, Christmas Day, New Year's Eve (after 1200 hrs.).
FRESH WATER: Available.
CUSTOMS ALLOWANCE: 100 cigarettes per man and 1 bottle of spirits per officer.
AUTHORITY: AB Dannemora Gruvor.
AGENT: Hagbard Dennel AB, PO Box 3, S–740 73 Hargshamn. Cable: "Dennelab Hargshamn/Uppsala". Telex 76042 (Hdhargs). Tel. Osthammar (0173) 200 71 and 201 32.

HARNOSAND (Hernosand): 62.37 N. 17.58 E.

DOCUMENTS:
2 Crew Lists and/or 2 Passenger Lists (stating what tobacco, cigarettes or spirits each man has).
Deratification certificate.
Manifest and/or Bills of Lading.
Register, and if vessels before in Sweden same year, bills for light dues paid.
PILOTAGE: Applications for licensed Pilots should be made at least 5 hours before arrival. When making application, specify name of vessel, tonnage, draft and destination. Also give estimated time for taking Pilot on board and route. If this procedure not followed, the Maritime Service cannot guarantee to supply a Pilot without considerable delay to vessel.

Preferable make application by telephone or by radio via a coastal station or by some other method direct to Pilot station. Also possible request Pilot by VHF.

Pilot Station at Harnoklubb.

ANCHORAGES: In port approaches in depth of 20 to 40 m.

RESTRICTIONS: Harbour can be closed by ice some time during Winter but assistance given by State Ice-breakers as long as possible.

MAX. SIZE: Up to 33 ft. draft.

RADIO: Cable Agents to give ETA, draft and cash required via either Hernosand Radio SAH or Stockholm Radio SDJ.

HEALTH: Vessels arriving from ports outside Europe must, for inward clearance, provide Customs Officer with written declaration of freedom from infection. Further instructions will be issued by Customs Office were such a declaration cannot be given.

TUGS: Tug assistance is available.

BERTHING: Depth alongside main quays from 7 to 8 m.

TANKERS: Oil pier, depth alongside 10.50 m.

DENSITY: Nearly fresh water.

FRESH WATER: Available from the quays or by barge.

FUEL: Can be supplied.

GANGWAY/DECK WATCHMEN: Available for gangway. Not compulsory.

OPENING/CLOSING HATCHES: Normally done by crew.

CUSTOMS ALLOWANCE: 200 cigarettes and one bottle of 75 centilitre per man/week. Extra granted on request.

CERTIFICATES: See "Stockholm".

IDENTIFICATION CARDS: Not necessary.

REPAIRS: Most repairs possible.

DRY DOCK: At Gustavsvik.

TIME: GMT plus 1 hour permanent.

HOLIDAYS: New Year's Day; Epiphany; Good Friday; Easter Monday; Labour Day; Ascension Day; Whit Monday; Midsummers Day; All Saint's Day; Christmas Day; Second Christmas Day.

Working ceases at 1130 hrs. on the following eves of holidays and is voluntary and paid with 100 per cent overtime: Easter Eve; Whitsun Eve; Midsummer's Eve; Christmas Eve and New Year's Eve.

POLICE/AMBULANCE/FIRE: Telephone numbers: Accidents, Police, 90000; Fire: ask for alarm 90000.

AUTHORITY: Harnosands Hamn.

HELSINGBORG: 56.03 N. 12.41 E. (See Plan)

DOCUMENTS: See "Stockholm".

PILOTAGE: Call Pilot on the VHF Channel 16. Pilots board about half nautical mile off jetty of Helsingborg Northern Harbour. Good anchorage within area of about half nautical mile off jetty.

ANCHORAGES: Areas as above, depths of water 50–70 ft.

RESTRICTIONS: Tankers not berthed during darkness.

MAX. SIZE: Permissible length about 220 m.; breadth unlimited; draft 34 ft. on MLW. No tides but certain variations following prevailing winds.

Tankers: Max. draft 10.5 m.

HEALTH: Pratique automatic for all vessels arriving from non-infected ports. In cases where pratique should be obtained, notice to be given through ship's Agent. Further directions given by Pilot.

RADIO: For communication – Goteborgs Radio.

TUGS: Join vessel outside entrances. Vessel's lines used.

4 tugs available, up to 2,640 h.p.

BERTHING: Basin No. 1, depth 6 to 7 m.
Basin No. 2, depth 5 to 7.3 m.
Basin No. 3, depth 5 to 7 m.
Basin No. 4 (Ocean Terminal), depth 8 to 10 m.
Basin No. 5 (Tanker Terminal), see "Tankers".
Basin No. 6, depth 8 to 10.5 m.
Basin No. 7 (Skane Container Terminal), depth 8 and 11.5 m.
Basin No. 8 (Copper Mill Harbour), depth up to 11.5 m.

CRANES: 35 cranes with capacity up to 45 tons.

BULK CARGO FACILITIES: 2 berths of 215 m. length for grain and fertilizers, max. draft 9.9 m.

SPECIALISED CARGO-HANDLING FACILITIES: Complete container terminal "Skane Terminal" with 540 m. berths and 2 Ro/Ro berths, max. draft 11 m. All types of handling equipment. Liquid chemicals handled at the tanker terminal.

STEVEDORES: Cargo handling performed by "Skaneterminalen AB" offering all kind of harbour works including loading, discharging, warehousing, etc.

MEDICAL: for attention, application to be made through ship's Agent. Hospital facilities available.

TANKERS: Dimensions of pipe-lines – for oils, 14 in., 12 in., 8 in., petrol, 12 in., 10 in., 6 in., slops, 6 in. Discharge facilities for slops through pipe-lines from berths numbers 504 and 505. Tankers berth at quay numbers 503 and 504 with depth of water alongside 36 ft. MLW, and quay number 505 depth of water alongside 26 ft. MLW.

DENSITY: 1007. No tides, but slight variations in accordance with prevailing currents.

FRESH WATER: Available for quay connections.

FUEL: Bunker fuel delivered from pipe-lines. No advance notice required. Any grade available.

FIRE PRECAUTIONS: Standard procedures apply.

GANGWAY/DECK WATCHMEN: Watchmen generally at Master's option.

OPENING/CLOSING HATCHES: By crew or stevedores.

CERTIFICATES:
Certificate of Nationality.
Bill of Measurements.
Bill of Health.
Deratification Certificate.
Crew List.

CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes or equivalent quantities for each person on board. Wine and/or Spirit, one bottle each member to be held out of bond.

CARGO GEAR: Usual Board of Trade Regulations valid.

IDENTIFICATION CARDS: Not needed.

CONSULS:

Belgium	Tel.	15 10 00	Netherlands	Tel.	12 09 20
Finland	,,	11 43 70	Portugal	,,	11 35 16
Germany	,,	12 75 10	Denmark	,,	12 05 20
United Kingdom	,,	12 09 20	Iceland	,,	11 00 78
France	,,	11 06 00	Norway	,,	12 06 00

REPAIRS: All kinds of deck and engine repairs can be carried out.

DRY DOCKS: Length of largest dry dock 354 ft. Depth on sill about 16 ft. One smaller dry dock.

SURVEYORS: Lloyds local agent: AB Otto Hillerstrom.

REPATRIATION: Repatriation possible, by air and by train.

AIRPORT: Kastrup 60 km., Sturup 70 km., Angelholm 30 km.

TIME: GMT plus 1 hour. No alterations.

HOLIDAYS: Official holidays 1st and 6th January, 1st May, 1st Saturday November, 25th and 26th December, plus 2 holidays for Easter, 1 holiday for Whitsun and 1 holiday for Midsummer on appropriate dates.

POLICE/AMBULANCE/FIRE: Police 14 40 40; Ambulance and Fire 12 00 35; or in an emergency situation all functions via tel. 90 000.

TELEPHONES: Quay-connected telephones are placed on board.

SERVICES: Tank cleaning, discharge of tank washings, compass adjustments, etc., can be carried out after application through local Agents.

SHORE LEAVE: No restrictions.

REGULATIONS: Normal regulations apply.

DEVELOPMENTS: New ferry terminal under construction for LB Ferry Co. service Helsingborg-Elsinore.

DELAYS: No other delays than berths being occupied by working vessels can be expected.

AUTHORITY: Port of Helsingborg.

HOGANAS: 56.12 N. 12.33 E. (See Plan)

Privately-owned port serving only owning company – Hoganas AB. Customs and pilotage arranged through authorities in Helsingborg (12 nautical miles South-East of Hoganas).

DOCUMENTS: See "Stockholm".

PILOTAGE: Compulsory. Pilot obtainable at Hoganas or at Helsingborg. Pilot service day and night, available after request to pilot office at Helsingborg.

RESTRICTIONS: Entrance channel, Length 750 m.; width 65 m.; depth 8.25 m.

The harbour is seldom closed by ice.

TUGS: There are no tugs stationed at Hoganas, but tugs are available after request to the Harbour Office at Helsingborg.

BERTHING: *The Pier (Extending South-westerly).*

Length of quayage:	380.00 m.
Depth alongside:	
For 120 m. (from outer end)	6.60 m.
For the next 160 m.	8.25 m.
For remaining 100 m. varies down to	4.00 m.
The Cross Quay;	
Depth alongside at 75 m. from Northern end	3.50 m.
the remainder is unnavigable	
Quay in the middle of the Harbour:	
Length of quay:	180.00 m.
Depth alongside N.W. side:	
For 120 m. (from outer end)	6.60 m.
For the next 35 m. the depth varies from to being unnavigable.	4.2 m.
Depth alongside S.E. side:	
For 30 m. (from outer end)	5.00 m.
remainder	unnavigable

The depth of water at this port is somewhat affected by winds.

CRANES: 1×25 ton and 1×5 ton railbound electric grab cranes, 1×25 ton mobile crane.

REPAIRS: Machine-shop repairs only.

STEVEDORES: Working hours; a normal working day, Monday to Friday from 0653 to 1600 hrs. Normally no working on Saturdays.

FRESH WATER: Available.

FUEL: Can be supplied.

AUTHORITY: Hoganas AB.

HORNEFORS: 63.67 N. 19.54 E.

DOCUMENTS: Documents necessary are:
1 List of Bonded Stores.
2 copies Tobacco List.
3 Crew Lists.
3 Passenger Lists.

Health documents, none – if all on board healthy. In case of illness on board, this must be reported to Customs on arrival.

Copy B/L and copy Manifest.

PILOTAGE: Pilot station, Bredskar, tel. 090/45021; Pilot must be ordered 5 hours before arrival. If change in position, this must be informed at least 2 hours before arrival. Pilot can also be taken at Skagsudde Pilot station 0660/66003. (Also see "Stockholm".)
ANCHORAGES: Will be informed by Pilots from case to case.
RESTRICTIONS: Vessels over 100 m. length only taken in and out of harbour during daylight.
MAX. SIZE: Max. length 105 m. Max. draft 20 ft. 08 in. (6.3 m.).
RADIO: Harnosand Radio, 0611/12733.
TUGS: Available.
BERTHING: No particular arrival times necessary.
CRANES: 1 stationary crane, capacity 3 tons.
STEVEDORES: Labour must be ordered latest 1430 hrs. day before commencement loading, and if such day is Monday labour to be ordered before 1100 hrs. Saturday.
MEDICAL: No special regulations. Hospital and doctors available day and night.
TANKERS: 8-in. connections.
FRESH WATER: By pipe, 2 t.p.h.
FUEL: No fuel available in port. Must be ordered from Holmsund.
GANGWAY/DECK WATCHMEN: Not compulsory, but can be arranged.
OPENING/CLOSING HATCHES: Normally done by ship's crew.
CERTIFICATES:

Lighthouse dues (receipts).
Oil Record Book.
Deratisation Exemption Certificate.
Nationality Certificate.
Ship's Register (International form).
For open/closed ships – Freeboard Certificate.

CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes man/week or 250 grams of tobacco man/week. Wines/Spirits, 1 bottle of wine and 1 bottle of spirits man/week. Note: age must be 21 years before crew member is allowed to have spirits or wines.
IDENTIFICATION CARDS: Not necessary.
CONSULS: None.
REPAIRS: No facilities available.
REPATRIATION: No facilities for crew changes.
AIRPORT: 25 km. from port. Served by domestic services Linjeflyg, flights to Stockholm 6 times a day.
TIME: GMT plus 1 hour; no changes during year.
HOLIDAYS: Christmas Eve; Christmas Day; Second day after Christmas; New Year's Eve; New Year's Day; Easter Friday; Saturday and Sunday; Midsummer Eve and Midsummer Day; Whitsunday; Epiphany (1st May); Ascension Day; The Day of All the Saints (1st weekend November).
POLICE/AMBULANCE/FIRE: Tel. 90 000.
TELEPHONES: None available for placing on board.
AUTHORITY: Norrlands Skogsagares Cellulosa AB.

HUDIKSVALL (including Iggesund and Stocka): 61.44 N. 17.07 E. (See Plan)

PORT LIMITS: Vessel is considered to be an "arrived vessel" when berthed alongside quays in port or if berths not available, at anchor in inner roads, outside berths, but not when vessels, owing to darkness, etc., are anchored outside pilot stations or in outer fairways.
DOCUMENTS: If arriving direct from foreign port, following documents presented to Customs officer who embarks during office times (0800–1700 hrs.).

3 Crew Lists.
2 Tobacco Lists.
Deratification Certificate (not over 6 months old).
Certificate of Nationality.
Certificate of Tonnage.
2 Manifests covering incoming cargo.
Receipts of Light Dues, paid to Swedish authorities during year.

PILOTAGE: Hoelick Pilot Station 61° 37′ N.; 17° 28′ E. Open for ordering pilots every day 0530–2100 hrs. local time. VHF Channel 16, after contact – working Channel VHF 13. Pilot to be ordered 5 hours before arrival. If ordered before 2100 hrs., vessel can obtain Pilot also during hours between 2100–0530 hrs. Pilot boat: orange painted cutter. International pilot signals. Pilot boards near "Myran" lightbuoy: 61° 36′ N., 17° 29′ E. Telegraphic address of pilot station at Hoelick: "Pilotstation Hudiksvall." (Also see "Stockholm".)
ANCHORAGE: Anchorage places for vessels awaiting pilot or anchoring owing to weather conditions: 61° 37.5′ N. 17° 25.0′ E.; 61° 37.0′ N. 17° 22.0′ E.; 61° 37.7′ N. 17° 21.3′ E. depending upon prevailing winds etc. Bottom mud and/or sand. Depth 10–30 m.
RESTRICTIONS: No tidal water at Hudiksvall. Tankers of more than 100 m. in length between p.p. not during darkness because of narrow channel with some curves. Dry cargo vessels up to 150 m. length after dark.
MAX. SIZE: *Tankers:* Daylight 45,000 d.w.t. Length 210 m., draft 9.2 m. After dark 6,000 d.w.t, length 100 m., draft 7.5 m.

Other Vessels: 16,000 d.w.t., length 160 m., draft 8.7 m.

Low water between 0.2–0.5 m. may occur often, sometimes as much as 0.7 m. below mean water level. Low water periods may occur when N.W. winds blowing over Northern Sweden.
HEALTH: Pratique automatic. No doctor visits incoming vessels if not specially ordered for treatment on board, etc.
RADIO: Vessels coming from South and having not yet passed the Stockholm area are recommended to call Stockholm Radio – VHF Channels 25 or 28 for vessels between Gotland/Sweden, 24 outside Stockholm South, 28 Stockholm East and North, 23 North of Aalands Sea, and in Gefle Bay, Hernoesand Radio SAH Channels 25 Hudiksvall area, 24 Sundsvall area, 23 Hernoesand area, 28 Oernskoeldsvik area. Hudiksvall harbour office: Channel 16. Working Channel 9.
TUGS: Tug compulsory for tankers over 6,000 tons d.w. and for other vessels over 8,000 tons d.w. in fairway. Vessels met near isle of "Enbarsskar" at 61° 39.5′ N., 17° 17.0′ E. For mooring purposes tug compulsory for tankers over 6,000 tons d.w. and for other vessels exceeding 5,000 tons d.w. Ship's lines used. Ice-breaking tug *Ago*, 203 tons, 1,260 EHK available in Hudiksvall during the whole year.
STEVEDORES: Ordered 1600 hrs. on day preceding vessel's arrival. For loading starting Monday morning, gangs to be ordered before 1100 hrs. local time Saturday. 3–5 gangs available at Hudiksvall and Iggesund; Stocka 3 gangs. Working hours: Monday-Friday, 0700–1600 hrs.; Meal hours: 0900–0930, 1230–1300. 2 hours overtime at extra cost of 50% Monday, Tuesday, Thursday, Friday (1600–1800 hrs.). For completing vessel, further 3 hours Monday, Tuesday, Thursday, Friday (1800–2100 hrs.). Extra cost of 100%. For completing vessel 5 hours' overtime can be obtained on Wednesday (1600–2100 hrs.), 2 hours at 50% and 3 at 100% extra.

On Saturdays no normal work, but stevedores available for maximum eight hours work, but 100 per cent overtime has to be paid and for minimum five hours even if vessel working less than five hours on Saturdays.
BERTHING: Main berth Hudiksvall draft allowed at mean water 8.7 m. alongside 165 m., thereafter 5.4 m. alongside 30 m. and therefore 4.9 m. alongside 160 m. One Ro/Ro ramp draft allowed 8.7 m. at mean water.

Pier at Iggesund 7.4 m. draft allowed mean water 150 m. length of pier. Ro/Ro berth 17.4 m. draft if more than 12 m. from Ro/Ro berth, if less draft allowed 6.3 m. Ro/Ro berth II 7.4 m. draft allowed if more than 12 m. from berth, if less 6.7 m.

Pier of Stocka 110 m. length, draft allowed mean water 4.9 m. On Southern side of pier draft allowed 3.9 m. alongside 48 m.
TANKERS: One berth only. Draft allowed: 9.2 m. at mean water. Pipe diameter for fuel: 10 in. light oils: 8 in. Connecting hoses between pipes and vessel: 8 in. diameter, both types. Shore tanks lie about 100–200 m. from berth, 5–8 m. above sea. Surface of jetty about 2 m. above sea level.
DENSITY: Average 1002–1001.
FRESH WATER: Fresh water available all berths. Delivery capacity about 15–20 t.p.h. During Winter it is difficult to arrange hoses, vessels assist with own hoses.
FUEL: Available all berths. Delivered by tank-lorries from Sundsvall 50 miles North of Hudiksvall. 24 hours' notice required.
FIRE PRECAUTIONS: No special precautions. Within bounded area oil jetty smoking prohibited. Also on new quay outside sawmill.
GANGWAY/DECK WATCHMEN: Available in all ports, not necessary if not required by vessel.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCE: Crew over 18 allowed 200 cigarettes; one bottle of spirits out of bond. If vessel stays in Swedish ports but still in foreign traffic, above quantities obtained from bond once a week (every 7 days). Instead of spirits one bottle wine or 6 bottles export beer.
IDENTIFICATION CARDS: Not needed. If crew going to doctor or to hospital preferable has passport.
CONSULS:

Country	*Address*	*Tel. Office*	*Tel. Home*
Denmark	Marknadsgatan 1 Hudiksvall	0650/11 712	0650/10 983
Finland	Varvsgatan 2–4 Hudiksvall	0650/15 250	0650/10 056
Gt. Britain	Drottninggatan 48 Gefle	026/18 03 00	
West Germany	Skeppsbroplatsen Sundsvall	060/15 55 00	060/15 24 40 060/62 22 2

REPAIRS: Small engine and deck repairs. To be ordered through vessel's Agent or through stevedoring foreman onboard.
DRY DOCKS: None.
REPATRIATION: Possible.
AIRPORT: Nearest regular airport: "Midlanda", near Sundsvall, 60 miles North of Hudiksvall. Regular Swedish inland airlines. Regular flights to Swedish main airports.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: No work on following days, although not all legal holidays. New Year's Day; Epiphany; Good Friday (Easter); Easter Eve; Easter Monday; Labour Day; Ascension Day; Whitsun Eve; Whit Monday; Midsummer Eve; Midsummer Day; All Saint's Day; Christmas Eve; Christmas Day; Second Christmas Day; New Year's Eve.
POLICE/AMBULANCE/FIRE:

Police Hudiksvall	0650/15 600	,, 90 000
Police Iggesund	0650/20 820	,, 90 000
Ambulance Hudiksvall	0650/10 670	,, 90 000
Ambulance Iggesund	0650/10 670	,, 90 000
Fire Hudiksvall	0650/10 670	,, 90 000
Fire Iggesund	0650/20 329	,, 0650/20 812
Doctor Hudiksvall	0650/17 370	,, 90 000
Doctor Iggesund	0650/70 026	,, 90 000
Hospital Hudiksvall	0650/92 000	
Hospital Iggesund	0650/92 000	

For Stocka: as Hudiksvall.

TELEPHONES: At Stocka and Iggesund: no telephones available for connecting onboard. At Hudiksvall telephones available. Skr 25 per day plus cost of calls.

GENERAL: Hudiksvall port is very near town. Railway station, bus station, etc., very near port. Oil port about 700 m. from town.
SERVICES: No tank cleaning or discharge of tank washings. Compass adjusting: 0650/10 339 (Pilot office). Ordered through Agent.
PORT REGULATIONS: Speed limit: max. 5 knots within the harbour basin. As plastic pipe is laid out on the bottom around the oil berth, anchoring during berthing is prohibited. Pipe filled with compressed air after vessel's mooring, comes up to the surface forming ring around vessel and oil jetty as shelter against oil leakage.
DELAYS: During Winter (December–April) delays on berthing/sailing owing to ice in fairways and alongside quays. Special mooring delays will occur owing to ice between vessel and quay.
AGENT: Main office, Hudiksvall. Aktiebolaget, J. E. Arndt, Godsgatan 5 PO Box 7, S–824 01 Hudiksvall, Sweden. Telegrams: Arndtbolaget Hudiksvall. Telex: 8225. Answer back: Arntds. Tel. (office): 0650/15 330. 0650/15 338. Tel. (private): 0650/13 097, 0650/10 036. Office time 0830–1200, 1300–1700 hrs.

KALMAR: 56.40 N. 16.20 E. (See Plan)

DOCUMENTS: See "Stockholm".
PILOTAGE: Compulsory for vessels carrying dangerous cargo. Pilot may be ordered on VHF, Channel 16 or by telephoning 0480/10719. Approaching from North, Pilot boards at Skaggenas or Krongrundet, from the South at Tradgardsgrundet. Round-the-clock service provided. (Also see "Stockholm".)
ANCHORAGE: Good anchorage outside port available.
MAX. SIZE: Largest vessel 25,000 tons deadweight, draft 24 ft. Channel and harbour depth 26 ft.
TUGS: Available, order by tel. 15775.
RADIO: Stockholm Radio.
CARGO HANDLING FACILITIES: Pontoon-crane with max. lifting capacity of 75 tons. Order by telephone 15775.
STEVEDORES: Available weekdays 0700-1630 hrs. Overtime is worked Saturdays and eves of public holidays. The operations comprise work on board, work ashore and rough sorting.
TANKERS: Oil dock has depth of 26 ft. alongside and has dealt with partly loaded ships of 25,000 tons. Discharge capacity about 28,000 cubic ft. an hour.
MEDICAL: Hospital available.
FRESH WATER: Available from wharves.
FUEL: Available.
DEVELOPMENTS: Ro/Ro berth will be erected during 1976–1977 at Barlastholmen. Depth of water about 21 ft.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Crew or stevedores.
CUSTOMS ALLOWANCE: 200 cigarettes plus 1 bottle spirits.
CONSULS:

Danish Vice-Consulate	tel. 14719.
Finnish Consulate	tel. 10700.
The Netherlands Vice-Consulate	tel. 14444.
Norwegian Vice-Consulate	tel. 22330.
German Consulate	tel. 21769.

REPAIRS: Available. Divers for underwater repairs; major repairs undertaken.
DRY DOCKS: Floating dock for up to 3,000 tons, also slip for vessel up to 850 tons.
AIRPORT: Ten kilometres from the port.
AUTHORITY: Harbour Master. VHF Channel 16.

KARLSBORGSVERKEN (Kalix District): 65.48 N. 23.17 E.

Axelsvik (Oil Harbour) 4 miles East.
PILOTAGE: Pilot station "Erikoren", Karlsborgsverken. Pilots embark or disembark at Maloren 18 nautical miles South Karlsborgsverken.
MAX. SIZE: Max. draft entrance to Karlsborgsverken 6 m., to Axelsvik 8.8 m. Size no limit.
TUGS: Available.
BERTHING:

	Max. draft.	Length of quay
Cellulose Quay	6.0 m.	145 m.
Sulphate Quay	5.0 m.	80 m.
Timber Quay	6.0 m.	250 m.
Kalix Outer Harbour Quay	5.4 m.	145 m.
Axelsviks Oil Harbour	8.8 m.	60 m.
Tore (17 nautical miles) N.W. Karlsborgsverken	6.0 m.	170 m.

STEVEDORES: Available, No particular ETA advice required except as normally sent by Master to the Agent.
MEDICAL: Hospital and dental services available.
FRESH WATER: Available at all berths except at Axelsvik's Oil Harbour.
OPENING/CLOSING HATCHES: Usually carried out by the vessel's crew.
FACILITIES: No land cranes. Mobile cranes to hire for loading/discharging.
CONSULS: None.
REPAIRS: Workshop available for repairs.
AIRPORT: Lulea 85 km. from Karlsborgsverken.
TIME: GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Telephone 90000 for emergency and ask for service required.
TELEPHONES: Available at quays.
SHORE LEAVE: Allowed.

AGENT: Kalixspedition, Svanberg & Co. AB, Box 61, S-952 01 Kalix Telex No. 8311.

KARLSHAMN: 56.10 N. 14.52 E. (See Plan)

DOCUMENTS:
2 Crew Lists (3 for tankers).
2 Passenger Lists.
1 Tobacco List.
1 Store List.
1 Manifest.
1 Bill of Lading.
PILOTAGE: Vessels approaching port call on VHF Channel 16, Karlshamn Pilot station 5 hours in advance. Pilot boat orange coloured. Lights and sound signals as international regulations. Pilot boat always located 2 nautical miles South from Pilot station Ortholmen, this point marked on charts. Location of anchorage in same area where Pilot taken. (Also see "Stockholm").
ANCHORAGE: Depths of water in anchorage area about 20–25 m.
RESTRICTIONS: Tankers not allowed enter during darkness. Maximum draft for tankers 33 ft.
MAX. SIZE: Maximum length 180 m., maximum draft 33 ft. Oil pier outside main harbour, Kolo harbour, length unlimited, maximum draft 41 ft. No tide.
HEALTH: If infectious disease on board Captain must immediately send information to Agent.
RADIO: Karlskrona Radio.
RADAR/VHF: The Pilot station is fitted with radar and VHF.
TUGS: Join vessels about 1 nautical mile outside Harbour boundary. Ship's lines always used.
BERTHING:

Inner harbour:	*Length*	*Depth*
Ocean Quay	150 m. (490 ft.)	9 m. (29 ft. 06 in.)
Soya Quay	220 m. (722 ft.)	8.5 m. (28 ft.)
West Quay	600 m. (1,970 ft.)	6.5–7.5 m. (21–24 ft. 06 in.)
East Quay	650 m. (2,130 ft.)	5–6.5 m. (16–21 ft.)
East Mole	170 m. (560 ft.)	8.5 m. (28 ft.)
Oil Harbour	100 m. (330 ft.)	11 m. (36 ft.)
Outer Harbour:		
Sterno Stone Pier	150 m. (490 ft.)	6.5 m. (21 ft.)
Shipyard Quay	200 m. (660 ft.)	5 m. (16 ft.)

CRANES: 7 cranes, capacity 5–10 tons, 8 mobile cranes, capacity 3–23 tons. Heavy lift crane, capacity 300 tons.
MEDICAL: Hospital facilities available.
TANKERS: Different lines used. From 12 to 6 in. depending on cargo to load/discharge. 2 different loading/discharging berths available. 1 at Inner Harbour 33 ft. draft, and 1 at Kolo Harbour.

Kolo Oil Harbour: Position 56° 09′ N. 14° 43′ E. Pilot boards by Laknallarna, position 56° 07′ 8″ N. 14° 53′ E. Berthing during daylight only. Max. size 250 m., draft 41 ft. Depth at berth and approaches 46 ft. 2 tugs are generally used.

The pipe-line is 20 in., length 400 m. and hose connection 12 in. Max. rate, 1,500 cbm/hour (hfo). There are no ballast facilities and no clean ballast can be discharged into harbour. Vessels are allowed to clean tanks and gas free in the roads only.

Fresh water available at 20 G./t.p.h. by pipe-line.

DENSITY: 1003.
FRESH WATER: Fresh water available and delivered by hoses.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Watchmen only necessary when tankers discharge petroleum products.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: Certificates of Tonnage, Derat Certificate.
CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes per man/week. Wine and/or Spirits, 1 bottle per man/week.
IDENTIFICATION CARDS: Not needed.
CONSULS:

The Netherlands, Tel. 10041	Denmark, Tel. 52080.
Norway, Tel. (0454) 14225	Finland, Tel. (0454) 11319.

REPAIRS: Small deck and engine repairs can be effected.
DRY DOCKS: None.
REPATRIATION: Facilities for repatriation of crew possible.
AIRPORT: Distance from airport 3 Swedish miles. 3 flights per day.
HOLIDAYS: January 1st and 6th; Easter; May 1st, 15th, 26th; June 21st; November 1st; December 25th, 26th. No work can be arranged during holidays.
POLICE/AMBULANCE/FIRE: Tel. 90 000.
TELEPHONES: Telephones on board arranged at cost of 25 Sw. Cr.
AUTHORITY: Harbourmaster.

KARLSKRONA: 56.10 N. 15.36 E.

DOCUMENTS: See "Stockholm".
PILOTAGE: Pilot is taken at Aspo. Tel. 0455/39016. (Also see "Stockholm"). Ordering Pilot between 2100–0500 hrs. contact Karlshamn Pilot station 0454/14102. Stations operating on VHF Channel 16. Pilot should be ordered 5 hours in advance. Pilot boats usually orange.

ANCHORAGE: On roadstead. Reference to nautical chart No. 821 (Swedish).
MAX. SIZE: Length 180 m., draft 8.5 m.
HEALTH: See "Stockholm".
RADIO: Stockholm Radio. Karlskrona Radio.
VHF: Karlskrona Port office equipped with VHF. Channels 16, 14.
RADAR: Radar service available when entering port. Tel. 0455/25075 or 0455/50780.
TUGS: Tugs assistant available.
BERTHING: Total quay length 4,700 ft., oil terminal 400 ft. (being extended), depth alongside quay 13–26 ft., oil terminal 29.5 ft.
STEVEDORES: Available. Ordered through Agents or directly 0455/10518.
MEDICAL: Advance notice to Agents desirable.
TANKERS: No specific requirements applicable on oil carriers. Two tanker berths available. Draft 7.0 and 8.5 m.
FRESH WATER: Available, customary delivery from quay-berth.
FUEL: All grades available. No advance notice required.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CONSULS:
Danish Vice-Consul, Tel. 15006.
Netherlands Vice-Consul, Tel. 10926 and 12495.
REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: Largest dry dock: length 185 m., breadth 20.76 m., depth 8.80 m. Six smaller docks.
REPATRIATION: Not allowed.
AIRPORT: 30 kms. from port.
TIME: GMT plus 1 hour. Permanent.
POLICE/AMBULANCE/FIRE: Tel. 90000.
TELEPHONES: None available.
SERVICES: Compass adjusting.
AUTHORITY: Harbourmaster.

KARLSTAD: 59.23 N. 13.31 E. (See Plan)

PORT LIMITS: Vessel considered to be an "arrived ship" when berthed or anchored South of the Gerholmsrevet buoy in case of congestion.
DOCUMENTS: As usually required in Swedish ports.
PILOTAGE: Not compulsory. However Pilots available.
ANCHORAGES: There is a safe anchorage South of the Gerholmsrevet buoy, sand and clay.
RESTRICTIONS: There are no restrictions imposed upon entry. Vessel to give one prolonged blast to call the attention of boatman.
MAX. SIZE: Vessels length, breadth and draft maximized by the locks of the Trollhatte canal (87 m. × 13 m. × 5.3 m.).
HEALTH: Documents etc. as usually required in Swedish ports.
RADIO: Gothenburg Radio.
VHF: ETA to be given to Karlstad Port Radio (0800-1600 hrs. MET)
RADAR: No port radar available.
TUGS: Two icebreaking tugs available. Ship's lines usually used.
BERTHING:

Vanerterminalen	Length	175 m.
(The Venerterminal)	Shipdraft	5.3 m.
Mobile cranes		
Styckegodskajen	Length	270 m.
(The general cargo quay)	Shipdraft	5.3 m.
Three general cargo cranes	6 tons	
Trakajen	Length	120 m.
(The wood quay)	Shipdraft	5.3 m.
Mobile cranes		
Kolkajen	Length	350 m.
(The coal quay)	Shipdraft	5.3 m.
One bulk cargo crane	5 tons	
One bridge crane	6.5 tons	
One heavy-lift crane	28 tons	
Lambergshamnen	Length	230 m.
(The Lamberg Harbour)	Shipdraft	5.0 m.
Mobile cranes		
One heavy-lift crane	160 tons	
Inrehamnen (Inner harbour)	Disused by merchant vessels.	
Oljehamnen Each pier (Oil harbour)	50 m. Mooring space both sides	
Three jetties for handling oil, etc.	Shipdraft	5.3 m.

STEVEDORES: Modern and extensive machinery equipment. Loading/discharging can be arranged in two or three shifts.
MEDICAL: Hospital facilities available.
DENSITY: Fresh water in the port.
FRESH WATER: Delivered by hose from piping on the quay.
FUEL: All kinds of bunker oil available.
CONSULS: Danish, Norwegian and German.
REPAIRS: All kinds of deck and engine repairs possible. Slipway 2,300 tons
SURVEYORS: All major classification societies represented in nearby port of Gothenburg. Government ship surveyor situated at Karlstad.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Usually carried out by crew
CUSTOMS ALLOWANCE: As usually allowed in Swedish ports.
CARGO GEAR: Shore gear usually used.
REPATRIATION: Crew changes and repatriation can be effected.
AIRPORT: Regular domestic airlines. Several flights per day to and from Stockholm and Gothenburg.
TIME: Local time is GMT plus 1 hour.
HOLIDAYS: Cargo work can not be arranged on Christmas, New Year's and Easter day or on Good Friday.
POLICE/AMBULANCE/FIRE: Telephone number 90 000.
SERVICES: Tank-cleaning equipment and facilities for discharge of tankwashings available.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not necessary for shore leave.
REGULATIONS: Ship's propulsion machinery may not be used when ship is berthed.
DELAYS: Normally not to be expected.
DEVELOPMENTS: Number of cranes and sheds will be increased.
AUTHORITY: Port Manager and Port Captain, Port of Karlstad.

KOPING: 59.31 N. 16.00 E.

DOCUMENTS: See "Stockholm".
PILOTAGE: Via Sodertalje: Pilots obtainable for inward bound vessels from Landsort to Sodertalje and from Sodertalje to Koping; for outward bound vessels from Koping and Sodertalje. Via Stockholm: Pilots obtainable for inward bound vessels from Simpnas, Furusund, Sandhamn, Dalaro and Landsort to Stockholm and from Stockholm to Koping; for outward bound vessels from Koping and Stockholm. (Also see "Stockholm"). Harbour pilotage obtainable but not compulsory in harbour area.

Distances: Landsort – Sodertalje (nautical miles), 34; Sodertalje – Koping, (nautical miles) 69; Landsort – Dalaro, (nautical miles), 32; Dalaro – Stockholm, (nautical miles), 46; Sandhamn – Stockholm, (nautical miles), 36; Stockholm – Koping, (nautical miles), 78; Vasteras – Koping, (nautical miles), 27; Harbour Pilotage, (nautical miles), 2.
ANCHORAGES: At the "Broken" light buoy, clay bottom.
RESTRICTIONS: Ice is prevalent in lake Malaren and the inlet from the Baltic from January to March, but the entrance channel is kept open during Winter season.
MAX. SIZE: The Pilot station on Lake Malaren, Tel. Sodertalje 30467, will give information on the max. admissible sizes of vessels. In general the following applies:

Max. Admissible	*Via Sodertalje*	*Via Stockholm*
Length	120 m.	110 m.
Breadth	18 m.	15 m.
Draft	6 m.	5.65 m.
Height of masts above water level	35 m.	26 m.

The figures stated for the draft are subject to variation according to the water level. The entrance fairway to the port has been dredged to a depth of 7.6 m., the width of the bottom being 60 m.

Also see "Developments".
VHF: Work freq. Channel 14. Call Koping Port Radio, Channel 16.
TUGS: Available day/night.
BERTHING: Deep-water harbour. Has 529 m. of quayage with depth of 6.2–7.3 m. alongside and is equipped with three 6-tons portal cranes and four 7-tons level-luffing jib cranes, two having max. lifting capacity 11 tons. Also 80 m. cross-quay – without cranes – loading/unloading with vessels own winches. Quays are rail-connected and equipped with electricity, telephone and fresh water. About 10,000 sq.m. of concrete stockyards within reach of cranes and outside this area at short distance from cranes, space of about 25,000 sq.m. available for storage of goods. Also about 18,000 sq.m. sheds of different types in connection to quays.

Cranes well equipped with lifting devices such as grabs of different types, etc. Conveyor belts of varying length, fork trucks, trimming and other cargo handling equipment also available.

Old Harbour: Has 400 m. of quayage with depth varying from 3.6 to 4.5 m. alongside, mobile cranes are used.

Oil Harbour: A modern oil harbour (built 1969) is situated at the mouth of River Kopingsan (North side), the jetty having one outside and one inside berth with depth of 7.6 and 5.7 m. respectively.

On the North side is a new (1975) 80 m. concrete quay for grainloading vessels. Depth alongside 7.3 m.

There is a private 120 m. concrete quay, depth 6.2 m., belonging to Messrs. Soderberg & Haak Ltd. (Iron and Steel Merchants).
STEVEDORES: Working hours: 0700–0900, 0930–1300 and 1400–1630 hrs. (Monday to Friday). Special conditions on Christmas Eve, New Year's Eve, Easter Eve, Whitsun Eve and Midsummer Eve.

Overtime work: can usually be executed on Mondays, Tuesdays, Thursdays and Fridays for 3 hours daily and 6 hours on Saturday.
GANGWAY/DECK WATCHMEN: Always available.
FUEL: Water, provisions, coal and oil obtainable.
REPAIRS: Minor mechanical, electrical and other repairs can be carried out by different local firms. Diver available.
DEVELOPMENTS: Enlarging works are in progress in the Sodertalje Canal.
AUTHORITY: Harbour Master.

LANDSKRONA: 55.52 N. 12.48 E. (See Plan)

DOCUMENTS: See "Stockholm".
PILOTAGE: Pilot available on request from Helsingborg Pilot station or from Landskrona Pilot station in daytime. 5 hours' notice required. Pilot stations and boats equipped with VHF. (Also see "Stockholm").

ANCHORAGE: Vessels of up to 10 m. draft can safely anchor North of Staffans Bank.
MAX. SIZE: Depth in channel and harbour 11 m. (36 ft.) Max. draft 10 m. Vessels up to 253 m. length have sailed from harbour.
HEALTH: See "Stockholm".
RADIO: Gothenburg Radio call sign SAG; Malmo Radio call sign SDP. The harbour office, Pilot station, Pilot boats and tug boats equipped with VHF.
TUGS: Tugs usually meet off Pilhaken lightbuoy. Ship's lines to be used.
BERTHING: Terminal for handling bulk cargoes. Rock phosphate can be discharged with a capacity of 8,000 tons per 24 hours.
MEDICAL: Medical attention and hospital facilities available.
TANKERS: No oil berth in Landskrona.
DENSITY: Density of water changes with currents.
FRESH WATER: Available from quay.
FUEL: Small quantities of fuel oil can be obtained from quay.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Usually carried out by ship's crew.
CERTIFICATES: See "Stockholm".
CUSTOMS ALLOWANCE: See "Stockholm".
IDENTIFICATION CARDS: Not needed.
CONSULS:

Finnish Vice-Consulate	Tel. 0418/16020
Danish Vice-Consulate	Tel. 0418/16150
Netherlands Vice-Consulate	Tel. 0418/16020
Norwegian Vice-Consulate	Tel. 0418/77000

REPAIRS: All types of deck and engine repairs.
DRY DOCKS: Dry dock for ships up to about 25,000 tons d.w. (189 m. length). Floating dock for up to about 5,000 ton d.w.
AIRPORT: Sturup, 60 km.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: See "Stockholm".
POLICE/AMBULANCE/FIRE: Tel. 90000.
TELEPHONES: Can be placed aboard.
SERVICES: Compass adjusting.
REGULATIONS: Anchoring prohibited between and up to 50 m. from harbour lights.
AUTHORITY: Landskrona Hamnforvaltning.

LULEA: 65.35 N. 22.09 E.

DOCUMENTS: See "Stockholm".
PILOTAGE: Telegraphic address, "Pilotstation Lulea". Advance notice 5 hours. VHF Channel 16, 156.80. Pilot boat, orange with international signals. Pilot boards about 1 mile S.W. of Rodkallen Pilotstation. Location of anchorage when awaiting Pilot, South of Pilot station. (Also see "Stockholm").
ANCHORAGE: Germandofjarden and inner road.
MAX. SIZE: Max. draft 37 ft. at mean water.
HEALTH: No special regulations.
RADIO: Harnosand Radio, call signal SAH.
TUGS: At the inner road for the ore dock, and in Sandoleden 1 n.m. South of the oil terminal. Ship's lines to be used.

A new tug, *Victoria*, 4,200 h.p. is available. The tug is also used for ice-breaking in the channel and harbour.

BERTHING: *Ore Quay:* Length 415 m. Depth at quay 13.2 m. Two ore loaders, 4,000 t.p.h. each.

Deep Quay: Length 345 m. Depth 8.8 m. General cargo and wood for wood loading.

NJA Quay: Length 498 m. Depth 8.0 m. Iron, steel loading.

Coal Quay: Length 400 m. Depth 12.2 m. 2 coal unloaders, rate 1,350 t.p.h.

BRIDGES: When passing up to Northern side of port, notice has to be given 2 hours in advance for opening of Bergnasbridge.
STEVEDORES: Bottenvikens Stuveri AB.
TANKERS: Dia. of lines from 150 mm. up to 350 mm. 2 oil jetties depth 7.8 m. and 12.2 m.
DENSITY: Fresh water, 1000.
FRESH WATER: Fresh water available at any berths.
FUEL: All grades of oil available.
GANGWAY/DECK WATCHMEN: Safety watchmen are to be on board all tankers when loading or discharging.
OPENING/CLOSING HATCHES: Stevedores.
SHIP'S CERTIFICATES: See "Stockholm".
CUSTOMS ALLOWANCE: (Tobacco) 200 cigarettes or 250 grams of tobacco for each crew member once a week. (Wine/Spirits) 0.75 litre for each crew member over 20 years old, once a week.
IDENTIFICATION CARDS: Not necessary.
CONSULS:

British	16329	Norwegian	13040
Danish	20240	Netherlands	12019
Finnish	10440	German	23025
France	10440		

REPAIRS: Only small engine repairs.
AIRPORT: 10 km. from port. Served by regular airlines.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: See "Stockholm".
POLICE/FIRE/AMBULANCE: Telephone 90 000.
TELEPHONES: Connections available at oil terminal, coal terminal, ore terminal and Deep Quay.
GENERAL: All ships mooring at oil terminal over 3,000 d.w.t., and ore dock have to use tugs.
DEVELOPMENTS: A steel terminal is to be built just outside the coal terminal. The terminal, which is expected to be ready 1981, will be used by Norrbottens Jarnverk AB. Length of quay 1,200 m. Depth 12.6 m.
SHIPMASTERS REPORT: *(November, 1976).* The Pilot boarding position for large ships is about 3 miles N.W. of Fartugrundens Light House. (The Pilot Boarding Station at Rodkallen, as mentioned in *The Guide*, and also in the Admiralty Sailing Directions and as indicated on the large scale chart, is for small ships only).

This information was given to me by the Pilot who took this ship (27,483 d.w.t.) outwards from Lulea on 30.10.76.

The Swedish Time Charterers had advised me prior to arrival to embark the inward Pilot at the Fartugrundens Light House position.

AUTHORITY: Lulea Hamnstyrelse.

LYSEKIL: 58.17 N. 11.26 E.

DOCUMENTS: See "Stockholm".
PILOTAGE: Latest 5 hours prior arrival Pilot station Tovas Ungar or Gaeven to be ordered either by phone Lysekil 10271 or via Agent. (Also see "Stockholm").
ANCHORAGES: Safe anchorages both for small and large vessels inside harbour or just outside harbour in Gullmarsfiord.
RESTRICTIONS: No restrictions night entry, except max. draft possible 30 ft. No tide.
MAX. SIZE: Maximum permissible length for berthing about 600 ft. Draft 30 ft.
HEALTH: Declaration of health only when required from Customs or for vessel coming from outside Scandinavia.
RADIO: Cable Agents giving ETA, draft, cargo and cash required via Gothenburg Radio.
RADAR/VHF: No port radar service, VHF for calling Pilot, Channel 16.
TUGS: Must be requested from Uddevalla or Gothenburg at least 1 day before arrival.
STEVEDORES: Ordered by Agents.
MEDICAL: Hospital in town.
TANKERS: Oil berth Munkedal, discharge line 12 in. connection 8 in. Also see the port of "Brofjorden".
DENSITY: About 1027.
FRESH WATER: Available from shore installation.
FUEL: Only Gasoil and Diesel available.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Normally opened by crew.
CERTIFICATES: Registered Tonnage Certificate.
CUSTOMS ALLOWANCE: See "Stockholm".
IDENTIFICATION CARDS: Not required.
CONSULS: Denmark, Finland, Iceland, Norway.
REPAIRS: Only small repairs possible.
HOLIDAYS: See "Stockholm".
REPATRIATION: Change of crew and repatriation possible.
AIRPORT: None.
TIME: Local time GMT plus 1 hour. Permanent.
TELEPHONE: Police 90000/13030; Ambulance Taxi 10101; Fire Brigade 10254.
AUTHORITY: Lysekils Hamnforvaltning.
AGENT: A. B. Ferm & Olsson AB, Gullmarskajen, 45300 Lysekil. Telephone 10007-10372-11107. Telex 42080. Cables "Fermson" AO 10372-12493-10472-10970-10151.

MALMO: 55.37 N. 13.01 E **(See Plan)**

DOCUMENTS:
2 Crew Lists.
1 Passenger List.
2 Lists of Personal Effects (Tobacco List).
1 Declaration of Health.
2 Stores Lists.
3 Cargo Manifests.
1 Bill of Measurement.
1 Certificate of Nationality.
1 Deratisation Certificate.

PILOTAGE: Vessel applies for Pilot by telegram, by telephone or VHF (telegraphic address, Pilotstation, Malmo; tel. 115269; VHF Channel 16). Advance notice required 5 hours before pilotage to commence. Pilot boat orange-coloured cutter equipped VHF and radar. Pilot boards at Malmo roadstead. In case of bad weather vessel awaits Pilot at roadstead. (Also see "Stockholm").
ANCHORAGE: Vessels anchor about 5 cables North of fairway buoy "Roder Prick" and East of leading lights Centralhamnsrannan Nedre and Ovre, and S.W. of leading lights Malmo Oljehamn, Nedre and Malmo Oljehamn Ovre. Depth 12 to 14 m. and bottom hard clay.
RESTRICTIONS: Speed must be reduced inside breakwaters. When red flag hoisted (red lantern at night) at the N.E Dry dock pier head, indicating dock gates open, vessels may pass breakwater at min. speed. Bridge opening signal for passing from South Wharf Basin 2 long blasts, followed by 1 short.
MAX. SIZE: Max. length recommended in Oil Harbour 740 ft. on draft not exceeding 34 ft. Max. length recommended at Oil Jetty in Free Port 650 ft. on draft not exceeding 24 ft., or 600 ft. on draft not exceeding 26 ft. Max. length recommended in New Harbour is 490 ft. on max. draft 21 ft. and in Industrial Harbour 550 ft. on max. draft 26 ft. No tides.

HEALTH: Free pratique automatically granted arriving from non-infested areas. If arriving from infested areas health declaration must be presented immediately on arrival. If diseases on board suspected, vessel allowed to enter after approval City Medical Adviser, but nobody allowed on board until vessel's crew examined by doctor and after approval of medical adviser.

RADIO: Vessel can route ETA cables to Gothenburg Radio (call sign SAG or Channel 26 on VHF), open all hours. Radio stations can also be called by radio-telephone on 2182 kHz.

VHF: Port Control Office equipped with VHF (Channel 16, 12 and 14), open 24 hours a day. Masters can receive information about berthing place, present traffic and existing hazards to navigation in harbour area.

TUGS: Tugs usually meet vessels at roadstead. Ship's lines used. 4 tugs, supplied at all hours, also carry out ice-breaking.

BERTHING:

Passenger Harbour:

			Quayside Cranes		
Berth	*Length* (ft.)	*Depth* (ft.)	*No.*	*Capacity* (tons)	*Range Outside Quay* (m.)
301–303	1,083	10			
304–308	1,903	23.5			
401–404	1,180	16.5–19.5	1	5	12.3
405–409	1,330	16.5–19.5			
410–411	670	23.5			
412	131	23.5			

Ferry and General Cargo Harbour:

			Quayside Cranes			
Berth	*Length* (ft.)	*Depth* (ft.)	*No.*	*Capacity tons*	*Range Outside Quay* (m.)	*Remarks*
501–502	656	21				Car-ferry berth
503–504	636	23.5				Train-ferry berths
505–506	560	23.5				(2) Car-ferry berth
507–511	1,050	23.5	4	5	16.5	
512–513	656	23.5				
514	328	23.5	1	6.2	10.9	Syd-Kraft grab
515–517	836	23.5				
518–523	2,312	23.5	3	6.0	12.55	Also equipped with grabs
524–526	607	17.5				

Free Port:

			Quayside Cranes			
Berth	*Length* (ft.)	*Depth* (ft.)	*No.* (m.)	*Capacity* (tons)	*Range Outside Quay* (m.)	*Remarks*
600–604	1,970	30	5*	6–40	22–24.5	2×40 tons cranes
605–609	1,645	30	15†	2.5–6	11–21.5	
610	560	30				Oil jetty

*Also equipped with grabs

†One of them also equipped with grab

Industrial Harbour:

			Quayside Cranes			
Berth	*Length* (ft.)	*Depth* (ft.)	*No.*	*Capacity* (tons)	*Range Outside Quay* (m.)	*Remarks*
801–804	1,194	23.5				
805–810	1,970	23.5	5	5–6	11.7–13	
811	387	23.5				
812–818	2,135	23.5–29.5	5	6–20	19.0–23.2	2×20 tons cranes
901–907	2,887	29.5	5	6	15.0–20.0	
908–909	788	23.5	1	6.5	14.75	Coal discharge quay at Syd-Kraft
910–918	2,148	29.5	3	6–20	19–23.2	2×20 ton cranes
930–932	560	19.5				
933	341	19.5	2	6–20	19–23.2	1×20 tons crane

12 of these cranes can be equipped with grabs

BRIDGE: Will be opened with certain exceptions 0700–1700 hrs. weekdays. May be opened other hours on request to Port Control Office.

STEVEDORES: Work in shifts from 0600 through to 0100 hrs.

CONTAINER HANDLING FACILITIES: 10 Roll-on/Roll-off ramps, 2 container berths with 40 tons capacity container cranes, 3 forklift trucks with 25–40 tons capacity.

MEDICAL: No advance notice required for medical attention. Good hospital facilities available. See also "Health".

TANKERS: The Oil Harbour in the Northernmost section of the port of Malmo, and can be reached by a special approach fairway, the Oil Harbour channel, which has a depth of nearly 37 ft. The harbour is equipped with 7 berths, 2 of these being for ocean-going tankers with modern equipment for the unloading of oils and chemicals. Water depth varies between 20 and 36 ft.

The harbour can accept fully-loaded tankers of up to 32,000 d.w.t. as well as partly-loaded ships of up to 65,000 tons.

The berths for ocean-going tankers are each equipped with 3 hydraulically manoeuvrable transfer plants for faster and more reliable unloading. A piping system leads from the berths, unloading capacity of up to 2,000 tons per transfer plant, berth and hour. Tanks and pipes can be heated from a central steam-production station used by all firms. The Oil Harbour area also contains storage tanks for liquid chemicals and solvents. There are also good possibilities for development within the area, for e.g. petrochemical industries.

Berth	*Quay Length*	*Depth*
1003	770 ft.	36 ft.
1004	770 ft.	36 ft.
1006–1007	295 ft.	19.5 ft.
1008–1009	295 ft.	19.5 ft.
1010	328 ft.	19.5 ft.

DENSITY: Average density 1010. No tide experienced.

FRESH WATER: Fresh water available all berths and delivered by private company (AB Malmo Skeppshjalp, tel. 970470.) Rate of delivery 60 t.p.h.

FUEL: All normal grades available. No special advance notice required.

FIRE PRECAUTIONS: Apart from usual non-smoking precautions, vessel discharging or loading dangerous goods of Class 1 in IMCO code required to have a fire guard on board at all times.

In Oil Harbour the shore-valve watchman also serves as fire guard.

GANGWAY/DECK WATCHMEN: Not considered necessary other than in Malmo Oil Harbour. Decision to be made by Master.

OPENING/CLOSING HATCHES: Normally carried out by stevedores on ocean-going vessels.

CERTIFICATES:

International Bill of Measurement. Radio Certificate.

Certificate of Nationality. Safety Equipment Certificate.

Deratisation Certificate. Gear Certificate.

Load-line Certificate.

CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes or 40 cigars or 150 grams of smoking tobacco per week out of bond. Spirits, 0.7 litre spirits per week out of bond.

CARGO GEAR: No additional requirements.

IDENTIFICATION CARDS: Not needed.

CONSULS:

	Telephone
Belgian Consulate	93 41 00
British Consulate	12 66 35, 308 06
Danish Consulate-General	12 33 44
Finnish Consulate-General	11 77 80
French Consular Agent	773 30
Guatemalian Consulate	722 30
Icelandic Consulate-General	726 00
Italian Consulate	377 31
Jugoslavian Consulate	12 42 01, 12 42 31
Netherlands Consulate	343 77
Norwegian Consulate-General	12 35 00
Polish Consulate-General	11 82 44, 310 02
Salvadorian Consulate	15 08 60
Swiss Consular Agent	12 75 35
Spanish Vice-Consulate	338 00
Turkish Consulate-General	11 48 11
German Consulate	355 60, 355 61
Austrian Consulate	93 21 11

Privately owned Quayside Silos:

			Intake capacity, tons of grain per hour			
Owner	*Situation*	*Berth No.*	*From ship*	*From railway*	*From vehicle*	*Storage Capacity in tons*
AB Kvarnintressenter	South Wharf Basin	304	100	100	180	4,000
Skanska Lantmannens	New Harbour, Jorgen					
Centralforening upa	Kocks Quay	513	50	120	210	18,000
Skanska Lantmannens	New Harbour,					
Centralforening upa	Hull Quay	521	100	130	130	17,000
AB Carl Engstrom	New Harbour,	603*	100*			
	Hull Quay	520	100	100	200	15,000
AB Malmo Silo	Industrial Harbour. basin I	803	60	40	90	19,000
AB Kontrolifoder	Industrial Harbour, basin I	816	50	50	50	4,000
Harald Fors & Co. AB	Industrial Harbour, basin II	901	120	60	60	8,000
AB Saltimporten	Industrial Harbour, basin II	913-914	250	60	60	20,000

*Unloading at Berth 603, Free Port, thence by conveyor belt to the silo in New Harbour

REPAIRS: Ship and engine repairs of all kinds, and dockings carried out by Kockums Mekaniska Verkstad, one of biggest shipyards in world. Certain kinds of repairs carried out by other firms in town.
DRY DOCKS: 2 dry docks for ships up to 25,000 d.w.t. and 1 dock with a capacity of 750,000 tons. Efficient crane equipment permits single lifts of up to 800 tons. Kockum are also large manufacturers of ship's engines, in particular MAN diesels and De Laval steam turbines.
REPATRIATION: Facilities exist for effecting crew changes and arranging repatriations.
AIRPORT: Sturup Airport, served by regular airlines, situated about 25 kms. from Port of Malmo.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: See "Stockholm". Cargo work can be arranged on those days after agreement with Stevedore Company. Oil tankers can be dispatched all hours.
POLICE/AMBULANCE/FIRE: 90000.
TELEPHONES: Can be connected at most berths. Cost Sw. kr. 15:-/day plus actual cost of long-distance calls.
SERVICES: All services available.
DELAYS: No delays expected.
AUTHORITY: Malmo Hamnforvaltning.

NORRKOPING: 58.36 N. 16.12 E. (See Plan)

DOCUMENTS: 3 Customs Documents. 3 Health Documents. 3 Crew Lists. 3 Passenger Lists. 3 Manifests.

Master of ship arriving from abroad to first Swedish port has to give Maritime Declaration of Health on special form.
PILOTAGE: See "Stockholm". Ships will be received 2 nautical miles North of the lighthouse Gustav Dahlen. The Pilot must be ordered on radio, telephone or in some other way at least 5 hours before piloting to start.
ANCHORAGES: 58° 38.7′ N. 16° 22.5′ E. Depth 70 ft.
RESTRICTIONS: Tankers loaded with more than 2,000 tons gasoline must not move in port at night-time. Tankers over 5,000 d.w.t. will not be shifted at night-time. Pampushamnen Oil Jetty: Tankers loaded with more than 10,000 tons must not enter at night-time. Inner Harbour: Tankers loaded with more than 5,000 tons must not enter at night-time.
MAX. SIZE: Pampushamnen Oil Jetty can berth vessel of about 45,000 d.w.t. with max. draft of 32.5 ft. Gastgivarehagen Oil Jetty can berth vessel with a max. draft 26.5 ft. and length 600 ft. Ramshall and Tallbracken Oil Jetty can berth vessel with max. draft 26.5 ft., length 580 ft., breadth 80 ft., daytime only. General cargo quay (Ohmanskajen) can berth vessel max. draft 27.5 ft. Inner Harbour can berth vessel max. draft 20.5 ft.

Largest tanker at Pampushamnen, 65,405 d.w.t. LOA 236.66 m. Also see "Tankers".
RADIO: Stockholm Radio, Tingstade radio.
RADAR/VHF: VHF radio Channel 14 and 16. No radar.
TUGS: 3 tugs available, 1,680 b.h.p., 1,265 b.h.p. and 310 b.h.p. The 2 large tugs are icebreaking. Join vessel off St. Juten 58° 38.1′ N., 16° 19.6′ E. Ship's lines to be used.
BERTHING: No specific requirements except at Oil Jetty Tallbacken and Ramshall, which require daylight docking and undocking.

Berths specially equipped for grain, berths equipped for containers, berth for roll-on/roll-off traffic, berths handling liquid chemicals. 4,500 m. of quayage with depths of 5–10.5 m. and 6 oil jetties.

Roll-on Roll-off berths:

One Ro/Ro berth with a fixed concrete ramp and a water depth of 9 m. Loading and discharging by shore cranes may take place simultaneously with Ro-Ro operations.

One Ro–Ro berth with a fixed concrete ramp and a water depth of 8 m. for Ro–Ro operations only. One Ro–Ro berth with a fixed concrete ramp adjacent to the heavy lift crane specially designed for heavy loads. Water depth 9 m.
CRANES: All cranes are owned and operated by the Port Authority. These include 26 electrical transportable quay cranes with a capacity of 4–10 tonnes, two 25 tonnes cranes which together can lift 45 tonnes, one fixed heavy lift crane with a maximum lifting capacity of 320 tonnes and one 4-tonnes floating crane.
STEVEDORES: Gangs must be ordered before 1500 hrs. day before arriving.
MEDICAL: Arranged by Agent. All services available.
TANKERS: *Pampushamnen* Pier I: Depth alongside 10.5 m. The berth is equipped with a crane for the handling of hoses and has pipe connections for all petroleum and bitumen products.

Pier II: Depth alongside 10.5 m. The berth is equipped with 3 mechanical couplings and has pipe connections for all petroleum products.

Pier III (coastal tonnage): Depth alongside 7.5 m. The berth is equipped with a crane for the handling of hoses and has pipe connections for all petroleum products.

Fuel oil: one 18 in. and one 16 in. pipe-lines for discharging. 2 connections with 8 in. hoses. Gas oil: 14 in. pipes with 2 connections to 8 in. hoses. Asphalt: 10 in. pipes. Kerain: 10 in. pipes with 1 connection to 8 in. hose. Gasoline: 12 in. pipes with 1 connection to 8 in. hose. Connection to bigger or smaller hoses possible through existing flange-connections.

Pipe connections for discharging ballast water are installed at all piers at Pampushamnen. Receiving of ballast water is covered by ballastage.

Receiving capacity during the first hour is 650 cu. m. Thereafter, 150 cu. m./hr.

Tallbacken (Shell): Depth alongside 9 m. Beam of vessels restricted to 24 m. (78′ 9″) due to passage through the Handelo drawbridge. Vessels require own gear for the handling of hoses.

3 connections for variable kinds of oil, 8 in. hose connections.

Gastgivarehagen (Gulf): Depth alongside 9 m. Vessels require own gear for the handling of hoses.

4 connections for variable kinds of oil, 8 in. hose connections.
FRESH WATER: Delivered by 2 water boats of 30 and 60 d.w.t.
FUEL: All grades available. Notice: daytime not necessary.
DENSITY: 1000.
GANGWAY/DECK WATCHMEN: Watchmen are not necessary. Hose-watcher required during loading and discharging.
OPENING/CLOSING HATCHES: Decided from case to case.
CERTIFICATES: International Tonnage Certificate, Derating Certificate, Trade Certificate, and Radio Safety Certificate.
IDENTIFICATION CARDS: Not needed. Crew List to be used in Oil Jetties.
CONSULS:

British	tel. 011/10 00 40	Dutch	tel. 011/10 11 20
Danish	,, 011/10 00 40	Norwegian	,, 011/18 62 60
Finnish	,, 011/12 90 80	German	,, 011/10 02 50
French	,, 011/10 61 00	Uruguay	,, 011/12 03 18

Belgian V. Consul tel. 011/18 62 60
REPAIRS: Slipway for vessels of 2,000 d.w.t. Small repairs of machinery can be made. No repairs in port without permission of Harbour Master.
DRY DOCKS: None.
REPATRIATION: Can be arranged.
AIRPORT: Distance from Airport "Kungsangen" about 4 miles. Daily communications with Copenhagen.
TIME: GMT plus 1. Permanent.
HOLIDAYS: All work stopped on December 24th from 1800 hrs. for 36 hours. Holidays are: New Year's Day; Twelfth Day; Good Friday; Easter Monday; May Day; Ascension Day; Whit Monday; Midsummer Day.
POLICE/AMBULANCE: These services can all be reached on telephone number 90 000.
TELEPHONES: Available at different quay berths.
SERVICES: Arrangements for discharging waste oil and ballast.
DELAYS: No delays normally expected.
AUTHORITY: Hamnforvaltningen.

NORRSUNDET: 60.56 N. 17.10 E. (See Plan)

DOCUMENTS:
2 Crew Lists.
2 Provision Lists.
Passenger List.
PILOTAGE: Pilot available at Eggregrund Gavle for ships coming from South and by Soderhamn for ships coming from North. Pilot available day and night. Contact Pilots by VHF on Channel 16, 5 hours before arrival. (Also see "Stockholm").
ANCHORAGE: South Gashallan in white section of Hallstenoren light.
RESTRICTIONS: During darkness max. length 100 m. and draft 18 ft.
MAX. SIZE: Draft 21 ft. 4 in. and length 146 m.
RADIO: Stockholm Radio or Harnosand Radio.
BERTHING: Max. draft by woodpulp pier 21 ft. 4 in. and timber pier 14 ft.
TUGS: 1 tug-boat available, can be ordered from Pilot or Agent.
FRESH WATER: Available from shore installations.
GANGWAY/DECK WATCHMEN: Available for gangway.
OPENING/CLOSING HATCHES: Crew allowed to open and close.
CUSTOMS ALLOWANCE: 200 cigarettes and 1 bottle spirits per man.
STEVEDORES: Ordered by Agents. Ordinary working time, Monday-Friday, 0700–1600 hrs. To finish a vessel max. 3 hours' overtime can be done.
REPAIRS: Next wharf in Gavle, 40 kms. from Norrsundet. Most repairs possible.
FUEL: Delivered by truck alongside vessel on pier.
IDENTIFICATION CARDS: Not required.
TELEPHONE NUMBERS: Police 10030, 10213; Fire Brigade 10609 or 90000; Gavle Pilot 026 99110, 026 99220; Soderhamn Pilot 0270 54185, 0270 60205.
AUTHORITY: Kopparfors AB.
AGENT: G. E. Lindgren & Son, PB 5, 817 01 Norrsundet 1. Tel. 0297 22003, 22570, 22650. Telex 81115. Cables Lindgrenetson.

NYKOPING: 58.45 N. 17.02 E.

DOCUMENTS:
Tonnage Certificate.
5 Crew Lists.
2 Manifest.
1 Provisions List.
PILOTAGE: Pilot station at Havringe (58° 33′ N. 17° 19.0′ E.), about 15 miles from Nykoping. Pilot must be ordered 5 hours before arrival Havringe. (Also see "Stockholm").
ANCHORAGE: There is good anchorage at Orsbaken in a depth of 9 m. (30 ft.).
RESTRICTIONS: The dredged entrance channel from Orsbaken to Nykoping nearly 5 miles long, 98 ft. wide, has a depth of 6.0 m. (19.5 ft.) at MW.

Signal: A black ball shown on the signal mast means: Entrance prohibited, a vessel is leaving the harbour.

MAX. SIZE: Roll-on/Roll-off vessels up to 4,600 d.w.t. and length 330 ft. can enter the harbour.

RADIO: Stockholm.

TUGS: There is a diesel tug of 220 h.p. Larger tug of 1,200 h.p. can be called from Oxelosund.

BERTHING: There is 560 m. of quayage with depth from 5.3 m. to 6.0 m. (17.5 to 19.5 ft.) alongside at MW.

CRANES: There are 2×4.5 tons mobile cranes and 1×4 ton crane.

STEVEDORES: Ordered by Agents. Working hours: 0700–1600 hrs.

FRESH WATER: Available.

FUEL: All grades available.

GANGWAY/DECK WATCHMEN: Ordered by Agents but not compulsory.

OPENING/CLOSING HATCHES: Normally by crew.

CUSTOMS ALLOWANCE: Each crew member 200 cigarettes or 25 cigars or 200 grams tobacco and 1 bottle spirits.

CONSULS: V. Consulate for Denmark and Finland, tel. 0155/30600.

REPAIRS: Minor repairs can be effected.

DRY DOCKS: None.

AIRPORT: Norrkoping 80 km., and Stockholm 120 km.

HOLIDAYS: New Year's Day; Good Friday; Easter and Easter Monday; Labour Day (1st May); Whit Monday; Midsummer Day and Christmas Day.

POLICE/FIRE/AMBULANCE: Police 17100; Ambulance 90000; Fire 90000.

TELEPHONE: None available for placing on board.

SERVICES: None.

AUTHORITY: Hamnkontoret Nykoping.

NYNASHAMN: 58.55 N. 17.58 E. (See Plan)

OIL HARBOUR

DOCUMENTS:

2 Crew Lists, and 3 Crew Lists on Imco form.
3 copies General Declaration (form supplied on arrival).
Bill of Health.
Deratisation Certificate.
3 copies Cargo Manifest/Bills of Lading.
Tonnage Certificate.
Certificate of Nationality.
Stores and Personal Effects Declaration.
Tovalop Certificate.

RESTRICTIONS: Draft limited by the passage through the Great Belt where depth 43 ft. Tankers berth and unberth in daylight only.

MAX. SIZE:

Berth	*Max. Length of Vessel*	*Max. Distance Bow-manifold*	*Water Depth*
1	300 m.	140 m.	17 m.
		165 m.	15 m.
2	110 m.	60 m.	7 m.
3	250 m.	90 m.	12.5 m.
		105 m.	12.0 m.
4	120 m.	60 m.	12.9 m.
5	70 m.	—	*5.2 m.

*As far as 18.0 m. N.E. of the berth.

HEALTH: Vessels arriving from ports outside Europe must, for inward clearance, provide Customs Office with written declaration of freedom from infection. Further instructions will be issued by Customs Office when such declaration cannot be given.

RADIO: Stockholm Radio; call sign SDJ.

VHF: Channels 6, 9, 12, 13, 16 and 19. Channels 6, 12 and 16 are portable and used during mooring operations.

Nynasoil on Channels 16, working 13 and 19.

BERTHING:

Berth No. 1: Loading arms: 3×12 in. for crude oil, 1×8 in. for bunker. Min. height of loading arms above sea level 2.5 m. Max. height of loading arms above sea level 23 m. Min. distance between connections of 2 loading arms 1.5 m.

Fresh water supply max. 15 t.p.h.

Ballast water can be pumped ashore at a max. rate of 300 cu.m. per hour.

Connection with the loading arms. Vessels usually berth starboard side alongside.

Berth No. 3: Loading arms: 1×10 in. for dirty oil. 1×10 in. for light fuel oil. 1×10 in. for gasoline. Min. height of loading arms above sea level 1 m. Max. height of loading arms above sea level 16.5 m. Min. distance between connections of 2 loading arms 1.5 m. Fresh water supply max. 15 t.p.h.

Ballast water can be pumped ashore at a max. rate of 300 cu.m. per hour. Connection with the loading arms. Vessels usually berth portside alongside.

Berth No. 2, 4 and 5: For coasters only. Jetty No. 2 and 4 are equipped with loading arms and hose connections of 6 in., 8 in. and 10 in. Jetty No. 5 hose connections only.

DENSITY: 1010.

FRESH WATER: Can be supplied from the piers. No barges.

FUEL: All grades can be supplied from the piers. No barges.

CUSTOMS ALLOWANCE: 200 cigarettes per person per week. 1 bottle of wine and spirits per person per week.

CONSULS: All consuls available at Stockholm.

REPATRIATION: Can be arranged.

AIRPORT: Nearest at Stockholm.

TIME: GMT plus 1 hour. Unchanged throughout the year.

SHORE LEAVE: No restrictions.

AUTHORITY: Nynashamnsraffinaderiet.

ORNSKOLDSVIK: 63.17 N. 18.43 E. (See Plan)

DOCUMENTS:

1 Crew List.
1 Passenger List.
4 Customs Documents.
1 Health Document.
1 Manifest.
1 Bill of Lading.
1 Ship's Paper.

PILOTAGE: Pilot station, Ornskoldsvik, tel. 0660/66003. 5 hours' notice. VHF Channel 16. Orange-coloured motor launch fitted with radar and VHF. International signals. Station 2 miles South Skagsudde Lighthouse. Pilots serve all ports between Umea and Harnosand, also sea Pilots and ice advisers for Gulf of Bothnia. (Also see "Stockholm").

ANCHORAGE: Ornskoldsvikfjarden 30–75 ft. Anchorage forbidden in area Raskarson-Malmon-Buron.

MAX. SIZE: Length, 700 ft.; breadth, 100 ft.; draft, 34 ft.

HEALTH: Customs Authorities give pratique on arrival from foreign ports. In case of suspected disease inform Customs and Port Authorities.

RADIO: SAH, Harnosands Radio.

RADAR/VHF: Radar service in Skagsudde Lighthouse. VHF Channel 16.

TUGS: In port, available. Ship's lines used.

STEVEDORES: Inform stevedores at latest 1530 hrs. day before gangs required, also if available space, for truck-loading in holds. Loose timber, 35 stds./gang/day. Packaged timber, 80 stds/gang/day. Board and wood pulp, 250 tons/gang/day.

TANKERS: 2 tankers berths 34 ft. and 33 ft., 6, 8 and 10 in. lines.

DENSITY: Fresh water.

FRESH WATER: From quay or boat. 60 t.p.h.

FUEL: Gas oil, light fuel, heavy fuel.

GANGWAY/DECK WATCHMEN: Watchmen available if desired.

OPENING/CLOSING HATCHES: Stevedores or crew.

CERTIFICATES: Cargo Gear Certificates.

CUSTOMS ALLOWANCE: (Tobacco), 200 cigarettes per week. (Wine/Spirits), 1 bottle per week.

CARGO GEAR: Not needed.

CONSULS: Norwegian, Danish, Portuguese, Finnish.

REPAIRS: Medium sized repairs carried out.

DRY DOCKS: None.

REPATRIATION: Available.

AIRPORT: 10 miles. 3 flights daily Northbound and Southbound.

TIME: GMT plus 1 hour. Permanent.

HOLIDAYS: Cargo work can be arranged on holidays.

POLICE/AMBULANCE/FIRE: Police 10800; Fire 10400.

TELEPHONES: Cost 20 Sw. crs. to be placed on board.

DELAYS: None.

AUTHORITY: Hamnforvaltningen.

OSKARSHAMN: 57.15 N. 16.27 E. (See Plan)

DOCUMENTS: See "Stockholm".

PILOTAGE: Pilot boards at Furon, 6 miles East of Oskarshamn. Give ETA at least 5 hours prior arrival. VHF Channel 16. Tel. 0491/10036 (also see "Stockholm").

ANCHORAGES: South of Furon, depth 25 m.

RESTRICTIONS: Channel to Oil Harbour depth 11 m. Channel to Inner Harbour depth 8.5 m.

MAX. SIZE: Draft 34 ft. 6 in. in oil harbour; 23 ft. elsewhere.

VHF: Channel 16.

TUGS: One tug available of 1,720 h.p.

BERTHING: *Oil Harbour:* Quay length 41 m., depth alongside 12 m.

Inner Harbour: South Quay length 470 m., depth 5–7.2 m.

Bradholm Quay: Length 140 m., depth 4.8 m. Length 88 m., depth 4 m.

North Quay: Length 452 m., depth alongside up to 7.8 m.

Extensions to North Quay for 50 m. in depth of 8 m. and for length of 200 m. in depth of 8.50 m.

Shipyard Quays: Up to 8 m. depth.

Vasa Quay: at Figeholm, quay length 50 m., water depth 5 m.

BULK HANDLING FACILITIES: Roll-on/Roll-off berth for goods traffic situated at the North Quay, depth alongside 8.50 m.

CRANES: 3 Portal cranes, 10 tons capacity. 6 mobile cranes, 10–36 tons capacity. One ASEA crane, 200 tons capacity.

TANKERS: One berth, depth at quay 36 ft.; draft 34 ft. 6 in. Discharge lines 8 in.

FRESH WATER: At every berth.

FUEL: Available.

CERTIFICATES: See "Stockholm".

CUSTOMS ALLOWANCE: 200 cigarettes, one bottle spirits out of bond.

IDENTIFICATION CARDS: Not needed.

CONSULS: Norwegian Tel. 0491/14090; Denmark Tel. 0491/10015. Finland 0491/17010.

DRY DOCKS/REPAIRS: Dry dock length 427 ft. Capacity 30,000 d.w.t. Repair facilities available. Oskarshamn Shipyard. Tel. 0491–17080.

AIRPORT: Oskarshamn, 3 km. away, 2 flights daily to Stockholm.

TIME: GMT plus 1 hour. Permanent.

HOLIDAYS: See "Stockholm".

POLICE/AMBULANCE/FIRE: Police, tel. 15090; Alarm, Police/Ambulance/Fire 90000.

TELEPHONES: Available, for connection on board.

SERVICES: Compass adjusting.

AUTHORITY: Hamnforvaltningen.

OTTERBACKEN: 58.57 N. 14.02 E. (See Plan)

DOCUMENTS:

2 Crew Lists.
1 Store List.
Ship's Register.
1 Manifest of Bill of Lading.

PILOTAGE: Pilotage is not compulsory. Pilot obtainable at Vanersborg.

ANCHORAGE: In the roads in depths from 16 to 19.5 ft., clay bottom, and in the bay E. of Storon from 18 to 16.5 ft., clay and sand bottom.

MAX. SIZE: All ships able to pass through the Trollhatte Canal with a max. draft of 16.7 ft. at MWL can enter the harbour.

HEALTH: No certificates required. In event of any disease or fever contact agent.

RADIO: All messages to Agent via Gothenburg Radio.

VHF: Port of Otterbacken can be reached by VHF Channel 16.

TUGS: Tugs available when icebreaking is necessary.

BERTHING: Gamla Kajen (old quay) Length of quay 374 ft. Depth alongside 13 ft.

Nya kajen (new quay) Length of quay 890 ft. Depth alongside 17-18 ft.

CRANES: One 50-ton fixed crane; two 7-ton travelling bridge cranes; two 10-ton movable diesel cranes; one 5-to 7-ton portal crane.

STEVEDORES: Provided by NBJ, Speditionskontoret (Otterbacken) Ordinary working hours: From 0700 to 0900, 0930 to 1300 and 1400 to 1630.

MEDICAL: Hospital available.

FRESH WATER: Available.

FUEL: Available.

REPAIRS: Minor repairs only can be effected.

GANGWAY/DECK WATCHMEN: Available but not compulsory or necessary.

HATCHES: Opening/closing is normally carried out by the crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 0.75 litres spirits for each crew member.

AIRPORT: Karlstad 90 km; Gothenburg (Torslanda) 180 km.

TIME: GMT plus one hour.

HOLIDAYS: January 1st and 6th; Good Friday; Easter Monday; May 1st; Whitsuntide; December 25th and 26th.

POLICE/AMBULANCE AND FIRE: Tel. 90000

TELEPHONES: Not possible to place telephones on board. Telephones available at harbour office.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.

AUTHORITY: Nora Bergslags Jarnvag, Port of Otterbacken,

AGENTS: NBJ, Speditionskontoret, S-547 02 Otterbacken Tel. 0551-22250. Telex: 66088

OXELOSUND: 58.40 N. 17.08 E. (See Plan)

PORT LIMITS: The seaward boundaries of the port is a line between the Eastern point of Ljungholmen and the ore quay. However, for ore-loading ships, a vessel is considered to be an "arrived vessel" when at anchor at the roads West of Vinterklasen.

DOCUMENTS:

4 Crew Lists (3 for Customs and 1 for Ship's Agent).
4 Passenger Lists, if passengers are not inserted in Crew List.
2 Customs Documents, showing all alcoholic liquors and tobacco, belonging to officers, crew and passengers.
2 Customs Documents, showing ship's store of alcoholic liquors and tobacco.
Health Documents, not necessary.
Manifests, at least 4 copies, normally only for general cargoes.
Bills of Lading, at least a copy if not otherwise stipulated.
Ship's Paper, Ship's Register and Deratisation Certificate, not older than 6 months.

PILOTAGE: (See "Stockholm"). Pilot station located at Havringe Lighthouse, tel. 0155/32920 or 30200. ETA required 5 hours in advance in order to avoid charge for waiting. When ships in open sea inform Pilot station over telephone, transfer over Stockholm Radio, call sign SDJ or Gothenburg Radio, call sign SAG, will be recommended. VHF Channel 16 can be used for contacting Pilot station or Pilot boat. Approaching vessel applies for Pilot when daylight with flag signal G and when dark with Pilot-light or Morse Code PT. Pilot boats orange. Ships advised to proceed by Northern inlet, where Pilot will board at Norra Krankan Lighthouse, Lat. 58° 37′ N., Long. 17° 27′ E. International requirements with respect to boarding and safety measures. Vessels awaiting for Pilot are prohibited to ride at anchor North of Lighthouse "Gustaf Dalen".

ANCHORAGES: Suitable anchorages West of Vinterklasen; clay-holding ground, depth 30–40 m., and between Beten Lighthouse and Harbour, clay-holding ground, depth 20 m. Ships are not allowed to berth until they receive orders and in the meantime they must anchor and await orders.

RESTRICTIONS: No tides. Draft not over 44 ft. 4 in. at mean water level. No other special restrictions with exception of berthing ships of and over 30,000 tons d.w.t.

MAX. SIZE: Ore loading berth: No restriction regarding length of ship. Vessels between 3,000 and 80,000 tons d.w.t. can be loaded. Depth at quay 45 ft. Berth for unloading coal, iron ore: Ships of up to 40,000 tons d.w.t. can be discharged. Depth at quay 39 ft. 4 in. Berth for general cargo: Depth at quay 32 ft. 10 in. Container terminal: Depth at quay 32 ft. 10 in. Oil pier: Oil carrier up to 80,000 tons d.w.t. can be berthed. Depth at quay 45 ft.

HEALTH: No special regulations.

RADIO: Stockholm Radio, call sign SDJ, or Gothenburg Radio, call sign SAG.

VHF: Harbour authorities and Clearance Department for ore loading ships has VHF Channel 16.

TUGS: Two modern combined tugs and ice-breakers of 1,680 and 1,260 IHP. Ship's lines to be used. Tugs normally join vessel near Beten Lighthouse, just near harbour.

BERTHING: Harbour Pilot compulsory and normally ordered by ship's Agent. No tides. Depths in harbour can vary occasionally from minus 1 ft. 6 in. to plus 1 ft. according to temporary alterations of mean water level. Ships of and over 30,000 tons d.w.t. cannot be berthed when dark.

CARGO-HANDLING FACILITIES: The port has, among other things, one ore quay equipped with a travelling ore-loader with an average capacity of 2,000 t.p.h. One quay for unloading coal, iron ore and similar equipped with two travelling cranes with a capacity of 600 t.p.h. One quay equipped for container-handling with a 35-ton travelling container crane of Paceco type. In connection with the container quay there is a 25 m. traverse ferry ramp equipped to accommodate roll-on/roll-off traffic.

STEVEDORES: No special ETA advice required. Master of ship with general cargo has to inform Agent in advance number of gangs required.

MEDICAL: Necessary for Agents to receive advance notice of required medical attention, informing Agent if doctor should meet upon ship's arrival, if ambulance is required for transport to hospital and promptness required. No special vaccination/fever certificates necessary. Hospital at Nykoping, about 8 miles from Oxelosund.

TANKERS: One tanker berth, depth at quay 45 ft. Connection to load/discharge lines, have diameter of 12 in. for products and 14 in. for heavy products. Almost all types of oils. No slop/residue/facilities.

DENSITY: 1006–1016, 75% fresh water. No tides.

FRESH WATER: Always available. Delivery through lines from quays at a rate of 10 t.p.h. Fresh water can also be delivered by tugs which have fresh-water tanks.

FUEL: All grades of heavy fuels can be delivered. At least one day's notice.

FIRE PRECAUTIONS: Watchman necessary loading/discharging gasoline.

GANGWAY/DECK WATCHMEN: When ship berthed, reliable gangway must be arranged to quay. Tankers discharging/loading gasoline must have watchmen, arranged through ship's Agent.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Usual international certificates. In order not to delay despatch, important that following certificates are available and valid: Measurement, Life-boat, Radio and Deratisation (not older than 6 months).

CUSTOMS ALLOWANCE: (Tobacco), each crew member permitted out of bond about 200 grams tobacco and 5 packets of cigarette-paper. (Wine and/or Spirits), each crew member is permitted to have out of bond 1 bottle spirits or 2 bottles of wine, if he is over 20.

CARGO GEAR: International certificates necessary. No additional requirements.

IDENTIFICATION CARDS: Not needed.

CONSULS: Denmark, Percy Tham AB, tel. 0155/30600; Finland, Percy Tham AB, tel. 0155/30600; Norway, Harbour Office, tel. 0155/31940.

REPAIRS: Minor repairs can be undertaken at workshop on No. 1 quay. Tel. 0155/30547.

DRY DOCKS: None.

REPATRIATION: Crew changes can be effected and necessary repatriation arranged by Agent.

AIRPORT: Arlanda 40.4 miles outside Stockholm. Distance Oxelosund–Stockholm 92.8 miles. Total distance 133.2 miles. Served by regular airlines.

TIME: GMT plus 1 hour. No alterations during year.

HOLIDAYS: General holidays on which no cargo work can be arranged: New Year's Day; Epiphany; Good Friday; Easter Monday; Labour Day; Ascension Day; Whit Monday; Midsummer Day; All Saints' Day; Christmas Day; Second Christmas Day.

On the following eves of holidays cargo work ceases for general cargoes at 1100 hrs. and for loading iron ore and for discharging coal, coke breeze, limestone and special ores at 1450 hrs. with maximum 2 hour's overtime to complete vessel: New Year's Eve; Whitsun Eve; Midsummer Eve; Christmas Eve.

POLICE/AMBULANCE/FIRE: Dial tel. 90 000 and ask for "Police-alarm", "Ambulance" or "Brandalarm" (Fire alarm).

TELEPHONES: Arrangements for placing telephones on board exist at berth Nos. 9.5 and 10. Cost for connection is charged per day.

SERVICES: Licensed compass adjuster. No tank-cleaning equipment or facilities for discharge of tank-washings.

SHORE LEAVE: No restrictions.

REGULATIONS: Ice-breaking dues equal to harbour dues are charged 21st December-20th March each year.

DELAYS: Normally no delays. Modern installations for loading and discharge.

AUTHORITY: Port is owned by Granges AB, Stockholm, and administered by the railway company, Granges TGOJ, Eskilstuna. Local Authority: Granges TGOJ, Harbour Office.

PITEA (Incl., Haraholmen, Pitsundet): 65.19 N. 21.29 E.

DOCUMENTS:
2 Crew Lists.
2 Lists Spirits and cigarettes.
Manifests and Bills of Lading of incoming cargoes to be presented to Customs.
1 Deratting Certificate.

PILOTAGE: Pilot to be taken at Gaasöeren-Skelleftea district. Must be ordered at least 5 hours prior arrival. All VHF channels used - also onboard pilot-boats. (Also see "Stockholm".)

Outward-bound vessels must order Pilot from Harbour Office during office hours.

Signal station at Pitsund.

ANCHORAGES: Accordance Pilots advice.
RESTRICTIONS: No entry in darkness to smaller ports in district.
MAX. SIZE: Max. size through Pitsundet draft up to 22 ft. Max. draft to Skuthamn 22 ft. and Pitea Town 17 ft. To Pitea max. d.w. about 3,000 tons. No tides. Also see "Berthing".
HEALTH: No special restrictions. Diseases must be reported to Customs before entering port.
RADIO: Stockholm Radio, Hornosand Radio. Radar and VHF on all stations. VHF also at signal station in Pitsundet – entrance to Pitea. Channel 16 only. Harbour Office, Channels 16 and 9.
TUGS: Tugs available if ordered beforehand. Tugs compulsory for larger vessels. Costs for three tugs about Skr 10,000.
BERTHING: At Pitea, larger vessels berth in daylight only.

Haraholmen: Quay recently completed, length 300 m., depth 12.5 m., max. draft 11.5 m. Quay is equipped with electricity, telephones, water and oil. Quay is very strong, capable of taking loads up to 250 tons. One place will be equipped for Roll-on/Roll-off vessels.

Harbour is specially built for all year round traffic. Four propeller engines are installed under the quay to keep water running and quay ice-free. Special lights are installed to assist in bad visibility.

Quay is equipped with 2 "*Asea*" cranes of 12.5 tons and 19.5 m. outreach.

STEVEDORES: Bottenvikens Stuveri AB – Pitea. Labour must be ordered latest at 1400 hrs. for morning start following day. Tariff available from Agents.
MEDICAL: All treatments available without notice.
TANKERS: Only one berth at Haraholmen. Max. draft 37 ft. 10 in. FW. No further restrictions. 3 tugs compulsory for vessels over 15,000 d.w.t.
FRESH WATER: Available by pipe and lorries.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Not necessary but available if ordered.
OPENING/CLOSING HATCHES: Normally done by ship's crew.
CUSTOMS ALLOWANCE: (Tobacco), 200 cig./man per week. (Wine and Spirit), 1 bottle man/week. Only crew members over 18.
IDENTIFICATION CARDS: Not needed.
CONSULS: None.
REPAIRS: All types of repairs can be effected.
DRY DOCKS: None.
AIRPORT: Regular flights 9 times per day. Kallax Airport at Lulea. Distance 50 km. from port. 60 minute flight to Stockholm.
TIME: GMT plus 1 hour. No alterations during year.
POLICE/AMBULANCE/FIRE: Tel. 90.000.
TELEPHONES: Facilities for placing on board available.
GENERAL: Masters to note the signals to be given before passing Pitsundet. Master must not forget that Pilot must be taken at Gaasoeren-Skelleftea district. If Pilot on bridge all way from Skelleftea to Pitea, a distance fee is charged. Piloting from Nygraan Lighthouse (entrance Pitea) only normal fee.
AUTHORITY: Hamnkontoret Pitea, Sjofartshuset-Haraholmen.

RONNEBY: 56.10 N. 15.17 E. (See Plan)

DOCUMENTS:
2 Number of Crew Lists.
2 Passenger Lists.
4 Customs Documents.
1 Health Documents.
2 Manifests.
1 Bill of Lading.

PILOTAGE: Pilot is taken at Karlshamn or Aspo (Karlskrona) pilot stations. Tel. Karlshamn 0454/14102, Aspo 0455/29016. Ordered over Karlskrona Radio on 3289 kHz or by VHF on Channel 16 (156.80 mc). Pilot should be ordered 5 hours in advance. (Also see "Stockholm").
ANCHORAGE: Open roads.
MAX. SIZE: Limited by depth in fairway: 20 ft. 9 in.
RADIO: Karlskrona Radio, 2182 kc/s.
VHF: VHF call sign Ronnebyhamn, Channel 16, 12, 13.
TUGS: None, when necessary such ordered from Karlsham or Karlskrona.
STEVEDORES: ETA given to ship's Agent sufficient.
MEDICAL: Medical attention required ordered from Agents.
TANKERS: Only small tankers with max. draft 20 ft. 6 in. 1×10 in. and 1×6 in. line. No facilities for residue discharge.
DENSITY: 1000. No tide.
FRESH WATER: From water post on quay.
FUEL: Diesel oil from tank-lorries.
OPENING/CLOSING HATCHES: Performed by crew.
CERTIFICATES:
Deratisation Certificate not over 6 months old.
Certificate of Nationality.
Certificate of Tonnage.

CUSTOMS ALLOWANCE: 200 cigarettes plus 1 bottle spirits out of bond.
IDENTIFICATION CARDS: Not needed.
CONSULS: Danish Consulate, tel. 0457/10675.
REPAIRS: Minor repairs only.
DRY DOCK: None.
AIRPORT: About 6 miles from Ronneby Harbour; daily flights to Malmo, Stockholm and Visby.
TIME: GMT plus 1 hour. Permanent.
POLICE/AMBULANCE/FIRE: Police 90000; Ambulance 90000; Fire 90000.
TELEPHONES: None available.
AUTHORITY: Ronneby Hamnstyrelse (Harbour Board).

SIKEA: 64.9 N. 20.59 E.

DOCUMENTS: See "Stockholm".
PILOTAGE: See "Umea/Holmsund". (Also see "Stockholm".)
ANCHORAGES: Port area about 700 × 450 m. Depths 18–27 ft. At wharf 15 ft.
MAX. SIZE: At roads all vessels draft less than 26 ft. At wharf 14.5 ft., but no longer than 60 m.
HEALTH: See "Stockholm".
RADIO: See "Umea/Holmsund".
TUGS: Tugs must be ordered from Holmsund.
STEVEDORES: Gangs have to be ordered day before loading/unloading – start, latest 1700 hrs.
TANKERS: No oil carriers call.
FRESH WATER: Available.
FUEL: All grades fuel oils. 24 hours notice required.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew.
SHIP CERTIFICATES: See "Stockholm".
CUSTOMS ALLOWANCE: Tobacco Wine and Spirits. See "Stockholm".
CARGO GEAR: No shore cranes in harbour.
IDENTIFICATION CARDS: Not needed.
CONSULS: No consuls.
REPAIRS: Only small repairs possible.
AIRPORT: Distance 55 km. Regular airlines, 5 flights a day.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: Easter; Whitsuntide; Midsummer; Christmas and New Year's Day; no service in port.
POLICE/AMBULANCE/FIRE: 90 000.
TELEPHONES: None available.
AUTHORITY: AB. J. A. Henriksson & Co. Umea Hamn, Holmsund.

SKELLEFTEHAMN: 64.41 N. 21.15 E.

DOCUMENTS:
2 Copies of Crew Lists (at Ronaskarsverken 3 copies).
1 List of Provisions.
Measure Bill.
Manifests and Bills of Lading.

PILOTAGE: Telegraphic address: "Pilot station. Skelleftehamn". Advance notice required, 5 hours. Contact pilot boat or pilot station on VHF Channel 16. Calling signal "Skelleftea Pilot" (pronounced – Shelleftео Pilot). Pilot motor boats usually orange. Pilot taken on board 2 miles East of Gasoren Lighthouse. (Also see "Stockholm".)
RESTRICTIONS: No tides or tidal current.
MAX. SIZE: Maximum permissible length of tanker 590 ft. in accordance to dredged basins length.
HEALTH: In case of disease or suspected disease, ship should call for medical assistance in common Swedish order.
RADIO: Stockholm Radio or Harnosand Radio. When in reach of VHF station of harbour office, at 0830–1200 hrs. and 1300–1700 hrs., or else through pilot station VHF. Call signals "Skelleftea Hamnradio" or "Skelleftea Pilot Station".
RADAR/VHF: Radar service available when entering or leaving port. Contact Pilot station (Channel 16).
TUGS: Normally meet at passage of Gasoren Lighthouse. Ship's lines should be used. Tug of 3,000 h.p. also acts as local icebreaker.
BERTHING: No special requirements. *Kage.* Depth in harbour at quay 23/20 ft.; length 609 ft. *Ronnskarsverken.* Southern quay (jetty), depth 30.5 ft.; length 394 ft. Northern quay, depth 42/19.4 ft. and length 1,814 ft. *Skelleftehamn.* North quay, depth 26/21 ft. and length of 1,300 ft. Oil Terminal, (jetty), depth 34 ft. and length 210 ft. with dredged basin of 656 ft. Orviken, depth of 12 ft. along a wooden wharf of a length of 200 ft. Siporex, quay depth 19.7 ft. and a length of 150 ft.

Ronnskarsverken. Northern quay, depth 42/19.4 ft. Bjuroklubb. Length 230 ft., depth 17.5 ft.

STEVEDORES: No stipulated ETA regulations.
MEDICAL: Available at short notice. Government hospital in town.
TANKERS: One tanker berth. Max. draft 33 ft. Diameter of discharge lines 8 in. Flanges Din 2633.
FRESH WATER: At oil terminal 25 t.p.h. Elsewhere 15 t.p.h. except at Ronnskarsverken, where fresh water delivered by road tanker.
FUEL: All usual grades available.
FIRE PRECAUTIONS: Standard.
DEVELOPMENTS: Planned to build jetty for drafts of about 42.5 ft.

GANGWAY/DECK WATCHMEN: Watchmen recommended.
OPENING/CLOSING HATCHES: Carried out by crew.
CERTIFICATES: See "Stockholm".
CUSTOMS ALLOWANCE: (Tobacco): 200 cigarettes. (Wine Spirits), 1 bottle of wine and 1 bottle of spirits.
CARGO GEAR: No additional requirements.
IDENTIFICATION CARDS: Not needed.
CONSULS: Denmark, Norway, Finland and Netherlands.
REPAIRS: Minor repairs only. Patent slip, max. size 1,000 tons displacement.
REPATRIATION: Every kind of facility for effecting changes of crew.
AIRPORT: 18 km. Regular airlines, 2 flights a day.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: New Year's Day; Good Friday; 1st and 2nd Day of Easter; Ascension Day; 1st and 2nd Day of Whitsuntide; 1 May; Midsummer Day; and 1st and 2nd Day of Christmas. Cargo work cannot be arranged.
POLICE/AMBULANCE/FIRE: 14070, 31080; 90000; 17200.
TELEPHONES: Available for placing on board at the Northern quay in Skelleftehamn.
GENERAL: All waste to be taken to special waste containers ashore.
SERVICE: Small amounts of tank-washings can be taken ashore. Compass adjusting carried out. Tug stationed in harbour.
DELAYS: In exceptionally bad weather.
AUTHORITY: Harbour Board of Skelleftea.

SKREDSVIK: 58.25 N. 11.30 E.

Oil-harbour in the Lysekil area.
DOCUMENTS:
3 Crew Lists, on Imco form.
1 Cargo Manifest.
1 Copy Bill(s) of Lading.
1 Stores List.
1 Personal Effects List.
Derat Certificate.
Tonnage Certificate.
Certificate of Registry.
PILOTAGE: Pilot station at Lysekil, tel. 0523/60800. VHF Channel 16. Five hours' notice of ETA required. Pilot vessel is an orange-coloured motor launch fitted with radar and VHF. International signals. Pilot boards between Gaeven and Tovas Ungar, about 6 miles West of Lysekil.
ANCHORAGE: Gullmarsfiord, South-East of Lysekil, depth about 60 m.
RESTRICTIONS: Draft not to be in excess of 40 ft. on passage from Pilot to Skredsvik.
TUGS: Have to be ordered either from Gothenburg or from Uddevalla.
MAX. SIZE: Length 700 ft. draft 36 ft. No limit on breadth.
FRESH WATER: Can be supplied from the pier.
FUEL: Can be supplied from the pier.
CUSTOMS ALLOWANCE: 200 cigarettes and 1 bottle spirits or wine per person per week.
IDENTIFICATION CARDS: Not required.
TELEPHONES: Police 0522/14920, or 0524/10068 and 90000; Ambulance and Fire 0522/10051, or 0524/10550 and 90000.
AIRPORT: Nearest at Gothenburg.
TIME: GMT plus 1 hour.
SHORE LEAVE: No restrictions, but photographing ashore is not permitted.
AUTHORITY: OE.E.F. Skredsvik.
AGENT: Ferm & Olsson AB. Post Box 66, 45300 Lysekil. Tel. nos. 0523/14060. Telex: 42080. Cables: "Fermson" Lysekil.

SLITE, Gotland Is.: 57.42 N. 18.50 E.

DOCUMENTS:
Crew Lists.
Customs Documents
Health Documents.
Bills of Lading.
Measurement Bill.
National Certificate.
Valid Derat Certificate.
All compulsory (also see "Stockholm".)
PILOTAGE: Service centralised to main station at Visby. Service day and night. Tel. 0498/10138. 5 hours notice required VHF Channel 16 (also see "Stockholm").
ANCHORAGE: Sheltered anchorage on Inner Road with up to 7 m. depth of water.
RESTRICTIONS: No restrictions. Entrance possible day and night.
MAX. SIZE: Draft not to exceed 21 ft. 6 in.
HEALTH: Restrictions only if fever on board or vessel coming from a port where disease or fever in existence.
RADIO/VHF: Tingstade Radio Station, call sign SAE, VHF see "Pilotage".
TUGS: No tug available.
BERTHING: No restrictions if due notice to Port Authority given.
STEVEDORES: Notice to be given latest noon on day before arrival, order to make start next morning (unless special arrangements or agreements made).
MEDICAL: Attention by doctors-in-charge. Central hospital at Visby.
TANKERS: Pipe-line connection flange 8 in.
FRESH WATER: Available alongside quay.
FUEL: Practically all grades bunker oil available subject prior notice.
GANGWAY/DECK WATCHMEN: Not compulsory but available.
OPENING/CLOSING HATCHES: Ship's crew to open or close.
CUSTOMS ALLOWANCE: Presently 200 cigarettes per head/week. Practically no spirits allowed out of bond.
IDENTITY CARDS: Seamen's book or passport if travelling outside port area.
CONSULS: No consul representations at Slite. Nearest consuls (for Denmark, Norway, Finland, West Germany) at Visby.
REPAIRS: Only minor repairs possible.
DRY DOCKS: None.
REPATRIATION: Good possibilities for changing crew.
AIRPORT: About 40 km. to Visby Airport.
TIME: GMT plus 1 hour. Permanent.
TELEPHONE: Alarm central tel. 90 000.
SERVICES: No services for tank-cleaning, tank washing, or compass adjusting.
SHORE LEAVE: Permitted.
AUTHORITY: Cementa AB.
AGENT: Atktiebolaget Rob. Myrsten, 620 30 Slite, Telex 4137 – A/S Myrsten. Cables: "Myrsten – Slite." Tel. 0498/20001/02/03. After hours 0498/20102/20021/20634.

SODERHAMN: (includes Stugsund, Langror oilberth and Sandarne factory berth) 61.18 N. 17.05 E. (See Plan)

DOCUMENTS:
2 Crew Lists.
3 Bills of Lading.
3 Manifests.
1 Tobacco List.
PILOTAGE: Pilot must have 5 hours notice. Telegraphic address "Soderhamn Pilot Station" Ljusne. VHF Channel 16 for calling pilot boat and pilot station (frequency 156.8 mHz). and 13 (frequency 156.656 mHz). Pilot boat is orange. International signals to be used. Vessels can normally receive Pilot between Hallgrund and Storjungfrun. In case of bad weather or ice, Master consults Pilot for advice (also see "Stockholm").
ANCHORAGE: Lilljungfru anchorage S.W. Lilljungfrun, where depths are 15–20 m., is W. or S.W. of Norrutharet. Branthalls anchorage W. Branthall isl., depths 10–15 m.
MAX. SIZE: Langror oil berth. Breadth of entrance fairway 55–60 m. and depth 8.5 m. at mean level. Max. ship length about 170 m. at the quay.
Sandarne. Breadth 30 m., depth 7.2 m. m.l. 55–60 m. in unlit fairway.
Stugsund. Breadth 30 m., depth 6.2 m. m.l.
Soderhamn. Breadth 10–15 m., depth 3.7 m. m.l.
Depth varies about 1 foot below and 1 foot above m.l. Breadth given at narrowest point in fairway.
HEALTH: No special action except for suspected disease. In case of disease contact Agent for information.
RADIO: Stockholm Radio when vessels come from South and Harnosand Radio from North. Within reach Master may call Soderhamn Port Radio. Tug station is Stugsund. Tug fitted VHF, Channels 16, 13, 12.

There is a radar station at Soderhamn. Pilot station, Ljusne, and some of the pilot boats are fitted with radar.
TUGS: Normally meet large vessels at Otterhallans Lighthouse and others off quays on request. Ship's lines to be used.
BERTHING: Boatmen can be ordered by Pilots or Agents. Large ships berth oil berth only in daylight because channel not lit.
STEVEDORES: Gangs to be ordered by Agent usually at 1500 hrs. for starting next morning at 0700 hrs.
MEDICAL: Medical attendant available day and night.
TANKERS: 6-in. or 8-in. connections. Only 1 berth and max. depth at quay 8.5 m.
DENSITY: Practically fresh water.
FRESH WATER: Available in all ports. Delivered through pipe-lines on wharf. Rate: 10 t.p.h.
FUEL: Any normally used grade on request to oil company with few hours' notice.
DEVELOPMENTS: A new quay at Langror berth for general cargo will be established in a few year's time.
GANGWAY/DECK WATCHMEN: Watchmen available.
OPENING/CLOSING HATCHES: Normally carried out by crew.
SHIP'S CERTIFICATES: Traffic permission (not necessary for ports within the custom district boundaries), Nationality and Reg. Certificate (or interim Nationality Certificate), Bill of Measurement, Swedish Sailor's Roll (only Swedish ships), Foreign Nation Crew Passport, Derat Certificate (6 month), Certificate of Health.

CUSTOMS ALLOWANCE: (Tobacco), out of bond, 200 cigarettes or 100 gr. tobacco and 100 cigarettes. (Wine/Spirits), out of bond, 1 bottle of spirits, 75 cl.
CARGO GEAR: Valid cargo gear certificates.
IDENTIFICATION CARDS: Not needed.
CONSULS: Danish, French and Dutch.
REPAIRS: Minor plate-work and welding can be carried out.
REPATRIATION: Facilities exist for effecting crew changes.
AIRPORT: Nearest international airport. Stockholm.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: No work on official holidays, but may be possible on special request. New Year's Day (1st January); Twelfth Day (6th January); Good Friday; Easter Sunday and Easter Monday; 1st May; Whit Sunday and Whit Monday; Midsummer Day; All Saints' Day; 25th December and 26th December; New Year's Eve; Easter Eve; Whitsun Eve; Midsummer Eve; Christmas Eve.
POLICE/AMBULANCE/FIRE: Police 90000 or 0270/10020; Ambulance 90000; and Fire 90000 or 0270/12249.
TELEPHONES: In Sandarne, quay telephones can be placed on board. 2 telephones.
GENERAL: There is a VHF port radio at the Port Office, Soderhamn. Working time 0800–1700 hrs. Channel 16 for call and working channel. During the ice-breaking season the tug may be out even at night. Tug has same channels. Soderhamn custom district includes only Stugsund. Illjungfrun Pilot also serves ports of Ala, Ljusne and Vallvik.
SERVICES: Facilities for discharge of tank-washings max. 20 tons. Tank-cleaning and facilities for discharge of tank-washings of great extent are Stockholm and Sundsvall. Compass adjusting in Stugsund berth.
REGULATIONS: Port regulations available from Agent or Port Office.
DELAYS: Fog, ice and bad weather may delay berthing. Rain and snow can delay loading and discharging of dry cargo.
AUTHORITY: Hamnforvaltningen.

SOLVESBORG: 56.03 N. 14.35 E. (See Plan)

DOCUMENTS: See "Stockholm".
PILOTAGE: Pilot station at Ahus, tel. 044/240027, needs 5 hours notice. Pilot station and pilot boat can be ordered by VHF Channel 16 (156, 80 mHz). Harbour office in Solvesborg can be called on same frequency. (Also see "Stockholm".)
ANCHORAGE: Roadstead to S. of harbour 25 ft. deep with good holding ground.
MAX. SIZE: Depth in outer harbour 8.2 m. (27 ft.) and in inner harbour 7.5 m. (25 ft.) Recommended for ships to have 1 ft. 6 in. of water under keel. Max. length 200 m. (656 ft.) Breadth 30 m. (98 ft.). Draft 7.7 m. (25 ft.) for vessel entering harbour. Largest ship to enter harbour was 20,000 tons oil tanker with load of 9,000 tons. That is, however, not the upper limit. Harbour entrance has bottom breadth of 65 m. (213 ft.).
HEALTH: See "Stockholm".
RADIO: Stockholm Radio and Gothenburg Radio.
VHF: Harbour Office can be reached by VHF, Channel 16 (156.80 mHz). Working frequency Channel 14 (15.70 mHz).
TUGS: Available. Ordered through Agent or directly to Harbour Office.
BERTHING: *Roll-on/Roll-off Quay:* Depth in Roll-on/Roll-off harbour 6.0 m. (19.69 ft.).
STEVEDORES: Need notice before 1500 hrs. if loading/discharging shall start at 0730 hrs. following morning, or notice before 1000 hrs. if loading/discharging shall start 1300 hrs. the same day.
TANKERS: 3 Shore-lines for oil products from oil jetty to depots. 1. 250 mm. for bunker C (2nd fuel); 2. 200 mm. for paraffin oil; 3. 200 mm. for petrol. For discharge coasters use ship's equipment. Bigger ships discharging bunker C oil use harbour's 8 in. rubber hose.
FRESH WATER: Fresh water available.
FUEL: Ordered from oil companies by ship's Agents.
GANGWAY/DECK WATCHMEN: Watchmen normally not needed. Can be ordered by ship's agents.
OPENING/CLOSING HATCHES: Normally opened/closed by crew.
SHIP CERTIFICATES: See "Stockholm".
CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes/week per head. Wine/spirit: normally 1 bottle/week.
IDENTIFICATION CARDS: Not needed.
CONSULS: Royal Danish Vice-Consulate. Railway Station Building. Tel. 0456/10115.
REPAIRS: Carried out by Solvesborgs Shipyard. Tel. 0456/10950.
DRY DOCKS: Dry dock in ship yard, 341 ft. long, 51 ft. wide at entrance, 14.5 ft. deep on sill HWOST.

Floating dock with 6,000 tons lift capacity, 476 ft. long 65 ft. wide and allows ship's draft to be 19 ft. (For ships up to about 10,000 d.w.t.).

REPATRIATION: No facilities.
AIRPORT: 50 km. to Kristianstad Airport and 60 km. to Ronneby Airport. Served by regular inland airlines.
TIME: Local time is GMT plus 1 hour. Permanent.
HOLIDAYS: See "Stockholm".
POLICE/AMBULANCE/FIRE: Dial 90 000 and ask for Police, Ambulance or Fire Department.
TELEPHONES: Telephones available in Agent's offices at quay and telephone boxes.
DELAYS: Normally no delays.
AUTHORITY: Chairman of the Harbour Board.

STENUNGSUND: 58.04 N. 11.49 E. (See Plan)

DOCUMENTS:
3 Crew Lists.
2 Passenger Lists.
1 Tobacco and/or Stores List.
1 Manifest.
1 List of Animals on Board (if any).
Access to the usual ship's papers (measurement, register, certificate, etc.).
If away from Sweden more than 15 days: Bill of Health.
PILOTAGE: Pilots board West of Skallen Lighthouse outside Marstrand. Pilots will not take big ships during darkness. Those ships must anchor and await daylight. Calling for Pilot can be made in usual manner and on VHF, Channel 16. Give 24 hours notice of ETA through Agents. (Also see "Stockholm".)
ANCHORAGE: While awaiting berth vessels anchor outside harbour N.W. of jetty. Safe anchorages everywhere, but fairway South of Galteron Lighthouse has to be avoided.
RESTRICTIONS: Large vessels daylight entry only.
MAX. SIZE: 65,000 d.w.t. Draft at berth is only limit, 12.7 m. at North side, and 11 m. at South side of jetty at mean water level.
HEALTH: No special pratique necessary. If any disease or fever suspected on board, doctor must be called on arrival. Pratique automatically granted when entering from another port in Sweden.
RADIO: Gothenburg radio.
VHF: Channel 16.
TUGS: Tugs from Gothenburg will join at bridge South of harbour. Ship's lines always used.
MEDICAL: Doctors and dentists available at short notice. Hospitals situated at Uddevalla and Kungalv, ambulances at Stenungsund.
TANKERS: 8 in. hoses at jetty. At North side of jetty tankers berth starboard side to, and at South side port side to. 4-ton crane situated on jetty but ship's derrick also used for hoses.
FRESH WATER: Supplied by hose at a rate of 25 t.p.h.
FUEL: Only available by barge from other places (i.e. Gothenburg). Bunkering only during daylight. Can be ordered at short notice.
FIRE PRECAUTIONS: Normal.
GANGWAY/DECK WATCHMEN: Watchmen from ashore necessary when telephone connected.
CUSTOMS ALLOWANCE: 200 cigarettes. 1 bottle of spirits.
IDENTIFICATION CARDS: The gate is TV-guarded. Each crew member must carry a Passing Permission allowing passage of gate. Required number of permissions will be handed over to the Master by the Agent at ship's arrival.
CONSULS: None at Stenungsund, but at Gothenburg.
REPAIRS: Some minor repairs may be effected.
REPATRIATION: All facilities exist. Consuls at Gothenburg.
AIRPORT: Gothenburg 50 km. away. Regular airlines.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: Tankers load and discharge all year round.
TELEPHONES: Connected on board if required. Watchmen attend calls. Fireman and alarm on jetty during whole operation.
AUTHORITY: Statens Vattenfallsverk.

STOCKHOLM: 59.19 N. 18.03 E. (See Plan)

DOCUMENTS:
- *(a)* Crew List; normally 2 copies; for oil harbour at Loudden and Free Port, 3 copies.
- *(b)* Passenger List: regular passenger services 2 copies; cruise ships (lists for cruise ships must be sent in advance to Agent for forwarding to Immigration Authorities), 2 copies.
- *(c)* Customs Documents: Arrival report (form can be obtained on arrival), 4 copies.
- *(d)* Quarantine Certificate or Bill of Health: Deratisation Certificate not more than 6 months old to be shown. *Note:* Additional quarantine regulations may be imposed in special circumstances.
- *(e)* Manifest: 3 copies.
- *(f)* Bills of Lading: 1 copy of each. Liners may be subject to other regulations with regard to *(e)* and *(f)* above.
- *(g)* Ship's documents: Tonnage Certificate. Certificate of nationality.

PILOTAGE: *(Sweden general).* Applications for licensed Pilots should be made at least 5 hours before pilotage is due to commence. When making application specify name of vessel, tonnage, draft and destination. Also give estimated time for taking pilot on board and route. If this procedure not followed, the Maritime Service cannot guarantee to supply a Pilot without considerable delay to vessel.

Preferable make application by telephone, or by radio via a coastal station or by some other method direct to Pilot station nearest point where pilotage is to begin. Also possible request Pilot by VHF (ultra shortwave) telephone to any Maritime Service Pilot station, Pilot waiting point or lighthouse which is equipped with VHF.

The Maritime Service's network of permanent VHF telephone stations has been extended to give almost complete coverage of all pilot stations and waiting points and is also operative for a number of lighthouses. The radio stations can operate on different channels and are equipped for frequency modulation. During hours when pilot stations are open, a constant watch is kept on frequency 156.80 mc/s (Channel 16). This frequency should be used for all signals and replies – and for distress traffic. Outside these hours, normal traffic transmissions, i.e. applications for Pilots, etc. should be made on frequency of 156.65 mc/s (Channel 13) or on reserve operating frequency of 156.60 mc/s (Channel 12).

When making VHF telephone call, the type of call signal that should be sent is "Lotsarna (or pilot station) plus the name of the pilot station or the pilotage attendance".

	Arholma	*Sandhamn*	*Landsort*
Cable address	Furusund Pilot station	Stockholm Pilot station	Nynashamn Pilot station
Notice of arrival	5 hours	5 hours	5 hours
VHF Channels	6, 12, 13, 16	6, 12, 13, 16	6, 12, 13, 16
Description of pilot boat	Pilot boat on day duty flies international flag "H". Pilot boat on night duty carries lights conforming to International Regulations for Preventing Collisions at Sea, Rule No. 8.		
	33 ft. steel cutter painted red-orange	33 ft. steel cutter painted red-orange	40 ft. steel cutter painted red-orange
Calling Pilot:			
During daylight	Flag G	Flag G	Flag G
At night	International PT with morse lamp	International PT with morse lamp	International PT with morse lamp
Audible signal in reduced visibility	International PT with siren	International PT with siren	International PT with siren
	Pilot may be called by radio or VHF.		
	Arholm	*Sandham*	*Landsort*
Boarding point	At Bjorko outside outer Skerries, 2–3 n.m. N.W. or E. of Simpnasklubb	2 n.m. S.E. of Revengegrund light	2.5 n.m. S. of Oja
Anchorage for vessels awaiting Pilot	Near position stated above	Near position stated above	Near position stated above

ANCHORAGES:

	Arholma	*Sandhamn*	*Landsort*
(a) Prohibited anchorage	59° 30′ N. 19° 05′ E. 59° 45′ N. 19° 14′ E.	59° 17′ N. 18° 54′ E.	
(b) Suitable anchorages	2–4 n.m. N.N.W. of Simpnasklubb	2–4 n.m. E. and S. of Revengegrund	6–8 n.m. S.S.E. of Landsort
(c) Depth	33–38 fathoms	11–22 fathoms	11–16 fathoms

RESTRICTIONS: Very large passenger vessels and fully-loaded tankers of approx. 15,000 tons d.w.t. or over not allowed pass through Skerries during darkness. Via Landsort 40 ft. draft; via Sandhamn 36 ft. draft; via Simpnas 30 ft. draft.

Ships with gross tonnage exceeding 400 tons must proceed only with an Easterly course in Lindalssundet. Ships with gross tonnage exceeding 400 tons must not proceed through Kodjupet and Sandhamnssundet (between Sandon and Korso).

Tankers with gross tonnage exceeding 22,000 tons must be accompanied by a tug from the narrows at Dalaro and Sandhamn through the Archipelago to Stockholm and nearby ports.

Ships with a gross tonnage exceeding 400 tons, not using a Pilot, must be equipped with VHF telephone which must be continuously watched on Channel 16.

Ships with gross tonnage exceeding 1,000 tons must report entry to and exit out of the Archipelago as well as arrival to, and departure from the port, to the nearest manned pilot station.

Tankships with gross tonnage exceeding 1,200 tons carrying crude oil products, mineral oil and certain chemicals must have licensed Pilot in the passages Arholma-Stockholm; Soderhamn-Stockholm; Sandhamn-Stockholm; Landsort-Stockholm; Landsort-Nynashamn; Landsort-Sodertalje and in the Lake of Malaren.

MAX. SIZE: Via Sandhamn:
Overall length = approx. 820 ft.
Beam = ,, 100 ft.
Draft = ,, 36 ft.
Via Landsort:
Overall length = approx. 820 ft.
Beam = ,, 100 ft.
Draft = ,, 39 ft.
Via Simpnas:
Overall length = approx. 650 ft.
Beam = ,, 100 ft.
Draft = ,, 29 ft.
There are no tides.

Tankers:

Tanker Discharge Quay	*Max. safe draft*	*Max. Safe length*
Bergs Oil Harbour	38 ft. 00 in.	850 ft.
Flaxenvik	34 ft. 00 in.	600 ft.
Gashaga	32 ft. 06 in.–34 ft. 00 in.	600–675 ft.
Kvarnholmen	31 ft. 00 in.–37 ft. 06 in.	600 ft. No restrictions
Loudden	31 ft. 06 in.–37 ft. 04 in.	500 ft.–800 ft.
Rasta	37 ft. 06 in.	600 ft.
Stora Hoggarn	37 ft. 00 in.	700 ft.
Telegrafberget	38 ft. 00 in.	No restriction
Vartan	22 ft. 08 in.–34 ft. 00 in.	600 ft.–800 ft.

HEALTH: Vessels arriving from ports outside Europe must for inward clearance provide Customs Office with written declaration of freedom from infection. Further instructions will be issued by Customs Office where such a declaration cannot be given.

RADIO: Stockholm Radio, call sign: SDJ.

RADAR/VHF: All 3 pilot stations have radar for internal use. No harbour radar service. VHF Channels 16 and 12.

TUGS: Very large vessels may be met by tugs by special arrangement at pilot boarding point. Tugs available to special order to assist with berthing; the rendezvous usually near berth.

Rates: According to fixed tariff.

BRIDGES:

RULES CONCERNING VESSELS CROSSING SEALANE AT LIDINGO BRIDGE

In force as from 1st May 1970 until further notice. Movable part of Lidingo Bridge is opened after request for letting vessels pass through 5 minutes before full-and half-hour, in accordance with following table.

For vessels in regular traffic: Weekdays excepting day before Sunday or Holiday, 0555–0655 hrs., 0925–1125 hrs. and 1855–2055 hrs. Day before Sunday or Holiday, 0555–0655 hrs., 0925–1125 hrs. and 1555–2055 hrs.

For pleasure crafts not passing at same time as vessels in regular traffic: Weekdays excepting day before Sunday or Holiday, 0555–0655 hrs., 1025–1555 hrs. and 1955–2055 hrs. Day before Sunday or Holiday, 0555–0655 hrs. 0925–1125 hrs. and 1655–2055 hrs.

For all types of vessels: Sundays and Holidays, 0555–2055 hrs. If opening of bridge required between 2055–0555 hrs., application to be given to bridge watchman stating time for opening, latest 1700 hrs. previous evening.

HOURS FOR OPENING FOR MOVABLE ROAD BRIDGES OVER HAMMARBY SEALANE

Movable parts of road bridges over sealane of Hammarby opened on request for vessel unable freely to pass under the bridges, all through the year at regular hours.

BERTHING: Services of boatmen available any time day or night. *See Table overleaf.*

STEVEDORES: Stevedores available at 0700, 0930, 1100 and 1330 hrs., Stevedores required for 0700 hrs. must be booked previous day: otherwise can be booked for next starting time. A price list can be obtained from Stockholms Forenade Stuveriaktiebolag, Stockholm.

MEDICAL: Duty medical officer available all hours day or night. Tel. Stockholm 21 55 49, 11 83 31 or 20 30 91. Seamen admitted to hospital with note from Medical Officer for Seamen, but not necessary for emergency admissions. Valid certificates of vaccination must be produced. Any necessary vaccinations carried out by Medical Officer for Seamen.

TANKERS:

Tanker discharge quay	*Diameter of discharge pipe-lines in.*	*No. of tanker berths*	*Depth of water at quayside ft. in.*
Bergs oil harbour	12–20	1	40 0
Flaxenvik	12	1	36 0
Gashaga	6–12	2	34 6–36 0
Kvarnholmen	8–14	3	33 0–39 6
Loudden	6–12	4	33 6–39 4
Rasta	8–10	1	39 6
Stora Hoggarn	6–10	1	39 0
Telegrafberget	6–8	1	40 0
Vartan	8–10	4	25 0–35 6

DENSITY: Salt content of 0.5%. No variations.

FRESH WATER: Fresh water may be obtained from quayside as well as from water barges or tugs. 1,000 cu.ft. per hour can be delivered from quayside, but at Loudden max. 3,500 cu.ft. per hour can be delivered. Water supply capacity of tugs and waterboats varies up to max. of 1,750–5,250 cu.ft. per hour. Special delivery charges payable for delivery of water to tanker discharge quays outside Port area by water-boat.

FUEL: All grades bunker oil, lubricating oil, etc. can be supplied.

GANGWAY/DECK WATCHMEN: Not essential, but recommended for large tankers.

OPENING/CLOSING HATCHES: If opened and closed by stevedores, subject to extra fee.

CERTIFICATES:

Tonnage Certificate.
Certificate of Nationality.
Deratisation Certificate not more than 6 months old.
Ship's articles, crew list or similar document listing all persons signed on aboard.

CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes per person per week or 200 g. (7 oz.) of tobacco per person per week. Wine and/or spirit: One bottle of spirits per person per week, one bottle of wine per person per week.

CARGO GEAR: Cargo vessels carrying goods which constitute a fire or explosion hazard or other flammable or otherwise dangerous goods must notify Port Authorities in advance the nature and quantity of goods concerned. In certain cases a red flag or red light must be carried at mast head.

IDENTIFICATION CARDS: Passport or seaman's discharge book with photograph.

Principal Quays and harbours	*Berth Numbers*	*Length of quay feet*	*Depth of water at mean water 13 ft. from quay** ft. in.	– ft. in.	*Quay cranes*** Number	*Lifting capacity tons*	*Warehouses, sheds, etc.* Number	*Kind*	*Notes*
On Baltic									
Stadsgardshamnen	151–167	6,332	31 3	18 2	10	5.0–7.5	2 2 2 3	Custom-buildings Sheds Pass. Term Buildings Custom-buildings	
Skeppsbrohamnen	101–108	1,870	19 10	17 8					
Sodra Blasieholmshamnen		902	11 6						
Nybrohamnen	1–10	1,539	18 2	10 0					
Strandvagen	11–27	3,291	16 5	8 4					
Vartahamnen	500–507 509–511 515–526	6,827	35 9	21 5	12	3.0–10.0	1	Pass. Term. Bldg.	
Free Port Harbour	610–611 620–625 630–638 640–641 650–655	5,794	34 1	24 9	35	2.5–24.0	18 7 1	Sheds Warehouses Grain-silo building	Suction installation for 120 t.p.h.
Oil harbour at Loudden	701–710	3,346	39 0	29 2					Shore with 8 loading jetties and 1 pier
Norra Hammarbyhamnen	301–322	5,545	20 8	11 7	11 1	5.0–6.0 20.0	1 1	Custom-building Shed	 Fixed crane
Sodra Hammarbyhamnen	351–358 363–369	4,564	20 8	12 9	5	5.0–7.5			
Small wharves		1,407	29 2	8 2					
Total for installations on the Baltic-side		41,417			74				
On Lake Malar									
Riddarholmshamnen		230	13 3						
Norr Malarstrand	453–466	2,523	21 2	6 7			1	Shed	
Soder Malarstrand	10–21, 25–26	3,012	14 11	13 0	5	3.0–5.0			
Ballstahamnen		686	16 7	13 7					
Hornsbergsstrand		1,207	22 10	13 7	2	6.0			
Hasselbyverkskajen		948	23 2	13 4	1	8.0			Administered by the Energy Supply Authority
Small wharves and quays		2,231	22 10	9 8					
Total for installations on the Lake Malar-side		10,837			8				
Grand total		52,254			82				
Principal private quays and wharves									
On Baltic									
Inside and close to the Port of Stockholm area		4,840	42 4	12 2					
On Lake Malar									
Inside the Port of Stockholm area		4,305	22 10	13 3					

Water level		*Baltic* ft in.	*Lake Malar* ft. in.
High water highest observed	HHW	+2 0	+3 3
normal	MHW	+0 10	+1 10
Mean water	MW	−1 0	+1 0
Low water normal	MLW	−2 6	+0 6
lowest observed	LLW	−2 11	−0 4

* Different heights of the water refer to the Swedish State Measure Datum:

** Besides the quay cranes there are 3 pontoon cranes of 6–260 tons lifting capacity, the biggest one with own propelling machinery. The number of cranes is thus 85. In addition to these there are 12 cranes in private ownership.

CONSULS:

Algerian Embassy	211070, 214070, 214080
Argentinian Embassy	617710
Argentinian Consulate	202685
Australian Embassy	244660
Austrian Consulate-General	206864
Belgian Embassy	118958, 202699, 201496, 104895
Brazilian Embassy	631285, 623669
British Embassy	670140
Canadian Embassy	237920
Chilean Embassy	627690
Chinese People's Republic, Embassy of the	217539
Colombian Embassy	218489
Danish Embassy	231860
– Consulate and Visa Office	107480
Dominican Republic Consulate-General	104292
Ecuadorian Embassy and Consulate	100701
Finnish Embassy, Consulate and Passport Office	240270
French Embassy	630270
German Embassy (Federal Republic)	631380
Greek Embassy	608860, 617880 608860
Guatemalan Consulate	229920
Haitian Consulate-General	670300
Honduras Consulate, Republic of	247350
Hungarian People's Republic, Embassy of the	616762, 625675 636639
Icelandic Embassy	624016, 672753
Indian Embassy	113237, 113213
Indonesian Embassy	635470
Iranian Embassy and Consulate	627068, 627368
Iraqi Embassy	639110, 639120
Irish Embassy	618005, 617409
Israeli Embassy	635240
Italian Embassy	245805
Italian Consulate	610810, 619525
Japanese Embassy	630440
Jugoslav Embassy	218436, 212824
Korean Embassy	623000, 618650
Lebanese Consulate-General	244950
Liberian Embassy	621040
Luxemburg Consulate-General	229450
Mexican Embassy	616080
Netherlands Embassy	247180
Nicaraguan Consulate-General	234195
Norwegian Embassy	760620
Norwegian Consulate-General	103699
Pakistani Embassy	678741, 678742, 678743

Panamanian Consulate-General	469616
Paraguayan Consulate	204363
Peruvian Embassy	600885
Peruvian Consulate-General	600886
Polish Embassy	114132
Polish Consulate-General	116374
Portuguese Embassy	626028
Portuguese Consulate	634555
Rumanian Embassy	108603, 205674
Singapore, Republic of	637488
South African Legation	243950
Spanish Embassy	625494, 616005
Swiss Embassy	231550, 217270
Tanzanian Embassy	244870
Thai Embassy	678090, 672160
Thai Consulate-General	220500
Tunisian Embassy	236470
Turkish Embassy	608066
Turkish Consular Department	672960
Union of Socialist Soviet Republics, Embassy of the	130440
– Consular Department	533732, 208632
United Arab Republic, Embassy of the	629603, 629687
United States Embassy	630520
Consular Section	230590
Uruguayan Embassy	603196, 603197
Venezuelan Embassy	110996, 110997

REPAIRS: All types of deck and machinery repairs can be carried out.

DRY DOCKS: Gustav V Dock, length 598 ft., width 79 ft., depth 31 ft. Also 3 other dry docks and 5 floating docks.

REPATRIATION: Crewmen may be signed-on and paid-off. Whether paid-off crewmen will be allowed to remain in the country and seek new employment, depends on existing bilateral agreements between countries. Generally, only a citizen of a Scandinavian country may seek work in Sweden without a special labour permit.

AIRPORT: Arlanda, approx. 22 miles from central Stockholm. Served by regular airlines.

TIME: GMT plus 1 hour. Unchanged throughout year.

HOLIDAYS: New Year's Day (January 1st); Epiphany (January 6th); Good Friday (variable Friday in March/April); Easter Monday (variable Monday in March/April); May 1st; Ascension Day (variable Thursday in May/June); Whit Monday (variable Monday in May/June); Midsummer Day (variable Saturday in June); All Saint's Day (first Saturday in November); Christmas Day (December 25th); Boxing Day (December 26th). No work is normally done on these days.

POLICE/AMBULANCE/FIRE: Tel. 90 000.

TELEPHONES: Ship-to-shore telephone connections can be provided at most quays.

GENERAL: Degaussing station available.

SERVICES: Electric current can be laid on at some quays. Port has a special barge for collection of oil residues. Licensed compass adjusters available.

SHORE LEAVE: No restrictions.

DELAYS: Occasionally shortage of stevedores. Some delay may be caused by ice, but port kept permanently open by ice-breakers.

AUTHORITY: Stockholms Hamn.

STORUGNS, Gotland Is.: 57.50 N. 18.48 E. (See Plan)

Situated on Eastside of Bay of Kappelshamn on the North coast of Gotland.

DOCUMENTS:

Vessels arriving from foreign ports shall have the following documents:

1 Crew Manifest.
1 Stores List.
3 Crew Lists.
Tonnage Certificate.
Certificate of Nationality.
Declaration of Health (Deratisation Cert.), not older than 6 months. Not applicable to vessels from Scandinavian ports.

NOTICE OF ARRIVAL: On which the loading turn number is based, should be given when the vessel has passed Lat. 57° 52′ N. The notice can be given by VHF (Storugns harbour radio) or by telephone 0498/27160 (outside normal working hours by telephone only).

Vessels may not berth without permission of the Company.

PILOTAGE: Pilot who boards in the outer approaches and should be ordered at least 5 hours in advance by tel. 0498/27010 or 10138. Pilots keep watch on VHF Channel 16.

ANCHORAGE: With good holding ground. Vessels waiting in the roads should keep watch on VHF Channel 16 during ordinary harbour working hours.

Ships lying in the roads shall anchor so that in-going and outgoing vessels can pass without hinderance or risk. Anchoring in Kappelshamnsviken in the area between Lat. 57° 51′ N. and an E.W. line 200 m. South of the quay's Southernmost point is prohibited unless permission is obtained from the Company.

RESTRICTIONS: The harbour can be entered at all times regardless of wind direction except during strong Northerly winds.

The bay is normally ice-free. During exceptionally cold spells with Northerly winds traffic may be temporarily stopped or hindered by ice-floes.

MAX. SIZE: Depth at entrance and at quay 10 m. Vessels up to 20,000 tons have loaded to full draft. Max. draft 9.2 m.

HEALTH: No restrictions provided no disease or fever on board and vessel not arriving from port where disease or fever in existence.

RADIO: 96 and 24 hours before vessel's ETA preliminary notice must be given to the Company. Changes of ETA exceeding 10% of the remaining time must be reported. It is, however, not necessary to report changes of less than 1 hour. The Company may under special circumstances waive the obligation to give 96-hour notice.

On the arrival of a vessel in the harbour area notice of arrival must be given either in writing, by telephone 0498/27160 or by VHF radio. In respect of notice of arrival the harbour area is Kappelshamnsviken South of Lat. 57° 52′ N. If a vessel, owing to bad weather or for any other reason cannot safely lie within the harbour area, the Company may accept notice of arrival from vessel North of above mentioned latitude. At night (from 2230 to 0530 hrs.) notice of arrival can be given by telephone only (automatic answering service).

Between 0500 and 2230 hrs. vessels waiting in the roads shall keep watch on VHF radio or, if the vessel is not equipped with such, on the ordinary radio.

Coastal Radio Stations: Stockholm Radio and Tingstade Radio (Tingstade Radio, radio telegrams only).

VHF: Storugns Harbour Radio VHF Channels 16 and 9.

TUGS: Not available on the island of Gotland.

BERTHING: The harbour which is situated on the Eastern side of Kappelhamsviken is intended solely for the loading of limestone which is obtained from the nearby quarry. The Gotland limestone which is of high purity and has a very low percentage of impurities is used in cellulose, sugar, metallurgic and chemical industries, and in iron production.

The limestone is delivered in 11 different grades. The density is 2.5/2.6 tons/cu. m.

The stowage factor varies between 17 and 26 (17–18 for grades 0–3 mm., 23–26 for grades between 3 and 120 mm., and 20–24 for grades above 120 mm.).

Quay		*Length*		*Depth*
Quay 1	outside	140 m.	outside	9.5 m.
	inside	120 m.	inside	7.0 m.
Quay 2		48 m. (no loading)		5.0 m.
Quay 3		110 m.	outer	7.0 m.
			inner	6.0 m.

Boatmen: Vessels with Pilots on board need not order boatmen. Other vessels should contact the Company well in advance. During night time boatmen can be obtained by contacting Securitas; tel. 0498/19000 not later than 2 hours before ETA.

BULK HANDLING FACILITIES: The loading elevators are movable along their respective quays. The capacity on Quay 1 is about 500–600 t.p.h and on Quay 3 about 300–350 t.p.h.

Cleaning of holds, discharging of ballast and opening of hatches shall be carried out in sufficient time to avoid delays in loading. The loading should be so planned that shifting of the vessel and loading elevators can be avoided as far as possible.

STEVEDORES: Normal working hours are Monday–Friday 0530-2230 hrs. Overtime working to complete loading is available to a limited degree, as is loading on Saturdays and Sundays. Vessels requiring overtime loading Sat./Sun. must give notice not later than Friday 1100 hrs.

During ordinary working hours vessels are loaded by turn. The turn is based upon the time of notice of arrival.

MEDICAL: Central hospital at Visby.

FRESH WATER: Not available.

FUEL: Most grades available from Visby subject prior notice.

GANGWAY/DECK WATCHMEN: Not compulsory but available.

OPENING/CLOSING HATCHES: Ship's crew open and close.

CUSTOMS ALLOWANCE: Presently 200 cigarettes per head/week. Practically no spirit allowed out of bond.

IDENTIFICATION CARDS: Seamen's book or passport if travelling outside port area.

CONSULS: Nearest consuls (for Denmark, Norway, Finland, West Germany) at Visby.

REPAIRS: Only minor repairs possible.

DRY DOCKS: None.

REPATRIATION: Good possibilities for changing crew.

AIRPORT: Visby.

TIME: GMT plus 1 hour. Permanent.

SHORE LEAVE: Permitted.

POLICE/AMBULANCE/FIRE: Dial 90 000.

AUTHORITY: Cementa AB.

STROMSTAD: 58.56 N. 11.10 E.

DOCUMENTS/PILOTAGE: See "Stockholm".

ANCHORAGE: Available within port to vessels up to and including 3,000 d.w.t.

MAX. SIZE: Cargo ships (not tankers), max. 3,000 d.w.t.

BERTHING: No particular restrictions for berthing within the port.

FRESH WATER: Available.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Necessary.

OPENING/CLOSING HATCHES: Carried out by crew.

IDENTIFICATION CARDS: Needed.

CONSULS: Norwegian Consul: Karl Krohn, Adr: Karlsgatan 2.

REPAIRS: No repairs possible.

REPATRIATION: Facilities exist for effecting crew changes.

AIRPORT: Torslanda (Gothenburg). Distance: 200 km.

HOLIDAYS: Cargo work cannot be arranged on holidays.

POLICE/AMBULANCE/FIRE: Police 12530; Ambulance 90000 (ask for ambulance); Fire 11160.
TELEPHONES: Arrangements exist for placing telephones on board.
TIME: GMT plus 1 hour. Permanent.
DELAYS: No delays in load or discharge.
AUTHORITY: Hamnforvaltningen Stromstad.

SUNDSVALL: 62.25 N. 17.20 E.

DOCUMENTS:

Crew Lists 4.
Passenger Lists 4 (if passengers onboard only).
Crew Declaration on tobacco, liquer, Cigarettes and spirit etc.
Derat. Certificate.
Tonnage Certificate.
Register.
Swedish light dues.
Manifest and/or Bill of Lading.

PILOTAGE: Pilot station at Spikarna Southern point of Alno Island VHF Channel 16. For communication and instructions Channel 13.

Pilot boarding from pilot cutter 2.5 m. East of Gubben Lighthouse in position 62° 21′ N. 17° 40′ E.

Entrance passage Gubben Light – Spikarna Light – Draghallan Light all 14 m. deep.

ANCHORAGE: Between islands of Tjufholmen and Alno and also in Svartvik Bay.
MAX. SIZE: See "Berthing" and "Tankers".
RADIO: Cable Agents giving ETA, draft and Cash requirements either via Hernosand Radio SAH or Stockholm Radio SDJ. At least 24 hours notice required. Change in time to be given at least 5 hours before ETA pilot.
TUGS: Available, ordered by Agent. Compulsory at Sundsvall Oil terminal for Tankers of more than 10,000 d.w.t.
BERTHING: Around the clock berthing. No restrictions except draft. Following drafts accepted in Sundsvall and adjacent ports.

	max. draft	
Soraker	20 ft.	
Ostrand Salt Berth	19 ft.	
Tunadal Sawmill	17 ft	
Tunadal	32 ft	under Sundsvall Port Auth.
Sundsvall	16-27 ft.	
Kubikenborg	33 ft.	

TANKERS:

	max. draft
Ostrand	23 ft.
Vindskarsudde	37 ft.
Ortviken	31 ft.
Svartvik	29 ft.
Vivstavarf	29 ft.
Essvik	21 ft.
N. Nyhamn	19 ft.

MEDICAL: First class medical attention and dental care available.
STEVEDORING:

Ordinary working hours Monday-Friday 0700-1600 hrs.

5 hours overtime may be worked to complete cargo. Saturdays 0700-1530 hrs. minimum of 5 hours at double time. Two hours may be worked to complete cargo.

CRANES: 5 shore cranes available capacity 5-10 ton. Heavy lifts handled by mobile cranes.
CUSTOMS ALLOWANCE: See "Stockholm".
DENSITY: Fresh water or very close to Fresh water.
FRESH WATER: Supplied at all berths.
FUEL: All grades delivered. Notice must be given in good time, since these installations normally close down weekends.
SHIP WATCHMEN AND SHIP'S TELEPHONE: Available. Compulsory at Oil terminals only.
CONSULS: Finland, Norway, Denmark, Germany, Great Britain, Holland, Belgium, France, Iceland.
REPAIRS: Most repairs possible through local repair shops.
DRY DOCKS: Lunde Varv outside Kramfors.
AIRPORT: International airport 22 km. outside Town. Good facilities to effect repatriation.
TIME: GMT plus 1 hour permanent.
HOLIDAYS: See "Stockholm".
POLICE/AMBULANCE/FIRE: Dial 90 000.
GENERAL: *Dangerous Cargo:* Ships carrying dangerous cargo must notify Port authorities in advance of nature, quantity and Imco code number of goods concerned.
Wintertime: Ice-breaker service available if needed. Wintertime November to April.
AUTHORITY: Sundsvalls Hamnforvaltning.

TRELLEBORG: 55.21 N. 13.09 E.

DOCUMENTS: See "Stockholm".
PILOTAGE: Available day and night. Meet inward-bound ships on roads with motor boat. Outward-bound Pilot obtained from pilot station of Trelleborg. Tel. 10141. Pilots also attend warpings and hawser-moorings. Pilot boats provided with short-wave radio telephone, and in pilot station an up-to-date radar set is installed. Also see "Stockholm".
ANCHORAGE: Recommended West of entrance fairway between fairway buoy and No. 1 light buoy. Depth varies from 23 ft. to 46 ft. Anchor ground good – clay and sand.
RESTRICTIONS: Entrance a straight, perch-buoyed fairway of about 5,415 ft. length, having measured depth of 28 ft., and a bottom width of 328 ft. Distance between moles 282 ft.
HEALTH: See "Stockholm".
TUGS: Tug-boats can be promptly obtained from Malmo.
BERTHING: New Harbour has depth of 26 ft. with quay on Northern side of basin. It is 1,640 ft. long and served by two bridges cranes and one gantry cranes. Western harbour basin has depth of 23 ft. in Western and Northern part and 26 ft. in Eastern part. Eastern harbour basin has depth of 21 ft. in Eastern and Northern part and 26 ft. in Western part. Oil quay 230 ft. long has depth at quay of 26 ft. is situated on Southern side of New Harbour. Tankers of max. length 570 ft. can approach this quay. From oil harbour area direct importation of oils is made to Svenska Fina, Statens Jarnvagar (the Swedish State's Railway Company), the Trelleborgs Gummifabriks AB (Trelleborg Rubber Factory Ltd.). Five berths equipped for Ro/Ro traffic.
STEVEDORES: Available (tel. 112 66,112 69).
FRESH WATER: Available on all quays at request in Harbour Office.
FUEL: All grades bunker oils supplied at oil quay through direct pipe-line from sea depot. Order on phone Trelleborg 107 76. Bunker coal can be ordered.
REPAIRS: Available through private firms. Tel. Trelleborg 150 60, 109 66 or 124 50. Diver available.
TIME: GMT plus 1 hour. Permanent.
TELEPHONES: Ship's telephone available at oil quay, tel. 148 28, and at the Harbour Bridge, tel. 147 67. Order is made through Harbour Administration.
AUTHORITY: Trelleborgs Hamnforvaltning.

UDDEVALLA: 58.21 N. 11.56 E.

DOCUMENTS:

3 Crew lists.
3 Passenger Lists.
Health document. Derat. Certificate when ship arrives from abroad, except from Denmark, Norway and Finland.
3 Manifests.
2 copies of Bills of Lading.
Tonnage Certificate.
Nationality Certificate.
1 Crew effects Declaration.
2 Ships Stores Declaration.
1 Declaration of living animals (if any).

PILOTAGE: Pilotage at Marstrand. Address "Marstrand Pilotstation". Required ETA 5 hours. VHF 16 and 6. Pilot boat South of Pater Noster Lighthouse. (Also see "Stockholm".)
MAX. SIZE: Draft 11 m.
HEALTH: Cable to Agent and he will arrange with health authorities.
RADIO: SAG. Gothenburg Radio (Goteborg radio).
RADAR/VHF: No port radar service, VHF Channels 16 and 14.
TUGS: 6 Tugs up to 5,000 h.p. available. Can be ordered through Pilot or Agent.
BERTHING: Depths alongside (at M.W.) as follows:

	Depth
Skeppsholm Quay	10.5 m.
Bado Quay	7.0–9.5 m.
Bave Quay	7.0 m.
Skans Quay	5.5 m.
Thule Quay	4.5 m.
Juno Quay	7.0 m.

CARGO-HANDLING FACILITIES:
Skeppsholmspiren: 5 electric cranes of 12 to 25 tons capacity. This berth is especially constructed to handle the loading/unloading of bulk cargoes ore, coal, coke, scrap iron etc. Very large storage areas. 1 berth equipped for Ro/Ro traffic.

Grain Cargoes: 2 silos owned by private companies.

STEVEDORES: Arranged by Agent.
TANKERS: Draft in the Skeppsviken Oilport, 11 m.; at the Bado Oilport, 9.5 m.
FRESH WATER: Available at all quays.
FUEL: All grades available.
FIRE PRECAUTIONS: Watchmen necessary when loading or discharging oils in pipe-lines.
GANGWAY/DECK WATCHMAN: There are watchmen available.
OPENING/CLOSING HATCHES: Preferably by crew. Can be arranged by stevedores.
CERTIFICATES: Tonnage Certificate, Nationality Certificate; Derat Certificate.
CUSTOMS ALLOWANCE: 200 cigarettes and 1 bottle of spirits for each man as a normal quantity. Possible to be increased for Master.
IDENTIFICATION CARDS: Not required.
CONSULS:

Danish	Tel. 151 91	Norway	tel. 910 00
Finland	,, 161 00	Holland	,, 168 60
	388 60		168 90
West Germany	,, 360 00		

REPAIRS: Facilities available.
DRY DOCKS: Dock for 20,000 d.w.t.
REPATRIATION: In accordance with instructions of Consul.
AIRPORT: Gothenburg, 100 km.
TIME: GMT plus 1 hour. Permanent.

POLICE/AMBULANCE/FIRE: Police, 90 000; Ambulance, 90 000; Fire 90 000.
TELEPHONES: Available for placing on board.
SERVICES: Compass adjusters and Ship's chandler available.
SHORE LEAVE: No restrictions.
AUTHORITY: Harbour Manager, Port Authority of Uddevalla.
AGENT: Anders Smith Shipping AB, Bavebacksgatan 19, P.O. Box 31, S-451 01 Uddevalla 1. Telex: 42044 Smith S. Tel: 0522-36280, after hours Tel: 0522-13013. Cables: "Andsmith Uddevalla".

UMEA: 63.49 N. 20.16 E. (See Plan)

DOCUMENTS:
Ship's Documents:
Tonnage Certificate.
Certificate of Nationality.
Deratisation Certificate (not older than 6 months).
Supplied by Master on arrival:
1 copy of each Manifest.
1 copy of each Bill of Lading.
Supplied by Agent and signed by the Master on arrival from foreign ports:
1 Maritime Declaration of Health.
3 Crew Lists (one set).
2 Passenger Lists (one set).
1 Crew Effects Declaration.
2 Ship's Stores Declarations.
2 Cargo Declarations.
4 Reports of Arrival.
1 Declaration of Living Animals (if any) (supplied by the Customs Officer).
Furthermore on arrival from any port:
1 Report of Arrival, with double net tons, if applicable (Harbour Office).
1 Passenger List (if any in transit).
1 Crew List.
On departure to a Foreign Port:
5 Reports of Departure.

PILOTAGE: Umea Pilot Station: Bredskar. Tel. 090-45021 and 090-45544. Telegraphic address "Pilotstation Umea".

At least 5 hour's advance notice of ETA at Pilot station, stating time and Pilot station and destination, can be given over any Swedish coastal radio station or free of charge on VHF over any Swedish Pilot station and some lighthouses.

Pilot station and pilot boats fitted with VHF Channel 16 – calling and safety; Channel 13 – pilotage and traffic; Channel 12 – spare Channel.

All pilot boats orange with flag "H" and equipped with radar.

Boarding point, 63° 36.5′ N. 20° 25.5′ E., 0.5 nautical miles South of Vaktaren Lighthouse. In case of bad weather, in the fairway, closer to the Pilot station.

Anchorage for vessels awaiting Pilot: 63° 36′ N. 20° 28′ E., 1.5 nautical miles S.E.of Vaktaren Lighthouse. Depth 18 to 30 m.

ANCHORAGES: See "Pilotage".

Osterfjarden roadstead between Umea Uthamn and Obbola. Length about 2,800 m. and about 400 m. wide, midstream in River Umea. To the North and South of 63° 42.3′ N. 20° 21.0′ E. and with a depth of 12 to 22 m.

Anchorage is forbidden around position 63° 40.5′ N. 20° 20.0′ E. Cables and fresh water pipe-line on Osterfjarden roadstead passing East-West around Lat. 63° 42.5′ N.

RESTRICTIONS: Entry permitted during darkness, for tankers, not more than 13,000 d.w.t. and a max. draft of 7.62 m., and dry cargo vessels with a draft not exceeding 8.53 m.

During unsuitable weather conditions, according to the Pilot on duty.

Tankers exceeding 1,600 g.r.t. and with a cargo of mineral oil products and other dangerous cargoes, must take a Pilot.

MAX. SIZE: Max. depth and max. permissible draft (at MW) in the fairway as follows:

The fairway to:	*Maximum draft metres*
Ferry Station No. 1-2	7.5
Ferry Station No. 3 Oil Berth	10.2
Stormskar Berth No. 1-10 and Obbla	10.2
Holmsund Oil Jetty	5.5
Umea Inner Harbour and Gimonas Oil Jetty	3.0

No tide.

HEALTH: Free pratique automatically for ships arriving from non-infected areas. In event of any suspected disease or fever on board notify the Agent, who will give necessary directions. It is possible to send a telegraphic message to "Sanitary Authority, Umea" containing state of health on board, in ordinary items or code. (Also see "Documents".)

RADIO: Harnosands Radio (SAH) on 2182 k/Hz or on VHF Channel 23-26 or 28 (depending on ship's position).

Port radio: Umea port radio keeps watch, Monday to Friday, 0830 to 1630 hours on VHF Channel 16. Working Channels 11 and 13. At other times Umea Pilot station. No port radar service, but Umea Pilot station and the pilot boats are equipped with VHF and can assist on request.

TUGS: Normally necessary only for larger tankers when berthing. Tugs join vessels just off the jetty. Ship's lines always used.

BERTHING: Depth alongside (at MW) as follows:

Umea Outport:	*Depth in metres*
Ferry Stations:	
No. 1 Hillskar	6.0
No. 2 Hillskar	7.0
No. 3 Truthallan	7.0
Oil Berth, Stormskar	11.0
Pilot Berth	5.3
South Quay, Berth Nos. 9 to 10	9.4
Pier Quay, Berth Nos. 7 to 8	9.0
Pier Quay, Berth No. 7	7.0
North Quay, Berth Nos. 2 to 6	7.0
North Quay, Berth Nos. 1 to 2	6.0

TANKERS: Oil berth at Umea Outport.

Stormskar, Depth 11 m. Reducing pieces for all diameters between 6 in. and 12 in. and all types of flanges available. One crane for handling hoses.

Obbala: Oil Jetty, depth 7.1 m. Max. draft with 1 timber raft between 6.7 m. Max. draft with 2 timber rafts between 7.1 m.

Holmsund: Oil Jetty, depth 5.5 m. Max. draft with 2 timber rafts between 4.57 m.

DENSITY: Nearly fresh water.

STEVEDORES: Holmsunds Stuveri AB. Tel. 090-40970. To be ordered before 1300 hrs. local time, day before gangs required. For work on Saturdays, Sundays, and holidays, special regulations.

Working hours: Monday–Friday 0600 to 1500 hrs., meal hour 1000 to 1100 hrs. Coffee breaks 0800–0810 hrs.; 1300–1310 hrs.

MEDICAL: All kinds of medical attention and hospital facilities available. Notify Agent as soon as possible.

FRESH WATER: Delivered from water posts in Umea Outport at Ferry Station No. 1, oil berth, Berth Nos. 1–10 and in Umea Inner Harbour.

FUEL: All kinds and grades of fuel oil available in Umea Outport. Bunkering at Berths 1–10 possible during normal loading or unloading from pipe-line. At ferry station Nos. 1 and 2 and the oil berth also bunkering from pipe-line. Fuel can also be delivered from lorries. Notice as soon as possible.

FIRE PRECAUTIONS: Security watchmen from port of Umea while alongside the oil berth. Alarm regulations in writing will be delivered on arrival.

GANGWAY/DECK WATCHMAN: Available but not compulsory except for tankers.

OPENING HATCHES: Can be done by stevedores if necessary, except patent hatches.

CUSTOMS ALLOWANCE: *Tobacco:* 200 cigarettes or 250 grammes of tobacco (7 ozs.)

Spirits and Wine: 1 bottle of each (75 centilitres), minimum age 21 years.

Above mentioned quantities are per crew member and per week in Sweden. After a week quantities are taken out after request to the Customs Office.

IDENTIFICATION CARDS: Not required. Seaman's book sufficient.
CONSULS: Following countries have representatives in Umea: Denmark, Finland, Netherland, Norway.
REPAIRS: Most deck and engine repairs.
REPATRIATION: Facilities exist for effecting crew changes and arranging repatriations.
AIRPORT: Umea, approx. 20 km. away, served by regular airlines.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: New Year's Day (1st Jan.); Twelfth Day (6th Jan.); Good Friday; Easter Monday; May Day (1st May); Whit-Sunday; Whit-Monday; Midsummer's Day (nearest Saturday to 24th June); All Saints' Day (1st Sat. in November); Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Alarm central 90-000 and ask for service required.
TELEPHONES: Available for placing on board at berths 1-10. and oil berth at Stormskar.
AUTHORITY: Port of Umea.

VALLVIK: 61.11 N. 17.10 E. (See Plan)

DOCUMENTS: See "Stockholm".
PILOTAGE: Pilot station at Lilljungfrun. For further information, see "Port of Soderhamn". (Also see "Stockholm".)
ANCHORAGE: *(a)* Ljusne bight sheltering for W., N. to N.E. winds, depths 6 to 8 fathoms. *(b)* North side of Storjungfrun island sheltering for S. to S.W. winds, depths 10 to 12 fathoms.
RESTRICTIONS: No direct restrictions. Ships of about 5,000 tons d.w.t. or more are recommended not to enter or leave the harbour in darkness (due to pilot and weather conditions).
MAX. SIZE: Maximum draft in fairway 25 ft. 6 in. Loading pier 650 ft., available on both sides (West side up to 320 ft. only) *Depths:* East side, from 28 ft. at the outer end to 18 ft. at the inner, with max. breadth 50 ft., breadths more than 50 ft. allow only 23 ft. 5 in. abreast of the pier. West side, from 28 ft. at the outer end to 20 ft. at the inner, max. breadth 50 ft.
HEALTH: No special action except if suspected disease. In that case contact Agent.
RADIO: Northward bound ships contact Stockholm Radio, Southward bound Harnosand Radio.
RADAR/VHF: No port radar service. There is a radar station at Lilljungfrun. Pilot station and some of the pilot boats are fitted with radar. Master may contact pilot by means of VHF Channel 16 (frequency 156.8 mHz) and 13 (frequency 156.656 mHz).
TUGS: Usually only needed when ships are leaving. Ship's lines always used.

BERTHING: Ship's Agent keeps contact with port authorities.
STEVEDORES: Agent arranges needed or available gangs according to the Shipmaster's wishes.
TANKERS: 10 in. diameter discharging hoses and pipe-line. Tanker berth at loading pier, 3 different connecting points.
FRESH WATER: Delivered by hose from quay. Rate about 8 t.p.h.
FUEL: Tanker lorries ordered through Agent, available with a few hours' notice.
GANGWAY/DECK WATCHMEN: Not necessary. If wanted, can be arranged.
OPENING/CLOSING HATCHES: Normally carried out by crew. Can be done by stevedores.
CARGO GEAR: Cargo gear certificates valid.
IDENTIFICATION CARDS: Not needed.
CONSULS: Danish, Dutch, and French Consuls in Soderhamn.
REPAIRS: Machinery repairs, plate-work and welding can be carried out to a certain extent.
DRY DOCKS: None.
REPATRIATION: Facilities for crew changes available.
AIRPORT: Nearest airport Arlanda, about 15 miles North of Stockholm.
TIME: Local time GMT plus 1 hour. Permanent.
HOLIDAYS: See "Soderhamn".
POLICE/AMBULANCE/FIRE: See "Soderhamn"
TELEPHONES: No arrangements for placing telephones on board. Telephone for ship's use, available in Harbourmaster's Office.
AUTHORITY: Hamnkontoret, Vallviks fabriker.

VARBERG: 57.07 N. 12.15 E. (See Plan)

DOCUMENTS:
Crew List.
Passenger List.
Maritime Declaration of Health (incl. Certificate of Derating).
Ship's Certificate of Registry.
Manifests and B/L copies.
PILOTAGE: Application for sea pilot through ship's Agent. Telephone to Pilot station 0340/10300. Pilot to board vessel on the road about 0.5 nautical miles off Varberg. (Also see "Stockholm".)
ANCHORAGE: On the roads 33 ft. depth.
RESTRICTIONS: No tide or other entry restrictions.
MAX. SIZE: Length 170 m., breadth 25 m., draft 23 ft. No tide.
HEALTH: Vessel to be kept in quarantine if disease on board suspected.
RADIO: Gothenburg Radio, SAG. VHF Channels 16 and 26.
TUGS: Tugs to be ordered 12 hours in advance.
STEVEDORES: Gangs to be ordered in advance through ship's Agent.
MEDICAL: Hospital facilities available. Desirable to give advance notice.
TANKERS: 1 tanker berth, max. draft 23 ft.
FRESH WATER: Available all docks 35 t.p.h.
FUEL: Fuel oil No. 1-5 available from tank trucks.
FIRE PRECAUTIONS: Oil No. 1 and petrol to be discharged under supervision of watchman.
DEVELOPMENTS: Planned increases of draft at the entrance to 9 m. = 29 ft. and in the harbour to 8 m. = 26 ft.
GANGWAY/DECK WATCHMEN: Recommended.
OPENING/CLOSING HATCHES: Generally done by stevedores.
CERTIFICATES: Certificates of Registry and Derating and also Crew List.
CUSTOMS ALLOWANCE: (Tobacco), 200 cigarettes per man. (Wine/Spirits), 1 bottle per man.
IDENTIFICATION CARDS: Not needed.
CONSULS:
Vice-Consul of Finland, tel. 0340/16000
Vice-Consul of Netherland, tel. 0340/16270
Vice-Consul of Denmark, tel. 0340/16190
REPAIRS: Only minor repairs.
REPATRIATION: Can be effected.
AIRPORT: Nearest airport with regular airlines, Torslanda/Gothenburg, 50 miles North Varberg.
TIME: Local time GMT plus 1 hour. Permanent.
HOLIDAYS: Principle Swedish Holidays – when no cargo work is obtainable: New Year's Day; Good Friday; Easter Day; 2nd Easter Day; Labour Day (May 1st); Whitsun Day; 2nd Whitsun Day; Midsummer Day; All Saint's Day (November); Christmas Day; 2nd Christmas Day.
POLICE/AMBULANCE/FIRE: Tel. 90 000.
TELEPHONES: Available on dock but not for placing on board.
AUTHORITY: Port Authority of Varberg, Hamnkontoret.

VASTERAS: 59.37 N. 16.33 E.

DOCUMENTS:
Ship's Register.
2 Crew Lists.
1 Tobacco List, signed by all hands on board.
1 Valid Deratting Certificate.
1 copy of Manifest or Bill of Lading for each Swedish port of call.
Light dues receipts, if on board.
PILOTAGE: Incoming ships receive Pilot from Landsort. Pilot ordered by VHF Channel 16 (= 165.80 m/c) or by RT. Pilot boats fitted with VHF. Give order 3 hours before Pilot required. Pilots meet ships about 2 nautical miles outside Landsort. Light and signals in accordance with the international rules. (Also see "Stockholm".)
ANCHORAGE: Within harbour area. Depth 9-10 m.
RESTRICTIONS: None. No tides.
MAX. SIZE: Vessels reach port through two deep navigable channels – through Soderjtalje Ship Channel or via Stockholm through Hammarby Ship Canal. Lowest depth of channels at average water level is 7.3 m. (24ft. 1 in.).
Sizes of Locks:

	Length	*Width*	*Depth*
Sodertalje	136 m.	20 m.	7.5 m.
Hammarby	115 m.	17.4 m.	7.0 m.

HEALTH: No special requirements or health documents, only valid deratting certificate. Disease or fever on board must be declared before entering port.
RADIO: Stockholm Radio.
VHF: The harbour office. VHF Channels 16 and 14. Monday-Friday 0800-1600 hrs.
TUGS: 1 tug for unberthing. Ship's lines.
BERTHING: *Deep Harbour:* 730 m. quay length, depth alongside 7.6 m. Roll-on/roll-off ramp. Two container handling cranes of 33 tons.
Old Harbour: 1,100 m. quay length, depth 4.5 m. to 7.6 m. Container handling cranes up to 210 tons.
Little River Harbour: Quay 120 m. length, 7.6 m. depth alongside.
Power Plant Harbour: Quay 200 m. length, 6.5 m. depth alongside.
Oil Harbour: Quay 125 m. length, 7.6 m. depth alongside.
BRIDGES: 4 bridges. All of them to be opened at passage except bridge at Sodertalje which closed from 1630 until 1830 hrs. weekdays and 1300-1500 hrs. Saturday or day before a holiday.
STEVEDORES: Stevedores for next working day ordered at least 1500 hrs. day before and ETA to be given in due time.
MEDICAL: Necessary service given by local hospital and private doctors. Vaccinations carried out.
FRESH WATER: Ordered through port administration.
FUEL: Bunkering of all grades of oil can be carried out at all quays from trucks.
FIRE PRECAUTIONS: Accordance harbour regulations.
DEVELOPMENT: Constant new development and extensions. Additional room for extension in old harbour, deep harbour and oil harbour.
GANGWAY/DECK WATCHMEN: Can be obtained from shorewatch companies at different rates for night/day work.
OPENING/CLOSING HATCHES: Crew. Can be carried out by stevedores.
CERTIFICATES: Measurement certificate and all gear test certificates required, if ships gear to be used.
CUSTOMS ALLOWANCE: (Tobacco), 200 cigarettes or 200 gr. tobacco. Additional allowance depending on expected stay in port and size of vessel. (Spirits), 1 bottle of 0.75 c.l. for each crew member over 21. Additional allowance on request.
IDENTIFICATION CARDS: None required.
CONSULS: Denmark, Finland and Norway.
REPAIRS: Most deck and engine repairs, as well as electrical.
DRY DOCKS: None.
REPATRIATION: Yes. Accommodation to be ordered in good time.
AIRPORT: Arlanda, 120 km. International lines.
TIME: GMT plus 1 hour.
HOLIDAYS: See "Stockholm".
POLICE/AMBULANCE/FIRE: Tel. 90000.
TELEPHONES: In oil and deep-water harbour, most quays fitted with telephones.
SERVICES: Compass adjusting. Small radio repairs by local radio men.
SHORE LEAVE: Crew can leave vessel after customs clearance and immigration control.
AUTHORITY: Vasteras Harbour Board.

VASTERVIK: 57.46 N. 16.38 E.

PILOTAGE: Pilot boards at Ido, available day and night.
BERTHING: *Outer Harbour:* Djuphamnskajen, length 200 m., depth 8 m.
Oil Quay: depth 8 m., equipped with 3 × 8 in. pipe-lines.
Ferry Harbour: quay length 100 m., depth 5.5 m.
Inner Harbour: quay length 900 m., depth alongside from 4 to 6 m.
Oil berth: depth alongside 6 m.
FRESH WATER: Can be obtained from all quays.
AUTHORITY: Vasterviks Hamn.

VISBY: 57.38 N 18.17 E. (See Plan)

DOCUMENTS: See "Stockholm".
PILOTAGE: Tel. 0498–10138 at 0600–2200, if possible five hours before arrival. Pilotage day or night. Embark/disembark outside port entrance. Radar–VHF on pilot station. (Also see "Stockholm".)
ANCHORAGE: Outside harbour, water depth 30 to 50 m. Clay bottom. No mooring buoys anywhere.
RESTRICTIONS: No tide in harbour. Currents outside harbour up to 4-5 knots running along coast. Prevailing winds, Summer time mostly S.W., Winter between N.W. and N.E. Harbour open to winds between S.W.-W., which with strong winds will make swell along the piers.
MAX. SIZE: Largest vessel, 2,500-3,000 d.w. Max. length about 100 m., turning in harbour.

TUGS: None available.
BERTHING: Four roll-on/roll-off berths. Oil Quay. Depth at all quays 5 to 6 m. No mooring buoys inside harbour. Prohibited anchor in inner basin.
BRIDGES: No bridges or overhead cables.
STEVEDORES: Working hours, Monday-Friday 0700-1700. Overtime possible.
FRESH WATER: Available.
FUEL: Coal, oil.
REPAIRS: Only small repairs are possible.
AUTHORITY: Visby Harbour Office.

WALLHAMN: 58.01 N. 11.42 E. (See Plan)

DOCUMENTS:
- 3 Crew Lists.
- 2 Passenger Lists.
- 1 Tobacco and/or Stores List.
- 1 Manifest.

PILOTAGE: Pilots board West of Skallen Lighthouse outside Marstrand. No pilotage of big ships during darkness. Big ships will have to anchor and await daylight. Address: "Marstrand Pilot Station", Tel. 0303-60004, VHF Channel 16. 24 hours' notice to be given through Agents.
ANCHORAGE: Whilst awaiting berth, vessels can anchor South of the entrance.
RESTRICTIONS: Large vessels entry only in daylight.
MAX. SIZE: About 50,000 d.w.t. Draft not to exceed 25 ft. (20 ft. at the inner quay for stone-loading).
HEALTH: No special action except for suspected disease, in which case Agent should be contacted for further information.
RADIO: Gothenburg Radio.
TUGS: Tugs from Gothenburg will join at entrance.
BERTHING: Two berths for roll-on/roll-off; 200 m. of quay for conventional handling; 50 m. of quay for loading of stone-products.
STEVEDORES: ETA given to Agents is sufficient.
MEDICAL: Doctors and dentists available at short notice. Nearest hospital in Kungaelv, 45 km.
FRESH WATER: Supplied from quay.
FUEL: Most grades of bunker oil available with short notice.
GANGWAY/DECK WATCHMEN: Available and recommended at least when connecting ship's telephone (0304-60383).
OPENING/CLOSING HATCHES: By crew or by stevedores.
CUSTOMS ALLOWANCE: 200 cigarettes, 1 bottle of spirits allowed each man.
IDENTIFICATION CARDS: Not necessary. Seamen's Book or Passports should be carried.
CONSULS: In Gothenburg, 55 km. away.
REPAIRS: Smaller repairs performed by own workshop. More complicated repairs by experts from Skaerhamn, 30 km. away.
REPATRIATION: All facilities available.
AIRPORT: Torslanda International Airport, Gothenburg, 55 km. away.
TIME: GMT plus 1 hour, all the year round.
HOLIDAYS: Stevedoring and clearance of vessels can be performed every day of the year, 24 hours' service.
TELEPHONE: Connected onboard if wanted.
POLICE/AMBULANCE/FIRE: Tel. 90 000.
SHORE LEAVE: No restrictions.
AUTHORITY: Wallhamn AB Port Authority.

AGENTS: Wallhamn AB – Roto Line, POB 103, S–444 01 Stenungsund, Sweden. Tel. 0304-60250. Telex 2429.

YSTAD: 55.26 N. 13.50 E. (See Plan)

DOCUMENTS: Crew List.
- Passenger List.
- Custom Documents.
- Manifests.
- Bills of Lading.
- Ship's Papers, etc.

PILOTAGE: Vessels approaching Ystad's Harbour must apply for Pilot at Trelleborg at least 5 hours before pilotage due to commence. Tel. 10141 or VHF (Channel 16), stating tonnage, draft and destination. VHF tel. call sign "Lotsarna plus name of pilot's station". (Also see "Stockholm".) Pilot boards at Ystad entrance buoy.
ANCHORAGE: Inner road: 0.5 n.m. S.W. harbour entrance, 7-9 m. depth; sand and clay. Outer road: 1.0 n.m. S.W. harbour entrance, 9-10 m. depth; sand and clay, good anchorage ground. The road is open for winds between S.S.W. Spanska redden: 1.5 n.m. S.W. to S. harbour entrance, 13-16 m. depth. The road is open for winds between S.E. to S.W.
MAX. SIZE: Largest fully loaded vessel that can enter harbour about 5,000 d.w.t.
RADIO: Goteborg and Stockholm.
VHF: 24 hour watch at Trelleborg pilot station on VHF Channel 16.
TUGS: Tug usually meets vessel about 1 mile S.S.W. harbour entrance. Ship's lines used. Tugs not compulsory.
BERTHING: Vessels of 160 m. length and 20 m. breadth can enter harbour. Draft 22 ft. at M.W.L.
STEVEDORES: Stevedores must be ordered from Ystads Stuveri AB. Working hours Monday-Friday 0700-1630 hrs. Meal intervals 0900-0930 and 1200-1300 hrs.
MEDICAL: Agents to be notified in advance if medical attention wanted.
TANKERS: Load/discharge lines 8 in. diameter, but reducing pieces for 6 in. and 10 in. diameter.
FRESH WATER: Available from quays. About 20 t.p.h.
FUEL: Coal and oil can be obtained by lorries.
GANGWAY/DECK WATCHMEN: Can be arranged.
OPENING/CLOSING HATCHES: Crew or stevedores.
CERTIFICATES: See "Stockholm".
CUSTOMS ALLOWANCE: (Tobacco), about 200 cigarettes or 200 gram of tobacco for each member of crew. (Spirits), one bottle for each member of crew.
CARGO GEAR: Loading/discharging with shore cranes and 5 roll-on/roll-off ramps.
IDENTIFICATION CARDS: Not needed.
CONSULS: Danish Consul, tel. 13800. Finnish Consul, tel. 13940. Norwegian Consul, tel. 13930.
REPAIRS: Mechanical workshop.
AIRPORT: 30 km. distant and served by regular airlines.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: Christmas; New Year; Easter; Whitsun and Midsummer. No cargo work.
POLICE/AMBULANCE/FIRE: Police tel. 13620; Ambulance and Fire 90000.
SHORE LEAVE: Permitted.
AUTHORITY: Ystads Hamnforvaltning.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Syrian Arab Republic

BANIAS: 35.14 N. 35.56 E.

PILOTAGE: Pilots board all tankers approaching the Terminals. These Pilots act in the same capacity as Mooring Masters in the berthing of vessels, after which they supervise the raising of the flexible hoses and their connection to the ship's manifold. During loading operation they act as the Company's Representatives. The Company's Mooring Masters will meet tankers in the vicinity of Marqab Light Buoy.

It is requested that tankers of 40,000 d.w.t. and over should have rigged, when in light condition, an accommodation ladder lowered to about 12 ft., above the water. This can be adjusted to suit conditions. A pilot ladder should be rigged immediately abaft the accommodation ladder, to within 2 ft. above the water. This will enable the Pilot to ascend the pilot ladder clear of the launch and then step on to the lower platform of the accommodation ladder. United Kingdom Merchant Shipping (Pilot Ladders) Rules 1965 is relevant.

APPROACHES: Vessels approaching the port should keep to the authorised passage, defined by the following co-ordinates:

(a) Lat. 35° 13′ 00″ N. Long. 35° 42′ 00″ E.
(b) Lat. 35° 13′ 00″ N. Long. 35° 56′ 00″ E.
(c) Lat. 35° 16′ 00″ N. Long. 35° 55′ 24″ E.
(d) Lat. 35° 16′ 00″ N. Long. 35° 40′ 34″ E.

ANCHORAGE: In the event of berth not being available, or suspension of mooring operations on arrival, a good anchorage is to be used South of the berths in the vicinity of the Marqab Light Buoy.

Shore control will advise expected time of berthing, etc. It is important to maintain a listening watch on Channel 16 VHF or visual on the shore signal station to avoid delays.

On being advised of expected berthing time Mooring Master will board.

The anchor should be hove short before his arrival.

MAX. SIZE: No. 2 Berth - draft 50 ft. Winter - 52 ft. Summer
No. 3 Berth - draft 51 ft. ,, - 53 ft. ,,
No. 4 Berth - draft 42 ft. ,, - 44 ft. ,,
No. 5 Berth - draft 34 ft.
No. 6 Berth - draft 40 ft. (This berth is used as a reserve).

NOTICE OF READINESS: Time of Notice of Readiness tendered will be considered when vessel arrives in the very near vicinity of the Marqab Light Buoy (position Lat. 35° 12′ 7″ N. Long. 35° 54′ 46″ E.), where the Mooring Master, who is the Company's Representative, will board and receive ship and remain on board throughout the entire operation.

HEALTH: Masters of tankers due may obtain free pratique by addressing the usual quarantine message to their Agents through commercial radio channels.

RADIO: Syrian Company for Oil Transport, Banias Terminal must be informed 48 hours prior to arrival of a vessel's ETA, quantity of cargo required if in a state to load and maximum loading rate required. All times to be given in GMT.

Banias Terminal Radio Station. Call sign: "YKM 5". Frequency: 500 kc/s and 442 kc/s and VHF Channel 16.

Tanker VHF Radio Communications. Vessels approaching Banias can communicate with the Terminal by FM, VHF, Channel 16. Range 30 to 40 miles. Frequency 156.8 Mc/s. Simplex Operation. Call sign: Banias. On arrival, ships radio installations will be sealed according to normal practice and the boarding Mooring Master will put his own portable equipment on board. Communications will then be as follows:

Banias. Equipment: Fixed station sited in the Terminal. Call sign: "Banias". Frequency: Transmitting 163.6 Mc/s. Receiving 159.1 Mc/s. Range: 8 miles. Watches: Continuous whilst vessels are in port or immediate vicinity.' Mobile Station. Equipment: Placed aboard vessel on arrival at Banias. Call sign: Ship's name. Frequency: Transmittting 159.1 Mc/s. Receiving 163.6 Mc/s. Range: 5 miles. Watches: Mutually agreed between ship and the Terminal on first establishing contact.

Note: The radio telephone circuit is connected with the main Company Communications network in Banias Terminal.

Communication with the Petroleum Company should be through the Agent.

It is essential that tankers bound Banias communicate with station ODC-8 at least 48 hours before arrival and thereafter maintain contact.

MOORING REQUIREMENTS: For tankers loading at Banias are as follows:

Forward

Anchors to be fitted with marker buoys with 20 fathoms of line.
2×120 fathom mooring lines.
2 rope stoppers.
1 suitable wire stopper (preferably carpenter patent) for use with 4.75 in. to 5.5 in. mooring lines.

Aft

4×120 fathom mooring lines.
4 rope stoppers.
2 suitable wire stoppers (preferably carpenter patent) for use with 4.75 in. to 5.5 in. mooring lines.

Boat Ropes

To be rigged on either side of ship, and of not less than 4.5 in. circumference.

BERTHING: At all berths vessels moor using both anchors forward, with wires to a buoy on the port bow, one buoy astern and one on each quarter. Hoses are lifted on the port side.

Berth No. 1:	Out of commission.	
Berth No. 2:	depth	56 ft., 2×20 in./16 in. hoses.
Berth No. 3:	,,	57 ft., 2×20 in./16 in. hoses.
Berth No. 4:	,,	48 ft., 2×16 in.,/12 in. hoses.
Berth No. 5:	,,	40 ft., 2×12 in. hoses.
Berth No. 6:	,,	46 ft., 2×12 in. hoses.

HOSES: A SWL of 7 tons is recommended. Must be capable of plumbing overside abreast of Loading Manifold.

Loading Manifold: Two suitable reducers already fitted and ready to be connected to terminals hose connection (12 in. series 150 flanges).

Two spanners 0.375 in. of non-sparking metal; two spanners 0.875 in. non-sparking metal; two hammers 7 lb. of non-sparking metal. One axe 2.5 lb. Four sets of hose clamps complete with bolts. Gaskets for the 12-in. hose connections. Four slings Terylene rope, 1.75 in. diameter, 9 ft. from end to end. Four stoppers Terylene rope, 1.75 in. diameter, 18 ft. long with one 12 in. eye at the end. Two stoplines Terylene rope, 2 in. diameter, 50 ft. long, complete with a hook, spliced at one end. Hook tested to 8 tons. Two Terylene ropes, 1.25 in. diameter, 120 ft. long, to be ready on stoppage loading. Two rubber mattresses to be used under stop-lines to protect them from chaffing.

Ship's crew with an officer in charge to assist all operations, as advised by the Mooring Master. This includes lifting, connecting, disconnecting, lowering of hoses and tending anchor cables and moorings.

FRESH WATER: Facilities are not available for the supply of potable or boiler water.

FUEL: Bunkers are not available at Banias.

BALLAST: All tankers should ensure ballast is clean. Authorities are most strict and impose heavy fines for the slightest contravention. Ballast quantity should be kept to the minimum required to ensure safe manoeuvring. No facilities for disposal of ballast ashore.

Banias is an open roadstead and sudden changes in weather can be experienced especially during the Winter months. It is good practice to commence loading as soon as hoses are connected and whilst ballast discharge is still in progress, always providing this can be achieved safely and with no danger of contamination.

POLLUTION: The Port Authorities will, in cases where pollution is ascertained, collect a declaration from the Master of the offending ship, in which declaration he authorises his Agents to pay any fine to be levied by the official committee in the future.

In the light of the above and to avoid any delay to vessels, owners are kindly requested to:

1. Supply vessels with necessary chemicals to destroy any quantity of oil overflowing into the sea.

2. Provide a bank guarantee of Stg. £5,000 to be deposited against eventual fines. Such a guarantee (or cash) must be given before offending vessel is released.

LOADING: Ships' Personnel are solely responsible for the loading operation, i.e. starting, loading rate, tank switching, topping off, stopping, etc. The Mooring Master will pass requirements to the shore control. It is in vessel's interest to advise loading rate required, also to give 30 minutes' notice of expected time of commencing loading. Order to start will be taken as final.

The Mooring Master must be advised when ship estimates 1,000 tons to go for completion of loading.

Ensure scuppers are effectively plugged. On no account are plugs to be removed.

A complete watch on deck must be maintained throughout the operation, especially towards the shore signal station, to ensure safe loading and avoid delays.

Loading Rates: No. 2, 7,000 t.p.h.; No. 3, 8,500 t.p.h.; No. 4, 6,500 t.p.h.; No. 5, 4,000 t.p.h.

REGULATIONS: *Vessel in berth:* Ships are not allowed to remain in berth for any reason when loading operation stopped. Hoses should be disconnected and dropped to sea unless stay authorised by Terminal Superintendent.

Lighting: During hours of darkness the manifold and poop mooring area of the sea in vicinity of ship should be adequately lit.

Main Engines: Must be kept on shore notice. Repairs which will immobilise must not be carried out in berth.

Deck Machinery: Must be ready for immediate use at all times.

Whistle or Siren: To be available at all times.

Signalling: An "Aldis" type lamp to be readily available.

Stores, provisions, etc: It is strictly forbidden for provisions, stores or other items to be received or discharged whilst loading is in progress. Launches or other craft must not lie alongside during the same period.

Tanker Safety Regulations: Tanker Safety Requirements must be strictly adhered to at all times. The Mooring Master is authorised to stop all operations should he consider the safety regulations are not being complied with.

Boarding: The boarding of a vessel whilst in mooring should be restricted to persons holding valid passes which are issued by the Syrian Company of Oil Transport (SCOT) on application to ship's Agents and authorised chandlers.

This restriction is carried out in conjunction with the Syrian Harbour and Security Authorities.

WEATHER: The Director of Port Authorities has issued statistics of the weather conditions along the Syrian coast after an experience of 20 years.

State of winds and whirlwinds on the Syrian Coast

Winter	*Kind and direction of winds*
December	Regular winds blowing from N.E. to S.E., sometimes S. to S.W., the alteration of winds is accompanied with rains.
January	Excess of storms starting to blow from S.E. to N.E. The alteration of winds from the E. is occasionally accompanied by heavy rains with probability of hail.
February	Excess of storms and heavy rains blowing from S.W. to N.E. and E.
Spring	
March	Variable winds from S.E. to S.W. and accompanied by heavy rains and altering to N.W. slight.
April	Variable winds from N.W. and S.W., and S. winds accompanied with light rains.
May	Regular winds blowing S.W. to N.W. and altering to S. sometimes accompanied by rain.
Summer	
June	Slight winds from S.W. and S.
July	Moderate winds from S. to S.W.
August	Slight N.W. winds.
Autumn	
September	Winds S.W. and N.W. accompanied by some rain from 15th September. Winds will lighten during the end of the day and will alter at night to slight E.
October	Variable winds from W. to S. and N.W. accompanied by rain will alter at night to E.
November	The winds are variable from N.E. and N.W. accompanied sometimes by rain which will alter to E.

SERVICES: In the event of tankers requiring assistance to lift loading hoses, recover lost anchors, and cables, etc., limited aid may be given during normal working hours. Current charges are available on application from Agent.

SHIPMASTER'S REPORT: Cigarette allowance is strictly enforced at 40 cig. per man, and has to be carefully declared. If the Chief Steward has a slop-chest, it has to be carefully declared. Whisky has to be declared separately from other spirits, but in practice it is better to declare each type of spirits separately.

The ship's Log Book is stamped by the police.

The new flag is red, white and black, with an eagle in the centre and may be obtained through the Agent.

AUTHORITY: Syrian Company for Oil Transport.

AGENT: Gulf Agency Co. (Syria) Ltd., P.O. Box 12, Banias, Syria. Cables "Gacship", Banias. Tel. 455. Telex 20906 Beirut or 216344 Athens.

LATTAKIA: 35.31 N. 35.46 E.

PORT LIMITS: The seaward boundary of the port is about 2 miles West of the main breakwater, starting with the entrance line of 133° South.

DOCUMENTS: In addition to the copies of Bills of Lading, Cargo Manifests and the various Ship's Certificates, the Master of an arriving vessel must produce the following documents:

- Crew List, showing full names of crew members, nationality, date of birth, and rank onboard.
- Stores List.
- Passengers List.
- Health Certificates and International Inoculation Certificates.
- All other documents relevant to the ship.

PILOTAGE: Upon a vessel's arrival at the anchorage area, she may call the Pilot in any of the following ways:

(a) Flying the internationally recognized flag.
(b) Blowing the ship's whistle – 2 long and 1 short.
(c) Calling the pilot station on VHF – Lattakia pilot station – using Channel 16.
(d) Signalling the pilot boat. – Grey colour hull and white colour bridge, always flying the Pilot's flag.

The Pilot boards an arriving vessel when she has reached a distance of about a few hundred metres West of the Breakwater Head under good weather conditions. When the weather is bad, an arriving vessel is directed to the port basin entrance by VHF. The Master is advised the proper directions to follow and when he is to lower the pilot ladder to the lee side.

ANCHORAGES: Upon arrival at the anchorage area referred to under "Port Limits", the vessel has to wait for orders. This Anchorage Area has a draft of 20–25 m., and all Masters awaiting there have to keep listening on VHF Channel 16, from 0600 until 0900 hrs. and from 1800 until 2100 hrs. local time, for fresh orders. It is always recommended to keep a special watch on VHF Channel 16, for sudden orders.

RESTRICTIONS: The state of tide at Lattakia is negligible, and all vessels may enter and sail out of the harbour by night or day provided she has a Pilot onboard.

MAX. SIZE: The maximum permissible length, breadth and draft of an arriving vessel are determined by the place of berth or anchorage point.

HEALTH: All arriving vessels are boarded by the quarantine service to whom all relevant documents are submitted, in particular the Deratisation Certificate, and incidents onboard reported.

The application is filed by the Agent, who accompanies the boarding authorities. Free pratique is never automatic.

RADIO: The name of the Lattakia station is "Lattakia Radio" on 2182 kc/s. or Channel 16 on the VHF. Following first contact another Channel is agreed upon, leaving Channel 16 for the pilotage service.

VHF: See "Radio".

TUGS: Tugs are always under the direct orders of the Pilot and join the vessel at the point the Pilot boards. Usually ship's lines are used but there is no charge for the use of the tug's lines.

BERTHING: Quay berths available as follows:

Name	*Length*	*Depth Alongside*
Main Quay	600 m.	9.50 m.
Silo Quay	180 m.	9.50 m.
Passenger Quay	160 m.	8.00 m.
Eastern Quay	250 m.	7.00 m.
Northern Quay	200 m.	4.00 m.

None of these quays is a specialized one. The water is always salty. Cargo is loaded or discharged either by the ship's gear or Port Co. Cranes, at the entire discretion of the latter. A ship may operate in the basin or open road in and from barges.

BULK CARGO FACILITIES: At the silo quay, grain and molasses are the only types of cargo which can be handled in bulk. Grain may be loaded into a vessel's holds at the rate of 450 t.p.h., and discharged at the rate of 50 t.p.h.

STEVEDORES: 24 hours ETA advice is required to arrange working gangs if vessel is scheduled to operate on arrival. The average loading and discharging rates vary with the type of vessel, nature of cargo, where berthing and whether working in lighters or not.

MEDICAL: Except for urgent cases on board, the Agent need not be notified in advance. Hospitals in town available, and likewise doctors and private clinics. No particular inoculations are required.

DENSITY: Salinity is 1.033 (33 grams Salt per cu.m.).

FRESH WATER: Supplied either from hydrants alongside main quay or from tank barge at a price of LS 1.00 per ton from hydrants and LS 2.50 per ton from tank barge.

FUEL: All types of known marine fuels are available, may be delivered in any quantity from cistern trucks alongside quay. 48 hours notice is required.

FIRE PRECAUTIONS: No specific precautions except that vessels carrying explosives must operate and discharge into lighters in the open road.

CONSULS: Sweden, Finland, Holland, Greece, Italy, Spain, Portugal.

REPAIRS: Only minor deck, radio, and radar repairs may be carried out. Extensive and specialised workshops are not available.

DRY DOCKS: Not available. Only a 900 ton slipway is in operation.

SURVEYORS: Only minor surveys by Lloyds, German Lloyds, and Veritas.

GANGWAY/DECK WATCHMEN: Compulsory and are supplied at a hire rate of LS 48.00 per watchman per day.

HATCHES: Normally opened and covered by the ship's crew.

CUSTOMS ALLOWANCE: Cigarettes, 2 packs per man. Spirits, as would be reasonably agreed with the Customs on board prior to sealing the vessel's stores.

CARGO GEAR: Both may be used at the entire discretion of the Lattakia Port Company. Two floating cranes are available – one of 100 ton capacity and the other of 35 ton. Also one mobile crane of 25 ton capacity.

REPATRIATION: All facilities exist and are attended to by the vessel's Agent.

AIRPORT: Damascus International airport is 340 km. from Lattakia by road.

TIME: Winter Time GMT plus 2 hours. Summer Time GMT plus 3 hours. (1st May through September).

HOLIDAYS: Following the Lunar Calendar, the first 2 days of Bayram and Al-Adha are the only non-operational days.

POLICE/AMBULANCE/FIRE: Police phone No. 93; Ambulance phone No. 93; Fire phone No. 91.

TELEPHONES: No proper arrangements exist. Vessels in port may use VHF Channel 16 with the pilot station of Lattakia Radio.

SHORE LEAVE: Crew members allowed ashore with shore passes.

IDENTIFICATION CARDS: Shore passes in addition to the seaman's book.

DELAYS: Vary with state of congestion prevailing in the port.

DEVELOPMENTS: The execution of the 2nd development stage has just started and it will cover the following new facilities:

Specialized container and Ro/Ro quays.

Draft	*Length*	
13.0 m.	260 m.	Containers
11.5 m.	190 m.	Containers
11.5 m.	200 m.	Ro/Ro
11.5 m.	350 m.	General Cargo
10.5 m.	425 m.	General Cargo
7.0 m.	450 m.	General Cargo

In addition there will be new warehouses and stacking areas totalling 230,000 sq.m.

AUTHORITY: General Manager, Lattakia Port Company, Lattakia, administered by the Syrian Ministry of Transport.

AGENT: Gulf Agency Co. (Syria) Ltd., POB 210, Lattakia, Syria. Cables "Gacship", Lattakia, Tel. 12214, 12670. Telex 20906 Beirut or 216344 Athens.

TARTOUS: 34.53 N. 35.45 E.

DOCUMENTS: Bill of Health – The usual International form should be filled in on arrival and the Agent will deliver on board the Bill of Health and Port Clearance upon departure.

Manifests – Should be certified by the Syrian Consulate at port of loading in 4 copies.

Ship's Registry – To be presented to the Port Authorities upon request.

Crew List – 4 copies should be handed over to the Agent along with passenger or transit manifests.

Store List – 2 copies required by Customs who will allow 40 cigarettes to be retained by each person on board, the balance of slop chest and stores shall be sealed during ship's stay in port. Customs officers are at liberty to search crew quarters.

Deratisation Certificate – Valid certificate required and no extension can be obtained.

APPROACHES: Vessels approaching the port should keep to the authorised passage defined by the following co-ordinates:

Lat. 34° 56′ 24″ N.	Long. 35° 38′ 00″ E.
Lat. 34° 56′ 24″ N.	Long. 35° 48′ 36″ E.
Lat. 34° 59′ 00″ N.	Long. 35° 50′ 00″ E.
Lat. 34° 59′ 00″ N.	Long. 35° 52′ 36″ E.
Lat. 34° 54′ 24″ N.	Long. 35° 51′ 12″ E.
Lat. 34° 54′ 24″ N.	Long. 35° 37′ 48″ E.

ANCHORAGE: Vessels proceeding to Tartous pick up Pilot at the Anchorage which is 0.5 miles S.W. of the main breakwater. The rocky bottom constitutes good holding ground with a depth of up to 20 m. of water.

MAX. SIZE: At present minimum depths are at the entrance of the harbour about 2 cables seaward of the green light on the S.W. Breakwater. Depth about 33 ft. Max. draft 32 ft. dependent on swell. *Tankers:* See below.

RADIO: Tartous Radio, call sign YKO, continuous watch on 2182 kHz from 0600 to 2400 hrs.

BERTHING: Mooring Masters are temporarily supplied by Lattakia port and vessels should therefore contact Agents at Lattakia giving them their ETA and requirements. Vessels berth heading to the predominant S.W. winds, i.e. stb. side alongside unless contrary winds prevail at the time of the berthing.

Southern breakwater – 2,650 m. long called Main breakwater
Northern breakwater – 1,650 m. long called Lee breakwater

The distance between the 2 heads of these breakwaters is 250 m. with a depth of 10.5 m., which is being dredged in order to bring it up to 13 m.

The harbour is divided into 3 basins which are protected by the 2 breakwaters: (1) The North basin; (2) The Middle basin; (3) The Southern basin. The Southern basin is the only one used presently, for the discharge of cargo.

12 vessels can be moored at anchor inside the breakwater of this basin, the depth being between 8–13 m. The turning circle at the entrance is 450 m. diameter with a depth of 11–13 m.

The main quay which is 150 m. wide offers on its Southern side from the shore side 300 m. of jetty with a depth alongside of 2–4 m., 300 m. with 8 m. and 200 m. with 9 to 10.5 m. depth. A standard gauge railway line is installed on the entire length of the quay.

POLLUTION: See "Banias".

TANKERS: *Operator:* Syrian Crude Oil Transportation Co.

Maximum safe length of tankers acceptable – 1,500 ft.
Maximum safe draft of tankers acceptable – 68 ft.
Maximum deadweight of tankers acceptable – 100,000 tons.

There are 2 berths for loading:

No.	*Max. Rate*	*Sealine*	*Hoses*	*Depth of Water*
1 (North)	4,000 t.p.h.	1×28 in.	2×12 in.	76 ft.
2 (South)	5,000 t.p.h.	2×28 in.	2×16 in.×12 in.	72 ft.

Loading is by gravity and loading rate depends upon height of tank and level of oil. All strings of hoses are fitted with 12 in. butterfly valves.

ETA: It is essential that tankers bound Tartous Terminal, S.A.R. communicate with "YKM – 5", at least 48 hours, prior to arrival, stating cargo required, maximum loading rate, SWL of derrick and confirming that the ballast is clean, and the last ETA Tartous Terminal.

Confirmation of ETA: Tartous Terminal control is equipped with Channel 16. Arriving ships should make contact at least 2 hours before ETA Tartous anchorage area. It is in vessel's interest to make contact to avoid delay on arrival. Vessels not equipped with Channel 16 should contact "YKO" Tartous Control on frequency 2182 – 2662.

Notice of Readiness: Notice of Readiness will be accepted when vessel arrives in the very near vicinity of the anchorage area (Position Lat. 34° 57′ N., Long. 35° 49′ 45″ E.) where the Mooring Master, who is Company's representative will board and receive vessel and remain on board throughout the entire operation.

Pilot Ladder: Combination of accommodation and pilot ladder to be rigged, accommodation ladder to be lowered to within 12 ft. of water. Pilot ladder to be placed abaft and to within 3 ft. of water.

Anchorage: In the event of berth not being available or suspension of mooring operations on arrival a good anchorage is to be used South of the berths in the vicinity of the anchorage area.

Shore Control will keep vessel advised of expected time of berthing, etc.

It is important and in the vessel's interest to maintain a listening watch on Channel 16 or a visual watch on the shore Signal Station, to avoid delays.

On being advised of expected time "Mooring Master will board", heave short anchor before his arrival.

Moorings:

Forward: Anchors to be fitted with marker buoys with 20 fathom of line. 2×120 fathom mooring lines; 2 rope stoppers; 1 suitable wire stopper (preferably carpenter patent) for use with 4.75 in. – 5.5 in. circ. mooring wires.

Aft: 4×120 fathom mooring lines; 4 rope stoppers; 2 suitable wire stoppers (preferably carpenter patent) for use with 4.75 in. – 5.5. in. circ. mooring wires.

Boat Ropes: To be rigged on either side of ship and of not less than 4.5 in. circ.

Derricks and Cranes: SWL of 7 tons is recommended. it must be capable of plumbing overside abreast of loading manifold.

Loading Manifold: 2 suitable reducers to be fitted prior to arrival on port side and to be connected to the Oil Company's hose connections (12 in. series 150 flanges). The following tools to be available: 2 spanners 0.375 in., 2 spanners 0.875 in., 2 hammers 7 lbs., 1 axe 2.5 lbs.

Hose hang-off bitts are required at about 10 ft. from the ship's rail at the loading manifold to secure submarine hoses on the port side.

Safety of Mooring: On completion of mooring operation vessel must have not less than 7.5 shackles of anchor chain in the water.

Ballast: No dirty ballast.

(a) The Port Authority is most strict and will impose heavy fines for any oil pollution of the sea. In addition they may order vessel out of the berth to sea to clean any such contaminated ballast, and keep it on board vessel in a separate or slop tank. N.O.R. will not be accepted until ballast becomes clean.

(b) Ensure ballast quantity on board is kept to a minimum to safe manoeuvre in the prevailing weather conditions.

(c) Excess ballast causes delay, Tartous is an open roadstead consequently sudden changes in weather can be experienced especially during the Winter months. It is good practice to commence loading as soon as hoses are connected and whilst ballast discharge is still in progress, always providing, this can be achieved safely and with no danger of contamination.

(d) Leakage or spillage of oil on board ship must be collected and not be swept or washed overboard.

Ship's Assistance: Ship's crew with an Officer in Charge to assist in All operations as advised by the Mooring Master. This includes lifting; connecting, disconnecting, lowering of hoses and tending anchor cables and moorings.

Deck Watch: A complete watch on deck must be maintained throughout the operation, especially towards the shore Signal Station to ensure safe loading and to avoid delays.

Deck Scuppers Plugs: Ensure scuppers are effectively plugged. On no account should plugs be removed.

Loading Operations: (a) Ship's personnel are solely responsible for the loading operations, ie. starting, loading rate, tank switching, topping off, stopping, etc. The Mooring Master will pass requirements to Shore Control. It is in vessel's interest *to advise loading rate required, also to give 30 minutes notice of expected time of commencing loading.*

(b) Should vessel require adjustments in the loading rate, please advise the Mooring Master, sufficient notice must be given to enable shore operators to comply. Failure to give proper warning may cause delay or a tank overflow on board.

(c) The Mooring Master will not transmit any loading instructions to the shore until the responsible ship's Officer has admitted that:

Ship is safely moored.
Hoses are correctly connected.
All valves have been set for receiving cargo.

Order to start will be taken as final.

Vessels in berth: Ships are not allowed to remain in berth for any reason when loading operation is stopped, or disconnect hoses and drop them into the sea unless authorised by Terminal Superintendent.

Lighting: During hours of darkness the manifold, poop, mooring area of sea in vicinity of ship should be adequately lit.

Main Engines: Must be kept on short notice. Repairs which will immobilise them must not be carried out in berth.

Deck Machinery: Must be ready for immediate use at all times.

Whistle or Siren: To be available at all times.

Signalling: An "Aldis" type lamp to be readily available.

Stores Provisions, etc.: It is strictly forbidden for provisions, stores or other items to be received or discharged whilst loading is in progress, launches or other craft other than Company launches must not lie alongside during the same period.

Tanker Safety Regulations: Must be strictly adhered to at all times. The Mooring Master is authorised to *stop all operations* should he consider that Safety Regulations are not being complied with.

Boarding: The boarding of vessel whilst in mooring should be restricted to persons holding valid passes which are issued by the Terminal Superintendent on application to ship's Agents and authorised Chandlers. This restriction is carried out in conjunction with the Syrian Harbour and Security Authorities.

Vessel not allowed to send any crew or materials outboard for any reason before asking Agents for granting the official authority.

Guests: Masters wishing to receive guests on board should make arrangements through their Agents.

Action in case of emergency: In the event of fire, oil spillage or other emergency on the vessel

The Emergency Signal is

Three or more blasts of not less than ten seconds duration each on whistle or siren supplemented by a continuous ringing of the general alarm bells.

Corridor: The corridor must be followed by vessel to Tartous Terminal:

Corridor Leading to Tartous Terminal

(a)	Lat. 34° 59′ 00″ N.	Long. 35° 50′ 00″ E.
(b)	Lat. 34° 59′ 00″ N.	Long. 35° 52′ 36″ E.
(c)	Lat. 34° 56′ 24″ N.	Long. 35° 38′ 36″ E.
(d)	Lat. 34° 36′ 24″ N.	Long. 35° 38′ 00″ E.
(e)	Lat. 34° 54′ 24″ N.	Long. 35° 37′ 48″ E.
(f)	Lat. 34° 54′ 24″ N.	Long. 35° 51′ 12″ E.

FRESH WATER: Unlimited supplies available to vessels berthed alongside the main pier.

FUEL: Only available in very limited quantities by tanker truck.

MEDICAL: Medical facilities are available, but serious cases may involve transportation to Lattakia or Damascus.

DEVELOPMENTS: A new quay for phosphate is now under construction 300 m. long and 4 m. depth and will be prolonged by a quay of 250 m. length and 11 m. depth for vessels loading phosphate up to 35,000 tons capacity. 1 shiploader, rate 1,000 t.p.h.

A dry dock will be soon under construction for repairing vessels and tankers with a capacity varying between 40 and 60,000 tons. Also 2 slip-ways for general overhaul for small vessels of 1,000 tons and less.

FLOATING CRANE: A floating crane of 100 tons lifting capacity available.

SHORE LEAVE: No amenities for the crew exist in the town of Tartous but crew may, if required, proceed ashore with a landing permit issued by the local security services.

WEATHER: See "Banias".

AUTHORITY: Harbour Master.

AGENT: Gulf Agency Co. (Syria) Ltd., Houssein Ali Building, Alnarges Street, PO Box 19, Tartous, Syria. Cables "Gacship", Tartous. Tel. 21897, 22287. Telex: Beirut 20906 or Athens 216344.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Taiwan

HUALIEN: 23.59 N. 121.38 E.

PORT LIMITS: Radius of 1 mile from the centre of Hualien Kan Breakwater Beacon (23° 59′ 11.3″ N. 121° 38′ 35″ E.).

DOCUMENTS:

Ship's Register.
Derat Certificate.
Last Port Clearance.
Taiwan Tonnage Dues Certificate.
Pratique.
8 copies Crew List.
1 copy Crew List visaed by office of China Mission (applicable to American vessels).
8 copies Passenger List – landing and transit.
1 list showing dates of vaccination (within 3 years) of all crew and any landing passengers. WHO "Yellow Books" may be examined.
1 Chinese Maritime Customs Stores List.
1 list Foreign Currency in safe.
1 list Narcotics in safe.
1 list Arms and Ammunition.
1 set of copy Bills of Lading.
2 Manifests of Inward Cargo.
3 Manifests of Through Cargo.
2 lists of Unmanifested Inward Parcels.
2 lists of Mail for landing.
Vessel's Log Book.

PILOTAGE: Compulsory. At anchorage hoist G flag.

QUARANTINE ANCHORAGE: Postions:

(A) Lat. 23° 58′ 30″ N. Long. 121° 36′ 50″ E.
(B) Lat. 23° 58′ 30″ N. Long. 121° 37′ 10″ E.
(C) Lat. 23° 57′ 50″ N. Long. 121° 36′ 50″ E.
(D) Lat. 23° 57′ 50″ N. Long. 121° 37′ 10″ E.

RESTRICTIONS: Hualien Harbour closed to all ships at 0000 until 0500 hrs. Large ships not allowed to enter after sunset.

MAX. SIZE: Draft not exceeding 8.5 m. and length 150 m. may enter Hualien Harbour at present time.

HEALTH: At anchorage hoist Q flag.

RADIO: Hualien Radio XSY; ETA reported 24 hours at least before arrival.

TUGS: Normally used in harbour. Ship's lines should be used.

STEVEDORES: Stevedores will be assessed against ships except when otherwise agreed between ships and consignees or shippers.

MEDICAL: Hospitalization can be arranged through Agent.

FRESH WATER: Hoses from water-lines to tanks.

FUEL: Fuel viscosity, special regular full SUS at 122°F, max. 225; regular full SUS at 85°F, min. 225; SUS at 122°F, max. 200; Diesel fuel viscosity, SUS, 100°F 35–45. Fuel line 6 in, connection, otherwise notify in advance.

DEVELOPMENTS: The third stage of harbour extension will be completed in 1977. This will increase harbour capacity by 15 ship berths.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CERTIFICATES:

Ship's Nationality Certificate.
Load Line Certificate.
Tonnage Certificate.
Certificate of Inspection of Ship.
Ship Safety Equipment Certificates.

IDENTIFICATION CARDS: Passport or Seaman's book required.

AIRPORT: Domestic airport connected to Taipei and Kaohsiung International Airport.

TIME: GMT plus 8 hours.

AUTHORITY: Hualien Harbour Bureau.

AGENT: (see Keelung). Recommended Owners contact their Taiwan Agents before sending vessel to Hualien.

KAOHSIUNG: 22.37 N. 120.16 E.

PORT LIMITS: Ship considered to be an "arrived vessel" when anchored at either of following locations:

1. Northern anchorage: Within two miles radius off Kaohsiung Lighthouse (22° 38′ 01″ N. 120° 15′ 25″ E.) forming a sector between Southern side of outer harbour channel toward shore line Southward.

2. Southern anchorage: Within a radius of 2.5 miles from the signal station of the second harbour entrance (22° 33′ 21″ N. 120° 18′ 26″ E.) forming a sector between Northern side of outer harbour channel toward shore line Northward.

3. For VLCC to discharge at two Monobuoys: SBM No. 1 position 22° 30′ 29″ N. 120° 17′ 49″ E. SBM No. 2 position 22° 29′ 45″ N. 120° 16′ 41″ E. Tankers are to anchor 1.5 miles West off the respective SBM as directed by Agents.

DOCUMENTS:

10 Crew Lists.
1 Customs Stores List (plain form acceptable).
1 Narcotic List.
1 Foreign Currency List.
1 Crew's Declaration List.
1 Arms and Ammunition List.
1 Parcel, Passenger and Mail List (all nil items may be put in one statement).
1 Set of Bills of Lading and Manifests if any.

PILOTAGE: Compulsory. Agents will arrange for Pilot to board vessel at anchorage outside breakwater. Pilot boat flies code flag "H".

Containerships over 15,000 g.r.t. and other freighters or tankers over 200 m. LOA must take two Pilots at double pilotage.

ANCHORAGE: See "Port Limits".

RESTRICTIONS: Containerships can enter and sail 24 hours a day. Other vessels up to midnight only. Vessels with max. draft 34 ft. must await high water to enter via Northern entrance.

MAX. SIZE: Length and breadth no restriction (largest containership entered: 950 LOA and 106 ft. B.). Max. draft inner harbour 34 ft. during high tide. Tankers with draft over 34 ft. discharge at Monobuoy outside.

HEALTH: Free pratique granted at anchorage after Master completes Quarantine Declaration Form furnished by quarantine doctors. No radio pratique available. No quarantine necessary if second port in Taiwan.

Shipmaster's Report: Master visited the port in May 1976 and Cholera Certificates were not requested for inspection.

RADIO/VHF: Kaohsiung Radio (XSW). Normally used by Agents when cabling vessels. Contact with the Agent and Port Authorities may be made via Kaohsiung Port Radio on VHF Channel 16. Call Port Radio on Channels 16/14, 156.8 mHz. one hour before arrival to report ETA at Kaohsiung Roads.

TUGS: Harbour tugs usually join vessel after entry and while berthing. Ship's lines always used. Largest tug 2,400 h.p.

BERTHING FACILITIES: No specific requirement except bulk-carriers and tankers with max. draft of 34 ft. must berth during high tide.

Wharves: there are at present 55 wharves (including two shallow-water berths) with a total length of 10,582 m., capable of accommodating 66 ships. Buoys: The harbour has in all 37 mooring buoys capable of berthing 26 ocean-going ships of various sizes.

Container Terminals: No. 1 – consists of 3 berths Nos. 41–43. Berths Nos. 42–43 served by one MHI 35-ton gantry crane. 4 straddle-carriers available for 20 ft./40 ft. containers.

No. 2 – includes 4 berths Nos. 63–66. Berths Nos. 64–66 are leased to lines for exclusive use. Berth 63 is the only common user berth. Container handling equipment includes 6 SIS gantry cranes and 20 straddle-carriers for handling 20 ft./40 ft. containers.

No. 3 – Planned to build three berths Nos. 68–70. first Berth No. 68 under construction since 1975, will be completed October 1977. Each berth 320 m. long with water depth 14 m. and will have two gantry cranes and four travel-lifts.

Grain and other bulk handling equipment: for grain, there are two silos of 40,000 tons capacity each, unloading rate 300–400 t.p.h. Another 80,000-ton silo being built. 105 grabs also used to discharge grain by ship's gear at hourly rate of 40–50 tons per gang/hour. For heavy lifts, there are three floating cranes of 120, 60 and 30-ton capacity available.

STEVEDORES: All Government stevedores ordered by Agents as required.

MEDICAL: No advance notice required unless emergency case. Vaccination Certificates against smallpox (3 years) and cholera inoculation (6 months) required.

See "Health" – Shipmaster's Report.

TANKERS: Discharge lines at oil terminal inside harbour 8 in. (2 berths), and 12in. at Monobuoy outside with necessary reducers supplied from ashore. In latter case, Master must inform Agents size of ship's manifold.

There are two Monobuoys situated about 7 miles S.S.E. of the Northern Anchorage. Their positions are:

SBM No. 1 – 22° 30′ 29″ N. 120° 17′ 49″ E. A white flashing signal light is mounted at the centre of the buoy with a range over five miles. The light appears for 1 second and goes off for 2, it then appears for 1 second and goes off for 11 seconds. This cycle is repeated. The area around the mooring buoy has a depth of 68 ft. and can accommodate tankers up to 140,000 d.w.t. The current runs at a maximum of 2.5 knots.

SBM No. 2 – 22° 29′ 45″ N. 120° 16′ 41″ E. depth around the area about 98 ft. capable of discharging tankers up to 250,000 d.w.t. Characters of signal light mounted at the centre of the buoy: White flash 1 second on and 1 off for 3 times then 1 second on and 8 seconds off in that cycle.

The two buoy moorings have facilities for two 12 in. hose connections. Bunkers and fresh water not obtainable. Stores can be arranged for delivery by boat. Other services available to tankers at the buoys are confined to those of urgent nature.

VLCC programmed to use the SBM Terminal are required to anchor 1.5 miles West off the respective SBM for arrival clearance. Pilot/Quarantine/Immigration, Cargo Supervisor and his hose-handling party board in this vicinity from a tug. After the discharge of cargo, the vessel is required to proceed to the Northern Anchorage to receive sailing clearance.

DENSITY: Average 1015 in Summer, 1023 in Winter.

FRESH WATER: Most berths supply from shore line, otherwise from barge paying additional lighterage.

FUEL: All grades, mostly received from barge. Owners must contact suppliers for nomination through Chinese Petroleum Corp. before ship's arrival.

FIRE PRECAUTION: No specific regulations, but routine precaution should be enforced.

DEVELOPMENTS: Eight new wharves for handling bulk cargo were added in 1976. No. 3 Container Terminal with first of three berths (No. 68) under construction, and will be completed in Oct. 1977 (Length 320 m. each, depth 14 m.).

GANGWAY/DECK WATCHMEN: Recommended to meet local security requirement.

OPENING/CLOSING HATCHES: Mostly handled by stevedores except steel hinged covers, which are to be done by crew.

CERTIFICATES: Ship's registry, Load-line, Safety Construction,

Safety Equipment, Safety Radio-telegraphy and Derat Exemption Certificates must be inspected by Customs/Harbour Authorities.
CUSTOMS ALLOWANCE: 200 cigarettes or 1 box cigars and 1 bottle of wine or spirit allowed each. Application can be made to break seal for next issue once every four days.
CARGO GEAR: No additional requirements, but Cargo Gear Certificate must be valid.
IDENTIFICATION CARDS: Not required.
CONSULS: All in capital city Taipei, 230 miles North of Kaohsiung.
REPAIRS: China shipbuilding provide 1,800 m. of quaywall and can handle any kind of repairs.
DRY DOCK: China Shipbuilding Corp. have a dry dock of 950 m. long with breadth 92 m. and average depth of 14 m. This dry dock is separated into three stages by two intermediate gates in between, of 380/390/180 m. respectively. Each stage can be independently operated to facilitate fabrication of ship sections, as well as to dock and repair ships.

A floating dock "Viva Island" LOA 174 m. with between side walls 30 m. Draft over keel blocks 7.3 m. with lifting capacity of 11,500 tons in operation Oct. 1976.
REPATRIATION: Crew changes arrangeable.
AIRPORT: 7 miles from main port area. Presently linked with Hong Kong, one return flight daily.
TIME: Local: GMT plus 8 hours. No alteration during the year.
HOLIDAYS: New Year's Day (Jan. 1–2); Youth Day (Mar. 29); Ancestors' Memorial Day (Apr. 5); Labour Day (May 1); Dragon-boat Day (5th day of 5th Lunar Month); Mid-Autumn Festival (15th Day of 8th Lunar Month); Confucius' Birthday (Sept. 28); National Day (Oct. 10); Taiwan Restoration Day (Oct. 25); Late Pres. Chiang's Birthday (Oct. 31); Dr. Sun's Birthday (Nov. 12); Constitution Day (Dec. 25); and Chinese Lunar New Year's Day (2 days mostly in Feb.). No work on New Year's Day (Jan. 1), Labour Day (May 1) and Chinese Lunar New Year's Eve and New Year's Day. Double stevedoring rates for rest of holidays.
POLICE/AMBULANCE/FIRE: Police and Ambulance: call 562311 Ext. 441; Fire: 562311 ext. 441 or 226119.
TELEPHONE: Telephone available for ships alongside wharf.
SERVICES: Laundry, ship-chandler and competent technicians available for repair of radar, radio, compass adjusting and other navigational aids. Tank cleaning equipment and facilities not available.
SHORE LEAVE: Normally arrangeable.
REGULATIONS: No curfew exists now. Port opened for containerships 24 hours day and night; for other vessels between 0600–2300 hrs. only. Vessels flying flag of nations without diplomatic relation with the Republic of China must send 1 copy each of ship's photo (8 in.×10 in. broadside) and photocopy of Registry or Tonnage Cert. and 10 crew lists for application of entry permit.
DELAYS: With rapid extension of the harbour and more new wharves and container terminals built. Delay has been considerably reduced and very scarcely occurs.
AUTHORITY: Kaohsiung Harbour Bureau.

AGENTS: Jardine, Matheson & Co., Ltd., P.O. Box 81, Taipei, Taiwan. Shipping Agents, Lloyd's Agents, Cargo Surveyor. Tel. 3931177 (40 lines), Telex 11391, 21851. Cable: "Jarocean". Sub-Agent: Loong Gon Co., Ltd., 213 Wu Foo 2nd Road, Kaohsiung. Tel. 237141 (9 lines), Telex: 81957 Jardines, Cables: "Jarocean".

KEELUNG: 25.08 N. 121.45 E.

PORT LIMITS: Considered to be an "arrived ship" once she has reported to Keelung Signal Station by VHF or visual signals whether she has entered the outer harbour or not. However, quarantine and customs inspectors do not attend ships outside the breakwater (as they do not have adequate transportation) and they do not consider a ship is an "arrived ship" unless she enters the outer harbour.
DOCUMENTS:

- Ship's Registry.
- Last Port Clearance.
- Crew List.
- Fumigation Certificate.
- Import Manifests.
- Through Cargo List.
- Store List.
- Arms and Ammunition List.
- Narcotics List.
- Foreign Currency List.
- Parcel List.
- Passenger List.

Yellow-book for every person on board. (Vaccination Certificate).
PILOTAGE: Compulsory from anchorage to dock and any other movements in port. Pilot may also meet ship within 1 mile outside breakwater upon ship's/Agent's request. VHF and Signal Station 25° 09′ 27″ N. 121° 44′ 23″ E. VHF radio listening on Channel 16, records arrival time and passes information to Agents or Pilots.
ANCHORAGES: Area is in Outer Harbour depth 8 to 16 m. but can only take 8 ocean-going vessels, ship may also anchor/remain outside breakwater waiting for Pilot or entry instructions.
RESTRICTIONS: Permission must be granted from Naval Signal Station located at Lat. 25° 09′ 43″ N. Long. 121° 45′ 08″ E. for entering breakwater. Ship's agent should declare ship's ETA to Port Authorities 24 hours ahead. Port closes from 0001 to 0500 hrs. daily.
MAX. SIZE: Max. draft 35 ft. and length overall preferably less than 700 ft. Navigation Channel-length 2 km., breadth 150 to 350 m.
HEALTH: Radio pratique not acceptable. Quarantine will clear vessel at anchorage area. Stool test will be conducted if vessel arrives from an affected area within 5 days.
RADIO: Radio Keelung. Send cables to "Harbour Master Keelung" report ETA, draft, etc. Channel 16–156.8 mc/s for safety and calling purposes. Channel 14–156.7mc/s for harbour control after contact and identified.
RADAR/VHF: No radar service to assist navigation in port. VHF only used on ship's arrival. However, Pilots carry pocket walkie-talkie to communicate with tugs and line-men on dock. Also see "Pilotage" and "Radio".
TUGS: Three main tugs with more than 1,000 h.p. each assist mooring and unmooring. Join at any point within breakwater. Ship's lines used.
BERTHING: Docking during day only. Pilot compulsory. Vessels usually anchor in outer harbour first for pratique and inspection.
SPECIALISED CARGO HANDLING FACILITIES: Wharf No. 2 to 4 and 14 to 18. 2 at 4 tons stationary shore cranes on each wharf.

Berth 2 and E2, passenger ships.

Berth 20, for receiving ore, sulphur, etc., and loading fertiliser.

Berth 21-26, for container ships and "lash" vessels. Equipment includes 3 gantry cranes capacity 31.5 tons. 4 straddle-carriers for 20–40 ft. containers and 1 side-loader for landing 30 ft. containers. Designed depth 10–13 m.

Berth 30, 3 elevators for grain in bulk. Max. capacity 400 t.p.h., average capacity 250 t.p.h.

Generally ship's gear is required for cargo handling on all except fully containerised vessels.

One berth for handling liquid chemicals sulphur: is unloaded by hoist with nets, 35 tons can be discharged per hoist per hour.
CRANES: 15 mobile cranes. capacity 5–40 tons 16 wharf cranes, capacity 3–30 tons. 2 container cranes, capacity 31 tons. 3 floating cranes, capacity 130 tons, 60 tons and 30 tons.
STEVEDORES: Owned and operated by Harbour Bureau, a government organization. Stevedores paid by tonnage instead of hours. Stowage plan and cargo details must be presented to concerned offices 24 hours prior operation.
MEDICAL: Clinics with English-speaking doctors available at Keelung and modern hospitals available in Taipei, 30 kilometres from port.
TANKERS: Wharf No. 33 specially reserved for tankers, draft limited to 34 ft. For other procedures in port tankers are treated same as other carriers.
DENSITY: 1002 to 1023.
FRESH WATER: Available subject 24 hours advance notice. Delivered by barges rate 60 t.p.h. or alongside at rate 20 t.p.h.
FUEL: Ordinary bunkers available but require 3–5 days advance notice. Fuel barge operated by C.P.C.
FIRE PRECAUTIONS: Red flags will be flown on dock and firefighting automobile and tug will be standing by while tanker in operation.
GANGWAY/DECK WATCHMEN: Harbour policeman always assigned by authorities at gangway free of charge. Other gangway/deck watchmen are recommended.
OPENING/CLOSING HATCHES: Normally carried out by stevedores, excepting new designs on modern vessels.
CERTIFICATE: International certificates, Safety Equipment, Load Line, Cargo Gear, etc.
CUSTOMS ALLOWANCE: Each crew member allowed 10 packs cigarettes for own use. Master enjoys some privileges and can keep several cartons if he thinks necessary. Wine and/or Spirit, no restrictions but slopchest will be sealed on arrival.
IDENTIFICATION CARDS: Passport or other identification papers are needed.
CONSULS: None. Mostly stationed at Taipei.
REPAIRS: All types of deck and engine repairs can be carried out in port.
DRY DOCK: One for vessels under 100,000 tons and another for 25,000 tons.
REPATRIATION: Crew repatriation usually carried out through International Airport in Taipei, and Immigration prefer either individual or group visa for landing crew from ship.
AIRPORT: International airport in Taipei only 30 minutes by car.
TIME: GMT plus 8 hours. No alterations.
HOLIDAYS: New Year's Day (1–2 Jan.); Lunar New year's Day (2 days in Feb.); Youth Day (29 Mar.); Labour Day (not a national holiday but only for labourers) (1 May); Confucius Birthday (Teachers' Day) (28th Sept.); National Day (10 Oct.); Taiwan Restoration Day (25 Oct.); Dr. Sun's Birthday (12 Nov.); Constitution Day (25 Dec.).
POLICE/AMBULANCE/FIRE: The gangway guard assigned by Harbour Police or ship's Agent will act in emergencies.
TELEPHONE: Local telephones available to be placed on board.
GENERAL: Shore pass issued by Immigration for each crew member on ship's arrival and will be collected on ship's departure. Any one who loses a shore pass is subject to fine.
SERVICES: Harbour Master prohibits discharge of tank washing, etc., in port.
SHORE-LEAVE: Crew allowed ashore except for crew members from Communist countries.
REGULATIONS: Searching for stowaways is strictly carried out on arrival and departure.
DELAYS: Keelung has rainfall on about 240 days in a year, port is sometimes congested after continuous rain.
AUTHORITY: Keelung Harbour Bureau.

AGENTS: Jardine Matheson & Co. Ltd., 36 Kwei Teh Street, PO Box 81, Taipei, Taiwan. Shipping Agents, Lloyd's Agents, Cargo Surveyors. Tel. 571281 (10 lines). Telex TP391. Cables: "Jarocean". Sub-Agent: Loong Gon Co. Ltd., 10 Chung Yit Road, Keelung. Tel. 22443, 22444. Cables "Loonggon" "Jarocean".

Tanzania

GENERAL: *All Ports: (Ship's Officer's Report)*: The Boarding Customs require crew declarations on their special form duly signed by each individual member of crew. The excess private property or the items not required during the ship's stay in port, are to be collected and placed in a locker or room and sealed by the Customs. This seal has to be kept intact even in the case of the vessel sailing from Tanzania to Kenya or vice versa. On arrival at the next port, the previous Custom's seal is replaced by the local authorities. No new crew declaration is needed if once filed at first port. However, it is recommended that an extra copy of the crew declaration is kept on board as a record in case it is requested by the local authorities.

CHAKE CHAKE: 05.14 S. 39.46 E.

DOCUMENTS, HEALTH: Refer to "Zanzibar", where vessel required call for clearance by Port Officals.

PILOTAGE: Not compulsory, but restricted to daylight only.

RESTRICTIONS: Entrance approached through Owen Channel or through passage between Mesale Island South and Ras Kingojelin. Depths from 10 to 22 fathoms but there are patches of 2.5 fathoms. Narrowest part of channel is 1.5 cables wide.

Vessels may enter and leave at any state of the tide, but in daylight hours only.

ANCHORAGE: No mooring buoys. Vessel's work cargo to lighters. Depth decreases to 3 fathoms for coastal anchorage off Ras Banani.

MAX. SIZE: 170 ft. length: 15 ft. draft.

TUGS: Not available and not required.

FRESH WATER: Not available.

FUEL: Not available.

AUTHORITY: See "Zanzibar".

DAR-ES-SALAAM: 06.50 S. 39.17 E.

PORT LIMITS: The port of Dar-es-Salaam includes all tidal waters enclosed by a boundary which, commencing at high water mark at a point S.E. of Ras Koronja (approximately 9.66 km. East of the city of Dar-es-Salaam), follows a straight line due North to the West tip of the Outer Sinda Island. Thence a straight line to Makatumbe Lighthouse, thence a straight line drawn to South tip of Mbudya Island, thence a straight line drawn 254° to the high water mark at a point on the mainland South of the entrance to Mto Peremji. Thence following the high water mark around Msansani Bay, Dar-es-Salaam Inner Harbours to the first point due South of Outer Sinda Island.

DOCUMENTS:

Health Certificates (forms supplied by Pilot).

6 Crew Lists.

10 Passenger Lists.

Ships Manifest.

Heavy Lift List.

Dangerous Cargo List.

Ship's Register.

Declaration and Advice of Consumable Stores (Form C-7 supplied by Customs).

Crew Declaration (Form C-8 supplied by Customs).

PILOTAGE: Compulsory South of Makatumbe lighthouse, for all vessels over 200 n.r.t. The pilot launch is painted white and shows the conventional day and night signals. Vessels wishing to enter must await the arrival of the pilot launch at the Outer Anchorage, and, if necessary, must anchor clear of the leading marks. During the hours of darkness ships entering or leaving the port are limited to 485 ft. OA on tides not exceeding 9 ft. range.

ANCHORAGE: Anchorage outside in 7-8 fathoms, sheltered by Nakatumbe Island during S.W. monsoon but exposed to swell in N.E. monsoon.

Shipmaster's Report: In good weather tankers waiting can anchor in a depth of 18 m., 12 cables from Makatumbe Light true bearing 250°.

RESTRICTIONS: Movements in and out of the basin are subject to restrictions depending on drafts and state of the tide at Spring tides. Tankers and vessels carrying explosives are not allowed to leave or enter during hours of darkness.

There is a signal station (with tower, flagstaff and red roof) on East Ferry Point (Lat. 6° 50′ S, Long. 39° 18′ E.). Entry prohibited signals are: day signal – black flag on masthead; night signal – 3 red lights disposed vertically, and distant signals – black square on white background.

The entrance channel at North end of the basin is about 1.25 miles in length from its outer entrance between the edges of the banks fronting North and South Reefs to the Inner Harbour, South of West Ferry Point.

There is a sharp bend in the channel at West Ferry Point. Minimum depth of 6.7 m. LWOST, and minimum width of 128.02 m. between the 4 fathoms contour lines. A very strong ebb and flood runs through the channel at periods of Spring tides. Maximum current at Spring tides – 3.5 knots. During period of S.E. monsoon strong winds and heavy seas may make entry difficult, but in Inner Harbour port working is normally unaffected by weather.

MAX. SIZE: Twin-screw vessels not exceeding 182.9 m. Draft 10.1 m. at HWOST, 7.0 m. at LWOST, and 9.1 m. at HWNT and single-screw vessels not exceeding 175 m. Tankers LOA 175.26 m. and draft 9.75 m. Also refer to "Mjimwema".

HEALTH: Radio Port Health officer giving ETA, name last port and health condition of passengers and crew. Q flag to be displayed until free pratique given.

BERTHING: In the Inner Harbour there are mooring and anchorage berths for up to 9 deep-sea ships ranging from 350 ft. to 600 ft. (106.48 – 182.88 m.) in length and from 23 ft. to 30 ft. (7.01 – 9.14 m.) in draft.

Deep water quays total length 2,013 m. comprising berths numbers 1-11 with 10.06 m. in depth at LWOST.

Accommodation:

Harbour sheltered and roomy, water area 95.9 ha; consists of tidal basin and Southern Creek, the latter having 11 deep-water berths. Anchorage in basin and creek.

		Depth	*Max. length*
"A"	Stern mooring	9.1 m.	183 m.
"B"	Moored Mooring	7.4 m.	152 m.
"C"	Moored mooring	7.4 m.	183 m.
"D"	Single Anchor	7.8 m.	183 m. waiting berth only.
"E"	Moored, buoys and anchor	7.3 m.	152 m.
"F"	Buoys	7.3 m.	168 m.
"G"	Buoys	8.6 m.	168 m.
"H"	Buoys	9.1 m.	168 m.

In addition there are 2 coaster anchorages. The Southern Creek, at the South-east corner of the basin had a navigable distance of 1.5 miles for ships drawing up to 30 ft. of water.

CARGO HANDLING FACILITIES: The port has no special facilities for bulk handling cargoes but, subject to advance notice being given, vacuvators and grabs can be made available.

Equipment and other facilities:

Deep water vessels berthed in stream are loaded and discharged by lighters. At the lighter quay there are 8 electric portal cranes for working the lighters (1 × 5-ton and 7 × 3-ton), on the main quay, the port has 6 × 7-ton and 21 × 5-ton (including 11 cranes). There are 8 other portal cranes on the stacking yards as per details below:

(a) Belbase (AMI) — 2 × 10-ton cranes.

(b) Tanzania — 3 × 5-ton cranes.

(c) Yard 5, 6 & 7 — 1 × 7-ton and 1 × 7-20 Gosna Cranes

(d) Yard 8 — 1 × 5-ton Conrad.

11 other Canadian portal cranes are still under construction at yard 8/9.

Mobile Cranes: 2 × 30-ton, 13 × 11 – 7-ton, 14 × 6-ton, 2 × 4-ton and 1 × 60-ton (Floating Crane – "Kifaru"). These are moved between deep-water quays, lighterage quays and any other points of work on the stacking yards as and when required.

DENSITY: 1025.

TANKERS: Bulk Oil Jetty at which tankers up to 175.26 m. LOA, and 9.75 m. draft can discharge to tanks ashore. Depth alongside of 10.06 m. There is a refinery on the opposite side of the creek to the Bulk Oil Jetty; the tankers serving the refinery are not to exceed 20,000 s.d.w.t. capacity. Also refer to "Mjimwema".

STEVEDORES: Week days (except Saturday) 0700–1500 hrs. (45 minutes break, 1500–2200 hrs. (no break), 2200–0600 hrs. (no break). Saturdays 0700–1345 hrs. (no break), 1400–2100 hrs. (no break). Sundays and public holidays 0700–1500 hrs. (45 minutes break), 1500–2200 hrs. (no break).

FRESH WATER: Available at deep-water berths, and a water barge supplies water to ships at anchorage. All water is chlorinated but should be boiled and filtered. Water for boiler requires feed treatment (formal solutions adequate).

FUEL: Not generally available.

MEDICAL: Doctors and good modern hospital facilities exist.

DEVELOPMENTS: Three more deep-water berths are under construction with an option of two more.

REPAIRS: Several light engineering workshops. There is an East African Harbours Corporation Dockyard for construction and maintenance of East African Harbours Corporation's lighters and other small craft. This has a slipway for vessels up to 100 ft., lifting power 100 tons. The Port Administration employs a skin diver.

REPATRIATION: Can be arranged.

CUSTOMS ALLOWANCE: Each crew member is allowed 1 carton of cigarettes, 1 opened bottle of spirits and 8 small beers.

AIRPORT: International airport with daily connections to all parts of the world.

TIME: GMT plus 3 hours. No alterations.

HOLIDAYS: Christmas Day and International Workers' Day are the only holidays on which no work is performed. Other holidays on which restricted working may be carried out are: Zanzibar Revolutionary Day (12th January); Id-el-Fitr (2 days); Id-el-Haj; Good Friday; Easter Monday; Union Day (26th April); Maulidi Day; Saba Saba Day (7th July); Tanganyika Independence and Republic Day (9th December).

SHORE LEAVE: Allowed.

AUTHORITY: East African Harbours Corporation.

MJIMWEMA TERMINAL: 06.49 S. 39.22 E.

DOCUMENTS and all General Information; refer to "Dar-es-Salaam".

LOCATION: The position of the Mono Buoy is Lat. 6° 49′ 20″ South, Long., 39° 22′ 00″ East, lying approximately 1.5 miles offshore in Mjimwema Bay. The buoy lies in 24 m. depth of water. The currents are up to about 1 knot and the direction varies.

PILOTAGE: Mooring Master/Pilot boards in an approximate position Makatumbe Island lighthouse bearing 240°. True distance 3.5 miles. Should the Pilot not be available on arrival, vessels are advised to keep underway and await the Pilot rather than anchor.

After mooring operations a Mooring Master/Pilot will remain on board.

Vessels must provide adequate means of boarding for Pilot, Customs and other officials. A pilot ladder with spreaders 4 ft. from the water and manropes are required.

The Mooring Master shall be provided with meals and accommodation comparable to a senior officer on board. The crew of the mooring launch will be provided with food comparable with ratings on board. No special foods need be provided.

RESTRICTIONS: Initially, berthing and unberthing will be in daylight hours only. It is expected after experience is gained that there will be no pilotage restrictions. It is anticipated that after the first few departures, night departures will be allowed and night arrivals may later be allowed at the discretion of the Harbour Master.

MAX. SIZE: The Mono Buoy accommodates tankers up to 100,000 tons d.w.t. Min. length allowed, 650 ft. Max. draft allowed, 55 ft.

HEALTH: Customs, Port Health and Immigration will board vessels on arrival.

RADIO: Within 6 hours of clearing the loading port, each tanker shall provide the Agent with the following information:

- *(a)* Name of Ship.
- *(b)* Name of last port from which the vessel cleared and the loading port if different from above.
- *(c)* Estimated date and time of arrival at Dar-es-Salaam (Mjimwema).
- *(d)* Cargo loaded.
- *(e)* API gravity.
- *(f)* Arrival draft, fore and aft.
- *(g)* Lifting capacity of derricks.
- *(h)* Size of manifolds.
- *(i)* Personnel requirements.

72 hours from the pilot station, a second cable should be sent to Agent with following information:

- *(a)* Name of ship.
- *(b)* Amended time of arrival.
- *(c)* Names of crew leaving the vessel (if any).
- *(d)* Requirements of doctor and dentist.
- *(e)* Any other requirements.

A final cable should be sent about 36 hours from the pilot station giving finally amended ETA.

When within 20 miles of Dar-es-Salaam Signal Station vessel should call the Signal Station on either Channel 12 or 16. A continuous watch is kept on both channels. Call sign is Dar-es-Salaam Signal Station.

VHF Channels 16 calling, 12 berthing. VHF Channel whilst discharging to be decided.

Portable radios can be provided for vessels not having a VHF set and the Agent should be so informed in order to allow time to dispatch a portable radio on arrival. A vessel arriving without suitable means of communication and not having informed the Agent of the fact could incur delays which would be to ship's account.

The Mooring Master will be in direct control of all radio communications on the vessel while in the terminal area. Any unauthorised communications may result in the immediate cessation of all operations and removal from the berth.

READINESS: Notice of readiness will only be accepted by the Pilot/Mooring Master on behalf of the Harbour's Corporation, when the ship is berthed and connected.

Any vessel which is not, in the opinion of the berth controller, ready in all aspects to discharge, may be rejected until corrections are made. The Harbour master's decisions are final.

BERTH: The Mono Buoy is a single point mooring buoy. The body of the buoy being secured in a fixed position with 6 moorings and the top of the buoy is in the form of a turntable allowing the ship, moorings and hoses to take up the position the vessel lies naturally due to tide, wind and current conditions.

MOORING: The following equipment is required to moor with safety: Two 10-in. nylon circumference ropes. 100 ft. in length. 4 end joining shackles.

The vessel approaches the Mono Buoy head to wind and tide or the resultant of these forces, and should have 2 mooring ropes lowered to the water, each having a 15 ft. lashing of 3-in. rope on it.

As the vessel nears the mooring, a launch will take the port rope from the ship and connect it to the port pick-up rope and return to the ship to take the starboard rope and repeat the operation on that side.

The vessel should heave on the ropes as soon as they are inboard and heave herself to the buoy until the chain is on the fairlead. The ship wire should then be shackled to the chain and turned up on bits. This applies to both sets of moorings.

HOSES: Raising and lowering of, connecting and disconnecting of hoses as well as other shipboard duties will be performed by the ship's crew under the advice of the Mooring Master. The ship should be capable of lifting 10 tons on her derrick, with a minimum of 7.5 tons.

When the vessel is securely moored, the launch will bring the hoses alongside on the port side. The vessel will lower the cargo hook to the boatman who will hook it on to the lifting ring on the forward hose. The hose will then be lifted to full height on the boom and secured on the "Hang off Chains" supplied. The hose is then lowered to the deck and the operation repeated with the after hose.

After completion of discharge the hoses will be filled with sea water by the ship. The hoses can then be disconnected from the manifold and lifted over the side of the ship and hung there on the slip ropes to be slipped off simultaneously with the moorings. This last operation will be carried out on the advice of the Mooring Master.

UNMOORING: On sailing, hoses will already have been disconnected and ready to be slipped at the direction of the Mooring Master.

The weight will be taken on the 2 approach ropes by heaving slowly with the winch. The shackles will then be released and the ropes slacked away until they are finally paid out through the fairlead and dropped into the sea.

The shore equipment should then be collected together under the derrick and returned to the boat.

BALLAST: Ballasting will be allowed during discharge but only with the express permission of the berthing controller, and in the case of ballasting in dirty tanks a dry certificate must be issued. Vessels will not be allowed to tank clean. There are no sludge tanks ashore.

FUEL: No bunkers available.

FRESH WATER: Only very limited quantities of fresh water in the region of about 50 tons can be provided.

STORES: Stores are available in Dar-es-Salaam, but the East African Harbours Corporation cannot undertake to transport stores to the Mono Buoy. Transport of stores to the buoy will be the responsibility of the Agent.

REPAIRS: During periods of calm and the fact that there is little current, it is foreseen that the problem of riding up on the buoy may occur. The vessel's engines shall therefore be available at all times and the telegraph shall be on stand-by while the vessel is in the berth. Engine repairs are not permitted. Should a vessel not be able to use her engines the cargo will be stopped and the vessel towed to a safe anchorage at the vessel's cost, until she can safely return to the berth.

SHORE LEAVE: Shore leave will not be permitted. Should any of the crew require to be landed for medical or relief reasons, the Agent will be reponsible for providing transport to the Inner Harbour. East African Harbours Corporation craft will on no account be available to ferry crew members to and from the passenger pontoon. The Mono Buoy lies 4.5 miles from the passenger landing pontoon, which is situated in the Inner Harbour.

POLLUTION: It is the Master's responsibility to see that no oil of any kind is pumped or spilled overboard from his vessel. This includes oily water from bilges, crude residues from the previous voyages or any other matter that may result in the pollution of the area. Owners and Masters should comply with any international regulations and recommendations concerning the prevention of pollution of the sea.

Serious consequences will arise if the above rule is broken. All costs and expenses involved will be for the account of the vessel concerned and the Master may be prosecuted under the Tanzania Merchant Shipping Act.

REGULATIONS: While in the berth the vessel should provide a pilot ladder on the opposite side of the vessel to the gangway, secured at the rail and ready for use.

No boats of any kind shall be lowered without permission from the Customs, Immigration and Harbour Master, except in an emergency.

East African Harbours Corporation maintains vessels to assist in berthing. These vessels are under the direct supervision of the Mooring Master/Pilot. Any service or faciility provided by the East African Harbours Corporation, including the services of the Mooring Master/Pilot and boats are the vessel's risk. The furnishing of Mooring Master/Pilot and launches or other services and facilities shall not be construed to be or give rise to a personal contract.

AUTHORITY: Harbour Master, Dar-es-Salaam, for Port Manager.

MKOANI (KOHANI): 05.21 S. 39.38 E.

DOCUMENTS, HEALTH: Refer to "Zanzibar."

PILOTAGE: No pilot available.

RESTRICTIONS: Vessels passing through channel between Zanzibar and Pemba should inform Port Authorities 24 hours in advance.

Entrance through Mkoani leading marks, buoyed and well-lit channel, depth of 11 fathoms. Vessels may enter and sail any time night and day.

ANCHORAGE: No mooring buoys. Min. depth 6 fathoms. Vessels work cargo to lighters. Sandy bottom with mud close inshore.

MAX. SIZE: Length 250 ft.

TUGS: Not available and not required.

FRESH WATER: Not available.

FUEL: Not available.

AUTHORITY: See "Zanzibar".

MTWARA: 10.16 S. 40.12 E.

DOCUMENTS, HEALTH: Refer to "Dar-es-Salaam".

PILOTAGE: Compulsory. Pilot based at Dar-es-Salaam and flys to Mtwara when required. Flights once daily except Wednesdays. Early information concerning ETA to Harbour Master, Dar-es-Salaam.(South-bound vessels requested to divert to Dar-es-Salaam to embark Pilot).

Pilot boards 0.5 mile North of Shangani Reef Buoy from tug.

Signal Station can be contacted on VHF, Channels 12 and 16, between 0800 and 1800 hrs.

ANCHORAGE: No safe anchorage outside port. Anchorage for 6 vessels inside harbour.

RESTRICTIONS: Port closed from 1800 to 0600 hrs. Buoyed entrance channel 1.5 cables wide at narrowest point. No tidal restrictions.

MAX. SIZE: Length 575 ft., draft 32 ft.

RADIO: Dar-es-Salaam or Mombasa Radio.

TUGS: Join vessel off Signal Station. Tug's lines used.

BERTHING: Deep-water Quay; 1,248 ft. length; 32 ft. depth alongside. two berths available at quay.

CARGO GEAR: Vessels load/discharge using ship's gear.

STEVEDORES: Stowage plan required preferably before ship's arrival.

MEDICAL: Doctor available. All crew require valid smallpox vaccination and yellow fever inoculation certificates.

DENSITY: 1025.

FRESH WATER: Not normally available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Arranged by Agents.

IDENTIFICATION CARDS: Required.

REPATRIATION: Possible.

AIRPORT: 7 miles distant. Daily service to international airport.

TIME: GMT plus 3 hours.

HOLIDAYS: All holidays worked as Sunday except following when no work done: Christmas Day and 1st May.

TELEPHONES: Direct connection on board not possible.

SHORE LEAVE: Crew allowed ashore.

AUTHORITY: East African Harbours Corporation, Dar-es-Salaam.

TANGA: 05.04 S. 39.08 E.

PORT LIMITS: From high water mark at Ras Kwawa 090° to the meridian of 39° 15′ E., thence 180° to the parallel of Lat. 5° 05′ S., thence 270° to the mainland at high water mark. Time of anchorage within port limits to constitute an "arrived vessel".

DOCUMENTS, HEALTH: Refer to Dar-es-Salaam.

PILOTAGE: ETA required via Mombasa Radio, if not given by Agents at previous port of call. Pilot embarks from white launch in vicinity of Ulenge Beacon on Ras Kazone leading line. Pilot ladder required on port side in N.E. monsoon, and on starboard side in S.W monsoon.

Vessels wishing to enter must await the arrival of the Pilot at the outer anchorage and, if anchored, must anchor well clear of the leading lines.

APPROACHES: Tanga is approached from the S.E. through channel in line with Ulenge leading marks bearing 319° T. A 3 fathom bank to starboard is marked by ship channel buoy. Care should be taken in this vicinity as there is frequently a strong set to the N.E. On the port hand, Niule Reef is marked on Northern tip by a buoy. After passing Niule Reef Beacon it is necessary to turn to port on to Ras Kazone leading marks bearing 266° T. until Ulenge Beacon is sighted.

A signal Station is situated immediately below Ras Kazone High light. Signals are exhibited to indicate if inner channel to harbour is clear. Morse lamp messages may be exchanged with incoming vessels.

Late afternoon arrivals to Tanga may encounter poor visibility of land marks due to haze from setting sun, but a chimney on the fertiliser factory site on Ras Kazone with three vertical red lights at a height of 100 m. is conspicuous.

RADIO: Mombasa Radio. Ras Kazone Signal Station keeps 24 hour VHF watch on Channel 16, working on Channel 12.

ANCHORAGES: Inner Harbour provides safe anchorage for four vessels up to 600 ft. length and 27 ft. max. draft also one coaster up to 250 ft. and 17 ft. draft. In addition there are six anchorages in Outer Harbour for vessels of draft greater than 27 ft., least depth of water being 45 ft. LWOST. Incoming vessels without Pilot should not anchor within one mile of Ras Kazone.

BERTHING: All except bulk cargo work is carried out at anchor. Vessels are not berthed in Inner Harbour during hours of darkness except by special request in cases of urgency. 30 lighters available, capacity up to 250 tons each.

CARGO-HANDLING FACILITIES: One 20-ton fixed crane is available on lighterage wharf for heavy lifts. A jetty on the Eastern side of Ras Kazone provides one berth for vessels of 20,000 dwt. equipped for the discharge of bulk cargoes and liquid ammonia. Two portal cranes of 7 tons capacity fitted with grabs. Jetty currently handling bulk products for fertiliser factory.

PASSENGER FACILITIES: All passengers and visitors to ships pass through the customs passenger terminal at the Eastern end of the new lighter wharf, and embark or disembark from the pontoon landing stage. Private hire launches available.

FRESH WATER: Not available.

FUEL: Not available.

GENERAL: Refer to "Dar-es-Salaam" for all general information.

AUTHORITY: Tanga Port Manager.

WETE (Pemba): 05.14 S. 39.43 E.

DOCUMENTS, HEALTH: Refer to Zanzibar.

PILOTAGE: Not compulsory, but restricted to daylight only. Vessels passing through channel between Zanzibar and Pemba should inform Port Authorities 24 hours in advance.

RESTRICTIONS: Entrance through Uvinje Cap, channel depth decreasing to 11 fathoms, with shallow patches to be avoided. Narrowest part of channel is 1.5 cables wide. Vessels may enter and leave at any state of tide but in daylight only.

ANCHORAGE: No mooring buoys, Vessels work cargo to lighters. Depth decreases to 2.5 fathoms. Mud bottom.

MAX. SIZE: 240 ft. length; 25 ft. draft.

TUGS: 1 Tug and 1 Labour boat.

LIGHTERS: 3 lighters of 200 tons each.
6 lighters of 100 tons each.

FRESH WATER: Not available.

FUEL: Not available.

AUTHORITY: See "Zanzibar".

ZANZIBAR: 06.09 S. 39.11 E.

DOCUMENTS:

Bill of Health.
3 Crew Lists.
6 Passenger Lists.
3 Cargo Manifests.
3 Customs Manifests.

PILOTAGE: Compulsory. Vessels approaching from English pass embark Pilot at Seagull Buoy, and vessels approaching from South pass meet Pilot at Penford Buoys. Pilot takes vessel in and out, day and night. Notice of ETA required 6 hours in advance. Pilot on VHF Channel 16.

ANCHORAGE: Six anchorages to accommodate vessels drawing up to 32 ft. Additional anchorage provided for vessels carrying explosives.

RESTRICTIONS: Two entrances, English pass and South pass. The former is approximately 1 mile wide and has min. depth of 6 fathoms and 4 ft. and a very narrow angular turning corner of 1.7 cables width. South pass wider and deeper than English pass. Passes are well buoyed and lighted. In English pass, tidal stream runs North and is stronger on ebb than on rising tide. South pass, tidal stream runs N.N.W. and stronger on flood than on ebb-tide. Vessel may enter or leave at any state of tide at any time.

MAX. SIZE: (Anchorage) Length 1,100 ft., beam 110 ft., draft 32 ft.

HEALTH: Pratique given by Quarantine Officer who boards on arrival. All crew required to be in possession of valid smallpox vaccination and yellow fever inoculation certificates.

TUGS: 3 tugs and 2 labour boats.

BERTHING: Concrete pile wharf 800 ft. long to North of Ras Shangani used mainly for lighterage purposes and for berthing Government coasters. Under special circumstances, upon prior request to Port Officer, vessels of less than 375 ft. length and drawing less than 20 ft. may be permitted to berth alongside, but due prevailing onshore winds this practice not encouraged.

STEVEDORES: Normal working hours Monday to Thursday, 0700 to 1500 hrs. Friday 0700–1200 hrs.

Work can be extended on overtime for a second shift up till 2300 hrs.

Average rates: bagged cargoes 15 tons per gang hour, general cargo 8 tons per gang hour.

LIGHTERS: 2 lighters, open at the top for heavy equipment 280 tons each.

2 lighters for bag and general cargo, each with a capacity of 300 tons.

5 lighters for bag and general cargo, each with a capacity of 200 tons.

5 lighters for bag and general cargo, each with a capacity of 150 tons.

6 lighters for bag and general cargo, each with a capacity of 100 tons.

FRESH WATER: There is one water barge of 250 tons capacity. Water can be supplied at the wharf by wharf hydrant or at the anchorage in the stream by water barge.

FUEL: Not available.

AUTHORITY: Serikali ya Zanzibar, Port and Marine Dept.

Territoire Francaise d'Afars et Issas

DJIBOUTI: 11.36 N. 43.08 E. (See Plan)

DOCUMENTS: Crew List for ship's Agent. Crew Manifests and Manifests of Passengers in transit or for disembarkation, for whom disembarkation cards are to be completed. Presentation of Health Declaration and verification of compulsory immunisations by the health representative. Cargo Manifest, required in 5 copies prior to any discharging operations, also deposit of 1 copy at port operation office.

PILOTAGE: Is compulsory. Pilot boards in vicinity of buoy No. 2 of the Heron Bank, where all vessels must wait. Call signals are regulated by International Code. Vessels at the quay wishing to put to sea must call Pilot half an hour beforehand by 3 long blasts (in addition to the "G" flag). VHF radiotelephony station to liaise with ships. Ships must ensure a permanent watch on Channel 12, at the latest after clearing parallel of Muskali beacon.

MAX. SIZE: Entrance to inner roads dredged to 11 m. depth.

ANCHORAGE: Anchorage zone is within following limits:

1. Eastern limit: a line parallel to and 0.25 miles West of the North passage.
2. Southern limit: Latitude 11° 37' N.
3 Western limit: a bearing with the Western extremities of Penguin and Ambouli Banks in alignment.

It is forbidden to anchor within 5 miles on each side of the alignment of Ambouli and d'Ayabele lights.

Average depth is of 15 to 20 m. Anchor hold is excellent, even with a strong S.W. monsoon when there is often a heavy swell.

RESTRICTIONS: Entry during the day or night. Highest tide 2 m. 90. Mean tide is approximately 1 m. 60, and lowest are 0 m. 20. Tidal currents are very weak in bay and rarely exceed 1 knot.

HEALTH: Generally free pratique by radio can be granted to all ships applying through Coastwise Station Djibouti Radio. Ships must radio in plain or international code, a maximum of 12 hours and a minimum of 4 hours prior to arrival in port. In all cases, when Pilot boards vessel he gives Captain a copy of Maritime Health Declaration which must be filled in by Captain and countersigned by ship's doctor, if the crew includes one. An examining official comes on board when vessel arrives to receive the Maritime Health Declaration. Smallpox certificate required from all travellers coming from all countries. Cholera certificate required from all travellers coming from an infected area, excepting children of under 6 months of age.

RADIO: For short distance communications, ships contact shore by radio telephone VHF through Harbour Master's office. Port office is equipped with a VHF station transmission and reception: Channel 12 (156.6 mHz). For medium or long distance communications, ships contact shore by radiotelegraphy and radiotelephony through Djibouti coastwise station, call sign: TXZ; call frequency: 8.682 and 500 kc/s; working frequency 8.682 and 464 kc/s.

TUGS: In Winter (slight Easterly monsoon), a single tug is generally sufficient for manoeuvring. In Summer during the Khamsin period, berthing or sailing often requires 2 tugs. There is a 1,500 h.p. diesel tug *Aboubaker Pacha*, a 1,320 h.p. diesel tug *Henri Lambert*, a 1,000 h.p. tug *Administrateur Bernard* and 1 auxiliary 600 h.p. tug.

BERTHING: exterior docks comprise:

Dock 11	depth of 11 m.
Dock 12	depth of 12 m.
Dock 10	depth of 11 m.
Dock 13	depth of 10.80 m.
Dock 9	depth of 9 m.

Average depth of remaining roadstead is between 15 and 20 m.

CRANES: There are no cranes on quays, but the port has 2 mobile cranes of 15 tons and 25 tons capacity plus a floating crane for the handling of heavy-lifts of 80 tons capacity.

BULK CARGO FACILITIES: Molasses can be handled.

SPECIALISED CARGO HANDLING FACILITIES: Open ground and shedded areas for containers, Roll-on/Roll-off traffic and Quay for the traffic of lighters.

STEVEDORES: Four companies available, office hours from 0700 to 1730 hrs. Stevedoring 24 hours.

MEDICAL: Port Medical Service directed by medical practitioner specialised in industrial medicine is situated in a building neighbouring the port offices. It operates a dispensary. Passengers and sailors in transit are treated by private doctors from town who may visit the ships. Serious cases can be hospitalised in Djibouti's civil or military hospitals.

TANKERS: Reception lines: berths 12 to 13 specially equipped for reception of bunkering products are linked with installations of the petroleum companies by a 16-in. dock-line and 12-in. (FO) and another of 12-in. (DO). Pier No. 10 is connected to the installation with a dock-line of 12-in. Rate of discharging can reach between 2,000 and 2,500 t.p.h. Reception of white products is assured from quay No. 13 by an 8-in. line; for gas there is a 4-in. line.

FRESH WATER: Each quay provided with 3–5 (200 mm.) water-hydrants. Delivery of 40 cu.m. of water per hour. Regardless of the season, there is never any shortage of fresh water.

FUEL: A complete range of different viscosities and products is available. Meets all the usual requirement of bunkering vessels. Ample supplies of fuel and diesel oil are always available.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

IDENTIFICATION CARDS: Required.

CONSULS:

	Address	Tel.
Belgium	Rue de Bruxelles	2360
Ethiopia	Rue Clochette	2318
Germany	Rue Marechal Foch	2207
Holland	Avenue des Messageries Maritimes	2822
India	Rue d'Athenes	2391
Italy	Rue St. Laurent du Var	2462
Norway	Avenue St. Laurent du Var	2951
Sweden	Avenue Messageries Maritimes	2822
U.S.A.	Place Lagarde	2126
Yemen	Pres Hotel "Siesta"	3175
Somalia	Rue Bourhan Bey	3421

REPAIRS: Small repairs available.

REPATRIATION: Good facilities exist.

AIRPORT: International airport with regular and local flights.

HOLIDAYS: *Section A:* New Year's Day (1 January); Aid Seghir (El Fithir) and the following day; Labour Day (1 May); Ascension Day; Aid El Kebir and the following day; Muslim New Year (1st Mouharam); National Holiday (14 July); Mouloud El Nabi; Armistice Day (11 November); Christmas Day (25 December).

Section B: Easter Sunday; Easter Monday; Whit Sunday; Whit Monday; Assumption (15 August); All Saints (1 November).

Dates referring to religious holidays vary every year, particularly where Muslim holidays are concerned. Loading and discharging operations as well as bunkering can be carried out during all of above holidays when other services are also available. Where loading and discharging are concerned, days in Section B are paid as ordinary working days but if work is carried out on days in Section A then special tariffs will apply to hourly and daily wages which are increased by 100%.

TELEPHONES: Available on every berth.

SHORE LEAVE: Allowed.

DEVELOPMENTS: A 4,400 sq.m. shed and two 1,600 sq.m. sheds (South Mole extension) are finished.

Building of 10,000 sq.m. sheds completed for trailers, tractors and elevators of strong capacity for the handling of containers.

Berth 9 under reconstruction.

AUTHORITY: Directeur, Port de Commerce de Djibouti.

AGENT: Socopao – Djibouti, P.O. Box 57. Tel. 24.50. Telex 827 Djibouti. Cables "Marill".

Thailand

BANGKOK: 13.42 N. 100.34 E. (See Plan)

KOHSICHANG:

North-east Monsoon 13.09 N. 100.50 E.
South-west Monsoon 13.11 N. 100.50 E.

PORT LIMITS: A vessel is normally considered to be an "arrived ship" on passing the Paknam Customs Station.

DOCUMENTS: Ship's forms: Crew List; Passenger List; Store List; List of arms and ammunitions for ship's use; List of Arms and Ammunitions in possession of passengers; List of opium and harmful habit-forming drugs; List of crew private belongings (cigarettes, radio, gramophone, camera, etc., including foreign currencies and liquors); Dangerous Cargo List; List of heavy lifts; Stowage plan; Inward cargo manifest; Transit cargo manifest; Through Cargo manifest; list of containers.

Documents to obtain from officials and agents: Immigration forms No. 3, 4 and 35, obtainable from Agents. International Maritime Declaration, obtainable from Quarantine Officer.

APPROACHES: The entrance of the river Chao Phraya is marked by the Bangkok Bar light beacon situated at the Lat. 13° 26′ 24.3″ N., Long. 100° 35′ 48.1″ E. Sea-going vessels have to cross the bar at the mouth of the river through an 18 km. long bar channel, which is dredged to a depth of 8.5 m. from MSL (mean sea level), and a bottom width of 100 m. in the straight section and 250 m. in the curve.

The depth of the river within the port area varies from 8.5 m. to 11 m. from MSL.

The MSL at the Bangkok Bar and at Klongtoi is 2.3 m. and 1.63 m. above lowest low water respectively.

At present the limiting length of vessels entering the port is 172.2 m. (565 ft.). The limiting draft of vessels will be determined by the bar adder plus the depth of water (predicted in the Tide Table published yearly by the Hydrographic Department RTN) from LLW at the Bangkok bar, but the max. draft of vessels allowed to cross the bar is not over 27 ft.

The MSL at the Bangkok Bar and at Klongtoi is 2.3 m. and 1.63 m. above lowest low water respectively.

PILOTAGE: Compulsory at Bangkok; Kohsichang not required; Advance notice required 48 hours prior to arrival.

Location Pilot vessel Bangkok: Lat. 13° 23′ 33″ N., Long. 100° 35′ 12″ E. Area waiting pick-up Pilot will be anchorage close to Pilot vessel, preferably 500 to 600 m. from Pilot vessel, enabling Pilot boat to get alongside safely. Pilot vessel marked by white flashing light every 2 seconds.

ANCHORAGE: (Map/DeLong Pier site.) Capacity – 10 deep draft ships. Location – N.E. of Ko Khram Yai Island between 12.43 N. and 12.44 N. Minimum depth 7.5 fathoms. Good holding ground. (Deep water port site.) Capacity unlimited. Location – South and S.W. of Channel entrance between 12.34 N. and 12.35 N. Miniumum depth 9 fathoms. Good holding ground. No protection from weather.

RESTRICTIONS: *Bangkok:* No restrictions, able enter day and night, dependent tide at Bar Channel. *Kohsichang:* No restrictions, able enter day and night.

MAX. SIZE: Bangkok: not exceeding 565 ft. LOA Kohsichang. See "Berthing".

HEALTH: *Radio Pratique:* According to the Thai Ministry of Health's Regulations and International Health's Regulations article 36:

Under the responsibility of ship's captain and shipping Agents, vessels from infected areas may apply for exemption of Quarantine through radio pratique by telegram sent to Quarantine Bangkok, stating name of ship, last port, number of passengers and health of crew and passengers.

(a) Vessels with passengers from infected areas proceeding to the berthing places in Bangkok must slow down at Paknam enabling Port Health Officer to board the ship for inspection.

(b) Vessels without passengers from infected areas go directly to berthing places in Bangkok where they will receive Port Health Officer for inspection.

Remarks: In case of suspected infectious disease on board any ship or anything wrong about health or ship sanitation, the ship's captain is requested, as early as possible, to inform the Port Health Officer at International Quarantine Office (Medical) Section, Immigration Division, North Sathorn Road, Bangkok, Tel. 39588.

Documents Required: 1 copy of Maritime Declaration of Health; 1 copy of Crew List; 1 copy of Passenger List; Derating or Derating Exemption Certificate.

Vaccination: Vaccination Certificates required: Smallpox; Cholera (only when leaving from infected areas); Yellow fever (only when leaving from infected areas).

However, vaccination may be done as deemed necessary by Port Health Officer even if the crew or passengers are from non-infected areas.

Vaccination certificates will be shown collectively for transit passengers/crew members and individually for disembarking passengers/crew members only.

Exemption from Vaccination: If the Port Health Officer is of the opinion that vaccination is contra-indicated on medical grounds, he shall provide the persons with reasons, written in English, underlying that opinion, which health authorities should take into account.

Death on Board: In the case of death on board after the ship was at the anchorage or at the port, permission to land the corpse must be obtained after the inspection of the Port Health Officer, if the cause of death was not quarantinable diseases.

Ship's Captain or shipping Agent must inform the Port Health Officer for inspection if there are cadavers and/or remains on board, who died in a foreign port, in order to pass through the quarantine. The dead should be accompanied by a death certificate (or a true copy)., signed by the medical officer and placed in a coffin hermetically sealed in a casket, which is air-tight and waterproof.

According to Immigration Law B.E. 2493 (1950): The traveller to Thailand must be free from diseases forbidden under section 14 (4) of the Immigration law such as: trachoma, leprosy, tuberculosis, venereal diseases, including physical or mental defects who cannot earn their living.

RADIO:

Name of Station	*Frequencies*	*Remarks*
Bangkok Radio:		
HSA Long Wave	500 kHz (for calling) 480, 512 (for traffic)	operate 24 hours
HSA Short Wave	8686 kHz (for calling) 8686, 12800 kHz (for traffic)	operate 7 times a day every day beginning hours of 0000, 0200, 0500, 0800, 1100, 1400 and 1600 (GMT).

In addition to above, communication can be made through the Port Radio and Pilot Radio; however these 2 stations can be reached within steaming time of less than 24 hours prior to arrival at Bangkok, their particulars as follows:

HSC 61 L.W. 500 kHz (for calling)
operate 2300–1700 hrs. GMT
512, 480, 468, 454 and 425 kHz.
(for working)
Traffic Lists broadcast at 0450 hrs. GMT, and the beginning of every hour every day.
HSC 62 S.W. 8466 kHz.
Operate 5 times a day every day beginning hours of 0000, 0300, 0600, 0900 and 1300 hrs. GMT.

Information to be supplied by incoming Vessel:

(1) Last port of departure.
(2) Estimated time of arrival pilot station.
(3) Draft (fresh water).
(4) General cargo tonnage for discharge.
(5) Dangerous cargo.
(6) Heavy lift required.
(7) Fresh water required.
(8) Number of passengers (landing and transit).
(9) Time of dropping anchor at pilot vessels.

VHF: VHF communication with port radio and pilot radio through Channel 16 (24 hours service). Also VHF communication with shore for International Maritime Mobile Service under following:

Channel 24
For ship transmitting frequencies 157.20) } (for calling)
For shore ,, ,, 161.80) }
Channel 26
For ship transmitting frequencies 157.30) } (for traffic) service
For shore ,, ,, 161.90) } 24 hours
Channel 28
For ship transmitting frequencies 157.40) } (for traffic)
For shore ,, ,, 162.00) }

TUGS: Will join when vessel approaches berth, using tug's line without extra charge. 6 tugs available, 25 tons static pull.

BERTHING: No difficulties in approaching berth. Agents will cable to Master to inform when Pilot has been ordered to board vessel.

Midstream: 21 anchorage places and mooring buoys for sea-going vessels.

2 berths in front of Co-operative Salt wharf for 500 ft. vessels
4 berths in front of Customs boarding station for 300 ft. vessels.
2 berths at Bangplakod for 565 ft. vessels.
1 berth at Bangplakod for 500 ft. vessels.
5 berths South Sathupradit (6 mooring buoys) for 450 ft. vessels.
3 berths North Sathupradit for 400 ft. vessels.
4 berths North of Krungthep bridge for 280 ft. vessels.

Berths: 70 wharves on both sides of the river for sea-going vessels:

14 berths for imported general cargo (km. 27 to km. 29) on the left bank of the river at Klongtoi operated by the Port Authority of Thailand for 565 ft. vessels.

1 berth for imported general cargo (km. 39.5) on the right bank of the river operated by Thai Maritime Company for 400 ft. and 280 ft. vessels.

1 berth for imported general cargo (km. 46) on the right bank of the river operated by Thai Maritime Company for 250 ft. vessels.

14 berths for imported petroleum products operated by private and government organization for 150 ft., 350 and 565 ft. vessels.

40 berths for export cargo operated by private companies for 280 ft. to 565 ft. vessels.

36 dolphins in front of Klongtoi wharf. A row of 36 dolphins along the river at a distance of 275 m. from the Klongtoi wharf, to accommodate 7 ocean-going freighters for exported cargo.

Kohsichang: 7 berths available, no limit on length, max. draft 35–47 ft.

CRANES: 2 floating cranes at 125 tons capacity may be used for handling cargo in the ship's holds. Both are owned and operated by private companies.

BRIDGES: Bangkok port has one bridge only. However, as bridge up river, vessel permitted to pass bridge with LOA not exceeding 280 ft.

STEVEDORES: Vessel to advise Agents 48 hours prior arrival, text required in this cable to be ETA, Drafts, Tonnage of cargo aboard for Bangkok, Number of crew/passengers, Dangerous cargo/Heavy lifts, Gangs required.

MEDICAL: Hospital facilities available, advance notice of ETA required.

TANKERS: Diameter of shore line various from 6 in. to 20 in. All terminals are able to provide reducers.

DENSITY: Bangkok: Min. 1000, max. 1011; Kohsichang: 1021.

FRESH WATER: Available, supply can be made through barges and shoreline. Capacity of barges from 120 to 250 tons, rate of supply approx. 30 t.p.h. Advance notice 24 hours.

FUEL: Available. Supply can be made by barge and alongside terminals, no delay on bunkering, advance notice 48 hours.

DEVELOPMENTS: *East Quay wall expansion at Klongtoi Wharf:* This project will provide 6 more berths for ocean-going vessels, consisting of 2 berths for conventional freighters, 4 berths for special container ships and a 450 m. long wharf for lighter aboard ship (LASH). The construction work is now being carried out and expected to be completed in 1976.

New alignment for Bangkok Bar Channel: This project is the result of a study on the siltation in the Bangkok Bar Channel aimed at reducing the expensive maintenance dredging cost. It is also proposed to widen the existing channel from 100 m. to 150 m. for safety of Navigation. A project for the new alignment of the Bangkok Bar Channel is now under consideration.

Laem Chabang deep sea port: The location of this deep sea port is expected to be at Laem Chabang on the Eastern side of the Gulf of Thailand near the town of Sriracha and about 120 km. S.E. of Bangkok. A Dutch engineering firm has been appointed to make the initial survey and final design under the financial assistance of the Dutch Government.

GANGWAY/DECK WATCHMEN: Necessary.

OPENING/CLOSING HATCHES: In general carried out by stevedores without extra charge. (Ordinary hatch covers, not new hatch cover system.)

CUSTOMS ALLOWANCE: 200 cigarettes for officers, while crew member only 100 for 3 days. Wine/Spirit 1 bottle each, opened.

CARGO GEAR: Supplied by stevedores except cargo tent and forklift truck.

IDENTIFICATION CARDS: Required for all crew and officers.

CONSULS:

Argentina	36911–3
Australia	35970–9
Austria	58327, 59071, 517208
Belgium	30840
Brazil	59070, 5–6030
Burma	30237, 31698
Canada	3–2956–7, 3–0746, 3–8215
China	5–8051–4, 51–3912
Denmark	26–3930
Finland	33617
France	3–0957–9, 3–0950, 3–4644
Germany	86–1041
Great Britain	53291, 517952
Greece	52–1686
India	3–5065
Indonesia	5–8045–7, 51–8915
Iran	86–0950, 86–1350
Iraq	229353
Ireland	39454
Israel	5–3371–2, 51–8915
Italy	3–4508, 3–7230, 3–7819
Japan	5–3301–9
Korea	86–1074–5
Khmer Republic	57650, 57709, 55223
Laos	86–1041
Malaysia	86–1390–1
Monaco	31437
Nepal	917240
Netherlands	5–3360, 5–3368–9
New Zealand	3–5936–7
Norway	3–0271
Pakistan	5–7006–8
Panama	911289
Philippines	910008, 910211
Portugal	30372
Saudi Arabia	37941–2
Sri Lanka	8291168
Singapore	30509, 33117, 38735, 38741
USSR	31824
Spain	56502, 58368, 55167
Switzerland	58002–4
Sweden	863907–8
Turkey	73999
United Arab Republic	53358
United States of America	59800, 59801–9, 53101, 55981, 517986, 516939, 519914, 58478, 522723
Vietnam	517201–3
Vatican	31804

REPAIRS: Only minor repairs.

DRY DOCKS: 1 for vessels up to 360 ft. LOA.

REPATRIATION: Possible; however, no facilities for crew changes.

AIRPORT: About 25 kms. from Bangkok, regular services by airlines.

TIME: GMT plus 7 hrs. No change of clock during the year.

HOLIDAYS: Able work all around the year except December 31st and January 1st.

POLICE/AMBULANCE/FIRE: Police (Highway) 816240, 816241, 816250. (C.I.D.) 219111, 225151; Ambulance 811544; Fire 816666, 811544.

TELEPHONE: Available when alongside PAT berths.

SERVICES: No tank cleaning equipment. No facilities for discharge of tank washings. Compass adjusting, but spare parts unavailable. Radar/VHF/radio repairs. Lloyd's/ABS/Veritas/Nippon Kaiji Kentei Kyokai, Surveyors available.

SHORE LEAVE: Permitted.

DELAYS: Occasionally congestion, delay 1 to 2 days.

AUTHORITY: Chairman: Port Authority of Thailand.

PHUKET: 07.50 N. 98.25 E.

DOCUMENTS:

PRIOR TO ARRIVAL AT PHUKET:

Entry documents and advance information.

Custom and Immigration Entry forms as well as list of other documents required on *vessel's own forms* to be completed in advance for presentation on arrival Phuket will be sent in advance to the Agent at one of the previous ports together with request for the following information required 4 days in advance of vessel's arrival.

Confirmation of ETA and any subsequent revised ETA.
Captain's name.
Last port of call before Phuket.
Next port of call after Phuket.
Net registered tonnage (n.r.t.).
Hatch distribution and gangs workable.
Cash advance of Master.

Flags: Vessels are required to fly the Thai flag and display the code flag "Q" on arrival.

PILOTAGE: There is no official Pilot available.

ANCHORAGE: The following anchorages are regularly used by ocean carriers of deep draft calling Phuket for loading or discharging cargo.

During the N.E. Monsoon Season: Prevailing wind from November through March and periods of strong Easterly winds, vessels are recommended to anchor in position 7° 53′ N. and 98° 27′ 15″ E. about 0.5 mile off Laom Mai Pai to pick up the boarding party and stevedores before proceeding to the actual anchorage for loading at position 7° 57′ N. and 98° 33′ E. about one mile off Koh Yac Hyai, draft approx. 16 m. (50 ft.) at LWOS. However, during calm weather periods cargo operation will be carried out at the first mentioned anchorage.

During the S.W. Monsoon season: Prevailing from April through October and any periods of strong Westerly winds, vessels are recommended to anchor at position 7° 53′ N. 98° 27′ 15″ E. about 0.5 nautical mile off Laom Mai Pai, draft approx. 14 m. or 45 ft. at LWOS.

To facilitate cargo operations during swell from South, vessels are requested to anchor as close as possible to the above anchorage positions according to the Master's judgement.

No Pilot is required on approaching the above anchorage; however, it should be noted *three ocean-going dredgers* are operating in the area between Koh Dok Mai and Kon Khai Nok which should be passed at a distance of about 1,500 ft. to keep clear of their anchor lines. The dredgers are lit up and clearly visible at night.

It should also be noted during the new moon period there are several small fishing craft in the area.

RESTRICTIONS: *Channel:* The channel around Koh Tapae Kyai is normally passed clockwise and is marked by a system of buoys, the position of which are shown on Thai charts. However, it is also possible to turn around by swinging on the anchor just after passing buoy No. 3 on a rising tide (South to North) just before high tide.

Width of Channel; Min. 230 ft. at buoy No. 6 measured (chart datum at LLW) at 6 m. depth curve. Max. 900 ft. at buoy No. 4 measured at 6 m. depth curve.

Restriction in Navigation: (1) Entering or leaving through the North channel involves a rather sharp turn with a radius of about 1,000 ft. and angle of about 115° between the axis of channel in a restricted area between buoy No. 6 and Koh Tapai Noi Island. Please also note the wreck buoy between buoy No. 6 and Koh Tapao Noi.

(2) The draft at buoy No. 6 is about 24 ft. 6 in. at Lowest H.W.

(3) At buoy No. 5 are placed two pairs of mooring buoys parallel in the channel, occasionally used by tankers discharging petroleum products to Esso and Shell installations ashore. The width between the narrowest pier is about 150 ft. and vessels are required to pass between these mooring buoys.

HEALTH: All crew and passengers must have valid health certificates for small-pox and cholera.

RADIO: Messages to and from vessels at sea on the West coast of the Malayan Peninsula are best transmitted via Penang Radio in time to allow retransmission to Phuket at about the following local times:

Weekdays at 0930 hrs., 1400 hrs. and 1630 hrs. Sundays at 1630 hrs.

For vessels outside this area, messages can be sent via Bangkok or Singapore as applicable. Cables via Bangkok Radio are normally transmitted every second hour from 0800 to 2100 hrs. local time, whereas cables via Singapore are sometimes retransmitted via Bangkok Radio and sometimes via Penang Radio.

There are no facilities for ship-to-shore communication in

Phuket, but vessels are *not* required to close down their radio station or VHF set while in port.

There is long-distance telephone connection with Bangkok, Penang, Singapore and Kuala Lumpur from Phuket at all hours.

Despatch Cables: Agent will in all probability need to send cables via the ship's radio reloading results, etc., subject to the Captain's approval. The cost of all such cables is to be borne by the vessel.

TUGS: No tugs available.

BERTHING: *Pier Facilities:* At Laen Klusi, Thailand Smelting and Refining Co. Ltd. have built a crossway connected by a short bridge to a pier which is parallel to the channel. The pier and channel are presently only suitable to accommodate vessels up to about 10,000 d.w.t. and approx. 430 ft. long, not exceeding 22 ft. draft. Vessels berthing at the pier are recommended to anchor at position 7° 48′ 24″ N. and 98° 25′ 12″ E. to await loading and favourable tide.

Dimensions of the pier: Length 61 m. (200 ft.), width 12 m. (40 ft.). Depth about 24 ft. 6 in. at LLW.

Fenders: The pier is protected by a system of wooden fenders in addition to which there is one fender at each end of the pier with solid rubber buffers.

Mooring buoys: There are two mooring buoys about 700 ft. apart each at equal distance from the end of the pier.

MEDICAL: It is only possible to get a doctor on board in the most severe cases, but otherwise there are two hospitals in Phuket, one of which is managed by American Seventh Day Adventists Mission Doctors and the other is a General Hospital.

FRESH WATER: Limited and difficult to obtain.

FUEL: Limited and difficult to obtain.

CONSULS: None.

SURVEYORS: No marine surveyors in Phuket; however, a surveyor can be called from Bangkok.

REPAIRS: No facilities.

SATTAHIP: (Military port, Royal Thai Navy).
Chuk Samet Port 12° 30′ 40″ N. 100° 55′ 00″ E.
Tungprong Port 12° 41′ 58″ N. 100° 50′ 21″ E.

PORT LIMITS: Extend to approximately 1,500 yards from the quay wall at Chuk Samet Port, and 1,000 yards from piers at Tungprong Port.

DOCUMENTS: See "Bangkok".

PILOTAGE: Recommended working daily during the day time only. Advance notice required 4 hours prior to arrival on working day (on holiday notice required at 0830-1200 hrs.) Radio frequency used when handling the vessel is 27125 mHz.

ANCHORAGE: Anchorage area for waiting berth and Pilot:

Chuk Samet Port; Capacity: eight deep-draft ships min. depth 8 fathoms.

Lat. 12° 34′ N.	Lat. 12° 36′ N.
Long. 100° 50′ 35″ E.	Long. 100° 51′ 35″ E.

Tungprong Port; Capacity: four deep-draft ships minimum depth 10 fathoms.

Lat. 12° 43′ N.	Lat. 12° 45′ N.
Long. 100° 49′ E.	Long. 100° 49′ 30″ E.

RESTRICTIONS: Berthing day time only.

MAX. SIZE: See "Berthing".

RADIO: Radio telephone.

Name of Station	*Frequencies*	*Remarks*
MSC	2738 mHz	Day time
Portsat	2738 mHz	Day time

TUGS: Join when vessel approaches berth, charge for use of tug's lines.

BERTHING:

Limitation of Draft:

Chuk Samet Port: Depth 32 ft. below LWOS or 36 ft. below MLW.

(1) For cruising in the channel
32 ft.
– 3 ft. for squat, tidal phenomena, etc.
– 2 ft. for under keel clearance
Draft = 27 ft. at LWOS

(2) For staying in port
32 ft.
– 2 ft. for under keel clearance
Draft=30 ft. at LWOS

(3) Draft of the vessel could be increased for the day of staying by adding the figure of the height of tide at low water of that day to the figure of draft in (2) above (30 ft.+Height of tide at LW).

Tungprong Port: Depth 29.8 ft. below LWOS or 33 ft. below MLW Draft of the vessel to be brought and stayed alongside is 27.8 ft. at LWOS.

	No. of Berths	*Max. LOA (ft.)*	*Remarks*
Chuk Samet	4	600	General Cargo
	1	600	Tanker
Tungprong	3	600	Ammunitions

Cruise passenger ships are permitted to berth at Sattahip.

STEVEDORES: Vessel to advise Agent 7 days prior to arrival. Text required in this cable are: flag, ETA, draft, tonnage of cargo aboard for port, number of crew/passengers, dangerous cargo/heavy lifts, gangs required.

MEDICAL: Hospital facilities available.

TANKERS: Diameter of shore lines are 6, 12 and 20 in.

DENSITY: 1021.

FRESH WATER: Limited, 200 tons per trip, addition 100 tons for boiler. Supply can be made by water trucks, advance notice of ETA required.

FUEL: Available, supply can be made by barges, advance notice of ETA required.

GANGWAY/DECK WATCHMEN: Necessary.

OPENING/CLOSING HATCHES: Carried out by stevedores without extra charge.

CUSTOMS ALLOWANCE: 200 cigarettes for each officer, 100 for each crew member for 3 days. One bottle each, wines and spirits, opened.

CARGO GEAR: Supplied by stevedores.

IDENTIFICATION CARDS: Required for all crew and officers.

REPAIRS: Only for minor repairs.

TIME: GMT plus 7 hours. Throughout the year.

POLICE/AMBULANCE/FIRE: Security centre 2187; Duty officer 2102 (after duty hours); Police 3180; Ambulance 116; Fire 117.

TELEPHONES: Available (U.S. military circuits).

SHORE LEAVE: Permitted.

AUTHORITY: Port Director.

SRIRACHA: 13.07 N. 100.51 E.

DOCUMENTS:

For Customs
6 copies Crew List.
6 ,, Personal Belonging List.
6 ,, Provisions – Stores List.
6 ,, Foreign Currency List.
6 ,, Deck Stores List.
6 ,, Arms – Ammunition List.
6 ,, Opium List.
6 ,, Drug Store List.
6 ,, Bonded Store List.
6 ,, Passenger List (to be typed also if no passengers aboard).

For Immigration
3 copies No. 3, 4 Inward Form.
3 ,, No. 3, 4 Outward Form.
2 ,, No. 35 Immigration Form.
2 ,, Crew List.

The above forms No. 3–4–35 will be handed to Master by the Agent's representative on arrival.

For Quarantine
2 copies Vaccination List (Cholera–Smallpox).
1 copy Maritime Declaration of Health.

PILOTAGE: Not compulsory. The terminal will provide a Mooring Master to give assistance in berthing. Advance notice required 48 hours prior to arrival. No VHF communications between ship and terminal.

The Mooring master boards off the berth in approx. position 13° 07′ N., 100° 50.5′ E.

It is reported that, when crossing the Bar with Ko Nok Islet abeam, distance 1.5 miles, vessel steering 048T, least recorded depth approximately 56 ft. LW.

The Mooring Master acts as supervisor and liaison between ship and shore and remains on board until clear of berth.

Accommodation ladder required.

APPROACHES: The recommended courses approaching seaberth through the Southern part of Ko-Sichang are as follows:

from Junction point named "A"	Lat. 12° 43′ 00″ N. Long. 100° 44′ 36″ E.	TC=360°
to Junction point named "B"	Lat. 12° 56′ 14″ N. Long. 100° 44′ 36″ E.	
from Junction point named "B"	Lat. 12° 56′ 14″ N. Long. 100° 44′ 36″ E.	TC=022°
to Junction point named "C"	Lat. 13° 00′ 00″ N. Long. 100° 46′ 12″ E.	
from Junction point named "C"	Lat. 13° 00′ 00″ N. Long. 100° 46′ 12″ E.	TC=037°
to Junction point named "D"	Lat. 13° 06′ 20″ N. Long. 100° 51′ 00″ E.	

from point "D" A/C to 000° (T) up to Anchorage Area or Point "E".

Point "E"	Lat. 13° 07′ 00″ N. Long. 100° 51′ 00″ E.

ANCHORAGE: Within 1 mile of position "E" in a depth of 12 fathoms. The bottom is mud.

RESTRICTIONS: Tankers berth in daytime only.

MAX. SIZE: Length 900 ft. max. draft 50 ft.

HEALTH: If vessel arriving from foreign port, cable required 48 hours prior to arrival at Quarantine Bangkok, stating number of crew and passengers, ETA, last port of call and date of sailing, any sickness or death arising during the voyage, otherwise confirming all well.

Vessels shall have derating certificates valid on arrival as well as all passengers' and crew members' valid vaccination certificates against cholera and smallpox.

RADIO:

Name of Station	*Frequencies*	*Remarks*
Bangkok Radio:		
HSA Long Wave	500 kc/c (for calling) 554, 512 480, 468 (for traffic)	operate 24 hours.
HSA Short Wave	8686 kc/s (for calling) 8450, 8420, 8400 8380, 8360, 8330, 8320 kc/s (for traffic)	operate 5 times a day every day beginning hours of 0900, 1200, 1500, 1800 and 2100 hrs.

Masters of all vessels proceeding to Sriracha are to notify their Agent by radio of their expected time of arrival at least 3 days prior to arrival. This notice shall be amended in the event of any change in the time of arrival.

In addition to the above, the ETA message shall be confirmed 24 hours before arrival. The first notice of arrival is to contain the following information:

Cargo grade and quantities to be discharged.
Discharging rates, barrels per hour.
Deepest salt water draft
Bunkers and water on arrival.
Urgent stores to be delivered on arrival, if any.
Bunkers and water to be delivered, if any.
Laundry service, if any.
Nature of any extraordinary repairs to be effected.
Any other matter to be attended to on arrival such as electronic equipment repairs, medical attention or hospitalisation, crew repatriation (in this case advise name, age, nationality, passport number).
Cash required, if any.
Crew liberty launch service, if any.

BERTHING: One buoy berth for tankers up to 50 ft. draft. Other berths where draft 43 ft. 6 ins. and 32 ft. 6 ins. Reducers available. No facilities for discharge of tank washing.

Each berth consists of 6 buoys – one at either bow and quarters, and inshore beam buoys abreast of focsle and poop breaks. The main berth is arranged to accommodate a tanker of 90,000 d.w.t. The required moorings are 2 ropes and a wire to each bow and quarter buoy, and 1 wire to each breast buoy. The offshore anchor is used (1.5 to 2 shackles) but only for purposes of dredging into the berth, and holding the vessel's bow whilst moorings are run out.

The discharge hoses connected to the vessels manifold are 2×12 in. being in turn connected to 2×16 in. hoses which leads into a common manifold on the sea bed. The submarine line to the shore is of 32 in. diameter and about 1 mile in length.

Maximum permissible discharge pressure at ships rail, approx. 110 PSI.

Upon completion of discharge and clearing berth, vessels proceed to an anchorage off the berths, in order to carry out the Immigration Clearance, which necessitates the signing of an Immigration Form by every crew member in the presence of the Immigration Officer. After signing the form the vessel is free to sail.

MEDICAL: Hospital facilities available, advance notice of ETA preferred.

DENSITY: About 1021.

FRESH WATER: Can be supplied by barge. 24 hours notice required.

FUEL: Can be supplied by barge. 48 hours notice required.

DEVELOPMENTS: A project for a new deep-sea port at Sriracha has been approved and is under survey.

CUSTOMS ALLOWANCE: 200 cigarettes for each officer, 100 for each crew member for 3 days.

Each man allowed 1 opened bottle wine/spirits.

IDENTIFICATION CARDS: Required for all officers and crew.

CONSULS: At Bangkok:

Argentina	36911–3	Korea	31940
Australia	35970	Laos	32010
Austria	58327	Malaysia	36927
Belgium	30840	Netherlands	53368
Brazil	59070	New Zealand	31318

AIRPORT: Situated about 25 km. from Bangkok, regular international services.

TIME: GMT plus 7 hours. No changes during the year.

AUTHORITY: Director General.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Togo Republic

KPEME: 06.12 N. 01.30 E. (See Plan)

PORT LIMITS: In accordance with the terms of Charter-party a vessel is considered to be an "arrived ship" when she is anchored between one mile and two miles from the end of the jetty.

DOCUMENTS:
2 Crew Lists.
2 Stores Lists.
2 Private Property Declaration Lists.
2 Lists of last two Ports of Call.
2 Passenger Lists (if no passengers, 2 lists stating same).
2 Cargo Manifests (if no cargo for Kpeme, 2 lists stating same).

PILOTAGE: The limits of the port of Kpeme are fixed at 1 mile from all points of the jetty . Pilot boards out of the above limits. The Company Pilot remains on board while ship is berthed and disembarks when vessel cleared port limits. International code pilot signal used. At night, vessel should anchor between 110° and 180° at least 1 mile from the end of jetty.
VHF: Radio station, call "Kpeme pilot station" on Channel 16. Pilot boat grey motor boat without special signals.

APPROACHES: By day the extremity of the jetty (three artificial islands and two loading machines) forms an obvious landmark.

At night a white light (situated at the extremity of the jetty, 23 m. above the sea) all around horizon – light 3 sec., occulting 1 sec., light 1 sec., occulting 1 sec.

ANCHORAGE: Good holding ground (sand and mud) between 14 and 16 m.

RESTRICTIONS: Vessels should signal twice the date and probable time of her arrival. The first time 72 hours and the second time 24 hours prior arrival. Vessels berth in daylight only from 0530 to 1530 hrs. GMT. Unmooring can be effected day and night. Water approaches are clear. Any ship should have both fore anchor cables in perfect order and capable of being used in their entirety. Any ship should be able to leave immediately if she receives order to do so from Harbour Master. With this in mind, engines must be on standby. Ships are not authorised to cross port entrance without a Pilot on board. After winches in perfect order.

MAX. SIZE: Tankers up to 31 ft. draft on arrival. Bulk carriers up to 38 ft. draft on sailing. Bulk carrier up to 32 ft. max. on berthing. LOA up to 215 m., max. airdraft 12.20 m.

HEALTH: Send message for free pratique within 24 hours of arrival to Port Health Officer, Kpeme.

RADIO: Until vessel within 600 miles, communicate through Portishead Radio, Senlis Radio and Dakar Radio. Within 500 to 300 miles via Abidjan Radio TUA 487 kHz. and within 300 miles via Lome Radio 5VA 472 kHz.

VHF: VHF radio station, call "Kpeme Port" on Channel 16.

TUGS: No tugs available. Two mooring launches of 150 h.p. each are at vessel's disposal.

BERTHING: Loading facility comprised of three artificial islands carrying conveyor belts for loading phosphate only. They are breasted by a row of four dolphins. Vessel moors using port anchor and wires to four buoys which hold the ship parallel to the dolphins and about 20 m. off. Springs are run to the dolphins. Each loader delivers at a rate of 1,250 t.p.h. and two holds can be loaded at same time.

TANKERS: Moor at a special berth situated to the East at 0.4 miles away from the extremity of the phosphate pier. One submarine line 12 in. diameter, hose connection 8 in. diameter. At any time sufficient draft for securing and sailing, also fire hoses ready rigged on deck.

FRESH WATER: Not available.

FUEL: Not available.

MEDICAL: No facilities at Kpeme. In emergency, doctor obtained from Lome, about 25 miles away, or from Anecho, 7 miles away.

CONSULS: Nearest at Lome.

REPAIRS: No facilities available.

CUSTOMS ALLOWANCE: 200 cigarettes or 2 oz. tobacco; one bottle of spirits. No Customs Authorities board the vessels or seal bonded stores.

REPATRIATION: No facilities exist for effecting crew changes. However, in emergencies repatriation can be arranged.

AIRPORT: Nearest Lome – four flights a week to Europe.

TIME: GMT.

TELEPHONES: Placed on board, charges included in stay-in-port tax.

SHORE LEAVE: Not allowed.

GENERAL: In the rainy season, high winds and swell may delay berthing operation.

AUTHORITY: Compagnie Togolaise des Mines du Benin.

LOME: 06.08 N. 01.17 E.

DOCUMENTS:
5 Crew Lists.
5 Kru-boy Lists.
5 Passenger Lists.
4 lists Previous Port of Call.
1 Maritime Declaration of Health.
1 List of arms and ammunition.

APPROACH: The approach to the port, by night, is assisted by three lights:

(1) *Baguida* (pos. 06° 09.5′ N. and 01°19.5′ E.) occulting white and red. Lt. 2.5 secs., occ. 0.5 sec. period 3 sec. Vis. 17 miles. Sector: red 042°, covers the breakwater as well as the old Lome Wharf (pos. 6° 07′ N. and 1° 13.5′ E.).

(2) *Lome Togo-Port* situated on head of West breakwater (pos. 06° 08′ N. and 01° 17.5′ E.). Qk. Fl. (4) white and red every 10 sec. Vis. 5 miles. Red light sector covers only old wharf and is not visible seawards.

(3) *Lome Light* situated near town of Lome (pos. 06° 07′ N. and 01° 13′ E.). Group Fl. (2) white every 10 sec. Vis. 15 miles all around horizon.

By day, large, light-coloured transit sheds and a high, grey water tower (pos. 06° 08.5′ N. and 01° 16.5′ E.) are the first indications of port from seawards.

PILOTAGE: Pilots available 7 days a week from 0600 to 1800 hrs. only. Pilot station equipped VHF radio and works 24 hours per day on Channel 16. Pilot boat green motorboat with orange superstructure and international flag "H". Pilot boards 0.5 mile to 1 mile S.E. of breakwater.

ANCHORAGE: Vessels which arrive during darkness should anchor about 0.5 to 1 mile South to S.E. of breakwater, in white sector of Baguida light in 8 fathoms, where good holding ground (sand) obtained. Northern boundary of anchorage is red sector of Baguida light.

MAX. SIZE: Max. length 900 ft. (270 m.) and max. draft 31 ft. (9.5 m.).

HEALTH: Health Inspector will board on arrival alongside and examine for cases of infectious diseases, after which will declare vessel free or not. Vessels entering must fly international quarantine signal "Q". Large hospital situated in Lome with doctors in attendance.

RADIO: Lome radio station can be contacted on 472 and 500 kHz, call sign "5VA". Port operations carried out on VHF Channel 16, with range of approximately 30 miles. Aero beacon (pos. 06° 10.7′ N. and 01° 16.3′ E.) call sign "LME" on 379 kHz.

TUGS: One tug 960 h.p. available. For vessels of more than 500 g.r.t. tug is obligatory when berthing or unberthing.

STEVEDORES: Agent should be informed as soon as possible of ship's ETA, length, max. draft, tonnage to load and/or discharge and number of gangs required. Agents should advise Pilot station of vessel's ETA.

TANKERS: Togo-Port has sea pipe-line belonging to the Societe Togolaise d'Entreposage. Tankers should moor at 3 large mooring buoys inside breakwater. Diameter of pipe-line 8 in. Discharging about 230 t.p.h. (depending on ship-pumps). Max. length which can be handled at buoys is 720 ft. (220 m.) max. draft 31 ft. (9.5 m.).

DENSITY: Density 1025. Harbour open to sea.

FRESH WATER: Available at every berth except tanker berth. Delivery rate 45 t.p.h. Fresh water examined monthly for purity by Sanitary Authority.

FUEL: Diesel fuel only available for small craft, such as fishing vessels, small motor-ships and tugs.

FIRE PRECAUTIONS: No extraordinary precautions are required. Vessels with hazardous cargo should declare this on ETA telegram to Agent. During time in port these vessels should take necessary precautions themselves, and all fire hoses should be ready rigged on deck. By day international code signal "B" should be displayed and by night a red light should be shown at masthead or at an all-round visible place.

Smoking on berths and within sheds *strictly* prohibited. Infringements of fire regulations punishable by fine.

DEVELOPMENTS: A second quay, a fishing harbour, a slip for small vessels and a tanker berth are projected for the Eastern section.

GANGWAY/DECK WATCHMEN: Gangway watchmen and hatch security watchmen available; they wear a distinctive uniform.

OPENING/CLOSING HATCHES: Either ship's crew or dockworkers.

CERTIFICATES: All normal ship certificates should be available for inspection.

CUSTOMS ALLOWANCE: Because Togo-Port is a Free Port, no individual declaration by crew members necessary.

CARGO GEAR: No extraordinary regulations. no cranes available and ships' own gear used for discharging and loading.

IDENTIFICATION CARDS: Shore landing passes issued by port police and should be supplemented by personal ID-Cards.

CONSULS: Ambassadors or Consuls from nearly all major maritime nations at Lome.

REPAIRS: Minor repairs only.

DRY DOCKS: Not available at present, but a slip for small vessels is included in future development.

AIRPORT: Lome airport with daily flights to Europe.

SEAMEN'S CLUB: A modern Seamen's Club with swimming-pool, bar and library situated 0.5 mile from port.

TIME: GMT throughout year.

PUBLIC HOLIDAYS: New Year's Day (1st January); Independence Day (27th April); Labour Day (1st May); Christmas Day (25th December). All other holidays will be worked in port with supplementary labour charges.

POLICE/AMBULANCE/FIRE: Push-button fire alarms situated in every shed and on exterior South wall of shed "B". Telephone for contacting Police, Fire-Station or Hospital available day and night in Harbour Masters office.

TELEPHONES: 3 public telephones within the port limits. No telephones on board.

SERVICES: No tank cleaning or compass adjusting available.

DELAYS: Ships berth in rotation of arrival at anchorage. Priority given to passenger ships as well as to vessels having less than 50 tons of cargo for discharge.

GENERAL: Distance from port to Lome city-centre is 4 miles. Taxis available at entrance of port.

AUTHORITY: Port Autonome de Lome.

AGENT: Socopao Togo, B.P. 821, Lome. Tel. 5588/89; Telex 2505. Cables, "Freight Lome".

Tonga (Friendly Islands)

NUKU'ALOFA: 21.08 S. 175. 12 W.

DOCUMENTS: *Immigration Dept.*
2 Crew Lists.
2 Passenger Lists.
Customs Dept.
2 Crew Lists.
2 Passenger Lists.
1 Bond List.
3 Cargo Manifests.
Agents
1 Crew List.
1 Passenger List.
3 Cargo Manifests.

PILOTAGE: Order through Agents at least 24 hours prior to arrival. Pilot boat may be contacted on R/T one hour before arrival at Pilot station. This position is indicated on B.A. Chart (approaches to Nuku'alofa). There are two approaches, namely the Ava Lahi Passage and the Piha Passage. Vessels using Piha Passage are limited to a length of 500 ft.

Vessels may anchor in the vicinity of No. 1 Buoy if required to await Pilot, but this is not normally necessary as the Pilot is available as requested. Pilot boat carries usual signals.

ANCHORAGES: Vessels may anchor wherever they wish within the port, subject to the approval of the Harbour Master.

MAX. SIZE: Length unlimited, beam unlimited, draft 40 ft.

HEALTH: Radio pratique may be requested from Tongamed, Nuku'alofa. Any suspected disease or fever must be reported by radio.

TUGS: No tug is required for berthing, but a tug is available in case of breakdown.

STEVEDORES: There is a Master Porter employed by the Queen Salote Wharf Administration, who will supply whatever gangs are required. The number of hatches to be worked and the tonnage of cargo must be passed by the Agent to the Harbour Master at least 24 hours before vessel arrives.

MEDICAL: It is advisable to inform Agent in advance should medical attention be required. Hospital facilities are available. Vaccination certificates are required for visitors who are staying. Ship's crew do not require them generally.

DENSITY: 1025 at all states of tide.

FRESH WATER: Available ex Queen Salote Wharf at 25 t.p.h. delivery.

FUEL: A small quantity of light diesel fuel could be supplied, sufficient to enable a vessel to make the port of Suva.

DEVELOPMENTS: Queen Salote Wharf to be extended to at least 600 ft. Land is to be reclaimed on the Eastern and Western sides of the Wharf.

GANGWAY/DECK WATCHMEN: Not necessary as entry to wharf is restricted.

OPENING/CLOSING HATCHES: This work is completely optional.

CERTIFICATES: Normal requirements. Harbour Master may require to inspect cargo gear record.

CUSTOMS ALLOWANCE: A reasonable quantity is allowed by Customs according to expected stay in port. There are heavy penalties for smuggling.

CARGO GEAR: Valid certificates issued by competent authorities are recognised.

IDENTIFICATION CARDS: Not necessary.

CONSULS: None.

REPAIRS: Repairs can be carried out in the Marine workshop.

REPATRIATION: No facilities.

AIRPORT: 14 miles from town. Flights to and from Suva on Tuesdays, Thursdays, Fridays and Saturdays. There are also flights to New Zealand, same days as Suva.

TIME: The local time is 13 hours fast on GMT.

HOLIDAYS: *No work of any description is permitted on the Sabbath. This is strictly enforced.* Official Holidays are: Christmas Day; Boxing Day; Good Friday; New Year's Day; Easter Monday; Anzac Day; Emancipation Day (June 4th); Constitution Day (4th November); H.M. Queen Elizabeth's Birthday; King's Birthday (July 4th).

POLICE/AMBULANCE/FIRE: Telephone numbers not necessary. Just ask for the Department required.

OTHER PORTS: Pangai, Ha'apai Group; Neiafu, Vava'u Group; both these ports are suitable for any size of vessel at anchor. Service is by lighter. Vessels of 400 ft. in length with a max. draft of 22 ft. may berth at Neiafu.

AUTHORITY: Harbour Master, Queen Salote Wharf, Nuku'alofa.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Trinidad

BRIGHTON (Texaco Oil Terminal): 10.15 N. 61.38 W.

DOCUMENTS/HEALTH/CONSULS, etc,: Refer to "Port of Spain".
PILOTAGE: Compulsory.
ANCHORAGE: Good holding ground in roadstead. Loading pier situated 10° 15′ N. -61° 38′ W., extending in a N.W. direction for 2,010 ft.
RESTRICTIONS/MAX. SIZE: Outer Berth East, 29 ft. 6 in. MLWST; Outer Berth West, 24 ft. 6 in. MLWST; Centre Berth East, 21 ft. 6 in. MLWST; Centre Berth West, 21 ft. 6 in. MLWST; Inner Berth West, 21 ft. 6in. MLWST.
TUGS: Not used. Launch assists with lines.
STEVEDORES: Supplied by Agent if necessary for loading Asphalt in drums only.
FRESH WATER: Available only at berth. Pumping rate 15 to 20 t.p.h.
FUEL: All grades of fuel alongside or by barge. Fresh water.
GANGWAY/DECK WATCHMEN: Customs guard on 24 hours duty at ship's side.
CUSTOMS ALLOWANCE: 200 cigarettes and moderate amount of spirits.
IDENTIFICATION CARDS: Not required.
REPAIRS AND DRY DOCKS: At Chaguaramas.
MEDICAL: All facilities available.
REPATRIATIONS: Can be arranged.
AIRPORT: See "Port of Spain".
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SHORE LEAVE: No restrictions.
DELAYS: Not usual.
AGENT: See "Port of Spain".

CHAGUARAMAS (Chaguaramas Terminals Ltd.): 10.40 N. 61.39 W.

DOCUMENTS/HEALTH/CONSULS, etc.: Refer to "Port of Spain".
PILOTAGE: Compulsory. Pilots board in Chaguaramas Bay – 10° 46′ N. – 61° 43′ W.
ANCHORAGE: Safe anchorage in Chaguaramas Bay between mainland and Gaspar Grande Island about 0.5 miles off the dock.
RESTRICTIONS/MAX. SIZE: No restrictions night operation. 2 docks – main wharf with overhead cranes for loading and discharging bauxite – 960 ft. long, max. draft 32 ft. Smaller wharf – 400 ft., draft 25 ft.
TUGS: Not used. Launch assists in mooring.
STEVEDORES: Not necessary. All loading/discharging done by Chaguaramas Terminals employees.
FRESH WATER: Available from dock, 40 t.p.h. Also supplied by barge.
FUEL: Can be delivered from dock or supplied by barge.
GANGWAY/DECK WATCHMEN: Customs guards on duty at ships side.
CUSTOMS ALLOWANCE: 200 cigarettes and a moderate amount of spirits.
IDENTIFICATION CARDS: Not required.
CARGO GEAR: Loading – carried out with travelling tower rate 1,000 t.p.h. Conveyor system. Discharging – carried out with travelling rig of 2×4 ton grabs. Conveyor system.
REPAIRS/FLOATING DOCK: Operated by Swan Hunter Docks. Displacing up to 11,380 tons, 560 ft. long vessels. Also good berthing alongside, draft to 35 ft., and a safe close anchorage, draft 50 ft. General extensive repairs undertaken.
MEDICAL: All facilities available.
REPATRIATION: Can be arranged.
AIRPORT: See Port of Spain.
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SHORE LEAVE: No restrictions.
AGENT: See "Port of Spain".

CRONSTADT ISLAND: 10.39 N. 61.38 W.

Terminal owned and operated by Barytes and Minerals Ltd., handling bulk barytes.

Vessels from abroad calling at Cronstadt are required to proceed first to Chaguaramas for clearance formalities.

DOCUMENTS/HEALTH/CONSULS, etc.: refer to "Port of Spain".
PILOTAGE: Compulsory.
TUGS: One tug used for berthing if required.
RESTRICTIONS: Berthing/unberthing in daylight only.
MAX. SIZE: 400 ft. length. This size vessel would overhang wharf approx. 100 ft. fore and aft. Draft not limited as depth of water alongside is 60 ft.
BERTHING: Vessel moored with 2 springs, 3 head and stern lines to dock. Discharging carried out with shore crane grab bucket 3 tons capacity.
FRESH WATER: Available by barge.
FUEL: Available by barge.
AGENT: See "Port of Spain".

GALEOTA POINT: 10.05 N. 61.00 W. (See Plan)

LOCATION: Galeota Single Buoy Mooring Terminal is located 3 miles on a bearing of 192° from Galeota Point Lighthouse, and is an open, unsheltered roadstead. Galeota Point is a narrow headland about 210 ft. high and located in Lat. 10° 08′ 00″ N. and Long. 60° 59′ 30″ W. The lighthouse, situated on top of the point, exhibits a light 240 ft. above sea level which flashes white every 5 seconds, and is seen for 22 miles. The buoy itself exhibits a quick flashing (1 flash per second) red light, 10 ft. high, and visible for 4 miles through 360°.

DOCUMENTS:

Health Declaration, International Health Form to be filled out by Master on arrival.
Derat Certificate/Derat Exemption.
4 Crew Lists.
Ship's Register.
2 Stores Lists, signed by Master.
2 Passenger Manifests, if any passengers on board.
Bonded-stores List, each crew member is allowed to retain in his possession 200 cigarettes and one bottle of spirits. The balance must be listed and will be sealed in a locker by the Customs.
Clearance from last port of call.
Manifest, or if no cargo a statement that vessel is in ballast.

PILOTAGE: Vessels arriving should approach to within 3 to 4 miles of Galeota lighthouse, on a bearing of 220/230° and will be met by the Amoco Mooring Master and a Trinidad/Tobago Pilot. The Pilot will be stationed on the bridge and will advise the vessel on the approach to the buoy. The Amoco Representative will be positioned in the bow to advise the ship's crew in picking-up and making fast the floating nylon mooring lines.

Vessels are requested to have a Pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach the Mooring Master's launch. If at night, adequate lighting must be rigged overside for the Mooring Master to approach the side of the ship and climb the safety ladder.

ANCHORAGE: Approaching vessels should never anchor to the East or N.E. of Galeota Point. A submarine pipe-line from a platform in Lat. 10° 10′ 24″ N. and Long. 60° 39′ 56″ W. enters the Galeota Point area about 0.5 miles Northward of the lighthouse. Vessels should approach from the S.W., and never anchor in the vicinity of the SBM or between the buoy and the coastline.

RESTRICTIONS: Galeota Terminal operates 24 hours per day, 7 days a week. Ships are loaded and unmoored at any hour, weather and other circumstances permitting. Vessels are moored during daylight hours only; however an exception to this rule may be made at the discretion of the Terminal.

NOTICE OF READINESS: The company will make every effort to load vessels upon arrival or as promptly as berth is available, weather permitting.

Notice of Readiness will not be accepted as at time of arrival, unless the vessel is in all respects ready to load. Arrival time will be considered as the time the Mooring Master boards the vessel or the time that the vessel anchors, whichever occurs first.

In the event that the berthing is delayed on account of weather, vessels will keep their position in line. Vessels required to leave the port area on account of weather (port closed) should keep in contact with the Terminal via radio in order that they will be available when the weather moderates.

RADIO: Incoming tankers must send ETA via commercial radio station 9YL 3 days before arrival, on the marine HF frequencies. Galeota Point listens on 2182 kc/s and operates with Amoco's marine units on 2398 kc/s.

Ships equipped with FM/VHF radio may call Galeota Point on 156.8 Mc/s, Channel 16.

The first ETA messages should also include a definite statement of the details of any equipment required from shore for connecting submarine hoses to ship's manifold. Further ETA messages should be sent to Amoco when the vessel is 24 and 12 hours distant from Galeota Point and at any other time any appreciable change occurs in the original ETA or those subsequent thereto. The 12 hours ETA should include a positive statement regarding ship's readiness to load on arrival and the number of hours that will be required to discharge ballast after ship is berthed in mooring.

Ship-to-shore communications while ships are in moorings will be by portable VHF radio telephone units. The Mooring Master will advise Masters and Officers regarding the emergency whistle signals set up for use in event VHF radio telephone units become inoperative. The use of the ship's radio station and/or battery-charging equipment is prohibited during cargo transfer operation.

CLEARANCE: Trinidad and Tobago Customs Officials will be stationed at Galeota and in most instances the Customs Officer will also handle the duties of the Quarantine and Immigration Officers. Should Customs guards be stationed on board vessel while in the moorings, it is expected that ship will provide food for these guards and other officials. All vessels calling at Galeota Terminal must provide an accommodation ladder for the officials.

SINGLE-BUOY MOORING: The tankers load by means of a 42-in. pipe-line from shore to SBM which is 3 miles offshore. The ballast water is pumped ashore through a 16-in. submarine line. The buoy piping consists of two 20-in. diameter for crude and one 16-in. diameter for deballasting with a by-pass. The loading hoses from the buoy to the tanker consist of two 20-in. floating hoses, 770 ft. long ending in 12-in. hoses of 105 ft. length.

This SBM is designed for maximum tanker size of 250,000 d.w.t. and is located in 95 ft. water depth. Amoco maintains launches to assist in mooring and unmooring vessel.

Tankers to have ready 2 nylon or manila messenger lines of not less than 6 in. circumference and at least 300 ft. long.

HOSE CONNECTIONS: After the tanker is securely moored the floating loading/deballasting hoses must be lifted to the rail with ship's equipment. The two 12-in. hose lifts weigh about 5 tons each. The flange connection on each hose is for a 12-in. manifold. Hoses are lifted individually by the ship's gear, and may be connected on either the port or starboard side. The 12-in. hoses are connected direct to the manifold and tankers should have their manifold fittings available.

The Mooring Master and the hose crew will sling and connect the hoses to the vessel's manifold. The ship's personnel are expected to operate the winch and assist where necessary. A deck officer should be present at all times.

BALLAST: No dirty ballast will be pumped overboard. A separate ballast disposal line (16 in.) is available at the terminal to pump ballast to a pit on shore where oil and water can be separated, and disposal made.

A vessel must have sufficient ballast for safe manoeuvring, and usually one-third of its tonnage is adequate. However, by a careful watch of the weather information and berthing instructions and by a knowledge of the behaviour of his own vessel a Master may desire to come to the terminal with minimum ballast.

In addition to the lights usually displayed, vessels discharging ballast or loading cargo during darkness will illuminate the area around the ship to the satisfaction of the Mooring Master, in order that any oil on the surface of the sea may readily be detected, and appropriate action taken. Vessels unable to illuminate the sea satisfactorily may not discharge ballast during darkness. Vessels should provide suitable flood-lights for working on deck during night operation.

Vessels equipped with a separate system of ballast tanks will be allowed to discharge ballast and load oil simultaneously, providing approval is received from the Terminal Superintendent.

All precautions shall be taken to prevent any loss of oil overboard, drip pans must be in place, and used when disconnecting oil hose from manifold. The waters in and adjacent to the Galeota Terminal must never be polluted.

LOADING: Maximum crude oil loading rate through two 12-in. deck hoses is about 25,000 b.h.b. The flow is by pump and the line pressure will not exceed 60 p.s.i.

Tankers valves must not be closed against incoming oil stream. At least 3 minutes is required to shut down pumps and stop flow of oil.

If ship-to-shore communications fail, the emergency signal is a continuous blast on the tanker's whistle.

MEDICAL: Vessels requiring emergency medical assistance should immediately contact the terminal by Marine VHF radio, and supply the necessary pertinent information which will be passed to the Agent.

Neither medical or hospital facilities are available at Galeota or provided by Amoco. Limited facilities are available in Mayaro, which is about 30 min. drive, and unlimited service is available in Port of Spain, which is 2 hours drive.

FRESH WATER: Only available by barge from Port of Spain.

FUEL: Only available by barge from Port of Spain.

REPAIRS: Masters of vessels loading or discharging at Galeota Terminal are advised that this port is considered an "open roadstead" and under no circumstances may engines be shut down for repairs while their ships are moored in the SBM system. There are no facilities for making vessel repairs, but arrangements may be made through vessel's Agent to utilize the Port of Spain facilities.

It is emphasized that all vessels in the SBM system must be in readiness to clear immediately on instructions to do so.

CONSULS: Nearest at Port of Spain

TIME: GMT minus 4 hours, and daylight saving (Summer time) is not applicable.

SHORE LEAVE: Shore leave for personnel of vessels loading or unloading at the terminal arranged through the vessel's Agent. All personnel going ashore must land at the Amoco small-boat harbour. Sufficient crew must be aboard at all times for letting go lines in order to clear the mooring immediately if necessary.

All vessels are required to fly the Trinidad and Tobago ensign on the foremast during daylight hours. Flags may be obtained from Agent.

The presence of unauthorized craft alongside is extremely hazardous. Ship's Masters are requested to require all non-Amoco craft to clear ship's side as soon as personnel have been embarked or disembarked.

No stores may be handled on the weather deck while ship is loading cargo, discharging dirty ballast, or while any ullage hatches, loading hose, or tank tops open.

A safety check-off list and terminal rules for safety will be delivered by the Mooring Master.

TERMINAL OPERATORS: Amoco Trinidad Oil Company.

POINTE-A-PIERRE (Texaco Oil Terminal and Refinery): 10.19 N. 61.28 W.

DOCUMENTS/HEALTH, etc.: As for "Port of Spain".

Officials require accommodation ladder to be rigged, usually on port side, for boarding and clearance.

PILOTAGE: Compulsory. Pilot ordered by Agent after receipt of ETA. Pilot ladder conforming to International Safety Regulations to be supplied by vessel.

ANCHORAGE: Safe anchorage and good holding ground in the roadstead. On acount of Pierre Shoal, a 21 ft. patch about 1.75 cables S.W. of the head of the main viaduct, vessels of moderate draft should approach with the main viaduct bearing more than 075°. The main viaduct consists of pipe-lines supported by reinforced concrete piling, located at 10° 20′ N. -61° 30′ W. and extends in a W.S.W. direction for 6,190 ft.

RADIO: Texaco Trinidad Inc. maintains their own radio station on frequency 2638 Mc/s. and VHF Channels 16, 13, 12, 11, 8 and 6.

MAX. SIZE:

No. 1 berth North: 40 ft. MLWST; 720 ft. LOA.
No. 2 berth North: 40 ft. MLWST; 775 ft. LOA.
No. 2 berth South: 35 ft. MLWST; 330 ft. LOA.
No. 3 berth North: 35 ft. MLWST; 640 ft. LOA.
No. 3 berth South: 20.5 ft. MLWST; 350 ft. LOA.
No. 4 berth North: 21 ft. MLWST; 350 ft. LOA.
No. 5 sea berth: 40 ft. MLWST; 900 ft. LOA.
No. 6 sea berth North: 48 ft. MLWST; no limit.
No. 6 sea berth South: 48 ft. MLWST; no limit.
No. 7 berth: 35 ft. MLWST; 700 ft. LOA.
No. 8 berth: 33 ft. MLWST; 570 ft. LOA.

TUGS: Texaco Trinidad Inc. maintains three tugs to assist in berthing.

FRESH WATER: Available alongside or by barge (if available and adequate notice given prior arrival).

FUEL: All grades supplied alongside or by barge.

SPECIAL PRECAUTIONS: Tankers loading or discharging.

Bonding: When a ship has docked, the bonding cable and hose shall be connected.

Weather: Loading and discharging of dangerous petroleum may be stopped during an electrical storm and ullage screens or ullage plugs must be put in place.

Emergency alarm: This safety device is conveniently placed on all docks and is under the control of the jetty personnel. This is used only in cases of emergency and has the effect of stopping all shore pumps immediately it is used. Owing to the size of vessels using No. 6 Berths, loud-sounding horns are situated on the hose structures and are sounded by the jetty attendant when urgent attention from the ship is required.

Hose pressure: The max. discharge pressure allowed on the jetty hose is 130 pounds. Pressure of jetty hose for loading shall not exceed 130 pounds.

Hot work: No burning, welding or major repairs can be carried out in the harbour without permission. Repairs involving hot work may be started only if a permit has been issued and the necessary gas-free certificate granted by the Company's qualified inspector.

Hoses: Loading hoses are connected up by dock personnel, but must be supported by ship's tackle at the rail during loading or discharging. Ship's officers should keep a close watch on the hose during operations and stop loading and/or discharging operations if anything untoward happens to the hoses. A drip pan is to be placed under all hose connections in use, After loading fuel oil, Marine diesel or NOR, air is used for displacing hose contents into the vessel before being disconnected. For all other products the hose is drained into ship's tanks or jetty slop tank.

Towing wires: On completion of mooring on arrival, a suitable wire shall be hung over the bow and stern on the side away from the dock so that, in an emergency a tug can tow the ship off. The wire should be properly secured on board and it should be long enough to reach the water's edge at the ship's lightest draft.

No Smoking: Smoking is prohibited on all the piers and launches. Smoking on board ship is permitted only in those enclosed spaces that are specifically designated by the Master as "Smoking Areas".

Tank Lids: Tank lids must be closed while handling cargo, and at all other times if tanks are not free of gas. Flame screens must be in position on all open ullage plug holes.

GANGWAY/DECK WATCHMEN: An efficient watch must be maintained on deck and in the engine room of all ships in port, and a sufficient number of men must be on board at all times to move the vessel either for harbour operations or in emergency situations.

CUSTOMS ALLOWANCE: 200 cigarettes and moderate amount of spirits.

IDENTIFICATION CARDS: Not required.

MEDICAL: Advance notice of medical attention preferred. Modern hospital facilities.

TELEPHONES: On dockside and at all sea berths.

SHORE LEAVE: Crew not allowed ashore at Pointe-a-Pierre. Regular launch service from ship to San Fernando, 3 miles away.

AGENT: See "Port of Spain".

POINT FORTIN (Shell Oil Terminal): 10.12 N. 61.42 W.

DOCUMENTS/HEALTH/CONSULS, etc.: Refer to "Port of Spain".

PILOTAGE: Pilotage is compulsory. Pilots board 0.5 miles off main jetty (Lat. 10° 12′ N. -Long. 61° 42′ W.).

ANCHORAGE: There is safe anchorage 0.5 miles off the head of the jetty.

MAX. SIZE: Jetty 2 miles long with "T" head providing two outer berths of 700 ft. length and a depth of 38 ft. One inner berth of 300 ft. length and a depth of 35 ft. and other inner berths of 300 ft. length with a depth of 15 ft. 6 in.

One conventional buoy mooring (six-buoy mooring) of 850 ft. length and a depth of 53 ft. situated 4,819 ft. North off jetty head.

TUGS: Required for berthing at outer berths for vessels of 30,000 d.w.t. and over and for unberthing vessels with a draft of 36 ft. or deeper. Also required for berthing and unberthing at conventional buoy mooring. Launch assists in berthing and unberthing.

BERTHING: Bottom alongside, mud; back pressure (hose), 100 lb; Current, flood S.W., ebb N.E. 2 to 5 knots; rise and fall tide, 4 ft.
FRESH WATER: Not available at CBM.
FUEL: Not available at CBM.
DIRTY BALLAST: No facilities available. Only small amount (approx. 200 tons) tank drainings acceptable on jetty and only if fluid at ambient temperature.
PRECAUTIONS: Normal oil terminal safety precautions applicable.
GANGWAY/DECK WATCHMEN: Customs guards on duty at ship's side.
CUSTOMS ALLOWANCE: 200 cigarettes, and a moderate amount of spirits.
IDENTIFICATION CARDS: Not required.
REPAIRS AND DRY DOCKS: At Chaguaramas.
MEDICAL: All facilities available.
REPATRIATIONS: Can be arranged.
AIRPORT: See "Port of Spain".
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SHORE LEAVE: No restrictions.

AGENT: See "Port of Spain"

POINT LISAS: 10.22 N. 61.29 W.

DOCUMENTS:
7 Copies Crew List.
2 Copies Ship's Stores List.
1 Copy Crew Stores List.
4 Copies Immigration arrival Report (supplied on arrival).
1 Declaration of Health (supplied on arrival).
Ship's Register.

PILOTAGE: Pilots ordered through Agent; 48/24/12 hour ETA needed. Pilotage is compulsory. Pilots board at Head of Pt. Lisas Channel (10° 22′ 37″ N. 61° 39′ 38″ W.); Pilot ladder conforming to International Safety Regulations to be supplied by vessel.

Launch hire arranged by Dock Master to take out Pilot to vessels on arrival, and again take off Pilots from vessels on departure.
CLEARANCE: Point Lisas being a port of entry is equipped with resident Customs Officer and Guard. Ships arriving from abroad could proceed directly to Point Lisas as Customs officer acts for Harbour Master/Immigration/Port Health. Tel. 659 2221.
ANCHORAGE: Safe anchorage 0.25 miles off head of channel. On occasions, when port congested, vessels may be requested to anchor Port of Spain Roads (10° 41′ N. -61° 33′ W.) before proceeding Pt. Lisas.
RESTRICTIONS: No restrictions on night entry -departure.
MAX. SIZE: Point Lisas "Liquid Pier" (vessels handling bulk sugar, molasses, caustic soda and Anhydrous Ammonia in Liquid form), Maximum LOA: 550 ft. Maximum draft: 28 ft. LW.

Point Lisas "Solids Pier" (vessels discharging plant equipment, and loading sulphuric acid in drums and bagged and bulk fertiliser). Maximum LOA: 400 ft. Maximum draft: 20 ft. LWOST.
HEALTH: Crews of vessels arriving must have valid Vaccination Certificates, covering smallpox. If not in possession, Master should advise when giving ETA and Port Health Officer will vaccinate on arrival.

For quarantine if required, or authentication of vaccination certificate, Honorary Port Health Officer could be in attendance at short notice. Tel. 656 2311.
TUGS: Molasses, bulk sugar and LPG carriers use a tug to assist in berthing and unberthing at Pt. Lisas "Liquid Pier". Tug will be ordered by the Agent.
STEVEDORES: If necessary will be ordered by Agents. No ETA to stevedores necessary.
FRESH WATER: Supplied at both piers. Also by barge.
FUEL: All grades supplied by barge. At "Solids Pier" gas oil only can be supplied ex shore installation.
FIRE PRECAUTIONS: When loading LPG no smoking on pier or on ship's deck.
GANGWAY/DECK WATCHMEN: Customs guards on 24 hours duty at ship's side.
OPENING/CLOSING HATCHES: Normally by crew.
CUSTOMS ALLOWANCE: 200 cigarettes and a moderate amount of spirits.
IDENTIFICATION CARDS: Not required.
CONSULS: At Port of Spain.
REPAIRS AND DRY DOCKS: At Chaguaramas 20 miles North of Pt. Lisas.
HOLIDAYS: New Year's Day (January 1st); Good Friday; Easter Monday; May Day (May 1st); Whit Monday; Corpus Christi; Discovery Day (August 5th); Independence Day (August 31st); Diwali Day (late October/early November); Eid-ul-Fitr (December 21st-22nd, approximately); Christmas Day (December 25th); Boxing Day (December 26th). Work is possible, except for May Day, on these holidays.
POLICE/FIRE/AMBULANCE: Accidents — Police — Help, 62999; Fire — First Aid, 62998; Foreign Calls, 6216.
VHF SERVICE: Pt. Lisas Dockmaster can be contacted on VHF Channels 16, 14 and 12.
MEDICAL: Advance notice of attention required will assist. Modern hospital facilities available.
REPATRIATIONS: Crew changes and repatriation can be arranged.
AIRPORT: Piarco International Airport — 30 miles from Point Lisas. Daily flights to world-wide destinations.
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SERVICES: Efficient maintenance gang available for normal work, tank cleaning, painting, etc.
SHORE LEAVE: No restrictions.
DELAYS: Due to congestion, sometimes delays are unavoidable, usually not more than 24 hours.
AUTHORITY: Federation Chemicals Ltd.
AGENT: Melville Shipping and Trading Ltd., Steamship Operators and Agents, 68/70 Sackville Street, Port of Spain. Tel. 54060, 54218, 52384, 54977, 54287. Telex POS 265. Cables "Meltra". Code: New Boe. Bankers: Royal Bank of Trinidad & Tobago Ltd. AO Tel. 23009, 41950, 43149, 22212.

PORT OF SPAIN: 10.39 N. 61.32 W. (See Plan)

DOCUMENTS:

For Immigration. On boarding, 3 Crew Lists and 3 Passengers Lists if passengers on board. Inspection of Derat. Certificate. Health Declaration and arrival report forms supplied by Immigration on boarding to be made up. Passengers and Crew must have valid smallpox certificates.

For Customs. 2 Crew Lists and 1 Passengers List if passengers on board, 2 Customs Ship's Stores Lists, 1 Crew's Stores List. Forms supplied on boarding.

Port doctor will board if calling from quarantine port. No forms required other than inspecting smallpox certificates of crew and passengers.
PILOTAGE: Not compulsory to Port of Spain anchorage but if required will attend from outside Bocas or where required through Agents in ETA message. Calling Pilot International Code Flag "H" by day and white light over red at night or International Code signal "G" on whistle.

Gangway or standard type pilot ladder with spreaders about 10 ft. apart. Ladder must be clean. It is desirable that 1 stanchion be securely fitted in the bulwalk at the top of the ladder.

Pilot station is situated on Port of Spain Wharf.
ANCHORAGE: Depends entirely on draft but should not be nearer than 0.5 miles from Grier Channel entrance, except in cases of vessels loaded with explosives; this anchorage is clearly defined on Chart.

Open roadstead in Gulf of Paria but can be considered as sheltered with choppy seas at times. Bottom shelves gradually from shoreline to 7 fathoms at Western end of harbour limits, increasing to 20 fathoms outside harbour limits Westward. Type of bottom, mud. Swinging area unlimited. No mooring buoy. Distance from anchorage to shore 2.25 miles at 5 fathoms to 5 miles at 7 fathoms, vessel will swing to the tide if loaded, and to the wind if light.

Currents 0.5 to 1.5 knots flood and ebb rise and fall of tides, variable minimum 1 ft. 5 in. maximum 4 ft. Rainy season June-December. Dry season December-June not always predictable. Rain squalls occur during months of July, August and September up to 30 to 40 knots unpredictable hurricane most unusual. Prevailing winds are mostly Easterly. Normally stronger during daylight.
RADIO: Advise through North Post wireless or telephone, call sign 9 YL. ETA 48 hours and 24 hours with other requirements.
RESTRICTIONS/MAX. SIZE: The Grier Channel, 350 ft. wide, leads to a dredged basin in which are the docks. No restrictions length, but maximum draft in channel, in basin and alongside is 32 ft. There is 4,600 ft. of docking area.
HEALTH: Crews of vessels arriving must have valid Vaccination Certificates, covering smallpox. If not in possession, Master should advise when giving ETA and Port Health Officer will vaccinate on arrival.
TUGS: There are 3 tugs in Port of Spain to assist in docking operations.
BERTHING: Eight berths with 32 ft. depth. Length of wharf 4,500 ft. Width of apron: King's Wharf 50 ft., extension 75 ft. Warehouses: Seven on wharf face, 254,250 sq. ft. Nine other warehouses, 136,147 sq. ft.
STEVEDORES: Labour on Docks and labour on ships: Controlled by Port Contractors Ltd. Ordered by Agents. Gang size on Docks: 14 to 18 men. Gang size on vessels: 13 men, 1 gangman, 2 winch drivers, 8 hold men, 1 cooper, and 1 hatch foreman.
CARGO HANDLING: One berth on the Eastern side is an open wharf without a seafront warehouse. This berth is strictly used for containerised and passenger (cruise) vessels. The Eastern wharf is 3,300 ft. with five seafront warehouses. On the Western side the wharf is 1,200 ft. long with two seafront warehouses for general cargo, but at these two berths there are also facilities for receiving bulk cargo, i.e. grain, liquid oil, fats and molasses. These cargoes are usually discharged by vessel's equipment, but grain can be discharged by shore equipment at a slower rate.

There is now one floating crane, 60 tons capacity, one crawler crane of 160 tons capacity and also one 125-ton fork lift handling 20 ft. containers. There is also a trailer service for 20 ft. containers from dock to consignee's warehouse.
FRESH WATER: Supplied alongside all berths.
FUEL: All grades supplied by barge.
GANGWAY/DECK WATCHMEN: Customs guards on 24 hours duty at ship's side.
OPENING/CLOSING HATCHES: This is handled by stevedores.
CUSTOMS ALLOWANCE: 200 cigarettes and a moderate amount of spirits.
CARGO GEAR: Vessels normally load and discharge with their own gear but shore cranes and heavy lift cranes available on the dock.
IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	6238711	Italy	6236255
Bolivia	6254123	Japan	6232866
Columbia	6236601	Lebanon	6231652
Costa Rica	6254123	Liberia	6222322
Denmark	6251901	Mexico	6254040
Dominican Republic	6241217	Norway	6236871
El Salvador	6226247	Panama	6223497
Greece	6232186	Portugal	6234930
Guatemala	6252441	Spain	6238851
Haiti	6232876	Sweden	6232166

EMBASSIES:

Argentina	6254069	India	6231276
Brazil	6225779	Jamaica	6224995
Britain	6252861	Netherlands	6251722
Canada	6234787	U.S.A.	6226471
France	6251437	Venezuela	6253872
Germany	6251898		

REPAIRS AND DRY DOCKS: See "Chaguaramas'.
HOLIDAYS: New Year's Day (January 1st); Good Friday; Easter Monday; Labour Day (June 19th); Whit Monday; Corpus Christi; Discovery Day (August 5th); Independence Day (August 31st); Diwali Day (late October/early November); Eid-ul-Fitr (December 21st/22nd, approximately); Christmas Day (December 25th); Boxing Day (December 26th).
POLICE/FIRE/AMBULANCE: Accidents — Police, 62999; Fire — First Aid, 62998.
MEDICAL: Advance notice of attention required will assist. Modern hospital facilities available.
REPATRIATIONS: Crew changes and repatriation can be arranged.
AIRPORT: Piarco International Airport — 17 miles from Port of Spain. Daily flights to world-wide destinations.
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SERVICES: Efficient maintenance gang available for normal work, tank cleaning, painting, etc.

Shipping Service: Three government-owned vessels, *Scarlet Ibis, Bird of Paradise* and *Tobago* operate a regular passenger and cargo service between Trinidad and Tobago.
SHORE LEAVE: No restrictions.
DEVELOPMENTS: A Container Berth 1,085 ft. long is under construction at the Port of Spain Wharves. A 40 ton gantry crane is expected to be in operation by May, 1977.

This Berth will be known as Berth 6A and when completed will have 23 acres of open storage and 162,000 sq.ft. of covered storage. Types of units to be handled include 20 ft., 35 ft. and 40 ft. containers. The following back up equipment are on order:

1 Yard Gantry Crane.
2 Straddle Carriers.
1 × 52,000 lb. Fork Lift.
1 × 20,000 lb. Fork Lift.
5 × 4,000 lb. Electric Fork Lifts.
60 Trailers.
6 Tractors.
1 Container Refrigeration System.

AUTHORITY: Port Authority of Trinidad and Tobago.

AGENT: Sprostons (Trinidad) Ltd., 29 Frederick Street, P.O. Box 8, Port of Spain. Tel. 34121-9 (nine lines). Telex SPROS WG286 Cables: "Sprostons", Port of Spain, Trinidad.

SOBO (Pitch Point): 10.15 N. 61.37 W.

Crude Oil Terminal operated by B.P. Trinidad Limited. Vessels from abroad calling at Sobo are required to proceed to Brighton for clearance formalities.
DOCUMENTS/HEALTH/CONSULS, etc.: Refer to "Port of Spain".
PILOTAGE: Compulsory.
TUGS: Not used. Launch assists berthing.
RESTRICTIONS: Berthing/unberthing only on flood tide.
MAX. SIZE: Controlled by depth alongside jetty — 29 ft.
BERTHING: Vessels moored with springs on jetty. Other lines to buoys.
FRESH WATER: Not available.
FUEL: Available by barge.
AGENT: See "Port of Spain".

TEMBLADORA (Alcoa Bauxite Terminal): 10.41 N. 61.35 W.

DOCUMENTS/HEALTH/CONSULS, etc.: Refer to "Port of Spain".
PILOTAGE: Pilotage is compulsory. Pilots board 0.5 miles off installation.
ANCHORAGE: Safe anchorage 0.5–0.75 miles off head of jetty.
MAX. SIZE: Max. draft 35 ft. and 35,000 d.w.t.
TUGS: Alcoa maintain their own tug to assist in docking operations.
BERTHING: There are two wharves: No. 1 with a length of 976 ft. and No. 2 with a length of 675 ft. Both are dredged to 36 ft.
STEVEDORES: Not necessary.
FRESH WATER: Supplied at both piers, also by barge.
FUEL: All grades by barge.
GANGWAY/DECK WATCHMEN: Customs guards on duty at ship's side.
OPENING/CLOSING HATCHES: Handled by crew.
CUSTOMS ALLOWANCE: 200 cigarettes and a moderate amount of spirits per man.
CARGO GEAR: As "Port of Spain". Loading: Carried out with travelling tower conveyor system, rate 1,200 t.p.h. Discharging: With travelling towers grabs two each 5 tons capacity rate 800 t.p.h.
IDENTIFICATION CARDS: Not required.
REPAIRS AND DRY DOCKS: At Chaguaramas.
MEDICAL: All facilities available. Advance notice of requirements should be given.
REPATRIATIONS: Can be arranged.
AIRPORT: See "Port of Spain".
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SHORE LEAVE: No restrictions.

AGENT: See "Port of Spain,,

NOTES

Please also advise Shipping Guides (Services) Ltd.

Tunisia

BIZERTE: 37.17 N. 09.54 E.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
4 Crew Personal Effects Lists.
Health Declaration.
Manifest of provisions on board.
2 copies vessel's particulars declaration.

PILOTAGE: International Code signals are used to call Pilot. The pilot station can be contacted by VHF or radio/telephone via Goulette Radio, call sign 3VW. Pilot's telephone number 02.31.139. Vessels awaiting Pilot may anchor outside the port entrance 50 m. from the breakwaters in depths of 13 m.

RESTRICTIONS: Entry at night is forbidden for tankers, which must complete their berthing operations one hour before sunset.

MAX. SIZE:

Petrol Harbour	Berth A max. length 225 m., draft 40 ft.
	Berth B max. length 130 m., draft 27 ft.
Commercial Harbour	3 berths max. length 220 m., draft 30 ft.
Cement Wharf	Max. length 150 m., draft 25 ft.
Douaria Quay	Max. length 150 m., draft 27 ft. 6 in.
Melasse Pier	Max. length 130 m., draft 30 ft.
Coal Quay	Max. length 150 m., draft 16 ft.

HEALTH: Free pratique normally given at the quays after mooring. Pratique is automatic for vessels coming from another Tunisian port. In case of suspected disease on board vessel will be ordered to quarantine anchorage.

RADIO: Messages for the port authorities can be sent by VHF Bizerte Radio call sign 3VW3. Other messages to Agent should be sent through Tunis Radio call sign 3VT.

TUGS: Tugs normally join vessel about 100 m. outside the entrance channel and if requested will come further out. Ship's lines always used.

BERTHING: Can be carried out at any time.

STEVEDORES: Minimum of 24 hours advance notice of ETA to Agent is required.

MEDICAL: Doctor available to board vessel. Hospital, private clinics and all facilities available. 48 hours notice required for Smallpox, Cholera, and Yellow Fever inoculations.

TANKERS: *Berth A.* Loading arms for fuel, gas-oil and petroleum products all 10 in. diameter. Ballast line 12 in. diameter.

Berth B. Loading arms for all products except LPG are 8 in. diameter LPG two loading arms of 4 in. diameter.

S.I.T.R. are equipped with an oil/water separator for ballast only. They are not able to accept residues from tankers.

FRESH WATER: Available from the quay at most berths. Rate 10/15 cu.m.p.h.

FUEL: Can be supplied subject to 48 hours notice.

FIRE PRECAUTIONS: The Petrol Harbour is equipped with fire hydrants. A tug of 1,200 h.p. is required to be permanently standing by when tankers are moored alongside the quay.

GANGWAY/DECK WATCHMEN: It is recommended to employ shore watchmen.

OPENING/CLOSING HATCHES: Carried out by stevedores at the request of Masters.

CUSTOMS ALLOWANCE: Each crew member is allowed 1 carton of cigarettes and 1 opened bottle of wine or spirits. In case of a prolonged stay in port, Customs may renew these quantities.

IDENTIFICATION CARDS: Crew members' identification cards will be collected by the Immigration service and exchanged for shore passes while vessel is in port.

CONSULS: France Tel. 02.31.466. Italy Tel. 02.31.747.

REPAIRS: All hull, deck and engine repairs can be effected.

DRY DOCKS: Three dry docks available the largest being 250 m.×35 m.×12 m.

REPATRIATION: Can be arranged.

AIRPORT: Tunis and Carthage airport is situated 70 km. from Bizerte. Served by international airlines.

TIME: GMT plus 1 hour all year round.

HOLIDAYS: There are 17 days official holiday during the year. Work can be carried out on all holidays except 1st May on payment of 100% overtime.

POLICE/FIRE/AMBULANCE: Police Tel. 02.31.200; Fire 02.31.022; Ambulance 02.31.422.

SHORE LEAVE: Allowed.

AUTHORITY: Direction du Port de Bizerte.

LA GOULETTE (Including Tunis): 36.49 N. 10.18 E.

DOCUMENTS: *Required by Police:*
2 Crew Lists.
2 Passenger Lists.
Required by Customs:
1 Crew List.
2 Passenger Lists.
2 Crew Manifests.
Required by Port Health:
1 Crew List.
1 Passenger List.

PILOTAGE: To call Pilot contact Goulette Radio station, call sign 3VW, 24 hour watch on 2182 kc/s. or VHF Channel 16. Pilot boats are in permanent direct contact with Goulette Radio. International code visual and sound pilot signals may be used on arrival at the sea buoy.

Pilot launches are stationed inside the port, and proceed on call to meet vessels about 0.25 mile beyond the sea buoy, i.e. the buoy No. 1 in the entrance channel to the port.

ANCHORAGE: Anchorages in the port roads are safe except during strong winds and heavy seas from the North or N.E.; good holding ground.

Larger vessels anchor about 0.5 miles N.E. of the sea buoy in depths of 12-14 m. Small vessels may anchor either North or South of the approach channel in depths of 7-9 m. in the vicinity of buoys Nos. 4 and 5 provided that they do not obstruct navigation in the entrance channel.

RESTRICTIONS: Tankers and ore carriers are not allowed to enter and leave port during the hours of darkness. Depth of water at low water is 32 ft.

MAX. SIZE: *La Goulette:* up to max. draft 32 ft. Max. length 200 m. *Tunis:* up to max. draft 21 ft. 6 in.

HEALTH: Master is required to complete Declaration of Health on arrival. Vessels which have previously called at another Tunisian port are given automatic free pratique except in time of epidemic.

RADIO: Tunis Radio 24 hour watch on 2182 kc/s, radio-telephone watch from 0600 to 2200 hrs. on 500 kc/s. Goulette Radio call sign 3VW 24 hour watch on 2182 kc/s. and VHF Channel 16.

TUGS: Are available to assist berthing as directed by the Pilot. Tugs join vessels in the vicinity of buoys Nos. 4 and 6, that is 400 or 500 m. from the berths. Vessels lines always used.

BERTHING: *La Goulette:* one ore berth, unloading rate 2,000 t.p.h.

STEVEDORES: Gangs are ordered before 0600 hrs. for morning work; before 1300 hrs. for the afternoon and before 2000 hrs. for night work.

MEDICAL: Preferable to advise Agent in advance if doctor required on board. Crew members should possess international vaccination certificates.

TANKERS: One berth is reserved for tankers with a max. draft of 27 ft. 6 in.

FRESH WATER: Hydrants are situated on the quays supplying fresh water at a rate of 12-15 c.m.p.h. A water barge of 50 tons capacity can supply vessels at anchor.

FIRE PRECAUTIONS: A watchman has to be permanently employed on board tankers when alongside. A tug equipped with fire-fighting equipment is required to stand by tankers discharging.

GANGWAY/DECK WATCHMEN: The employment of gangway watchmen is necessary.

OPENING/CLOSING HATCHES: Are performed by ship's crew.

CUSTOMS ALLOWANCE: Each crewman is allowed two packets of cigarettes or 4 cigars or 50 gr. of tobacco and one opened bottle of alcohol.

CONSULS: Following countries are represented in Tunisia:
Algeria
Australia
Denmark
France
Great Britain
Greece
Italy
Morocco
Norway
Panama
U.S.A.
Venezuela

REPAIRS: Machinery and boiler repairs can be effected on board. For large repairs it is necessary to send part to the Shipyards of Soconema at Menzel Bourguiba -70 miles away.

DRY DOCKS: At Menzel Bourguiba 4 dry docks, the largest of which is 253 m. long, 41 m. wide, 10.5 m. depth.

REPATRIATION: Can be arranged.

AIRPORT: Situated 10 km. from the port. Regular daily flights to Europe and N. Africa.

TIME: GMT plus 1 hour. No alterations during the year.

HOLIDAYS: 20th March (Independence Day); 1st May (Labour Day); 25th July (Republic Day); 15th October (Evacuation Day). In addition there are 13 other holidays on which work is carried out on payment of overtime.

POLICE/FIRE/AMBULANCE: Tunis Police, tel. 5389; Goulette Police, tel. 275.028; Fire. 198; Ambulance 260.022.

Telephones can be connected on board vessels and are compulsory for tankers.

SHORE LEAVE: Crew members are permitted to go ashore after obtaining a pass from the Port Police.

AUTHORITY: Director of the Port, Office des Ports Nationaux.

AGENT: Compagnie Tunisienne de Navigation, Head Office: 5, Avenue Dag Hammarskjoeld, Tunis/Tunisia. Cables "CotunavTunis"; Teleprinter 475 & 479. Tel. 242.999.

LA SKHIRRA (Terminal Platform): 34.18 N. 10.09 E. (See Plan)

DOCUMENTS:
5 Crew Lists.
2 Lists of Crew Personal Effects.
2 Stores Lists.
5 Passenger Lists, if passengers carried.
Manifest of cargo on board.
Manifest of cargo in transit.

PILOTAGE: Compulsory for berthing alongside. Pilot employed by TRAPSA. ETA required 48 hours and 24 hours before arrival. Call Pilot by international code signals on arrival, or by VHF Channel 16. TRAPSA will advise if vessel required to anchor, or berth immediately. Pilot boards 2 miles off the terminal by black and white motor launch. If it is necessary (vessel without chart) Pilot will proceed outside the port limits.

ANCHORAGE: Vessels should anchor outside the prohibited zone which is limited to the South by the parallel of Buoy No. 5 and to the East by bearing 350° from the terminal platform light.

MAX. SIZE: Length 300 m. Draft 47 ft. 6 in. or up to 51 ft. at high water.

HEALTH: International Quarantine signals to be shown on arrival. Vessels normally receive free pratique at the quay after berthing. Suspect vessels must wait at anchor until pratique is given.

RADIO: TRAPSA operate coastal station Laskhirra Radio (3VP). Messages for TRAPSA passed by other stations should be addressed Rapetrol Laskhirra.

VHF: The harbour office and loading terminal are equipped with VHF on the following channels: 156.8 Mc/s (calling), 156.6 Mc/s., 156.7 Mc/s., 156.55 Mc/s. Contact with tugs can be made on all 4 channels.

TUGS: Two tugs 1,500 h.p. each, normally used for berthing. Lines provided by tugs.

BERTHING: Two loading berths situated one each side of terminal platform connected by a jetty to the shore. For safe manoeuvring tankers are recommended to arrive with ballast up to 30% of summer deadweight. Mooring may need to be doubled during months of December to April, when sudden violent squalls sometimes occur. A vessel alongside requiring tug assistance may sound one long blast at frequent short intervals.

Depth alongside loading berths is 15 to 16 m. Loading platform is served by three 30 in. oil pipe-lines and two 24 in. ballast lines. Each berth equipped with four 12 in. flexible hoses.

MEDICAL: Advance notice required of any medical assistance needed. Hospital facilities available. Crew members require valid vaccination certificates.

BALLAST: All ballast, except permanent, to be pumped to shore installation. Heavy fines for water pollution.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCE: Two packets cigarettes allowed each crew man. No alcohol allowed.

CONSULS: Following countries are represented at Sfax: France, Sweden, Great Britain, Netherlands and Italy.

REPAIRS: There are no facilities for repairs. Nearest at Sfax.

REPATRIATION: Can be arranged.

AIRPORT: Nearest at Tunis 350 km. away.

TIME: GMT plus 1 hour all year round.

SHORE LEAVE: Not allowed in Trapsa installation. Can be arranged through Agent.

AUTHORITY: T.R.A.P.S.A.

SFAX: 34.44 N. 10.46 E.

DOCUMENTS: Within 24 hours of arrival Masters must submit a written declaration giving the name of ship and of the Master, Owner or Charterer, vessel's tonnage, draft, cargo, port of origin and destination, number of crew on board. Also required:

Customs Manifest.
Crew List for Police.
List of Dangerous Cargo.
Health Declaration.

PILOTAGE: Compulsory for all vessels over 100 gross tons. Pilotage commences at the outer buoys of the entrance channel. Day signals for Pilot, International Code Signal "P.T" or Code flag "S" hoisted alone or below code pennant. Night signals according to International rules. For entry at night, vessels must radio Harbour Master at the latest one hour before sunset to confirm their intention. Before boarding, Pilot will check that vessel does not exceed the max. authorised draft. If the "Entry Prohibited" signal is not hoisted at the port signal mast, vessel may await Pilot in the channel axis about 1 mile off the outer buoys. Pilot boards from a launch 11 m. long, displaying international pilot signals. Pilot may be contacted by radio through Radio Port de Sfax. Agent must give advance notice of vessels arrival to Harbour Master 24 or 48 hours beforehand.

ANCHORAGE: In immediate vicinity of the port, depths up to 15 m., good holding ground.

MAX. SIZE: Length 192 m., beam 26 m., draft 33 ft.

HEALTH: To request free pratique, hoist "Q" flag on arrival, or radio to Port Health Service. Pratique normally given at the berth after mooring. Suspect vessels are required to wait at anchor until pratique is given.

RADIO: Sfax. Port Call—call sign 3VW2, operating from 05.00-09.00 and 15.00-19.00 hrs. GMT.
Calling frequency 2182 kc/s., working frequency 1743 kc/s. CR3. Used only for communications with port services. Meteorological information provided on request.

TUGS: Join vessel at outer buoys or according to circumstances in the outer port.

BERTHING: N.E. Quay 820 m. long phosphate berth.
West Quay 150 m. long phosphate berth.
Petrol Pier 105 m. long Max. size: length 180 m., draft 33 ft.
Salicole Pier salt loading berth.

STEVEDORES: Available, arranged by Agent basis vessel's ETA.

MEDICAL: Advance notice preferred if medical attention required. Hospital facilities available. Vaccination certificates required for all crew.

DENSITY: 1025.

FRESH WATER: Hydrants fitted on all quays. Written request for replenishing water is required by Harbour Master.

FUEL: Available by barge.

DEVELOPMENTS: Entance channel to be widened to 60 m. Dredging to 12.50 m. of channel and principal quays. These projects are under study.

GANGWAY/DECK WATCHMEN: Normally ship's crew. Available from shore if required.

OPENING/CLOSING HATCHES: Normally performed by crew.

IDENTIFICATION CARDS: Required by all crew.

CONSULS: Local representatives for France, Great Britain, Netherlands, Norway, Sweden, Denmark, Spain, Italy, Greece, Portugal and Belgium.

REPAIRS: Small engine repairs can be effected. Floating dock for vessels less than 350 tons.

REPATRIATION: Can be arranged.

AIRPORT: There is an airfield 7 km. from the city. No regular services.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January; 18th January; Aid El Kebir; Hegirian New Year; 20th March; 9th April; 1st May; Mouled; 1st and 2nd June; 25th July; 3rd August; 13th August; 3rd September; 15th October; Aid Es Seghir.

POLICE: Tel. 21-700.

SHORE LEAVE: Allowed.

SHIPMASTERS REPORT: (May 1976):

Documents:
1 General Declaration.
2 Stores Lists.
3 Crew Lists.
1 List of Dangerous Cargo.
1 Health Declaration.

Pilotage: To be contacted on VHF Channel 16, between 0600–1000 hrs. local time and between 1600–2000 hrs. local time. Also Harbour Master may be contacted at the same hours on Channel 16. At other times the same Authorities may be contacted by radio 2182 kc/s.

My vessel had a draft of 26 ft. By the VHF the Harbour Master ordered me to enter the channel and continue up to the Outer Basin where a Pilot would embark on the Port side.

It was later confirmed both by the Pilot and Agent to be usual for ships up to 10,000 tons to enter the outer Basin without Pilot. Also upon our departure, the Pilot disembarked at the outer harbour Basin.

The Agent told me the channel was 34 ft. deep. Although no measurements have been taken for 10 years. Lately a ship with draft of 33 ft. has passed through the channel without any difficulties.

An unmarked wreck is situated in position 34° 37.5′ N., 10° 49.5′ E. The best way to approach the outer channel from S.W. or South, would therefore be to navigate to a position 6.5 miles S.E. of Tina's Lt. Tr., then change course for the outer buoys of channel.

The only Beacons illuminated around Kerkenah Banks were Beacon No. "1" and No. "8". All other buoys were in correct position, but extinguished.

Stevedores: Work in shifts from 0700 hrs. till 1300 hrs. and from 1400 hrs. till 2000 hrs. In case of sailing it is possible to arrange overtime up to 2100 hrs. It is also possible to have night gangs from 2100 hrs. till 0300 hrs.

AUTHORITY: Direction du Port de Sfax.

SOUSSE (Suza): 35.50 N. 10.38 E.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
4 Crew Personal Effects Lists.
Health Declaration.
Manifest of Provisions on Board.
2 copies vessel's particular declaration.

PILOTAGE: Contact Pilot Station on VHF Channel 16 or Tel. 03.20.401.

RESTRICTIONS: Entrance to the port coming from the sea is East to West. Channel 820 m. long, dredged to 10 m. Depth in port area 7.80 m., height of tide 0.40 m.

HEALTH: Free pratique normally given at the quays after mooring. Pratique is automatic for vessels coming from another Tunisian port. In case of suspected disease on board vessel will be ordered to quarantine anchorage.

BERTHING: One basin for ocean-going ships, yacht basin and fishing vessel harbour.

Length of quays 830 m. 8 berths.

STEVEDORES: Minimum of 24 hours advance notice of ETA to Agent is required.

MEDICAL: Doctor available to board vessel. Hospital, private clinics and all facilities available.

REPAIRS: No facilities.

GANGWAY/DECK WATCHMEN: It is recommended to employ shore watchmen.

OPENING/CLOSING HATCHES: Carried out by stevedores at the request of Masters.

CUSTOMS ALLOWANCE: Each crew member is allowed one carton of cigarettes and one opened bottle of wine or spirits. In case of a prolonged stay in port, Customs may renew these quantities.

IDENTIFICATION CARDS: Crew member's identification cards will be collected by the Immigration service and exchanged for shore passes while vessel is in port.

TIME: GMT plus 1 hour all year round.

HOLIDAYS: There are 17 days official holiday during the year. Work can be carried out on all holidays except 1st May on payment of 100% overtime.

AIRPORT: Skanes Monastir – 13 km. from the port.

AUTHORITY: Direction du Port.

Turkey

GENERAL:

On arrival off Canakkale, coming from the Aegean, or off Buyukdere, coming from the Black Sea, ships must stop for sanitary inspection. However, tankers with a d.w.t. over 100,000 tons proceeding to the Gulf of Izmit to discharge or load petroleum products may obtain pratique there without stopping at Canakkale, provided Agents are notified 96 hours in advance.

In the event of bad weather at Canak, vessels may be allowed to continue their voyage to Istanbul and undergo the sanitary inspection there. Permission to do so is notified to them by the Canak Sanitary Office with the signal "H.M." in daytime and three vertical lights (green, white, green) at night.

Pilotage through the Dardanelles and the Bosphorus is not compulsory. Pilot stations, equipped with VHF operating on Channel 16, are located at Canakkale, Istanbul and Telli Tabia (Upper Bosphorus).

Turkish Flag: All foreign ships are required to fly Turkish flag during their stay in Turkish ports or when passing through the Straits (Dardanelles and Bosphorus).

Sanitary and Port Inspections: On arrival at a Turkish port, every ship is boarded by a Sanitary Officer for examination. Nobody may join or leave the ship before this inspection is completed.

The ship must produce the following documents:

Sanitary Declaration Form.
Deratisation Certificate.
Ship's Register.
Load-line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Cargo Ship Safety Construction Certificate.

Police Customs Controls: After obtaining free sanitary pratique, the ship must likewise produce:

(1) 3 Crew Lists together with every member's passport, discharge book or Z-card.
(2) 1 List of Provisions, Stores and Bunkers.
(3) 1 Declaration of all Monies or cheques carried in the ship's safe.
(4) Manifests of all cargo on board, whether for discharge at Turkish or foreign ports.
(5) 1 List of Passengers landing in Istanbul showing nationality, number, date and source of entrance visa (if such visa is required) together with the passports.
(6) 1 List of Transit Passengers together with the passports.

Documents covered by items 1, 2, 3, 4 and 6 as well as a list of passengers embarking at Istanbul are also required on departure.

Police and Customs Controls are effected at Istanbul when arriving from the Aegean and at Buyukdere when arriving from the Black Sea. However, vessels under 500 n.r.t. have to undergo control formalities at Canakkale, both inwards and outwards, apart from those to be effected at Istanbul. It is recommended to prepare the accommodation ladder to facilitate the boarding of officials.

Excepting the case of tourist vessels, the Customs Officers will seal stocks of provisions and tobacco, spirits, as well as any other items in bond. Sufficient quantities of the foregoing will be left unsealed for the needs of the ship during the stay in port.

If stores left unsealed are exhausted while a ship is in port, a request to the Customs Officers will ensure further withdrawal.

The seals must not be broken before the ship's exit from territorial waters or if sailing from one Turkish port to another Turkish port.

Special Rules for the Passage of the Bosphorus: Art. 35 of the "International Regulations for Preventing Collisions at Sea" does not apply to ships navigating in the Bosphorus. Ships proceeding up the Bosphorus must keep to the European side, and coming down must keep to the Asiatic side of the mid-stream; that is to say they must always keep to the left in so far as is consistent with safety.

During their passage through the Bosphorus, ships must regulate their speed, without exceeding the 10-knot limit over the bottom, so that piers, landing stages, etc., or other craft (sailing and rowing boats, etc.) may not be damaged by their wash. Further, they must take care not to hinder fishing and diving operations or to damage submarine telephone, telegraph or electric cables.

Sound Signals, Wireless Sets: It is forbidden to make use of sirens or steam whistles in the harbour, except for manoeuvring purposes as laid down in the regulations for the avoidance of collisions.

Wireless transmitters are not sealed on arrival of a vessel but it is recommended that their use in Turkish territorial waters be restricted to cases of emergency.

Refuse: No refuse such as garbage, ashes, polluted oil and the like can be thrown or pumped overboard, nor any scraping, cleaning of tanks and/or bilges can be effected inside port limits.

SHIPMASTER'S REPORT: For outward clearance through the Dardanelles vessel has to produce: 1 Crew List, 1 Stores List, 1 Manifest and Customs Clearance.

ALIAGA: 38.50 N. 26.57 E.

Aliaga Refinery Terminal.

LOCATION: *Northern Point:* Lat. 38° 50′ N. Long. 26° 57′ 36″ E.
Southern Point: Lat. 38° 50′ 10″ N. Long. 26° 46′ 33″ E.

DOCUMENTS: See "Izmir".

PILOTAGE: Pilot boards 1 to 2 miles N.W. of Tasli Burnu Light.

ANCHORAGE: The port itself is situated about 40 miles N.N.W. of Izmir on the Southern arm of the Gulf of Candarli and the anchorage is considered safe for large ships.

RESTRICTIONS: Water depth at entrance about 14 fathoms. Water depth at crude oil wharf 15 m.

MAX. SIZE: Crude oil berth designed for up to 100,000 d.w.t. Products berth designed for up to 40,000 d.w.t.

HEALTH: *Customs:* Customs post at refinery.

Immigration: None locally. Incoming and outgoing personnel have to be processed at Izmir and escorted under guard to and fro.

Health: No office locally. Officials have to be brought from Izmir.

RADIO: Cable address of Aliaga Refinery: "Petrol Izmir".

Four days prior arrival, Agents require notice of ETA (time and date) followed by any subsequent change.

TUGS: Two 2,000 h.p. tugs are on order. Meanwhile tug can be obtained, if free, from Port Monopoly Izmir at additional cost. Mooring boat also on order, meanwhile local boat available for hire.

BERTHING: Incoming tankers discharge at a "T" type oil jetty just South of Tasli Burnu Light. The jetty runs parallel to the coastline and is situated 39° 49′ 30″ N. 26° 57′ 30″ E. approximately. The outer arm of the jetty, 317 m. long, is designed for crude oil tankers of 75/100,000 d.w.t. on the outer side and for tankers of 40,000 d.w.t. on the inner. The outer S.E. arm is designed for products tankers of up to 22,000 d.w.t. and the inner berth for small tankers of up to 8,000 d.w.t.

The crude oil berth is roughly in the centre of the N.W. arm and has 4 loading arms. The jetty is protected by 4 pivotal concrete buffers.

The products berth is similarly in the centre of the arm and is equipped with flexible hoses. Crude oil pumping rate up to about 3,000 t.p.h.

FRESH WATER: Not available.

FUEL: Not available.

AIRPORT: Izmir is not an international airport and cargo is nearly always transhipped leading to unforeseen delays.

SUPPLIES: From local towns; adequate fresh fruit and vegetables and meat.

AUTHORITY: See "Izmir".

AGENT: See "Izmir".

CANAKKALE: 40.08 N. 26.24 E.

DOCUMENTS: Vessels in transit through the Dardanelles must stop at Canakkale and produce following documents to boarding Officer.

Certificate of Registry.
Deratisation Certificate.
Crew List.
Name of Agent in Istanbul.

Vessels proceeding to a Turkish port will require in addition:

4 Crew Lists.
2 Personal Effects Lists.
2 Currency Lists.
2 Stores Lists.

PILOTAGE: Not compulsory for vessels proceeding to Istanbul. Compulsory for vessels over 1,500 g.r.t. proceeding to Canakkale. Vessels requiring a Pilot use International Code signals, or signal "G" by light or whistle. No advance notice required. Telegraphic address of pilot station, Kilavuzluk Canakkale, via radio station TAM 7. Pilot boards off Khepez lighthouse, where vessel should slow down but no need to anchor. In bad weather pilot boat will anchor in Gulf of Kilya.

Also see "Shipmaster's Report".

ANCHORAGE: Vessels may anchor in position 40° 09′ 00″ N., 26° 23′ 09″ E. in depths of 12 to 16 fathoms.

MAX. SIZE: Vessels of any size may navigate Canakkale Strait.

HEALTH: All vessels bound for a Turkish port must stop for Sanitary Clearance at Canakkale. Any suspected disease on board must be declared. Sick crew members may be landed for hospitalisation.

Also see "Shipmaster's Report".

RADIO: Radio station TAM 7 situated at local Post Office.

TUGS: One tug available, belonging to pilot station. Ship's tow lines always used.

BERTHING: Agents require at least 24 hours notice to arrange berthing at Canakkale Pier. Vessel may be required to shift anchorage to give place to Turkish passenger vessels which have priority.

STEVEDORES: Arranged by Agent on basis of Master's ETA.

MEDICAL: 12 hours notice required to arrange medical assistance. Hospital facilities available.

DENSITY: Salt water. No tide.

FRESH WATER: Only available from the pier, rate approx. 10 t.p.h.

FUEL: Marine grades not available.

DEVELOPMENTS: New installations and berths under construction.

GANGWAY/DECK WATCHMEN: Customs guard compulsory for vessels at the pier.

OPENING/CLOSING HATCHES: May be operated by crew or stevedores according to Charter Party.

CUSTOMS ALLOWANCE: Crew allowed to retain only quantities for personal consumption.

IDENTIFICATION CARDS: Required for crew members going ashore.

CONSULS: Italy, tel. 1008.

REPAIRS: Minor repairs can be effected.

REPATRIATION: Can be arranged if visa requirements are satisfactory.

AIRPORT: Situated 2 km. from Canakkale, internal services only.
TIME: GMT plus 2 hours, Summertime GMT plus 3 hours.
HOLIDAYS: Cargo work can be arranged on all holidays by agreement.
POLICE/FIRE/AMBULANCE: Police Tel. 1181; Fire 00; Ambulance 1098.
SHORE LEAVE: Allowed at all times.
SHIPMASTER'S REPORT: *Dardanelles and Bosporus:* A pilot station has been established at Mehmetcik Point (Cape Helles); if the weather is too bad to embark the Pilot here, vessels should proceed to Canakkale. If a Pilot is required for both Dardanelles and Bosporus, give 24 hours' notice through Istanbul Agent. Same Pilot remains on board for full transit, Sea of Marmara included, and this applies for both North and South-bound traffic. Pilots at Dardanelles and Bosporus work VHF Channel 16.

Sanitary Control: White launch. Officers do not board but require Chief or 2nd Officer to go down into boat. Canakkale required Ship's register, Derat, Crew List and Quarantine Declaration of Health. It is also required to fill in a form giving details of ship, cargo, last port, number of crew and passengers, etc., also name of ship's Agent in Turkey.
AUTHORITY: Canakkale Liman Baskanligi.

DERINCE: 40.45 N. 24.49 E.

PILOTAGE: Pilotage in the Gulf of Izmit is compulsory for foreign flag vessels. The Izmit Gulf Pilot will disembark at harbour limits. Harbour Pilot also compulsory for all foreign flag vessels.
ANCHORAGE: Suitable anchorage at harbour entrance.
TUGS: Two tugs are available, 970 h.p. each.
BERTHING: Pier length 207 m., depths alongside vary from 5 m. up to 7.35 m.
BULK HANDLING FACILITIES: Two silos with storage capacity 5,000 tons each. Loading capacity 160 t.p.h., discharging capacity 120 t.p.h.
SHIPMASTER'S REPORT: Fresh water available in small quantities from fire engines but expensive.
AUTHORITY: General Directorate of Turkish State Railways.

EREGLI (Karadeniz Eregli), including Usunkum: 41.18 N. 31.27 E.

DOCUMENTS:
- 5 Crew Lists.
- 5 Passenger Lists.
- 3 Provisions Lists, including Bonded Stores.
- 3 Cargo Manifests.
- 3 sets Bills of Lading.

PILOTAGE: Pilotage available night and day for use in port under all weather conditions. Pilotage is carried out by qualified and experienced Pilots.

Compulsory for ships over 500 tons to have pilot service, and for ships over 1,000 gross tons to have pilot and tug-boat service.

Ships will take Pilots on board at a reasonable distance off the breakwater's red light. It is strongly advised that ships awaiting Pilot should avoid drifting South of the transit line of the green light on the breakwater ruin (Boshane Mendiregi) and the Citadel ruin which can be seen on top of the hill. (Transit direction is approximately 041° true.) The distance from the entrance of the port to the dock is approximately 4.6 cables, and the depth gradually decreases from 10 fathoms to 5 fathoms at the dock side.

In stormy weather, if the Pilots are unable to board, ships will proceed to a point in the Inner Port enabling the Pilots to board.
ANCHORAGE: Vessel waiting Pilot may anchor about 1 mile West of breakwater red light. The bottom of the port is muddy and sandy, and therefore ships can lay at anchor in any weather without fear of drifting.
RESTRICTIONS: *Eregli:* The depth of water in Outer Harbour is 15 m. (49.2 ft.) and Inner Harbour has 10 m. (35 ft.)

Usunkum: The length of Usunkum breakwater is 1,250 m. The depth of water is 42 ft. Under normal weather conditions ships up to 34 ft. (inclusive) can enter into the Inner Harbour and berth alongside the dock safely. Average tide is about 1 ft. The width of channel is 200 m. but safe lane is 144 m. wide.
MAX. SIZE: *Eregli:* Under normal weather conditions ships up to 35 ft. draft can enter Inner Harbour and dock safely.

Usunkum: Up to 34 ft. draft can be berthed.
HEALTH: Pratique given after port doctor's visit on vessel's arrival. Crew vaccination certificates should be presented if required. Sanitary certificate required for any live animals on board.
RADIO: Istanbul Radio, TAH.
TUGS: Available. Normally join vessel outside the breakwater. Ships lines always used. Towing is done by one or two 600 h.p. diesel tugs. Towage is required for entering, leaving, berthing and shifting according to the size of the ship. Ships having a draft of over 20 ft. shall not use their own propellers in the Inner Harbour except in case of danger or absolute necessity.

Vessels with a draft greater than 30 ft. may be asked by the Port Authority to use a second tug at a very high cost.
BERTHING: *Eregli:* Inner quay is about 400 m. long for general cargo and 135 m. for coal loading.

The normal depth alongside quay is 30 ft, The docks have loading and unloading facilities, a railway track and open and closed warehouses at a very short distance. The railroad is a local system and is not connected to the Turkish railroad network. It has a length of approximately 16 km. for coalmine operations.

Buoys: There are four mooring buoys in the port 105 m. apart and at a distance of 170 m. from the breakwater at an average depth of 8 fathoms, buoys anchored with 50 tons concrete blocks and marked I, II, III and IV starting from the main breakwater head.

It is possible and safe to moor to the buoys with or without anchor and to moor to the breakwater by the stern (if the ship's length is adequate).

Usunkum: Usunkum has one loadout dock of about 172 m. length and one ore unloading dock about 195 m. length. Max. size 35,000 d.w.t. Max. draft 35 ft. Max. LOA 665 ft. Discharge rate 400 t.p.h. Coal also discharged, rate 375 t.p.h. also one small general-purpose quay for small ships.
STEVEDORES: At least 24 hours notice required to order gangs.
MEDICAL: All details of any medical assistance required to be given to Agent with one hours notice. Hospital facilities available. Vaccinations can be arranged.
FRESH WATER: Can be delivered at 40 t.p.h.
REPAIRS: Small repairs such as lathing, levelling, welding, blacksmith work and woodwork can be effected ashore.
OPENING/CLOSING HATCHES: By either stevedores or crew according to Charter Party.
CUSTOMS ALLOWANCE: 200 grams tobacco and two bottles wine/spirits allowed each man per week.
IDENTIFICATION CARDS: Needed for crew going ashore.
CONSULS: No local representatives.
REPATRIATION: No facilities exist.
TIME: GMT plus 2 hours, Summertime GMT plus 3 hours.
HOLIDAYS: Cargo work can be arranged on all holidays.
POLICE/FIRE/AMBULANCE: Police tel. 28; Fire tel. 00; Ambulance tel. 500.
TELEPHONES: Cannot be connected on board.
SHORE LEAVE: Crew permitted to go ashore at all times.
AUTHORITY: Karadeniz Eregli Liman Baskanligi.

GIRESUN (Kerasunda): 40.56 N. 38.24 E.

PILOTAGE: Pilot ordered by Agent who requires 24 hours notice in advance of vessel's arrival. Compulsory for all foreign flag vessels.
ANCHORAGE: Good anchorage in Outer Harbour. Vessels should keep the entrance channel clear.
TUGS: Available in the harbour, but normally not required for vessels entering and leaving.
BERTHING: Entrance between breakwaters with width 275 m. depth 14 m.

Berth A for passenger vessels, berth length 150 m., depth alongside up to 8.5 m.

Berth B for cargo vessels, berth length 275 m., depth alongside up to 8.5 m.

Berth C length 135 m., depth alongside up to 8 m.

Other berths for Port Administration vessels.
STEVEDORES: Working hours normally 0800 to 1200 and from 1300 to 1700.
FRESH WATER: Not available.
FUEL: Not available.
REPAIRS: No repair facilities.

GOLLUK: 37.14 N.27.38 E.

DOCUMENTS: The following documents have to be prepared by Masters before arrival:
- 4 copies of Crew Lists.
- 2 copies of Store Lists.
- 1 copy Health Document.
- 4 copies of Passenger Lists.
- 3 copies of Customs Documents.
- 3 copies of Manifests for cargo destined to port.
- 1 copy of Manifest for all transit cargo aboard.

N.B. Ship's particulars Form is to be filled by Masters upon arrival and remitted to the Port Authorities.
RESTRICTIONS: Golluk is a well-protected natural harbour, not affected by winds from any direction. Deep water approaches to pier.
PILOTAGE: Pilot unavailable.
HEALTH: Vessels to show their Sanitary Certificate if available aboard and also their Registry. Presentation also of Vaccination Certificate of all the crew, if required by sanitary officials. Pratique is necessary on arrival even if vessel has called at another port in the same country. Sanitary Certificate is required for live animals aboard.
RADIO: Izmir radio station, call letters TAN2. Istanbul radio station, call letters TAH.
TUGS: Not available.
BERTHING: One pier 170 m. long used for handling emery ore in bulk. Depths alongside 39 ft. shelving to 20 ft. at 90 m. from seaward end.
CUSTOMS ALLOWANCE: 50 cigarettes for each member of crew going ashore. Aboard the vessel each member of the crew is permitted to have one carton out of Bond. One litre wine/spirits for each member of the crew in opened bottle is permitted out of Bond. However, this allowance is to be kept aboard the vessel.
TIME: Local time GMT plus 2 hours, Summertime GMT plus 3 hours.
HOLIDAYS: New Year's Day (from December 31st 1200 hrs. to January 1st 2400 hours); National Sovereignty Day (from April 22nd 1200 hrs. to April 23rd 2400 hours); Spring Day (1st May), Constitution Day (27th May); Sports Day (19th May); Victory Day

(30th August); National Holiday (28th October 1200 hrs to 30th October 2400 hrs); Sheker Bayram (3 days movable); Kurban Bayram (4 days, movable).

ISKENDERUN: 36.35 N. 36.10 E. (See Plan)

DOCUMENTS:
- 5 Crew Lists.
- 4 Passenger Lists.
- 2 copies Transit Cargo Manifest.
- 3 copies Inward Cargo Manifest, of which one must be legalised by Turkish Consulate at loading port. If no consulate existing same to be certified by local Customs Officer or Authorities.
- 1 set Bills of Lading.
- 2 copies Cargo Stowage Plans.
- Health Documents.
- 2 Stores Lists.
- Ship's Certificates.

PILOTAGE: Compulsory. Ordered by Agent on basis of Master's ETA. International Code signals used to call Pilot who boards at harbour entrance. 2 pilot boats available.

ANCHORAGE: Safe anchorage in open roadstead at 0.5 to 0.75 mile from shore. Vessels over 30,000 tons d.w.t. work cargo at anchorage using ship's gear to lighters and pontoons. Vessels loading/discharging to lighter should anchor as close as possible to harbour entrance but not less than 800 m. from the pier.

MAX. SIZE: At anchorage, no limitations. Alongside pier, length 166 m., draft up to 30 ft. Also see 'Tankers'.

HEALTH: Pratique obtained on arrival. Master required to show vessel's Health Declaration and Certificate of Registry. Crew vaccination certificates to be produced if required. Sanitary certificate required if live animals on board.

RADIO: Istanbul Radio, call sign TAH. Izmir Radio, call sign TAN2.

TUGS: 4 tugs available of 300, 700, 970, and 1,200 h.p. respectively.

BERTHING: Jetty 509 m. long can accommodate 2 large vessels and several small vessels simultaneously.

Berth No. 1 at jetty head, 48 m. length, 35 ft. depth.
Berth No. 2, South side, 166 m. length, 28–32 ft. depth.
Berths 3 and 4, suitable only for tugs and small vessels.
Berth No. 5, North side, 166 m. length, 29–34 ft. depth.

Due to shelving depths vessels of 20,000 to 30,000 d.w.t. berth partly alongside and lighten cargo then shift once or twice further in.

The T.M.O. have a silo of 20,000 tons capacity which can deliver up to 300 t.p.h. Loading capacity of ore, 200 t.p.h., Unloading capacity for coal, 150 t.p.h.

Inner Port, used only by pontoons, lighters and tugs.

Priority given to Army, food relief and passenger ships.

STEVEDORES: 2 consecutive shifts of 8 hours each day. At anchor, approximately 100 tons can be handled each shift, for general cargo. Baled cargo, 125 tons per shift. Bagged cargo, 150 tons per shift.

Gangs secured by Agent through the Port Monopoly, 24 hours prior arrival.

MEDICAL: Master to inform Agent by cable if urgent medical assistance required on arrival, also indicating, if possible, seriousness of case in order to take adequate steps.

TANKERS: 2 buoy mooring berths operated by Mobil Oil and Petrol Ofisi, suitable for vessels up to 50,000 tons d.w.t.

No slop reception facilities.

Also see "Developments".

FRESH WATER: Supplied only by barge, two available each of 250 tons capacity.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Services of watchmen recommended. 3 shifts of 8 hours each. Extra tariff for Sundays and holidays.

OPENING/CLOSING HATCHES: May be opened/closed by ship's crew. May be performed by stevedores at tariff rates.

CUSTOMS ALLOWANCE: 50 cigarettes for each man going ashore. On board the vessel each man may hold 200 cigarettes and 1 open bottle wine/spirits out of bond.

IDENTIFICATION CARDS: Seamen's Book is sufficient.

CONSULS: Vice-consulates of Sweden, Norway, Netherlands, France, Greece, Italy and Iran.

REPAIRS: Welding and other minor types of repairs are possible.

REPATRIATION: Can be arranged.

AIRPORT: Adana Airport, served only by domestic lines with routes to Beirut and Istanbul. Airport situated 140 km. from Iskenderun. Twice daily service to international airport Istanbul.

POLICE/AMBULANCE/FIRE: Police 1044; Ambulance 1443; Fire 1000.

TIME: GMT plus 2 hours, Summertime GMT plus 3 hours.

HOLIDAYS: New Year's Day (commencing 1200 hrs. Dec. 31st); National Sovereignty Day (April 23rd, half day April 22nd); Spring Day (May 1st); Constitution Day (May 27th); Sports Day (May 19th); Victory Day (August 30th); October 28th (half day); October 29th and 30th; Sheker Bayram (3 days, movable); Kurban Bayram (4 days, movable).

SHIPMASTER'S REPORT: Customs and health clearance is performed at anchor outside the port. Vessels should anchor about 0.5 miles North of the landing stage in the main part of the town. All officials and Agents arrive by boat and when clearance is given the Pilot comes out. Vessels with cargo for the chemical works at Sariseki (3.5 miles North of the main port) the procedure is the same except that a Pilot is not required.

Customs, Immigration, and Health officials require 4 crew lists on arrival. The Agent will require 2 more crew lists prior to the vessel's departure for clearance with the Harbour Master. On departure the vessel will anchor off again while outward clearance is obtained.

Summer time is in operation all over Turkey from 1st April until 30th September each year.

DEVELOPMENTS: New oil terminal at Golovasi, 20 miles from Iskenderun.

The oil line comes from the Kirkuk Field in Northern Iraq and has a capacity to pass 35,000,000 tons of oil per year.

There are four loading berths, each with four booms. The maximum capacity to load on Berths 1 or 2 will be 20,000 t.p.h.

The terminal can handle tankers of 300,000 d.w.t. down to 80,000 d.w.t.

The length of the jetty, 1,700 m., was dictated by the necessary water depth available to accommodate very large liquid carriers. A vessel of 300,000 d.w.t. draws 25 m. of water, at Berths 1 and 2 depth of water is 27 m.

It is hoped to commence loading tankers in the Spring of 1977 and complete the entire project by the end of 1977.

A harbour has been built to accommodate the service craft necessary to operate such a terminal. The vessels which will be berthed and operate from here will be tugs of 2,400 h.p., pilot boats and auxiliary service boats.

AUTHORITY: Harbour Master, Iskenderun.

AGENT: Gulf Agency Company Limited, POB 277, Iskenderun. Tel. 1277. Telex 68124. Cables: "GACSHIP Iskenderun."

ISTANBUL: 41.01 N. 28.58 E.

DOCUMENTS: *Operating Vessels*
- 5 Crew Lists.
- 6 Passenger Lists.
- 3 Stores Lists.
- 1 Transit Cargo Manifest.
- 2 Inward Freighted Manifests.
- 2 Inward Non-freighted Manifests.
- Copies of relevant Bills of Lading accompanying Inward Manifests, Ship's Certificates (Deratisation, Tonnage, Safety, Safety Radio, Class or Freeboard).
- 3 ships safe money lists. (if there is no money on board, please issue three lists as follows: THERE IS NO MONEY ON BOARD).
- Harbour Masters Sailing Permit (which must be exchanged at each Turkish port and kept on board).

Transitting Vessels

Master to present only Tonnage and Deratisation Certificates during Sanitary Control at both Straits (Canakkale and Buyukdere).

PILOTAGE: For both operating and transitting vessels, Pilot secured by the Agent through the Port Monopoly Administration. Master to wire ETA notices 48 and 24 hours prior to arrival. Pilot boarding vessel with service boat hoisting red and white flag. Pilot boarding vessel off Haydarpasa and Seraglio or off Kavak. Pilotage for entering and berthing in harbour areas is compulsory. Pilotage through Bosphorus is optional. All Pilots can be contacted by VHF Channel 16.

Also see "Shipmaster's Report".

ANCHORAGE: Free and safe anchorage in roads off Marmara coast approach to Istanbul. It is however recommended to anchor as near as possible to the harbour. Anchoring at other anchorage areas is subject to special permission via Harbour Master. Good anchorage off Haydarpasa and off Yenikapi, Ahirkapi for large vessels and for smaller vessels there is a good anchorage between Dolmabahce Palace and Kurucesme.

RESTRICTIONS: Ships carrying hazardous cargoes (inflammable, explosives, corrosives, etc.) are not allowed to enter the harbours. Ships can anchor in roads outside the harbour at any time without Pilot. Ships to operate upon arrival at night can enter the harbours with Pilot and with special permission through the Port Monopoly Administration. 48 hours' notice has to be given to the Harbour Master of Istanbul for vessels calling at Istanbul and/or passing in transit through Bosphorus.

Vessels entering the Black Sea must keep to the European side and those leaving the Black Sea must keep to the Asiatic side of the fairway.

MAX. SIZE: No limitation of draft in open roadstead, at anchor. Max. draft in port alongside quay: 10 m. for dry cargo ships. Tankers up to 48 ft. draft can berth at Haramidere oil port.

HEALTH: Sanitary control of both transitting and operating vessels performed at the Straits entrance (Canakkale and Buyukdere). Ships entering from South must slow down at Canakkale and ships arriving from North must slow down at Buyukdere for Sanitary Control. In case of non-performance of such control due to bad weather, Master has to inform Agent in time and have to stop and wait at South Entrance of the Bosphorus until Sanitary Control is performed otherwise heavy fine would be levied.

Also see "Shipmaster's Report".

RADIO: Wirelesses to be routed to Agent via Istanbul Radio. Call sign of Istanbul Radio Station is THA. Frequency MW 500 m. Ships can also communicate with Agent by radio telephone on frequency 2182 kc/s. It is recommended that ships be on watch for any radio telephone call by Agent for any berthing and operation arrangement.

TUGS: Arranged by Agent. Tug-boat compulsory for vessels over 2,000 grt, charged per hour or fraction of each operation.

2 of 970 h.p., 1 of 620 h.p. and 1 of 200 h.p. Lighters: 1 of 100 tons, 6 of 150 tons and 3 of 230 tons.

BERTHING: Priority to Army food relief and passenger ships. If no berth available then ships to wait for turn in roads at anchor.

Wharves:	*length in m.*	*Depth of Water in m.*
Karakoy (ex Galata) exclusively for passenger vessels	520	7–10
Salipazari	600	10
Sarayburnu	240	6
Camialti and Haskoy (Golden Horn)	68	3–4

Haydarpasa. This port, protected by 2 breakwaters of an overall length of 1,709 m., has quays of 1,988 m. total length, that may simultaneously accommodate 6 medium-sized vessels and where cargo operations may be made direct to and from wharves or railway trucks.

The draft of water at the quays varies between 6 and 10 m.

Silos: 4 grain silos are available:

Capacity	*Delivery per hour*	*Intake per hour*
34,500 tons	200 tons	100 tons
20,000 tons	120/150 tons	90/100 tons
10,800 tons	120/150 tons	90/100 tons
5,280 tons	120/150 tons	90/100 tons

Equipment – Total number of cranes: 31.

Electrical Cranes along the quays:

3 of 1.5-ton capacity
10 ,, 3 ,, ,,
6 ,, 5 ,, ,,
1 ,, 6 ,, ,,
1 ,, 8 ,, ,, (coal winch)
1 ,, 25 ,, ,, (fixed with swinging boom)
1 ,, 25 ,, ,, (gantry crane on rails)

Rubber Wheeled Mobile Cranes:

6 of 5-ton capacity
1 ,, 8 ,, ,, with caterpillar tracks
1 ,, 10 ,, ,, ,, ,, ,,
1 ,, 18 ,, ,,

BULK HANDLING: Three grain silos are available:

One of 34,500 ton capacity with 200 ton delivery/100 ton intake per hour.

One of 10,800 ton capacity with 120–150 ton delivery, 90–100 ton intake per hour.

One of 5,280 ton capacity with 120–150 ton delivery, 90–100 ton intake per hour.

TANKERS: The oil port called Haramidere is a small bay open to Southern winds and 60 km. distant from Istanbul in the Sea of Marmara. There are buoys and an oil pumping platform in this bay. Tankers can berth by dropping 2 anchors and mooring by stern at these buoys or at platform. Average sea depth is 48 ft.

BRIDGES: There are 2 bridges: Galata Bridge is between Eminonu and Karakoy: Ataturk Bridge is between Unkapani and Azapkapi. Both bridges are opened in the morning for vessels entering the Inner Harbour (Golden Horn). Vessels wanting to pass through the bridges have to give notice in due time to the Harbour Master of Istanbul.

STEVEDORES: Gangs of stevedores secured by the Agent through the Port Monopoly, 24 hours prior arrival. Average loading and discharging rates of about 150–200 tons per gang per shift depending also on the kind of goods. Discharging operations are generally performed alongside the wharves and loading operations at buoys; however, as stated above, can also be effected alongside simultaneously with discharging. Working hours: Monday to Friday 0800/1200 and 1300/1700 hrs; Saturday 0800/1200 hrs.

MEDICAL: Master to inform Agent by cable if urgent medical assistance is required upon arrival, also indicating, if possible, seriousness of case in order to take adequate steps.

DENSITY: Always variable due to strong currents, however, can be reckoned as 1015.

FRESH WATER: Supplied by barge and shore installation at the rate of 30–60 t.p.h.

FUEL: Diesel oil, gas oil and bunker fuel can be supplied by barge at transit cost, subject 48 hours pre-advice. Fuel supplied only against advance payment in foreign exchange (dollars, sterling or Swiss francs).

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Owners or Master to decide whether this work should be underaken by the stevedores or by the crew.

CERTIFICATES: Safety, Safety Equipment, Safety Radio, Class and Freeboard documents.

CUSTOMS ALLOWANCE: 40 cigarettes and 1 bottle wine/spirits per crew member.

CARGO GEAR: Generally shore cranes operating. However, ship using own means when such cranes are not available. Full lights to be supplied by ship.

IDENTIFICATION CARDS: Seaman's book is sufficient.

CONSULS:

Albania
Austria
Belgium
Brazil
Bulgaria
Czechoslavakia
Chile
Denmark
Dominican Rep.
Finland
France
West Germany
Great Britain
Greece
Holland
Hungary
Iceland
Iraq
Iran
Israel
Italy
Japan
Yugoslavia
Lebanon
Mexico
Norway
Pakistan
Poland
Portugal
Romania
Spain
Sweden
Switzerland
Syria
Thailand
A.R.E.
U.S.A.
U.S.S.R.

REPAIRS: At the Golden Horn are 3 graving-docks:

One 388 ft. length, 72 ft. width at entrance
Two 279 ft. ,, 62 ft. ,,
Three 600 ft. ,, 63 ft. ,,

At Istinye (in the Bosphorus) are:
1 floating dock 137.50 m. length, 21.25 m. width with 8,500 tons lifting capacity. 1 floating dock 67.82 m. length, 30.40 m. width with 5,000 tons lifting capacity. 1 floating dock 126.14 m. length, 34.0 m. width with 10,000 tons lifting capacity. In cases of necessity floating docks of 5,000 and 10,000 tons capacity can be united and be put in operation as single floating dock with 15,000 tons lifting capacity. Every kind of repair can be effected at Istinye docks.

At Fener (Golden Horn) is a dry dock for vessels up to 600 tons, and at Kaskoy (Golden Horn) is a dry dock for vessels up to 176 tons. There are also some privately owned. All kinds of repairs can be effected.

SURVEYORS: American Bureau of Shipping, Bureau Veritas, Germanischer Lloyd, Lloyd's, Norske Veritas.

REPATRIATION: Crew exchange and repatriation is possible for citizens of Italy, Great Britain, Benelux, Sweden, Norway, West Germany, Austria, Switzerland, France, Ireland, U.S.A., Iceland, Pakistan, Monaco, Australia, Canada, Japan, New Zealand, Spain, Cyprus, Portugal, Tunis, Kenya, Iran, Yugoslavia, Romania, Morocco. Citizens of other states not specified above are subject to a Turkish visa.

AIRPORT: Yesilkoy Airport is an international airport with daily connection to everywhere. Airport distant 15 km. from Istanbul.

TIME: GMT plus 2 hours, GMT plus 3 hours in Summertime.

HOLIDAYS: New Year's Day (Dec. 31st p.m. and January 1st); National Sovereignty (April 22nd p.m. and April 23rd); Spring Day (May 1st); Sports and Youth Day (May 19th); Sheker Bayram (3 days) (movable); Courban Bayram (4 days) (movable); Liberty/Constitution Day (May 26th p.m. and May 27th); Victory Day (August 30th); Proclamation of the Republic (Oct. 28th p.m. to Oct. 30th). In the event of a holiday ending on a Friday, the Saturday that follows is considered also as a holiday in full, and normal working starts as of Monday morning 0800 hrs.

POLICE/AMBULANCE/FIRE: Fire Istanbul 21 42 22, Uskudar 33 20 30; Police 27 45 00; Ambulance Istanbul 21 15 95, Beyoglu 44 49 98, Uskudar 33 04 01.

TELEPHONES: No installation for connection facility on board.

SERVICES: Tank cleaning (gas-free service), deratisation, compass adjusting carried out by experts of shipyards or Turkish Maritime Lines.

SHORE LEAVE: Crew members are allowed ashore at all times.

SHIPMASTER'S REPORT: *Dardanelles and Bosporus:* If a Pilot is required for both Dardanelles and Bosporus, give 24 hours' notice through Istanbul Agent. Same Pilot remains on board for full transit, Sea of Marmara included, and this applies for both North and South-bound traffic. Pilots at Dardanelles and Bosporus work VHF Channel 16.

Sanitary Control: Required at Buyukdere, Ship's Register, De-Rat, Crew List and certificate issued at Canakkale North-bound.

AUTHORITY: Marmara Bulgesi Liman ve Denizisleri Mudurlugu.

AGENT: Gulf Agency Co. Ltd., POB 1230–Karakoy, Istanbul/Turkey. Cables: "Gacshipping – Istanbul". Telex 22213. Tel. 44 29 80, 457652.

IZMIR: 38.25 N. 27.09 E.

DOCUMENTS:

5 Crew Lists.
4 Passenger Lists.
2 Manifests of Transit Cargo.
3 Manifests of Inward Cargo, one of which must be legalised before arrival by Turkish Consulate at loading port.
1 set Bills of Lading.
2 sets Cargo Stowage Plans.
2 Stores Lists.
Health Documents.
Ships Certificates.

N.B. Ship's particulars form is to be filled in by Masters upon arrival at Izmir, and remitted to the Port Authorities.

PILOTAGE: Vessels are permitted to arrive and sail from Izmir by day and night. After entering the Gulf of Izmir, Masters who are not familiar with the waters, require a Pilot at Pelican Spit. The pilotage from Pelican Spit to Izmir is not compulsory and Masters must notify their Agents at least 12 hours in advance giving their ETA at Pelican Spit and ask for a Pilot.

Pilot can be contacted on VHF Channel 16.

ANCHORAGE: In the Outer Harbour, 300 m. outside Old Port breakwater, ample space for vessels to anchor. Cargo operations cannot be performed at anchor unless vessels have red label cargoes aboard for Izmir or in transit.

RESTRICTIONS: Docking of ships at the old port is not permitted during night, but ships can sail any time during night. At the new port, docking is permitted during night (weather permitting) also ships can sail any time during night. There are no tides at Izmir.

MAX. SIZE: Vessels of any size with a max. of 33 ft. draft can operate at Izmir. There is a pipe-line for oil-carriers in the Gulf of Izmir where tankers with a max. draft of 33 ft. can operate.

In Old Port, length restricted to 165 m., max. draft 8 m.

HEALTH: Vessels to show their Sanitary Certificate – if available aboard – also their Registry. Presentation also of Vaccination Certificate of all the crew, if required by sanitary officials. Pratique is necessary on arrival even if the vessel has called at another port in the same country. Sanitary Certificate is required for live animals aboard. If quarantine (fumigation) of the vessel is necessary, very considerable time is lost, and expense incurred because vessel must proceed to Fumigation Station at Klazomene, located at about 20 miles from Izmir (in the Gulf of Izmir) where fumigation can be effected and bad cases hospitalised.

RADIO: Izmir Radio Station: call letters TAN2. Istanbul Radio Station: call letters TAH.

TUGS: Tugs are compulsory for vessels of more than 2,000 grt. At Harbour Master's estimation, two tugs will be used for vessels over 4,000 grt in case of bad weather. Dues will be collected for each tug.

Four tugs of 200, 300, 970 and 1200 h.p. continuously available.

BERTHING: *Old Port:* Location Lat. 38° 25′ N. Long. 27° 10′ E. Harbour entrance to port 130 ft. wide, depth 40 ft., harbour length 1,200 m., harbour width 700 m. (Pilots boards 0.25 mile off entrance).

Precaution to be taken against N.E. and South winds. Mooring stern to quay. Operations effected by means of lighters. Altogether 8 vessels can berth in Inner Harbour with a draft of 24 to 30 ft.

Alsancak – New Port: Located at a distance of about 2 miles from the old port. Depth alongside berths 22 to 33 ft. Pilot's board vessels outside breakwater old port. Presently 9 cargo vessels of various sizes (mainly medium and small sizes) otherwise 5 to 6 large vessels can operate at the new port. There is also a berth for 1 large passenger vessel or 2 small size vessels.

BULK HANDLING FACILITIES: Grain silo has capacity 40,000 tons. The conveyor can deliver between 2,500 and 3,000 tons in 24 hours.

Bulk ore loaded by grabs. Daily loading capacity per shift of 8 hours is between 750 to 1,000 tons.

STEVEDORES: Straight time 0800–1200, 1300–1700 hrs. Overtime 1800–0200, 1300–1700 hrs. (Saturdays). Sundays and holidays as well as Saturdays from 1300 hrs.: overtime charges 50% increase on S.T. charges.

For overtime discharging operations at the new port, handling charges (overtime) from ship's tackle to the Custom's warehouse, are for account of the ship.

9 men per gang aboard (6 labourers, 2 winchmen, 1 hatch tender) 3 lightermen or men on the Dock.

Extra men used to reinforce regular gangs and in hatches congested with cargo for discharge secures a quick despatch.

MEDICAL: Advance notice optional. There is a local English-speaking doctor for service on board vessels.

Hospitals: U.S. Military Hospital, French Hospital, Government Hospital (Memleket). Doctors available to board ships or patient to proceed to their clinics.

U.S. Military Hospital for emergency cases only.

TANKERS: Izmir is a discharge port for tankers. Socony Mobil Oil receives petroleum products in bulk through a pipe-line at a distance of about 1 mile from their shore installations. Depth at the end of the pipe-line is 33 ft. The pipe-line is of 12 in. and the pumping is effected through a flexible of 10 in, at an average of about 450/500 t.p.h.

British Petroleum, receives petroleum products at jetty where the tankers berth stern to with a max. draft of 23 ft. Pumping is effected by the vessel from her stern with a 6 in. flexible hose.

Petrol Ofisi receives petroleum products at their jetty. Vessels berthed stern to with a draft of 17 ft. Same procedure for pumping as for British Petroleum. The above three installations are located in the Gulf of Izmir opposite the new port of Alsancak.

FRESH WATER: Fresh water is available for drinking. The water is given both from dock or by barge. Water is supplied by Port Monopoly. Delivery at the dock about 20 t.p.h. By barge about 40 t.p.h.

Two barges each of 200 tons capacity available.

FUEL: All kinds of fuel available subject to 24 hours' advance notice. Fuel supplied only against advance payment in free foreign exchange direct to Agent of the vessel.

DEVELOPMENTS: New port of Alsancak to be extended during the next five years by the construction of a breakwater, docks, warehouses totalling a berthing capacity of additional 5 to 6 cargo vessels.

GANGWAY/DECK WATCHMEN: Services of the watchmen recommended. Three shifts of 8 hours per day.

OPENING/CLOSING HATCHES: This work can be carried out by crew. If carried out by stevedores the cost is charged to vessel.

CERTIFICATES:

Deratisation Certificate. Vaccination Certificates (if required).
Registry. Health Certificate.

CUSTOMS ALLOWANCE: 50 cigarettes for each member of the crew going ashore. Aboard the vessel each member of the crew is permitted to have one carton out of Bond. Wine and/or spirits: One litre for each member of the crew in an open bottle is permitted out of Bond. However, this allowance is to be kept aboard the vessel.

IDENTIFICATION CARDS: Seamen's Book is sufficient.

CONSULS:

U.K. General Consulate	tel. 32501
West Germany Consulate	" 34916
U.S. Consulate General	" 32137
Italian Consulate	" 33882
Greek Consulate	" 32622
Belgian Consulate (Honorary)	" 24110
Danish Consulate (Honorary)	" 24018
Norwegian Consulate (Honorary)	" 32066
French Consulate General	" 23116
Luxemburg Consulate (Honorary)	" 35737
Swedish Consulate (Honorary)	" 24878
Netherlands Consulate (Honorary)	" 32064
Finland Consulate (Honorary)	" 24930
Spanish Consulate (Honorary)	" 33689

REPAIRS: Ship's repair shops available: Denizcilik Bankasi (Turkish State-owned), Lui Tius (private). Deck and engine repairs are possible.

DRY DOCKS: No dry docks available.

REPATRIATION: All facilities available for crew changes and arranging necessary repatriation.

AIRPORT: Airport from dock – distance 30 kilometres. Airport is served by Turkish Airlines with 5 flights per day (local flights in connection with Istanbul International flights). Also one daily flight from Izmir to Athens (Greece) and back by Turkish Airlines.

TIME: Local time 2 hours ahead of GMT. Summertime GMT plus 3 hours.

HOLIDAYS: New Year's Day (from December 31st 12.00 hrs. to January 1st, 24.00 hrs.); National Sovereignty Day (from 22nd April, 12.00 hrs. to April 23rd, 24.00 hrs.); Spring Day (May 1st); Constitution Day (May 27th); Sports Day (May 19th); Victory Day (August 30th); National Holiday (October 28th, 12.00 hrs. to October 30th, 24.00 hrs.); Sheker Bayram (3 days) movable; Kurban Bayram (4 days) movable.

On these days offices are closed. Work in port is allowed by paying 50% overtime to the S.T. wages. The overtime for the National Holiday (Oct. 29th) is paid 100% on the total regular overtime, which makes 300%. On the first days of Sheker and Kurban Bayram work aboard is unlikely.

POLICE/AMBULANCE/FIRE: Police, tel. 22771; Ambulance, tel. 22319; Fire, tel. 22222.

TELEPHONES: It is possible to place telephones aboard vessels at the new port of Alsancak.

SHORE LEAVE: Crew members are allowed to go ashore.

REGULATIONS: Berths at the new port of Alsancak are obtained on basis of the time and date of arrival of each vessel. If the port is congested, vessels wait for their turn at anchor.

DELAYS: During the active export season, some delays occur varying one or two days.

AUTHORITY: Izmir Harbour Master.

AGENT: Gulf Agency Company Limited, POB 857, Izmir. Tel. 32755 and 32864. Telex 52371. Cables: "GACSHIP Izmir."

MERSIN: 36.47 N. 34.38 E. (See Plan)

DOCUMENTS:

5 Crew Lists.
4 Passenger Lists.
2 Transit Cargo Manifests.
3 Inward Cargo Manifests, one of which must be legalised prior arrival by Turkish Consulate at loading port; if no Turkish Consulate, same to be certified by local Customs Authorities.
1 each of the Bills of Lading accompanying Manifests.
2 Cargo Stowage Plans.
Health Documents.
Ship's Certificates (Safety Equipment, Safety Radio, Class and Freeboard Documents).
2 Store Lists.

PILOTAGE: Agent orders Pilot through Port Monopoly Administration. Master to wire ETA notices 48 and 24 hours prior to arrival. Pilot boards vessel with service boat hoisting red and white flag. Sound signals: 2 long and 1 short blast. Pilot boards vessel outside main breakwater. Shipmaster can use VHF station according existing international frequencies.

ANCHORAGE: Safe anchorage in open roads outside main breakwater.

RESTRICTIONS: No particular restrictions. Ships can anchor in roads outside main breakwater at any time without Pilot.

MAX. SIZE: No limitation of draft in open roadstead, at anchor. Maximum draft in port alongside quay: 11.6 m. for tankers, 9 m. for other ships.

HEALTH: Clearance is effected on arrival. Vaccination Certificates to be presented if required. If suspected disease on board radio Agents full details before arrival.

RADIO: Istanbul Radio, call sign TAH, Izmir Radio, call sign TAM2, Mersin Radio TAM5. Wireless messages to be routed to Agent, preferably via Istanbul Radio. Port VHF service in operation.

TUGS: Tug boat compulsory for vessels over 1,000 grt. charged per hour or fraction of each operation. 4 tugs available up to 1,200 h.p.

BERTHING: Priority to Army, food relief and passenger ships. If no berth available then ships to wait for turn in roads at anchor.

	Length metres	*Depth metres*
Quay No. 1 (Passenger Quay)	175	10
Quay Nos. 2 and 3	274	10
Quay No. 4	150	10
Quay Nos. 5, 6 & 7	493	10
Quay Nos. 8 & 9	275 each side	10
Quay Nos. 10, 11, 12 & 13	577	6 to 8
Quay Nos. 18 & 19 (ore and coal)		10

BULK HANDLING FACILITIES: At Quay Nos. 8 and 9 there is conveyor system which can deliver 600 t.p.h. from each spout. Discharging rate 100 t.p.h. from each of the 2 suckers.

STEVEDORES: Gangs of stevedores secured by the Agent through the Port Monopoly, to be ordered 24 hours prior to arrival.

Generally 2 consecutive shifts of 8 hours per day. Discharging/loading rates average:

100 tons per shift general cargo.
200 tons per shift bagged cargo.
150 tons per shift baled cargo
175 tons per shift bulk ore

Max. rate for ore 400 tons per shift if grab loading.

MEDICAL: Master to inform Agent by cable if urgent medical aid is required upon arrival, also indicating if possible seriousness of case in order that adequate steps can be taken.

TANKERS: Quays No. 20 and 21, 350 m. long, berths on each side with depth of 12.5 m.

ATAS Refinery Terminal: Depth in harbour channel, 11.2 m. and, in approaches to channel, 12.3 m. Turning basin 1,148 ft. diameter, depth 42 ft. 8 in. Depth alongside berths 48 ft. 6 in.

Maximum length 229 m., draft 11.6 m. Tankers up to 12.19 m. draft have berthed.

Tankers in ballast up to 15,000 d.w.t. may berth/unberth at any time, day or night. Other vessels manoeuvre in daylight hours only.

One finger pier, berths for 2 tankers, 10-in. hose connections to 26-in. shore line. No facilities for slop disposal ashore.

Fresh water available from barge 100 tons each load.

DENSITY: Salt water 1025.

FRESH WATER: Fresh water supplied to tankers by barge but otherwise by shore installation at the rate of 30/35 t.p.h.

FUEL: Almost all kinds of fuel available in transit and facilities for delivery to ships.

GANGWAY/DECK WATCHMEN: Available and recommended.

h **SOPENING/CLOSING HATCHES:** Owners or Masters to decide whether this work should be undertaken by the stevedores or by the crew.

CUSTOMS ALLOWANCE: 200 cigarettes and 1 bottle wine/spirits per crew member.

CARGO GEAR: Generally shore cranes operated. However, ship using her own means when such cranes are not available. Full lights to be supplied by ship.

IDENTIFICATION CARDS: Seamen's Book is sufficient.

CONSULS: Lebanon, Italy, Norway and Sweden.

REPAIRS: Welding and other minor types of repairs are possible.

REPATRIATION: Repatriation can be arranged by air.

AIRPORT: Adana Airport served only by domestic line THY (Turkish Airlines) with routes to Cyprus (ERCAN), Ankara and Istanbul. Distance is 75 km. from Mersin. Twice per week to Cyprus (ERCAN), twice daily to Ankara and 3 times daily to Istanbul.

TIME: GMT plus 2 hours, Summertime GMT plus 3 hours.

HOLIDAYS: New Year's Day, 1.5 days (31st December 0.5 day. 1st January 1 day); National Domination 1.5 days (22nd April 0.5 day, 23rd April one day); Spring Day, 1 day (1st May); Youth and Sport Day, 1 day (19th May); Liberty and Constitution Day, 1.5 days (26th May 0.5 day, 27th May 1 day); Victory Day (20th August); Republic Day 2.5 days (28th October 0.5 day, 29th and 30th October); Ramazan Day 3.5 days (14th September 0.5 day, 15th, 16th and 17teptember in 1977), every year 10 days earlier start; Kurbam Day 4.5 days (21st November 0.5 day, 22nd, 23rd, 24th and 25th November in 1977), every year 10 days earlier start; All Saturdays and Sundays.

POLICE/AMBULANCE/FIRE: Telephone numbers: Police 3439; Ambulance 3555; Fire 0000.

TELEPHONES: No installation for connection on board.

GENERAL: Two consecutive shifts every day, the first one starting 0800–1700 hrs. and the second one at 1700–2400–0100 hrs. Agent may provide extra men if necessary to help ship's despatch. Ships have to hoist a Turkish flag.

SHORE LEAVE: Crew allowed shore leave.

AGENTS: Gulf Agency Company Limited, PO Box 328, Mersin. Turkey. Cable Address: "Gacship" Mersin. Telex: 67141. Telephones: 1080–3730.

SAMSUN: 41.19 N. 36.21 E.

PILOTAGE: Refer to "Canakkale" and "Istanbul".

Harbour Pilot compulsory for all foreign vessels. Ordered by Agent subject to vessel's advance notice of ETA.

ANCHORAGE: Good anchorage in the Outer Harbour.

TUGS: Tugs are available.

BERTHING: Harbour protected by two breakwaters, entrance width 300 m., depth 11.9 m.

One quay, 956 m. long, depth alongside from 6.5 to 11 m., providing 4 deep-water berths.

FRESH WATER: Available from the quay.

FUEL: Not available.

STEVEDORES: Working hours for general cargo: From 0800 to 2400 hrs. in 2 shifts.

For bulk cargo: 24 hours operations in 3 shifts.

TRABZON: 41.01 N. 39.46 E.

PILOTAGE: Refer to "Canakkale" and "Istanbul".

Harbour Pilot compulsory for all foreign flag vessels. Arranged by Agent subject to vessel's notice of ETA in advance.

ANCHORAGE: In the Outer Harbour off the breakwater.

MAX. SIZE: Vessels up to 29 ft. draft.

TUGS: Two tugs available. Towage compulsory for vessels over 550 tons.

BERTHING: Main wharf 410 m. long, depth alongside 10 m. Vessels may be loaded and discharged while moored stern to the breakwater.

FRESH WATER: Obtainable from the quay.

FUEL: Fuel oil obtainable in limited quantities.

STEVEDORES: Working hours from 0800 to 1200 hrs. and from 1300 to 1700 hrs. Overtime can be arranged.

REPAIRS: There are no repair facilities.

ZONGULDAK: 41.28 N. 31.49 E.

PILOTAGE: Refer to "Canakkale" and "Istanbul".

Harbour Pilots obtainable from Coaling Company, Pilot boards off port entrance by launch. Ordered by Agent subject to vessel's ETA given at least 24 hours before arrival.

ANCHORAGE: Good anchorage off the harbour in depth of 13 fathoms, sand and mud bottom.

Anchorage prohibited South of a line drawn in direction 292.5° distance 7.5 cables from head of the Northern breakwater. The Southern limit of this area is a line drawn in direction 262° from the head of the Northern breakwater to the shore.

RESTRICTIONS: Harbour entrance between breakwaters. Entrance width 600 ft.

Traffic signals displayed from signal mast on Northern breakwater, as follows:

2 black balls or 2 red lights, meaning "Harbour closed."

2 black cones or 2 green lights, meaning "Harbour open."

A black ball over black cone or red light over green light, meaning "Do not attempt to enter".

A black cone over a black ball or green light over a red light, meaning "No tug available."

A black ball between 2 black cones or red light between 2 green lights, meaning "Wait. You will be piloted into the harbour."

3 black balls, or 3 red lights, meaning "Because of unfavourable weather you cannot be piloted into the harbour."

TUGS: Available.

BERTHING: Coal quays length 1,650 ft. depth alongside 10 m.

Cargo quay length 500 ft. depth alongside 10 m.

Northern Breakwater, 2 berths, at inner end with depth of 7 m. alongside.

FRESH WATER: Available from the quays.

FUEL: Only coal bunkers available.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Union of Soviet Socialist Republics

ALL PORTS:

GENERAL:

(a) *List of Soviet ports and port roads opened for foreign vessels:*

I. Arctic Ocean Ports

1. Murmansk
2. Onega*
3. Archangel
4. Mezen
5. Naryan-Mar
6. Igarka

*Since 1971 the port of Onega is closed for foreign vessels from 1st September to 31st December early.

II. Baltic Sea Ports

1. Leningrad
2. Vysotsk
3. Vyborg
4. Tallinn
5. Pyranu
6. Riga
7. Ventspils
8. Klaipeda

III. Black Sea Ports

1. Reni
2. Izmail
3. Kilia
4. Belgorod-Dnestrovsky
5. Ilyichevsk
6. Odessa
7. Kherson
8. Novorossiysk
9. Tuapse
10. Poti
11. Batumi
12. Yalta
13. Sochi
14. Sukhumi

IV. Azov Ocean Ports

1. Zhdanov
2. Berdyansk

V. Pacific Ocean Ports

1. Nakhodka
2. Aleksandrovsk-Sakhalinsky
3. Makarevsky (or Due) Roadstead
4. Octyabrsky
5. Shakhtersk
6. Uglegorsk
7. Kholmsk
8. Nevelsk
9. Makarov Road stead
10. Poronaisk

(b) *Addresses and telephone numbers of V/O "Sovinflot", V/O "Sovfracht", V/O "Sovsudopodyom" and V/O "Soyuzvneshtrans":* Vsesoyuznoe Obyedinenie "Sovinflot" acts as General Agent for all Soviet shipping companies abroad and co-ordinates agency services rendered to foreign flag vessels at U.S.S.R. ports through the local Inflot agencies.

Postal address: V/O "Sovinflot", 1/4 Zhdanov Street, Moscow, K-12, U.S.S.R.

Tel. 296–50–32. Cables "Sovinflot Moscow". Telex 7217 (answer back 7217 Sovinflot Su, 7236 Sovinflot Su).

Vsesoyuznoe Obyedinenie "Sovfracht" – All Union Chartering Association carries out operations connected with chartering of foreign and Soviet tonnage for transportation of goods, both for the Soviet foreign trade organisations and foreign charterers respectively.

Postal address: V/O "Sovfracht", 32/34 Smolenskaya Square, Moscow, G-200, U.S.S.R.

Tel. 244–24–11. Cables "Sovfracht Moscow". Telex 7168–7172, 7541, 7542, 7217, 7636.

Vsesoyuznoe Obyedinenie "Sovsudopodyom" performs offshore and deep-sea salvaging, ship-raising and underwater engineering works, deep-sea towage and dredging.

Postal address: 1/4 Zhdanov Street, Moscow, K-12, U.S.S.R.

Tel. 151–02–32. Cables "Sovsudopodyom Morflot Moscow". Telex 7197 (answer back 7197 Morflot-SU).

Vsesoyuznoe Obyedinenie "Soyuzvneshtrans" – handles transportation and forwarding of export and import cargoes on Soviet territory as well as transit of goods via the U.S.S.R.

Postal address: V/O "Soyuzvneshtrans", 32/34 Smolenskaya Square, Moscow, G-200, U.S.S.R.

Tel. 244–39–51. Cables "Suyuzvneshtrans Moscow". Telex 7266, 7291.

(c) *Guiding principles to comply with when calling at U.S.S.R. ports:* When calling at U.S.S.R. ports Masters of all foreign flag vessels are requested to comply with the Instructions and Provisions of the Government of the U.S.S.R. published annually in issue No. 1 of the U.S.S.R. Notices to Mariners, Special Instructions for vessels calling at U.S.S.R. ports and General Rules for Soviet merchant and fishing sea ports.

All vessels calling at U.S.S.R. ports must also abide by the Customs and Obligatory Harbour Regulations of each particular port of call which are obtainable through the local Inflot agencies, viz. shipping agents for foreign flag vessels at U.S.S.R. ports.

(d) *Ship/shore radio link:* Ships' communication with ports of call is usually maintained through the local port radio stations, some information of which is given in the respective entries for the ports.

Ships' radio stations and/or radio-telephones (excluding VHF), must not be operated when the vessel navigates or lies at anchor within the limits of the port boundaries as well as when calling at or leaving the port, except in emergency, e.g.:

when giving distress signals;
when rendering assistance to other vessels in distress;
while making way through the ice;
after having obtained special permission of the Harbour Master.

(e) *Notice of arrival:* At least 48 hours prior to arrival Masters should give notice through Inflot agency to the Port Administration stating the following particulars:

Name and call-sign of the ship.
Nationality (flag).
Last port of call.
Draft fore and aft and length.
Net and gross register tonnage.
Nature and total quantity of cargo to be discharged or loaded and stowage plan.
Number, location and weight of heavy lifts (over 3 tons), if any.
Number and length of oversized pieces (over 9 metres), if any.
Shipowners' cable address and telex number.
Quantity and location of tanks with ballast water and time required for deballasting (for tankers only).
Whether vessel requires supply of electric power from shore for lighting purposes.
Health and sanitary conditions both aboard the ship and at the last port of call.
Quantity of fresh water, bunkers, provisions, etc., if required.
Estimated time of arrival (ETA).

Likewise, Masters of incoming vessels shall also report to Inflot agency 12 hours before arrival the following particulars only:

Name and call sign of the ship.
Draft.
ETA as definite and final.

Masters should immediately advise the Port of Call Administration through Inflot agency of all unforeseen delays.

Masters should also notify charterers in due time and as per conditions of the relevant Charter Party or Sale Contract.

All possible damages to a vessel which may occur either for lack of all relevant details mentioned above or due to untimely and/or incorrect information given by the Master to the Port Authorities when advising ETA, etc., are to be for the vessel's account.

Vessels calling at ports for bunkers, fresh water, provisions, etc., only, should advise their ETA, etc., to the Port Administration as per details shown above.

In case a vessel is not equipped with radio the Master shall advise ETA and relevant details to the next Port of Call Administration through the radio station of the last port of call.

The Port of Call Administration should provide Masters of calling vessels with all necessary information regarding anchorage, berthing and handling of cargo not later than 2 hours prior to vessel's arrival.

Since for some ports time and terms of giving Notice of Arrival are different from those mentioned above, Masters are advised to look for the precise information in the entry for the particular Port of Call.

(f) *Pilotage:* Pilotage is compulsory for all vessels that enter or leave U.S.S.R. sea and river ports, as well as when mooring, unmooring and shifting berths in the harbour.

A Pilot having boarded a vessel shall be obliged to hand over to the Master a pilotage receipt conforming to a specimen established by the Ministry of the Merchant Marine of the U.S.S.R.

The following data shall be entered by the Master on the receipt: name of the vessel, its flag, draft, length, breadth, net register tonnage as well as the time and place of the Pilot's arrival.

The Master of a vessel shall be obliged to pay a fine in an amount of double the rate due as pilotage fee for incorrectly declaring the draft, length or breadth of a vessel or its net register tonnage, irrespective of the liability established by law for the consequences which may occur as a result of the incorrect information.

(g) *Anchorages:* A vessel approaching the Port of Call and not having been boarded by a Pilot immediately on arrival, or for any other reason, shall anchor in the anchorage area specially designated for the purpose.

All vessels when at anchor shall carry the lights or the marks as to the International Regulations for prevention Collisions at Sea. Apart from that every vessel by night, when at anchor, shall be illuminated from stem to stern with additional lights placed so that the hull be as far as possible visible from the surface of the water.

Vessels using a kedge anchor shall, in addition to the lights and the marks as to the International Regulations for Prevention Collisions at Sea, conspicuously display by night a white light and by day a red flag lowered from the stern by the anchor chain to the extent of half of the side's height.

In restricted visibility whether by day or night, every vessel when at anchor shall use sound signals conforming strictly with the International Regulations for Prevention Collisions at Sea.

All vessels when in port must hoist their national flags on the stern's flagstaff.

During Winter months all vessels when in Arctic ports must hoist their national flags daily until they are visible and during Summer from 0800 to 2000 hrs.

Restrictions:

No vessel shall anchor beyond or on the boundaries of the recommended anchorage area and/or obstruct leading lines, buoys, navigation lights and marks.

No anchorage is allowed in the prohibited zones shown on the charts in the Sailing Directions and/or in the Obligatory Harbour Regulations as well as announced in the appropriate Notices to Mariners.

No anchorage is allowed at a distance of less than 1.5 cable length off fairways and leading lines as well as in depths not providing a vessel with a safe anchorage while drifting on the anchor chain.

No vessel shall anchor within the water area of a shipbuilding yard after being refused to carry out repairs.

It is prohibited to change a vessel's anchorage by drifting.

Vessels carrying explosives or inflammable liquids must anchor in the areas recommended for them only.

Masters of all vessels when at anchor are not allowed without the Harbour Master's consent, except in emergency, and/or in case of Port and Boarding officials, to give anybody permission to come alongside in a private launch or a small rowing boat whether under oars or sail and board a vessel.

Swimmers must not be allowed to come on board a ship.

Should, in case of emergency, swimmers have been taken on board or strangers have been discovered aboard a vessel, the Master of such ship shall forthwith without delay report the fact to the Harbour Master and shall later hand those people over to the Representatives of the Port Administration.

(h) *Regulations for entering and leaving U.S.S.R. ports;* Every vessel coming from abroad shall hoist quarantine signals of the International Code of Signals depending on health and sanitary conditions on board.

For entry permit a vessel must contact the Port Control service either by VHF radio-telephone or by means of visual signals, viz. by day hoisting her call-sign and by night making call-sign signals in Morse Code by search-light or by Morse-lamp.

No ship shall enter the harbour until the proper signal has been hoisted at the Signal Station or by a pilot boat authorising such entry.

No vessel is allowed to enter the harbour until the prohibition signals hoisted at the signal station have been lowered down.

If entry is refused a vessel must immediately slow down, alter course and if possible go off the fairway and have to drift or drop anchor in the recommended area.

Turn of entry to the harbour is controlled by the Port Administration with regard to tonnage of vessel, nature of cargo, weather conditions in the port area, readiness of the port to start cargo operations and other circumstances.

Simultaneous entry of two or more vessels to the harbour or vice versa is not allowed in the majority of ports.

Under all circumstances a vessel entering the harbour must give way to the outgoing one not preventing her manoeuvrability.

When approaching U.S.S.R. ports all vessels must follow the recommended course announced in issue No. 1 of the U.S.S.R. Notice to Mariners.

(i) *Sanitary and Quarantine requirements:* Cargo vessels arriving from ports subject to cholera at Azov and Black Sea ports of U.S.S.R., and not equipped with retention tank for sewage should have all toilets sealed whilst at the U.S.S.R. ports, passengers and crew being obliged to use the shore toilets.

According to the requirements of the U.S.S.R. Medical authorities dumping of sanitary wastes from vessels equipped with retention tanks is allowed at sea, not less than 50 miles off the U.S.S.R. shore line.

The discharge of oil-contaminated water and/or oil residues is prohibited in all sea areas within 50–100 miles from the U.S.S.R. coast as to the Regulations of the International Convention (1967) for the Prevention of Pollution of the Sea by Oil.

Not later than 6 hours before arrival Masters of all vessels coming from foreign countries to the U.S.S.R. ports should advise Quarantine Authorities by radio through Inflot Agency giving full details of health conditions on board as well as sanitary conditions at the last port of call.

If medical assistance is required on board Master has to contact Inflot Agency by radio.

No shore connection is allowed to a vessel until free pratique is obtained

Foreign vessels are granted free pratique after the arrival formalities have been accomplished by the boarding officials, viz. Health Authorities, Customs and Immigration.

Masters are advised to ask a Sanitary Officer for inoculation, vaccination, fumigation, decontamination, etc., if required, whilst he is on board a ship together with the other boarding officials.

Veterinary Certificates of Good Health are required for livestock, all kinds of meats, animal food and raw meat stuff brought to U.S.S.R. ports from aboard. Certificates should be issued by the proper authorities of the country from which the cargoes have been exported.

Masters should have a Phytoquarantine Certificate for goods of vegetable nature.

It is prohibited to take ashore fruit, vegetables, grain, seeds, plants, plant products, etc., without a certificate issued by a local branch of the U.S.S.R. Agricultural Quarantine Inspection. Animals and birds are not allowed to be brought ashore without a Veterinary Certificate.

(j) *Documents:*

(A) Upon arrival at a U.S.S.R. port: The following ship's documents should be produced by the Master to the representative of Inflot Agency for further examination by the boarding officials upon arrival at a U.S.S.R. port:

Ship's Patent.
Ship's Certificate of Registry.
International Radio Certificate.
International Class Certificate.
Measurement Certificate.
Load-line Certificate (or International Load-line Exemption Certificate).
Passenger Ship Safety Certificate.
Safety Construction Certificate.
Safety Equipment Certificate (or Safety Equipment Exemption Certificate).
Safety Radiotelegraphy Certificate.
Safety Radiotelephony Certificate.
Loading Certificate.
Health Certificate.

Model Clearance Forms introduced as from 1st January 1974: On arrival of the ship the Master is to submit to the representatives of the Port Authorities the following documents (IMCO Forms) duly signed by ship's administration:

5 copies of General Declaration (Form 1) (filling in of points 8 and 11 is not compulsory).

4 copies of Cargo Declaration (Form 2) (filling in of point 6 is not compulsory). Points 7, 8 and 9 are to be filled in for:
(a) cargoes for which Bills of Lading were not issued (names of Shippers and Consignees to be stated);
(b) transit cargoes;
(c) cargoes for other Soviet ports;
(d) agricultural cargoes.

Ship's Stores Declaration (Form 3) – not required.

2 copies of Crew's Effects Declaration (Form 4) (amount of Captain's and crew members' valuables: gold, silver, platinum, jewellery, bonds, travel cheques, etc., personal fire arms and cartridges (ammunition), explosives and narcotics are to be stated in point 2).

4 copies of Crew List (Form 5).

4 copies of Passenger List (Form 6).

The Master has also to produce to Port Authorities for checking:
Deratisation Certificate.
Main Ship's Articles Book (Muster Roll).
Passports (Seamen's Books)
Vaccination Certificates of crew and passengers.

In accordance with article 38 of the Merchant Shipping Code of the U.S.S.R. a foreign flag ship which, on calling at a U.S.S.R. port, raises doubts as to her meeting the requirements of safe navigation may, irrespective of whether she possesses the necessary ship's papers mentioned above, be subjected to an examination by way of technical survey on the same basis as ships sailing under the State Flag of U.S.S.R.

The Obligatory Harbour Regulations to be complied with fully during a vessel's stay at a U.S.S.R. port should be handed over to the Master either by Pilot or by representative of the Harbour Master's Office, or by Agent.

(B) Before sailing from a U.S.S.R. port:

No other documents apart from those mentioned under item "A" are required in order to obtain the authorisation to leave the port.

No vessel is to get under way without having obtained the permission of the Harbour Master.

The authorisation to leave the port shall be given after a vessel herself and her draft shown in the Master's Statement have been checked by a Port Authorities' representative.

The Harbour Master may not allow a vessel to leave the port, in case:

1. The Cargo Loading Regulations have not been fulfilled.
2. In view of the seaworthiness of a vessel which may cause a threat to the safety of life at sea or on board.
3. In case the ship's documents regulations have been broken and the port dues, tolls and fines have not been paid.

All expenses which may occur due to a vessel's possible delay in the port in connection with the reasons stated above are to be for the Owners' account.

(k) *Customs Regulations and Allowances:* Commodities and articles not designed for the port of call are not allowed to be taken ashore and should be sealed by a Customs Officer, if necessary, immediately after the clearance formalities have been accomplished or after the part of the delivered cargo loaded and stowed at the same place has been discharged.

It is prohibited to bring in or take out of the country any Soviet currency. No articles are to be taken ashore or brought on board a ship without permission of the Customs Authorities otherwise all the articles concealed should be regarded as smuggled goods and a fine shall be imposed. Likewise, sale of any articles of foreign origin on U.S.S.R. territory shall be also regarded as smuggling. In all U.S.S.R. ports tobacco is allowed to be taken ashore in small quantities and for personal consumption only. No wine or alcohol is allowed to be brought ashore.

(l) *Berthing:* Berthing can only be effected with a State Pilot on board. Likewise, no vessel shall leave or shift berth without employing the services of a Pilot authorised by the Port Administration to make the voyage in question.

Vessels must take up the berths assigned to them and conform strictly to the Obligatory Harbour Regulations in force.

A Pilot or the Agent shall provide the Master with all necessary information as regard to depths, tugs, conditions in the Harbour, etc., before mooring starts.

The responsibility for the safety of a vessel during her manoeuvring and berthing as well as for possible damages to a berth or other port facilities shall always rest with the Master.

No vessel is allowed to change berth due to handling of cargo or for any other reason unless the main engines, the mooring winches, the steering gear, etc., are in good working order and there is sufficient number of the members of the crew to ensure shifting berth when required.

It is strictly prohibited to work with vessel's propellers when lying alongside berth. To avoid damage to the underwater parts of a berth while mooring or unmooring every vessel must have the main engines going "dead slow" until her stern is 10 m. from the quay.

When berthing, Masters should use strong and reliable mooring lines and make them fast over the quay pile-moorings and bollards only. It is strictly prohibited to make fast mooring lines over any part of the quay equipment which has not been intended for that purpose.

When lying alongside berth, every vessel must have a gangway or a gangway board with a lifeline secured along, led ashore and made fast. There should be a life net under the gangway platform and a lifebuoy nearby. Gangways must be sufficiently illuminated at night.

(m) *Stay in port:* When lying alongside berths, all vessels to be moored by long safe ropes which are to be kept fast at all times, and constant watch should be kept by day and at night.

All mooring ropes must be fitted with rat-guard plates.

From sunset to sunrise all vessels' decks, cargo decks and gangways must be illuminated.

Every vessel, whether in the outer roads or in the harbour, must always have on board a sufficient number of crew to be able to ensure both the ship's safety and her everyday routine. Vessel's fire-fighting and life-saving equipment must always be ready for use on board or to render assistance to other vessels or shore objects in case of emergency.

When in port, no vessel is allowed, without having obtained the Harbour Master's permission, to make repairs to the main engines or to the ship's auxiliary equipment thus depriving her of the opportunity to shift berth at short notice in case of emergency.

It is not allowed, without the permission of the Port Administration, to use vessel's boats, underwater oxygen and any underwater apparatus of other types.

No vessel is allowed to clean boilers or discharge any sort of chemicals or organic products into the water.

It is strictly recommended to avoid giving off smoke and sparking from vessels' funnels.

No rubbish, bottles, waste foodstuff, baskets, carcasses, stones, dirt, ashes or any objectionable or malodorous matter shall be thrown into the water or on the quay. The Master of any ship shall cause anything of this nature to be removed by special barges or lorries day by day. No oil or oily water is to be pumped out or allowed to escape into the harbour. Washing water and/or oil residues must be discharged into shore facilities only.

(n) Ship's movement in the harbour and shifting berths: No vessel shall leave or shift berths without the permission of the Port Authorities. In case there are no provisions in the Contract of Carriage of Goods by Sea or in the Bill of Lading, a vessel shall accomplish one shifting from berth to berth during the course of her loading and shifting upon unloading to the loading berth at the Owners' risk and expense. Any subsequent shifting shall be at the expense of the goods.

All shiftings in the port connected with a vessel's needs, viz. bunkering, loading supplies and/or provisions, making repairs, etc., shall be at the expense of the vessel.

All haulings both during the course of loading and unloading shall also be at vessel's expense.

(o) Tugs and salvage assistance: Tugs and salvage craft for rendering necessary services and assistance to foreign vessels are available in all the U.S.S.R. ports.

If necessary, Masters should order tugs from the Port Controller through Inflot Agency in time stipulated by the Obligatory Harbour Regulations.

Tugs, if necessary, are usually ordered by the Master according to a Pilot's advice.

In some ports use of tugs during mooring and shifting berths is compulsory due to the heavy conditions of navigation.

Masters shall be charged for tug assistance, if required, according to the current port rates. Time for use of tugs shall be counted from the moment of leaving their usual berthing place up to the moment they return.

Notes: In all the U.S.S.R. ports 1 hour time is fixed for passage of a tug-boat to a vessel from her usual berthing place and vice versa after she has accomplished her assistance, except the port of Archangel where 2 hours time is applied. For detention of a tug-boat a vessel shall be charged as per usual working time.

For cancellation of a tug, a vessel shall be charged full rate, including detention time and time of passage of a tug from the berth to the vessel and vice versa.

When ordering a tug for unmooring, Master should fill in and sign a special application form given by the Agent. The actual time of completing the towage shall be approved by the Master of a towed vessel.

In ports where the towage is compulsory when mooring and shifting berths, the Master shall be charged for the tugs' assistance whether used or not, and having refused tugs shall be held responsible for the consequences thereupon.

(p) Notice of readiness: In case there are no special provisions in the Contract of Carriage of Goods by Sea, the Master shall, during the established office hours upon the accomplishment of Customs formalities and having obtained free pratique, deliver through his Agent in the port, viz. Inflot Agency, a notice of the ship's readiness for loading or unloading to the consignee or the shipper.

The notice of the vessel's readiness shall be considered accepted if she is actually ready to load the cargo into or unload it out of all the vessel's holds or tanks.

(q) Handling of cargo: All cargo handling areas in the ports are under control of the Port Administration which shall provide vessels with labour, tally staff, sheds and warehouses, employees, etc.

To ensure successful handling of cargo the vessel shall, when required by shippers or consignees, receive or discharge cargo day and night, as well as on Sundays and holidays, furnishing free of charge all necessary cargo handling gear. Though in most ports the cargo handling is done by port cranes both from the quays and lighters, a vessel shall, in some ports, use her own cargo handling equipment, which has to be in good working condition.

In the latter case, the Master shall produce to the Agent the Cargo Equipment Certificate which must be valid.

Loading or unloading time is calculated as to the rates stipulated in a Charter Party or according to the Customs of the Port in the absence of same.

Should the port labour participate in the opening or closing of hatches, a vessel's administration shall be responsible for the rules of safety engineering to be complied with.

Opening and closing of mechanised ship's hatches shall always be done by the ship's crew.

Should shore cranes be used for loading or unloading instead of a vessel's cargo-handling equipment, the Master shall beforehand remove aerials, aerial halyards, stay rods, wires, etc., crossing the air space over a ship's hatches and preventing the shore cranes' derricks from free circulation.

Overloaded and/or wrongly loaded vessels shall not be allowed to leave the port until the cargoes are properly stowed.

A vessel shall be considered overloaded or wrongly loaded, if:

(a) a vessel's load lines corresponding to the maximum depth to which she should have been loaded are underwater without any list;

(b) the cargoes loaded in the holds and/or on deck have not been made fast enough or have not been made fast at all;

(c) a vessel has a bad list caused by faulty loading or her stability does not correspond with the ship's documents;

(d) a vessel loaded with bulk or liquid cargoes has not used the necessary materials or accommodations to prevent cargoes from shifting or overflowing in case of vessel's pitching and rolling;

(e) the deck cargo is considered as a danger for the safety of a vessel and the safety of life on board caused by faulty loading;

(f) in the course of loading some other loading regulations have been broken.

(r) Agency: All foreign vessels upon arrival at the U.S.S.R. ports are attended by the maritime agencies Inflot.

Inflot agencies provide foreign vessels with the following services:

Inform the Port Authorities and other organisations about vessels' expected time of arrivals (ETA), nature and quantity of cargo to be handled, expected time of loading or discharging, etc.;

Render assistance to the Masters in obtaining Pilots, tugs, berths, launches, etc.;

Fulfil all the necessary formalities connected with the vessels' arrival and departure;

Ensure that Masters are acquainted with the Port Rules, Obligatory Harbour Regulations as well as other documents and instructions issued by the Port Authorities;

Give advice to the Shipowners and other interested parties regarding vessels' movement and the prospects for the handling of cargo;

Render help in speeding up loading and/or unloading of the cargo;

Provide vessels with supervisors and tallymen;

Make time sheets and submit them to the Masters, Port Authorities, Shippers and/or Receivers for their further approval;

Sign on Masters' behalf cargo and other documents;

Organise bunkering, delivery of fresh water, provisions, technical supplies and all kinds of ship-repairs;

Render help to the members of the crews in obtaining medical assistance;

Make payment of dues, charges, fines (if any), etc., on behalf of the Shipowners and for their account;

Take all necessary measures for improvement of the handling of cargoes and ships' services;

Look after the Court (Arbitration) cases and cargo claims on behalf of the Shipowners;

Make Sea Protests as well as translation and duplicating of any documents on Masters' requests;

Repatriate members of the crews from the U.S.S.R. to their home ports;

Invite surveyors qualified by the U.S.S.R. Register of Shipping, to conduct vessels' surveys;

Make extension of ships' documents;

Render help to the Shipowners in delivering and redelivering of their vessels on time charter;

Assist in arranging cargo fumigation on board;

Perform any commissions on the instructions of the Shipowners in regard to the ships' services and protection of their interests before any Authorities.

It is in the interest of the Master to advise Inflot Agency timely information as regard to a vessel's name and nationality; her net and gross register tonnage; draft fore and aft; kind of cargo to be discharged or loaded per each hold (stowage plan); number, weights and location of heavy lifts, number and length of oversized (over 9 m.) pieces and Owners' cable address and telex number thus putting the Agent in a position to calculate the approximate sum of the disbursement expenses and ask the Shipowners to remit same (disbursement accounts are to be paid before vessel's departure).

Note: Bearing in mind the fact that most of the shore offices are closed on Sundays and holidays, the Master shall cable to Inflot Agency well in advance his order for bunkers, repairs, technical supplies and cash to enable the Agent to make necessary arrangements.

All branches of Inflot Agency work round the clock, including Sundays.

Cable address of any branch of Inflot Agency is "Inflot", e.g. Inflot Archangel, Inflot Novorossiysk, etc.

(s) Fire safety measures: Fire safety measures on all foreign vessels staying at U.S.S.R. ports must comply with the Fire Safety Regulations of the 1960 International Convention for the Safety of Life at Sea as well as with the provisions of the International Code for the Carriage of Dangerous Goods by Sea. Every vessel upon arrival at a port must keep constant fire watch day and night and have fire-fighting and life-saving equipment always ready for action. Members of the crew must keep strictly to the Fire Safety Regulations especially during vessels' stay at oil and timber berths.

Giving off smoke out of the funnels is strictly prohibited. In all the U.S.S.R. ports a fire brigade could be called through the Agent, or over the phone by dailling 01 in case of fire.

(t) Medical assistance: Medical assistance, if required, is available, including vaccination and inoculation as well as dispensary and hospital treatment in all the U.S.S.R. ports. In case of emergency an ambulance or a doctor should be called through the Agent or by telephone – 03 in all the ports.

(u) Customs of the ports: Customs of the ports should apply in case:

(1) there is no Contract of the Carriage of Goods by Sea;

(2) there are no provisions in a Charter Party or in the Bills of Lading in respect of items covered by these Customs;

(3) a Charter Party or a Sale contract and/or any other Contracts of the Carriage of Goods by Sea specially refer to these Customs of the Ports.

(v) National and general holidays of the U.S.S.R.: National and general holidays in the U.S.S.R. are fixed.

5 days working week with 2 holidays has been introduced for most of the industrial enterprises, government and commercial offices and other institutions. Saturdays and Sundays are weekly holidays in the U.S.S.R.

The other holidays are:

1st January (New Year's Day); 8th March (International Women's Day); 1st and 2nd May (Days of International Workers' Solidarity); 9th May (World War II Victory Day); 7th and 8th November (Anniversary of the Great October Socialist Revolution, 1917); 5th December (U.S.S.R. Constitution Day).

SHIPMASTER'S REPORT: (May, 1975) On arrival at the port the Master is to submit to the representatives of the Port Authorities the following documents (IMCO FAL forms) duly signed by the ship's administration:

General Declaration (IMCO FAL form 1)	5 copies
Cargo Declaration (IMCO FAL form 2)	4 copies
Ship's Stores Declaration (IMCO FAL form 3)	not required
Crew Effects Declaration (IMCO FAL form 4)	2 copies
This list to include all money and valuables with totals of each currency separately stated.	
Crew List (IMCO FAL form 5)	4 copies
Passenger List (IMCO FAL form 6)	4 copies

ARCHANGEL: 64.32 N. 40.31 E.

Port open for navigation from May to November.

LOCATION: A White Sea port. Archangel is situated at the mouth of the Severnaya Dvina river, in the S.E. corner of Dvina Bay. A part of the harbour is situated at the Northern end of the Povrakulsky Island, at the junction of the Maimax river and the Kuznechikha river, and is called the Economia Avant-port. The total length of the port area is about 30 miles.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Notices of ETA in accordance Soviet Wood Charter Party. Pilot boat located in area 64° 57′ N., 40° 05′ E. VHF Channel 16. Pilot boat is tug-boat with word "Pilot" on wheelhouse. Vessels awaiting Pilot may anchor at safe distance to North from pilot boat location. In event bad weather pilot boat goes to shelter, being available by VHF radio.

While waiting for a Pilot, vessels may lie at anchor at a safe distance to the North from the pilot boat location.

In the event of bad weather a Pilot shall board a vessel at a sheltered place shown by him.

When a Pilot is not able to board a vessel due to weather conditions, a pilot boat is usually situated on the Southern side of the Mudyug Island. In this event vessels should anchor at the entrance of the channel from seaward and wait for a Pilot's arrival.

ANCHORAGES: Anchorages in port area usually indicated by Pilot, depending upon draft, etc.

There are several anchorages on the way to the port of Archangel. The depths are about 10 m. and the holding ground is sand and mud. The anchorages are:

(1) Quarantine anchorage – in the Chizhov roadstead.

(2) At the entrance of the channel leading through the Beresovy Bar from seaward.

(3) On the S.W. and Southern sides of Mudyug Island.

(4) In the channel of Beresovy Bar vessels may anchor at the line of the leading lights not obstructing them from seaward, in the depths of 6m. – 7 m. The bottom is sand and mud. The anchorage however, is open to S.W. and N.W. winds and not recommended for large vessels.

(5) All vessels may obtain good anchorage at the islands Muravoy and Lebedin. The holding ground is sand. The anchorage is well sheltered from all winds except those from N.W,

(6) Vessels waiting for Customs and Quarantine formalities to be accomplished should anchor in the Northern part of the Maimax river, opposite the Customs post, situated at Chizhov Island at a distance of 0.5 mile to the South of it, in depths of 4.5 m. – 9 m. Vessels with drafts exceeding 4.5 m. are recommended to anchor to the North of the parallel of the rear light mark of the Lapominsky leading light marks.

(7) A good anchorage may be obtained in the Solombala Roads. When at anchorage at the Solombala Cat Island, vessels are not recommended to cross the 2 m. isobath.

(8) Vessels may also obtain a good anchorage in depth of 7.5 m. – 19 m. in the Town roadstead which is opposite the town of Archangel.

MAX. SIZE: Vessels longer than 150 m. not recommended enter port. Draft not to exceed 26 ft.

HEALTH: All vessels coming from foreign countries inspected by Sanitary Office. If no diseases vessel obtains free pratique. If vessels entering after calling at another U.S.S.R. port, pratique automatic.

RADIO: All information from sea may be routed through Murmansk Radio (UMN) and Archangel Radio (UGE), A1 500 kc/s., A3 2182 kc/s.

All vessels when approaching the port of Archangel should establish radio contact through the coastal "Archangel radio" station which operates 24 hours per day on the following frequencies:

Call Sign	*Frequencies* *working* (kc/s)	*calling* (kc/s)	*Type of trans-mission*	*Time*	*Remarks*
UGE	500	500	A1	H24	
UXN	6505.5	6270	A1	HX	
	8610	8357			
	12795	12540			
	17205	16726			
Archangel-radio	2182	2182	A3	H24	During
	13119.5	—	A3H	HX	navigation
	—	12340.5	A3	HX	only
	(mc/s)	(mc/s)			
"Port" (Port control)	160.65	156.80	F3	H24	,,
"Lotswakhta" (Pilots' watch)	156.65	156.80	F3	H24	,,
"Inflot" (Inflot agency)	156.65	156.80	F3	HX	,,

Storm signals are shown from a mast on the roof of the Port of Archangel Authority (Lat. 64° 32′ N., Long. 40° 31′ E.) and from a mast of the Solombala signal station situated in the suburbs of the town of Archangel, on the embankment of the Severnaya Dvina river named after George Sedov (Lat. 64° 35′ N., Long. 40° 30′ E.).

Signals can be made by the International code of Signals by day and by Morse system at night.

Masters of vessels proceeding to the port of Archangel should advise ETA and all necessary information to the Inflot Agency as per conditions of the "Soviet Wood" Charter Party.

24 hours prior to arrival advise ETA to the Harbour Master. Four hours prior to approaching the Beresovy Bar Masters should advise more precise time of arrival.

TUGS: If necessary ordered two hours before arrival and normally join vessel near berth. Usually use ship's lines.

BERTHING: To certain extent depends upon tides. 37 berths available with depths alongside up to 8.25 m.

There are a large number of berths in the port along the river front, as well as at the Economia Avant-port.

Berths are equipped to handle timber, wood-pulp, paper, machinery and general cargo. There are enclosed warehouses and concrete floor sheds in the port.

BRIDGES: Vessels proceeding to load cargo at sawmills 2 and 3 have to pass under bridge which is opened twice a day.

STEVEDORES: No particular Eta advices to stevedores/shippers required except those mentioned in Soviet Wood C/P. Loading rates, etc., also stipulated by Charter Party.

Mobile electric cranes of up to 20 tons capacity are operated on the quays. There are also floating cranes of up to 50 tons capacity, other cargo handling equipment and intra-port transport facilities. Sometimes, cargo handling is by vessels' gear.

MEDICAL: If any medical attention or prompt assistance required, Master has to contact Agent. No advance notice required. Clinic and hospital available.

DENSITY: Fresh water practically throughout port.

FRESH WATER: Usually delivered by lighters (minimum charge for 15 tons). A few berths equipped with shore water lines.

FUEL: Some grades available. Delivery on by barge.

FIRE PRECAUTIONS: While lying alongside timber berth vessel to take maximum fire precautions.

DEVELOPMENTS: For the immediate future no draft increase expected. Some berths under reconstruction and cranes being installed to load timber.

GANGWAY/DECK WATCHMEN: Not available from shore. Usual watch kept by ship's crew.

OPENING/CLOSING HATCHES: Normally carried out by ship's crew.

CERTIFICATES:

Seaworthiness.
Measurement.
Loading Line.
Cargo Equipment.
Safety Equipment Certificates.
Deratisation Certificate.

CUSTOMS ALLOWANCE: Tobacco/wine: No quantity limits, but not allowed to be brought ashore.

IDENTIFICATION CARDS: Only Seamen's Books required.

CONSULS: No Consuls in Archangel.

REPAIRS: All types of repairs possible.

DRY DOCKS: Largest dry dock 140 m. max. length; length at coping level 126 m.,; suitable for ships not exceeding 5,000 tons and 18 m. beam. There are other smaller docks.

REPATRIATION: Repatriation and crew changes require visa formalities.

AIRPORT: Airport near town. Served by regular airlines.

TIME: GMT plus 3 hours.

HOLIDAYS: General holidays: all Sundays and Saturdays: January 1st (New Year's Day); March 8th (World Women's Day); May 1st, 2nd (World Labour Day); May 9th (Victory Day); November 7th, 8th (Great October Socialist Revolution Day); December 5th (U.S.S.R. Constitution Day). Cargo work on these days at shippers' discretion.

POLICE/AMBULANCE/FIRE: Police 02; Ambulance 03; Fire 01.

TELEPHONES: Can be arranged on board.

SERVICES: Compass adjusting, radar and radio repairs, etc.

SHORE LEAVE: Each crew member properly signed in Ship's Articles and having valid seamen's Book allowed ashore.

DELAYS: On account of rain when loading timber.

NAVIGATION: Masters proceeding for loading timber should bear in mind that the swing bridge on their way to timber mills No. 2 and No. 3 is open twice daily.

All vessels with drafts of less than 3.6 m. especially when engaged in towing timber rafts, should keep out of the way of deep-drafted vessels when passing through narrow places and approaching channels both at sea and in the river, and should not hamper their safe passage in such places. They should also safely pass vessels engaged in dredging of a channel.

When approaching a bend in a channel, every vessel should beforehand give a signal by one prolonged blast on her whistle or siren, reduce her speed and when it is safe and practicable, keep to that side of the channel which lies on the starboard side of such vessel.

Every Master when passing through a narrow channel, or approaching a bend in a channel should take positive early action prescribed by the International Regulations for Preventing Collisions at Sea to avoid a risk of collision with a vessel approaching from the other direction.

Low-drafted vessels shall not overtake each other when navigating in the channel of the Beresovy Bar. A vessel proceeding to the port along the course of the channel must keep out of the way of another vessel leaving the port.

No vessel shall navigate in the port harbours in restricted visibility when navigational lights, marks, leading lights, buoys, etc. are not visible.

Ice: At the head of Dvina Bay drift-ice extends as far as 12 miles from the shore by the end of November. The Severnaya Dvina estuary usually gets frozen over at the beginning of November. At Dvina Bay the ice usually breaks up in April and at the Severnaya Dvina estuary – at the beginning of May. Thus, navigation in the port area lasts between 6 – 7 months from May till October.

Powerful ice-breakers, ice-strengthened vessels and tugs are maintained by the Port of Archangel Authorities to assist in navigation of the Dvina Bay waters and off the coast when ice conditions prevail.

Tide: The tidal range at the head of Dvina Bay reaches 0.8 m. – 1 m. and at Mudyug Island 0.1 m. – 0.5 m.

The in-going flood stream is usually stronger and about 1 hour longer in duration than the out-going ebb stream.

Sometimes the in-going stream at the bar of Severnaya Dvina may be hardly observed, being reduced to a few minutes of slack water. It may run steadily for some time then gradually attains its usual strength and goes on to set up to the time of high water.

The tidal streams in the Severnaya Dvina are considerably influenced by both strength and direction of the wind.

Moderate Northerly and Westerly winds increase the height of the tide and hold the fall of the water.

Only the in-going flood streams have been observed at the Severnaya Dvina estuary at springs. The extreme tidal range of the water level observed there is about 4 m.

AUTHORITY: Harbour Master.

AGENT: Shipping Agency "Inflot", Archangel. Tel. 35874, 38573, 34040.

BATUMI: 41.39 N. 41.38 E. (See Plan)

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Batumi situated in South of Black Sea Caucasian coast, at head of Batumijsky Bay. Navigation is year round. Navigational range marks to note when approaching port are: Batumijsky beacon, Burun-Tabia light, Batumijsky light buoy with siren and Batumijsky leading light marks. When proceeding Batumi, Master should give 96 hours notice prior arrival, advising Port Controller and "Inflot" Agency: time of arrival, description and quantity of cargo brought in, location, ship's draft and length, as well as declare services required. 4 hours prior to approaching port, Master shall advise more precise time of arrival. Inflot will arrange Pilot.

Pilot boards vessel either at the Receiving Buoy or in the outer port roads. Watch is kept by a pilot boat day and night.

ANCHORAGES: A mole protects port from seaward; safe anchorage provided except during periods of winds blowing from S.W., West and N.W. when "Tyagun" is formed at port (strong variable current with surge). At time of "Tyagun" ships recommended stop loading, discharging operations and to head out of berth using anchor or mooring buoy, or to put to sea. S.W. wind is particularly troublesome.

Outer roads, some 5 cable's lengths wide and with depths up to 20 m., stretch for about 1.5 miles. N.E. from Batumijsky light buoy along shoal's border. Roads' bottom is mud and sand.

Inner roads situated between Western shore Batumijsky Bay and shoal stretching from Bay's Southern and Eastern shores. Depths over 11.5 m. at roads. Roads open to North winds, but with other winds blowing strongly, anchorage not safe on roads; ship must take precautions not to lose her anchors. In case of stormy weather, in Autumn and in Winter particularly, ships without cargo must enter port with sufficient ballast on board.

The recommended anchorage is in the outer roads at a distance of 7.8 cables to N.N.E. from the Eastern side of Batumi Point, depths 9–14.4 m.

In the outer roads vessels may anchor only after having obtained the Harbour Master's permission and according to Pilot's recommendation.

In the inner roads vessels may obtain anchorage only Eastward of the entrance leading line. It is strictly prohibited to lie at anchor both on the leading line and to the West of it.

BALLAST: In case of stormy weather, in Autumn and Winter particularly, vessels without cargo must enter the port with ballast water on board, having ensured fore draft not less then 1.5 m.–1.8 m.

Ballast water should not be contaminated with oil residues.

RESTRICTIONS: Vessels may enter and leave the port at any time of day and night. All vessels when entering or leaving the port must have keel clearance of not less than 0.3 m. (1 ft.).

In the event of stormy weather vessels approaching the port at time of S.W. and N.W. winds particularly, should obtain Harbour Master's entry permit. If due to the "Tyagun" vessels are not allowed to enter the harbour, they should anchor either in the outer or inner roads.

All necessary information as regard to changes of wind, possibility or turn of entry to the port for vessels at anchor in the outer roads, is given by the Harbour Master over the VHF radio-telephone or by the signal station by flags of the International Code of Signals, in Morse Code or by semaphore signals.

MAX. SIZE: For oil carriers: Berth No. 1, 175 m. LOA 31.6 ft. draft; Berth No. 2, 165 m. LOA 30.5 ft. draft; Berth No. 3 165 m. LOA 30.5 ft. draft; Berth No. 4, 150 m. LOA 29.5 ft. draft: Berth No. 5, 212 m. LOA 29.5 ft. draft. For Cargo ships: Two berths where vessels may discharge. Maximum draft 32.5 ft.

BERTHING: The berths of the port with depths alongside of up to 10.3 m. are equipped to handle crude oil and oil products, bulks (coal, grain, ores) and generals (machinery and mechanical equipment) as well as passenger shipping. There are covered warehouses and concrete floor sheds in the port.

A vessel should lie at a berth with her bow directed to the port entrance and with her anchor dropped from the proper side. Berthing in the harbour may only be effected with tugs' assistance.

A vessel may be berthed at the outer side of the Oil Jetty after having obtained the Harbour Master's permission.

Vessels entering or leaving the harbour are not allowed to pass vessels loading at the outer (Northern) side of the Oil Jetty at a distance of less than 80 m.

The berths of the port are equipped with electric cranes of up to 10 tons capacity. There is also a floating crane of 100 tons capacity. Other cargo handling equipment, covered warehouses and concrete floor sheds are available.

TIDE: The range of water level in the port area is small and is due to the effects of strong winds. The maximum range observed 0.6 m.

RADIO: All vessels when approaching the port of Batumi should establish radio contact via Batumi Radio port radio station operating 24 hours per day on the following frequencies:

	Frequencies (kc/s.)		*Type of*	
Call Sign	*Working*	*Calling*	*Trans-mission*	*Time*
UFA	484	500	A1	H24
UKK	8456	8366	A1	HX
Batumi Radio	2182	2182	A3	H24
"Polden 7" ("Noon-7"-Port control)	156.65 mc/s	156.80 mc/s	F3	H24
"Polden-1"	156.70 mc/s	156.80 mc/s	F3	H24

Shore signal station is situated 1.6 cables from Batumi Point. International Code signals, and sometimes storm signals, are hoisted at the mast of the signal station.

MEDICAL: Medical attendance in local seamen's hospital. Masters to advise by radio prior arrival of medical attendance required on board.

DENSITY: 1018.5.

FRESH WATER: Supplied ex-shore to ship directly. Maximum pressure 20 t.p.h. Also supplied ex water barge. Maximum quantity delivered by barge is 650 tons. Pressure about 60–80 t.p.h.

FUEL: Ships can be supplied with bunkers: heavy fuel oil, light fuel oil, diesel oil. Bunkers may be taken at the oil berths and can also be delivered by bunkering vessel to a ship handling non-dangerous cargo. In the latter case fire precautions must be strictly observed by the vessel taking bunkers.

FIRE PRECAUTIONS: No special precautions. There is one fire-fighting boat.

OPENING/CLOSING HATCHES: According to Charter Party and contract.

CUSTOMS ALLOWANCE: Tobacco. No restrictions. Wine and/or spirits. No restrictions.

IDENTIFICATION CARDS: Not required.

CONSULS: Turkey.

REPAIRS: Only light hull repairs, machinery and gear.

AIRPORT: Batumi connected by airlines with different towns in Soviet Union. Airport situated about 5 km. from port.
TIME: GMT plus 4 hours.
HOLIDAYS: New Year's Day; 8th March (Women's Day); 1st May; 7th–8th November; 5th December; but port works on those days.
SHORE LEAVE: Crew members allowed ashore till midnight.
SHIPMASTER'S REPORT: There is now a sea-loading berth at this port immediately outside the harbour, the vessel lying to two anchors and stern on close to the breakwater and close Eastward of the harbour entrance.

The stern is secured to two buoys, using ship's ropes, five to a port quarter buoy and three to a starboard quarter buoy.

The bow is in about 60 ft. of water and the stern in about 42 ft., and vessels of up to about 40,000 tons d.w.t. are loaded there, this vessel loading safely to a draft of 37 ft. 6 in.

Two 10-in. pipe-lines are connected on the starboard side, 1 for discharging ballast ashore and 1 for loading at a rate of about 1,600 t.p.h. The charge for discharging ballast ashore is 7 kopeks per ton and it is not permitted to discharge any ballast into the harbour.

1 copy of a money list was required.
AUTHORITY: The Port of Batumi Authority.

AGENT: The port of Batumi Main Maritime Agency "Inflot", postal address: 5 Gogebashvili Street, Port of Batumi, U.S.S.R. Cables: Inflot Batumi. Tel. 9–24–15.

BERDYANSK: 46.45 N. 36.48 E. (See Plan)

DOCUMENTS: Refer to beginning of U.S.S.R. section.
APPROACHES: The port of Berdyansk is situated in the N.E. part of Berdyansk Bay, on the Northern coast of the Azov Sea.

Inner roads and port facilities are protected from Southern and S.E. winds by a mole and a breakwater.

Navigation in the port is all year round, but in Winter ice-breaker assistance is necessary for about two months.

Vessels should proceed to the harbour through the approach channel, with least depth of 6.6 m.
PILOTAGE: Pilot meets vessel at Reception buoy No. 12, situated at the beginning of the approach channel.
ANCHORAGE: Vessels may obtain good anchorage in Berdyansk outer roads situated on both sides of the approach channel leading into the harbour.

The outer roads are well protected from Northerly winds, but during Southern and S.W. winds the anchorage is troublesome.

At time of strong S.W. swell ships in the outer roads are usually effected by heavy pitching and rolling, and plenty of cable should be paid out on both anchors. Holding ground in outer roads is shell and mud.
RESTRICTIONS: Vessels can enter and leave at any time of day and night.

At least 0.3 m. (1 ft.) keel clearance at low tide is required to enter or leave the port. The max. permitted draft for entry to the port is 6.7 m., and length 160 m.

Speed of vessels proceeding through the approach channel should not exceed 6 knots. Vessels are not allowed to enter the approach channel or navigate in the harbour in restricted visibility and fog.
BERTHING: Berths of the port with depths alongside of up to 7 m. are equipped to handle general and bulk cargoes (ores, mineral-building materials), metals, cotton, foodstuff, vegetables, etc., and passenger traffic. There are covered warehouses and concrete floor sheds in the port.

Quay are equipped with electric cranes of up to 10 tons capacity. There is also a floating crane and other cargo-handling equipment and intraport transport facilities.
RADIO: Master should advise time of arrival and the max. draft of the ship to the Harbour Master not later than 4 hours prior to arrival at Reception buoy No. 12.

Vessels should establish radio contact through "Berdyansk Radio" port radio station operating 24 hours daily on the following frequencies:

Call Sign	*Working*	*Calling*	*Type of transmission*	*Time*
UBH	500 kc/s.	500 kc/s.	A1	H24
	418 kc/s.		A1	H24
Berdyansk-Dispetcherskaya (Berdyansk-Port Control)	156.6 mc/s	156.8 mc/s	F3	H24

FUEL: Available in limited quantities.
FRESH WATER: Supplied at berths.
REPAIRS: Only minor hull and machine repairs.
AUTHORITY: The Port of Berdyansk Authority.
AGENT: Branch of the port of Zhdanov Main Maritime Agency "Inflot" at the port of Berdyansk. Postal address: 9 Uritsky Street, U.S.S.R. Cables Inflot Berdyansk. Tel. 31-87; 90-81 (ext. 39).

GRIGOREVSKY: 46.35 N. 31.10 E. (approx.).

GENERAL: New port under construction in Grigorjyevskiy Liman, about 16 miles N.E. of Odessa. Port expected to commence operations 1976, and to have a depth of about 14 m. Port is to be used for shipment of chemical products.

IGARKA: 67.24 N. 86.30 E. (See Plan)

GENERAL: A sea and river port, Igarka is situated about 344 miles Southward of the mouth of the Enisei river which flows into the Enisei Gulf of the Kara Sea.

The port is open for navigation about 4 months (110-115 days) from July till October. Ice first begins to form in the second half of October. Ice-breaker assistance is rendered within half a month.

No tidal range is observed in the port waters.

The port of Igarka is well protected from the effects of the wind. It specialises in timber exports.
DOCUMENTS: Refer to beginning of U.S.S.R. section.
PILOTAGE: Compulsory for Yenisei River and entering port. Pilot vessel *Meridian* is located in the following positions: 71° 45′ N., 83° 0′ 0″ E., and 71° 37′ N., 83° 30′ E. Pilot radio station OEFV, operates on 500 kc/s at the following times (Moscow time): from 0000–0300, 0700–1300, 1500–1700, 1900–2100 and 2300–2400 hrs. Master to give notice 96 hours before arrival at the Pilot station and confirm ETA 5 hours before arrival. Within 15 miles of the Pilot station, communication is made through "Akatsia" radio, OKV on 132 mc/s. or VHF Channel 16.

On approaching pilot boat, vessel should reduce speed to dead slow, or stop engines if requested. In the event of bad weather, Pilot is embarked or disembarked at a place as directed by the pilot boat.

Distance of pilotage from the Pilot station to Igarka is 360 miles, and 2 Pilots together are usually required.

If Pilot not available, vessel should anchor in vicinity of pilot station. Berthing Pilots and Pilots for departing vessels are arranged by "Inflot".
ANCHORAGE: Information on best location of anchorage, if required, will be given by the pilot boat.

The anchorage in the outer roads is bounded on the East by the leading lines of Igarka and Northern Igarka leading marks, on the West by the leftbank of the Enisei river, on the North by the beam line of the buoy of Igarka Oseryodok, on the South by the leading line of Port of Igarka entrance leading marks.

All vessels when at anchor in the outer roads anchorage should lie at anchor as close to the bank of the river as possible, not to obstruct vessels' traffic along the Karmakulskie, Igarka and Northern Igarka leading lines.

In the event of bad weather or main engine trouble a vessel should lie at anchor in a place as directed by a river Pilot, who shall advise a Master all necessary data about the anchorage: depths, direction and speed of the current, etc.
RESTRICTIONS: Vessels can enter or leave the port 24 hours per day.

To ensure safe passage across the Lipatnikovsky and Turushinsky bars of the Enisei river, vessels proceeding to the port of Igarka must have draft not exceeding 7.3 m. (see "Max. Size.)
MAX. SIZE: Length 160 m., draft is limited by river depths, max. 24 ft.
HEALTH: Not later than 4 hours before arrival, Master to radio "Inflot" advising health condition on board. International code quarantine signals to be shown on arrival at port limits. No one, except Pilot and Port Authorities, may board or leave the ship until free pratique is given after port health inspection.
RADIO: Communications with Agent through Igarka radio, sign UFR, operating 24 hours on 500 kc/s and 470 kc/s. Ship's radio station must not be operated when vessel is at anchor.
TUGS: Normally join vessel with Harbour Pilot on approaching port. Vessels at anchor order tugs through "Inflot". Ship's tow lines used.
BERTHING: Tug assistance for berthing is compulsory. A berthing Pilot boards a vessel from a tug either in the outer roads or in the port.

After having approached a berth at a safe distance, a vessel, in most cases, should cast 2 anchors and then with tug assistance, turn stern to the Island and moor with 3 mooring ropes led from the stern. When mooring, a vessel should have ready on board 4 mooring ropes each not less than 100 m. in length (3 ropes to be led ashore and 1 prepared for a tug.).

Vessels moored in the inner roads must have strong ropes which should be made fast over the pile moorings only.

If 3 or 4 vessels are moored at the quay, the outside ones should have a red light exhibited in the middle of each mooring rope led ashore.

Notice of readiness and other conditions of loading – as per the "Soviet Wood" Charter Party. Opening and closing of mechanised hatches by ship's crew, otherwise by port workers.

When a vessel is moored in the inner roads, stern to the Island, loading is by floating cranes; when at berth – ship's derricks are used.

Loading is by use of ship's soft manila strops, 6 cm. in diameter and 12 m. total length.

A test label should be attached to every strop.
MEDICAL: Medical assistance is free, hospital facilities available – all arrangements made by "Inflot".
DENSITY: Fresh water.
FRESH WATER: May be taken from the river.
FUEL: Available.
GANGWAY/DECK WATCHMEN: Ship's crew to provide watchmen services.
OPENING/CLOSING HATCHES: Mechanical hatches operated by crew, otherwise handled by stevedores.
IDENTIFICATION CARDS: Required for crewmen going ashore.
CUSTOMS ALLOWANCE: Only reasonable quantities for personal consumption may be taken ashore.
REPATRIATION: No facilities.

AIRPORT: Situated 1.5 km. away, 1 daily flight to Krasnogarsk.
TIME: GMT plus 7 hours.
HOLIDAYS: No official holidays are observed during the navigation season.
POLICE/AMBULANCE/FIRE: Police, tel. 0-02; Ambulance, tel. 0-04; Fire, tel. 0-01.
TELEPHONES: Telephones cannot be connected on board vessel.
SHORE LEAVE: Permitted during 0600–2400 hrs. subject to police control.
GENERAL: It is forbidden for crew to swim in the harbour.
AUTHORITY: Port Office.
AGENT: "Inflot". Cables: "Inflot" Igarka.

ILICHEVSK: 46.19 N. 30.40 E. (See Plan)

GENERAL: The port of Ilichevsk is situated on the N.W. coast of Black Sea, on the right bank of the Sukhoi Liman, about 15 miles to the S.W. from Odessa City.

The Sukhoi Liman is divided by dams into 3 parts called Basin No. 1, Basin No. 2 and Basin No. 3.

A part of Basin No. 1 bounded by the leading line of the Port of Ilichevsk leading lights, thence by the S.W. coast of the Liman, thence by the Southern Sand Headland, is called the Inner Roads.

The berths for large sea-going vessels are along the Western side of the Southern Sand Headland, thence along Southern and S.W. sides of Basin No. 1.

The berths of the Western side of Basin No. 1 are used by fishing trawlers.

Navigation at the port is year round. Ice usually begins to form in the second half of December and finally disappears in February. Ice-breaker assistance is required in severe Winters for about a 30 day period.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Master shall give Agent preliminary information not less than 96 hours prior arrival stating: Vessel's name and ETA, type and quantity cargo on board (or required), draft, length and beam, number and weight of each heavy lift and where stowed (if any), number of passengers, service required. In case of delay, Master shall advise Agent accordingly. Approaching port communication can be established by radio-telephone on international frequencies. Vessels which have entered inner roads are prohibited to broadcast except in emergency. Call sign of port Radio Station UEH-2. Inwards and outwards pilotage of all foreign vessels is compulsory. Pilot and Boarding Officials embark or disembark in outer roads near pilot buoy. Position of embarkation or disembarkation may be changed as agreed upon with Master when weather conditions unfavourable. Embarkation and disembarkation of Pilot and Boarding Officials shall be effected in compliance with Regulation 17 Chapter V of "International Convention for Safety of Life at Sea" 1960. Position of pilot buoy 46° 18′ N.; 30° 45′ E.

APPROACHES: The approach channel leads from seaward into Basin No. 1. Depths in mid-channel are 12.2 m. Strong Easterly and Southerly winds may cause heavy surge in the channel influencing a vessel's manoeuvrability.

ANCHORAGES: When vessel not boarded by Pilot immediately on arrival it shall anchor in anchorage area specially designated in outer roads South of pilot buoy and await boarding of officials or Pilot. The leading entrance line extending from Harbour gates to pilot buoy and further seawards, marks Northern limit of anchorage area. No vessel shall anchor North of or on this line.

A good anchorage can be obtained in the outer roads situated at a distance of 2 miles off the coast between the parallels of 46° 17′ N. and 46° 21′ N. The outer roads are open to all winds blowing from N.E. via S. up to N.W.

The anchorage (on charts marked as No. 24) is situated about 1.2 mile to the S.E. of the port entrance. It is bounded by the following points:

46° 18′ 12″ N.	30° 41′ 36″ E.
46° 17′ 12″ N.	30° 41′ 00″ E.
46° 17′ 12″ N.	30° 42′ 10″ E.
46° 17′ 48″ N.	30° 42′ 48″ E.

The holding ground is grey mud and clay.

RESTRICTIONS: Vessels entering channel shall make way for vessels leaving. Passage in and out governed by shore Signal Station located on Port Radar Building. If no signals exhibited on signal mast, both in and out simultaneous navigation is permitted. Speed of vessel shall not exceed 5 knots except for emergency cases to improve manoeuvrability. Vessels prohibited anchor in channel except in emergency when necessary prevent immediate danger of drifting aground, or engine or rudder damage, or other justifiable reasons. Such cases shall be immediately reported to Harbour Master.

MAX. SIZE: The maximum permitted draft is 11 m. length 260 m.

Vessels drawing over 11 m. must obtain the Harbour Master's permit for entry to the port.

HEALTH: Foreign vessels granted free pratique when berthed alongside and all arrival formalities accomplished by the boarding officials, irrespective whether day or night. If berthing delayed, under certain circumstances vessel may be granted free pratique at roads where anchored. Event suspected disease Master shall inform Agent by radio. When arriving from another Soviet Black Sea port, free pratique automatic.

RADIO: Channel 16 (156, 80 mc/s) for radio-telephone used for calling only, with subsequent switch to any other Channel. All information addressed to ship's Agent, Cable address "Inflot Ilichevsk", Telex No. 232448. Port Radio UEH.2.

Radio contact can be established through the port radio station "Ilichevsk Radio" operating 24 hours daily on the following frequencies:

Call sign	*Working*	*Calling*	*Type of trans-mission*	*Time*
UEH-2	500 kc/s	500 kc/s	A1	H24
"Buran-13"	156.80 mc/s	156.80 mc/s	F3	H24
Ilichevsk-Radio (main port control)	2535 kc/s	2535 kc/s	A3	H24

The port radar station gives all possible information to all vessels navigating in restricted visibility and in the absence of floating marks, from the point of a Pilot's embarkation up to the port.

Radar navigation is controlled by a Pilot.

A signal post is situated at the Northern side of the entrance to the port.

TUGS: Normally join vessel when approaching mooring berth. Ship's lines used.

BERTHING: Quays with depths alongside of up to 11.5 m. are equipped to handle oil, general, bulk and other cargoes. There are mechanised warehouses and open concrete floor sheds.

Electric cranes of up to 41 tons capacity are operated on the quays and by the warehouses. There are floating cranes with lifting capacity of up to 100 tons, other cargo-handling equipment and intra-port transport means.

Opening and closing of mechanised hatches is always done by the ship's crew.

TIDE: The range of the water level caused by strong winds may reach 2 m. The rise of the water level is due to Northerly winds and the fall of the water level to Southerly winds.

The changes of the water level caused by variation in atmospheric pressure ("Seish" phenomena) are observed periodically. This phenomena can last from a few minutes up to several days and the range of the water level may reach 0.6 m.

STEVEDORES: No particular ETA advices required.

RADAR: Port Radar Station gives all possible technical information to any vessel navigating within Station's broadcast zone, if requested. Navigation in channel controlled by Port Radar Station. Communication between Station and vessels established by radio-telephone on international frequencies.

MEDICAL: Medical assistance rendered immediately when requested. Hospital facilities available. Particular inoculations required prescribed by International Sanitary Regulations.

DENSITY: Average density 1.010.

FRESH WATER: Available. Delivered from berth or appliances.

FUEL: Following grades available: *(a)* Fuel Oil Redwood viscosity at 50° C 1250 – 1500. *(b)* Marine Fuel Oil Redwood, viscosity at 50°C 187 – 360. Diesel Oil Redwood, viscosity at 20°C 32 – 47. Orders for bunkers preferably 3 days prior arrival in port.

DEVELOPMENTS: At present port only partially constructed. Work of further development being carried out.

GANGWAY/DECK WATCHMEN: Watch carried out by crew.

OPENING/CLOSING HATCHES: By crew.

CUSTOMS ALLOWANCE: No restrictions. Free use on board.

CARGO GEAR: No additional requirements. Cargo work usually carried out by means of shore cranes.

IDENTIFICATION CARDS: Required.

CONSULS: None.

REPAIRS: Good facilities. All kinds of repairs for vessels of up to 60,000 d.w.t. can be carried out.

DRY DOCKS: Docking arrangements settled with Black Sea Steamship Co. of Odessa, Lastochkina 1 Street. A floating dock, 250 m. length, 18 m. depth. There is a new floating dock with a lifting capacity of 15,000 tons.

AIRPORT: The distance from Odessa Airport about 30 km.

TIME: GMT plus 3 hours.

HOLIDAYS: Official Holidays are Sundays and following Calendar dates: January 1st, March 8th, May 1st, 2nd, 9th, November 7th, 8th, December 5th.

POLICE/AMBULANCE/FIRE: All mentioned services easily obtained through Agent.

TELEPHONES: Can be placed on board.

GENERAL: Shipowners recommended deposit funds for disbursements prior to arrival. All bank operations carried out by Vneshtorgbank of Moscow.

SERVICES: Shipchandler's supplies, technical equipment supplies, laundry, car hire.

SHORE LEAVE: Permitted.

DELAYS: Vessels berthed at specialised berths depending upon cargo. Delays if berths occupied. Normally no delays in bunkering.

AUTHORITY: Odessa-18, Management of the Ilichevsk Merchant Sea Port.

AGENT: The Port of Ilichevsk, Maritime Agency "Inflot". Postal address: The Port of Ilichevsk, Odessa-18, Ukrainian S.S.R., U.S.S.R. Cables "Inflot Ilichevsk". Tel. 6-99-36-58; 6-99-36-61. Telex 448.

IZMAIL: 45.20 N. 28.51 E. (See Plan)

GENERAL: A sea and river port, Izmail is situated on the left bank of the Kiliiskoe Ghirlo (Kilia Mouth) of the Danube river, between the 92nd and 94th km.

Navigation in the port lasts about 317 days per year. The Danube river usually becomes frozen over at the end of December or early January. In the less severe winters navigation can be effected with ice-breaker assistance.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Pilot should be ordered through "Inflot" before leaving the port of Sulina giving vessels ETA at Izmail. Alterations in ETA whilst vessel is navigating the Sulinsky channel should be advised to "Inflot". Also refer to Sulina, Romania.

Navigation in the Kilia Mouth up to the port of Zhdanov is allowed with a Port of Izmail Pilot on board, who should be ordered through Inflot Agency after leaving the port of Sulina. ETA at the Chatal of Izmail should be stated in the message. Masters should keep the Port of Izmail Harbour Master informed of all delays in the Sulina Channel and, if necessary, advise alterations in ETA at the Chatal of Izmail.

ANCHORAGE: Vessels can obtain anchorage in the roads situated in the area between 91.4 km. and 92 km. Depths in the roads from 5 m.-15 m., the holding ground is soft mud.

RESTRICTIONS: Izmail port is situated on the left bank of the Kilia channel, channel depths are 10-20 m. Reni port is situated on the left bank of the Danube, channel depths are 10-20 m. Ice-breakers assistance is available during periods when the Danube is frozen. Draft and length of the vessel entering the port of Izmail should be the same as of vessels navigating through the Sulina Channel.

HEALTH: International code quarantine signals are to be shown on arrival and free pratique is given by the quarantine doctor who will board the vessel to examine Master's Health Declaration.

RADIO: Vessels can establish radio contact via the port radio station Izmail Radio operating 24 hours per day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of trans-mission*	*Time*
UJO-3	472	468	A1	HX
UJO-5	1296	12552		
	8586	8361		
	4357	4186		
"Izmail" (Port)	156.6 mc/s	156.8 mc/s	F3	HX

TUGS: Vessels normally berth and unberth without tug assistance. A tug can be made available if particularly requested.

BERTHING: Vessels drawing up to 8.25 m. can enter the port and moor at berths with same depths alongside.

Quays are equipped to handle general and bulk cargoes, metals, chemicals, timber and passenger shipping.

There are enclosed warehouses, open concrete floor sheds and a grain elevator.

Simultaneous berthing and shifting berth of two or more vessels at neighbouring berths is not allowed. On the quays there are electric cranes of up to 15 tons capacity. There are floating grain elevators, floating cranes with lifting capacity of 15 tons and other cargo handling equipment and machinery.

FRESH WATER: Available in unlimited quantity.

FUEL: Heavy fuel oil available.

GANGWAY/DECK WATCHMEN: Gangway watchmen compulsory, carried out by ship's crew.

OPENING/CLOSING HATCHES: Normally opened and closed by ship's crew. Stevedores can perform this work at special request.

CUSTOMS ALLOWANCE: No restrictions on crew consumption tobacco and alcohol on board. It is prohibited to take these items ashore.

IDENTIFICATION CARDS: Required for crewmen going ashore.

REPAIRS: Hull and machine repairs can be effected.

REPATRIATION: Can be arranged.

AIRPORT: Regular connections with internal services.

TIME: GMT plus 3 hours all the year round.

TIDE: Changes of water level in the river are due to effects of the wind and seasonal increase and decrease of the amount of water brought down from the land in Winter; rise of water level is due to the ice piling up.

Max. rise of water level is in April, May and June, usually caused by Easterly winds. The least water level is observed in August September and October, due to Westerly winds.

HOLIDAYS: New Year's Day (1st January), National Women's Day (8th March); Worker's Day (1st and 2nd May); Victory Day (9th May); Anniversary of October Revolution (7th and 8th November); Soviet Constitution Day (5th December).

POLICE/FIRE/AMBULANCE: Izmail – Police, tel. 316; Fire, tel. 524; Ambulance, tel. 600. Reni – Police, tel. 205; Fire, tel. 210; Ambulance, tel. 203.

SHORE LEAVE: Allowed up to midnight.

AUTHORITY: The Port of Izmail Authority.

AGENT: The Port of Izmail Shipping Agency "Inflot". Postal address: 14 Port Street, Izmail, U.S.S.R. Cables "Inflot Izmail". Tel. 9-01-81, 9-05-29.

KHERSON: 46.37 N. 32.37 E. (See Plan)

GENERAL: The sea and river commercial port of Kherson is situated on the right bank of the Dnieper river and on the left bank of the Koshevaya river.

The port is open for navigation all the year round but in severe Winters ice-breaker assistance is required.

Ice at the estuary of the Dnieper finally disappears in the first half of March.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

APPROACHES: The port is accessible for sea-going vessels. The approaching channel is very well marked by navigation marks; therefore, there are no difficulties in navigating a vessel along it when entering or leaving the port.

PILOTAGE: Compulsory. Navigational range marks, leading marks of Stanislov, Adjigolsky beacons, Verbchansky and Maliy Kasperovsky leading light buoys, and spar buoys. Master advises Port Controller and Inflot Agency ETA minimum of 96 hours prior notice.

Masters of vessels proceeding to the port of Kherson must advise ETA to the Harbour Master and Inflot Agency at the Port of Odessa 24 hours prior to arrival at the Vorontsov lighthouse. More precise time should be given 6 hours before approaching the lighthouse.

After having embarked a Pilot at the Vorontsov lighthouse, vessels proceed farther to the port of Kherson. Upon passing the Port of Odessa, Master should advise ETA to the local Inflot Agency at the port of Kherson.

ANCHORAGES: A part of the Dneiper river from the Northern border of the town of Kherson, nearly up to the Maly Potemkin Island, is considered as the Port of Kherson Roads.

Anchorages are situated in the following places: *(a)* in the Dnieper river between leading lines No. 6 and No. 7 (broad reach); *(b)* at the estuary (Liman) of the Dnieper river, 2 miles S.W. off the Stanislav Point.

The roadstead for foreign vessels is situated between the beam line of creek No. 2 (46° 38′ N., 32° 38′ E.) and the upper leading marks line, marking the place where a submarine cable is laid 6.5 cables S.W. of the creek.

RESTRICTIONS: The permitted draft for passing through the channel is 25 ft. (7.62 m.) but it may vary depending on weather conditions.

In the Summer the channel is open for navigation 24 hours a day.

Speed of vessels having draft over 5 m. should not exceed 10 knots whilst navigating through the channel.

There are no length restrictions for vessels entering the port.

Navigation through the channel in restricted visibility is strictly prohibited.

HEALTH: No automatic pratique.

RADIO: Ship-shore radio link can be established through the port radio station operating 24 hours on the following frequencies:

Call sign	*Working*	*Calling*	*Type of trans-mission*	*Time*
UHZ	500 kc/s	500 kc/s	A1	H24
"Kherson Radio"	2182 kc/s	2182 kc/s	A3	H24
"Glazur" (Port Control)	156.80 mc/s	156.80 mc/s	F3	H24

A signal mast is located on the roof of the sea and riverside passenger terminal.

BERTHING: 9 berths, depths up to 8 m. 40 cm.

Mooring is effected with port Pilot assistance. Number of tugs required for mooring is determined by Pilot with Master's consent.

Cranes of up to 10 tons capacity are operated on the quays and by the warehouses. There are floating cranes with lifting capacity of up to 27 tons and other cargo handling equipment, intra-port transport included.

Berths of the port, with depths of up to 8.40 m. alongside are equipped to handle general and bulk cargoes (ore, chemicals, building materials), metals, grain, timber, cotton, cement, food products, etc., as well as passenger traffic. There are enclosed warehouses, a grain elevator and open concrete floor sheds.

TIDE: Changes in the water level observed in the port are due to the effect of the wind and variation in atmospheric pressure. The maximum range of the water level caused by winds may reach 2 m.

The changes of the water level due to variation in atmospheric pressure ("Seish" effect) are observed at times. They may last from a few minutes up to several days and may reach 0.58 m.

MEDICAL: Hospital facilities available.

FRESH WATER: Available.

FUEL: Fuel oil, diesel oil of certain viscosities, also coal.

OPENING/CLOSING HATCHES: Opening and closing of hatches is usually done by the ship's crew. It may also be done by port workers for vessel's account.

REPAIRS: Only minor repairs can be carried out. There are no dry docks in the port.

TIME: GMT plus 3 hours.

AUTHORITY: Ul Ushakova.

AGENT: The Port of Kherson Maritime Agency "Inflot". Postal address: The Sea Passenger Terminal, Port of Kherson, U.S.S.R. Cables "Inflot Kherson". Telex 132.

KHOLMSK: 47.03 N. 142.03 E. (See Plan)

GENERAL: The seaport of Kholmsk is situated on the Western coast of Sakhalin Island, in the Tartarsky Strait of the Japan Sea and at the head of the Gulf of Nevelskoy.

The port is open for navigation all the year round. The port is frozen over in January. Ice finally disappears in the middle of March. The formation of fast ice along the coast is usually of small account. At times drift ice appears from the North. The action of the wind and sea sometimes packs pieces of drift ice into large hammocks along the shore.

Despite the fact that the port harbours are surrounded by moles, the port area is subject to effects of the wind and waves between

October and March in particular. During this period a strong variable current with surge ("Tyagun") or heavy waves occur in the port. Due to this reason vessels are recommended to use manila ropes for mooring berths.

When Westerly or N.W. winds begin to blow, vessels are recommended to leave the port for sea.

The outer roads of the port are bounded by an arc of 7 cables length radius, the centre of which is marked with a light located on the Southern mole of the Commercial Harbour.

The port is divided into three parts: The Kovsh, The Commercial and Fishing Harbours. The Commercial Harbour is situated in the centre of the port area. It is protected by the Southern and Northern moles. The entrance to the Harbour 150 m. wide, is situated between these two moles. Due to shoal water along the coast, there is not much space for vessels manoeuvrability in the Commercial Harbour. Cargo berths are situated in a basin of the Southern part of the Harbour.

The Port of Kholmsk, due to its position, size and weather conditions in the area, cannot be used as a shelter port.

The Commercial Harbour is not protected at all from heavy swells caused by strong Westerly and N.W. winds blowing more often in the period between October and March. Therefore, vessels are recommended to leave the port for sea after having received a storm warning about a gale coming from Westerly or N.W. directions.

All vessels proceeding to the port of Kholmsk in the Autumn and/or Winter must have available on board a sufficiency of fuel, fresh water, provisions and safe manila ropes, be seaworthy in all respects, thus ensuring vessel's safety during a possible stay in the open sea roadstead.

In case there are no vacant berths in the port, vessels are not allowed to enter the harbour without prior permission.

It is also prohibited to enter the harbour after a storm warning has been received by vessel despite the fact that there are vacant berths in the port.

PILOTAGE: Pilot meets a vessel in the outer roads. In the event of bad weather, when Pilot is unable to come on board, vessel should follow in the wake of pilot boat.

ANCHORAGES: There are no anchorages protected from the wind in the Gulf of Nevelskoy.

During off-shore winds vessels may anchor in the outer roads situated opposite the port entrance. The outer roads are open to Westerly winds; depths are from 16 m. – 40 m. The bottom is sand and mud.

Masters should bear in mind that during the period of navigation fish nets are usually laid in the outer roads. The seaward side of the border of the fish nets, situated about 8 cables length off-shore, is usually marked by wooden buoys with flagstaffs.

Anchorage in the outer roads may also be obtained at 4 – 6 cables length off shore. Depths are from 18 m. to 20 m. Holding ground sand and stone.

A vessel should proceed to the anchorage along the leading line of the port of Kholmsk leading lights. At a distance of half a mile off the port entrance, a vessel should steer off the leading line at 2 – 3 cables length and then drop anchor.

The holding ground is better in the Southern part of the outer roads than in the Northern part.

When at anchor, a vessel may not approach the leading line closer than 1.5 cables length.

RESTRICTIONS: Vessels may enter the port at any time of day or night.

MAX. SIZE: The maximum permissible draft for entry to the port is 6 m. length – 100 m. Since depths in the channel may vary at times, the Port Authorities shall undertake to advise the Masters of incoming vessels accordingly.

RADIO: Ship-shore radio link can be established through the port radio-station Kholmsk Radio operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of trans-mission*	*Time*
UFO	500	500	A1	H24
UFO	522	480	A1	H24
UQB	8675	8370	A1	H24
UQB	3605	4186	A1	H24
Kholmsk Radio	4361.6	—	A3A	HX
Kholmsk Radio	—	4066.1	A3	HX
Reclama (Port	2182	2182	A3	H24
Control)	161.90 mc/s	156.80 mc/s	F3	H24

The port signal station is situated at the Southern mole base. There is also a radar station in the port.

BERTHING: Berths with depths from 2 m. up to 6.5 m. alongside, are equipped to handle general and bulk cargoes, metals, timber, food products, etc., as well as passenger traffic.

Number of tugs required for assistance is usually agreed between Pilot and Master.

Cranes of up to 41 tons capacity are operated on the quays. There are also other cargo-handling equipment and intra-port transport facilities. There are enclosed warehouses and open concrete floor sheds.

FUEL: Not available.

FRESH WATER: Available.

REPAIRS: Only minor repairs can be carried out. There are no dry docks in the port.

TIDE: Changes in the water level are of small account and are usually caused by tides. The tide is diurnal with one high water and one low water a day. The time difference between high and low waters is irregular. The range of the tide is very small, reaching only 0.25 m. at mean springs.

TIME: GMT plus 11 hours.

AUTHORITY: The Port of Kholmsk Authority.

AGENT: The Port of Kholmsk Main Maritime Agency "Inflot". 6 Morskaya Street, Port of Kholmsk, Sakhalin, U.S.S.R. Cables "Inflot Kholmsk". Tel. 22-86; 34-92.

KLAIPEDA: 55.43 N. 21.07 E. (See Plan)

GENERAL: A Baltic seaport, Klaipeda is situated in a narrow strait called the Morskoi Canal, which connects the Kursky Gulf with the Baltic Sea.

The port of Klaipeda comprises the Morskoi (Sea) Canal consisting of three harbours; The Zimnyaya (Winter), The Novaya (New) and the Zavodskaya (Industrial), then the Boat Basin, the Fishing Port and the Danghe river quays situated down the auto-bridge.

The Southern half of the port water area, a part of the Danghe river up to the mouth, and the Kursky Gulf become frozen over every Winter for quite a long time. Part of the port situated to the North of the Danghe river mouth very seldom gets frozen over, but the entrance to the Morskoi Canal may be packed by the drift ice in the course of a few days.

The port is open for navigation all the year round but in the Winter time ice will be managed with ice-strengthened tugs' assistance.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

APPROACHES: The width of the approaching channel to the port is about 80 m. and depth 8.4 m. Depths of the channel at a distance of 400-600 m. from the entrance to the Sea Canal are subject to changes due to lots of sand and mud brought down from the Kursky Gulf by the Spring floods, in particular. The entrance to the Sea Canal is protected by the Northern and Southern moles.

The length of the fairway of the Sea Canal from the entrance up to the Secluma-Kyaules-Nugara shoal at the entrance to the Kursky Gulf is 4 miles, width varies from 180 m. to 300 m. and the depths are from 6 m. to 9 m. at the mean water level.

The permissible drafts for vessels navigating along the Sea Canal are as follows: Up to 7 m. from the canal entrance up to the Zimnyaya (Winter) harbour.

Harbour: Up to 6 m. from the Winter Harbour; up to the Fishing Port; from the Fishing Port up to the Timber.

Harbour – not more than 4 m.

PILOTAGE: Report 96 hours, then 24 hours prior arrival by radio giving ETA, name vessel, fresh water draft. Pilot compulsory inward/outward and shifting. Pilot meets vessel at buoy No. 1 unless wind force above 5 Beaufort or fog. In such cases pilot station instructs Master by radio-telephone and fixes meeting with Pilot.

Pilot station is situated at the entrance to the Zimnyaya (Winter) Harbour.

ANCHORAGE: A good anchorage can be obtained in the outer roads at receiving light buoy No. 1 (55° 44′ N., 21° 00′ E.).

The outer roads are situated at a distance of 2 miles to W.N.W. from the entrance to the Morskoi (Sea) Canal. Depths are from 19 m.-23 m.

The holding ground is sand and clay. Anchorage in the outer roads is not safe during heavy seas caused by Westerly winds.

RESTRICTIONS: Day and night entrance. Max. permissible draft 8 m. Anchorage at inner roads limited to vessels under 100 m. length.

MAX. SIZE: Length and breadth unlimited. Max. permissible draft for all vessels entering the port, 8 m.; and for tankers loading at installations outside main port area, 9 m.

BERTHING: No specific requirements. Vessels allocated berth according kind of cargo to be loaded/discharged and their turn.

The quays of the port with depths alongside of up to 9.75 m. are equipped to handle general, bulk and liquid cargoes as well as passenger shipping. There are enclosed warehouses and concrete floor sheds.

Mobile electric cranes of up to 45 tons capacity are operated along quayside and by warehouses. There are also other cargo handling facilities including a coal loading installation.

RADIO: Vessels can establish radio contact through the port radio station Klaipeda Radio operating 24 hours per day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of trans-mission*	*Time*
UNM-2	500	500	A1	H24
	455	454	A1	H24
	4343	4183	A1	HX
	6475	6275.25	A1	HX
	8701	8370	A1	HX
	12703	12552	A1	HX
Klaipeda Radio	2181	2182	A3	H24
Dispetcher (Port Control)	156.45 mc/s	156.80 mc/s	F3	H24
Ocean (Pilot watch)	161.90 mc/s	156.80 mc/s	F3	H24
Neftegavan (Oil Harbour Port Control)	156.65 mc/s	156.80mc/s	F3	H24
Klaipeda Radio (CPR)*	161.95 mc/s	156.80 mc/s	F3	H24

*CPR – Central Port Radio Station.

Vessels' traffic in the roads and harbours is controlled by the signals exhibited at the signal stations situated at the entrances to the port and New Harbour.

Storm signals are shown at the same stations and also at the Fishing Port signal station.

TUGS: Ordered by Pilot if necessary. Mooring and unmooring of large sea-going vessels can be effected with tugs' assistance only. Number of tugs to be ordered depends on the weather conditions and can be agreed upon between Master and Pilot. Master should order tugs by radio well in advance.

STEVEDORES: Report 48 hours, then 12 hours prior arrival giving ETA, and 72 hours then 12 hours prior arrival advising perishable goods, characteristics of vessel, gross capacity, number and measurement of hatches, tween-decks, shelter-decks, description and quantity of cargo, stowage plan, heavy lifts, pieces of above 3 tons each especially indicated. Day and night loading/discharging operation, Sundays and holidays included.

MEDICAL: Master to advise by radio prior arrival if medical attendance required on board.

TANKERS: Three berths. Max. draft 9 m. Shore facilities for discharge of ballast.

FRESH WATER: Most berths supply by shore installations, otherwise barge. Quantities under 15 tons from barge charged as 15 tons.

FUEL: Deliveries only by bunker barge.

GANGWAY/DECK WATCHMEN: Compulsory for gangway checking. Guard net and life buoy required.

OPENING/CLOSING HATCHES: Normally by crew. Possible by shore workers.

CONSULS: No Consuls at Klaipeda.

REPATRIATION: No facilities for crew changes. Arranging any necessary repatriation at Captain's request effected by Immigration Authorities.

AIRPORT: At Palanga (25 km. from Klaipeda), served by regular lines; Palanga-Moscow, Palanga-Leningrad, Palanga-Riga. Airport at Klaipeda – some regular flights per day: Klaipeda-Vilnius, Klaipeda-Kaunas, Klaipeda-Kaliningrad.

POLICE/AMBULANCE/FIRE: Tel. Police, 02; Ambulance, 03; Fire, 01.

GENERAL: In case of stormy weather or dense fog vessels are lying at Outer Roads until entering permitted by Harbour Master. In such cases vessels lying alongside berth to be shifted to Inner Road.

CERTIFICATES: All ship certificates required on every call.

CUSTOMS ALLOWANCE: Cigarettes and wine/spirits on board limited by personal requirements; take ashore max. 2 packets cigarettes, no wine/spirits.

REPAIRS: Urgent repairs possible. Pre-advise 2 days. Dry dock 6,500t. Ordered only on special agreement with Lithauen Steamship Company. All kinds of repairs for vessels of 10,000 d.w.t. can be effected.

TIME: Moscow time. GMT plus 3 hours.

TIDE: There are periodical alterations in the water level, chiefly due to the effects of the wind. In general, strong Westerly, Northerly, N.W. and sometimes S.W. winds raise the water and Southerly and Easterly winds lower it.

The water level usually begins to rise suddenly. It rises very quickly but lasts for a very short period of time. The max. difference between high and low level is usually observed in Autumn and Winter.

Sometimes the changes in the water level can be caused by the considerable variation in atmospheric pressure ("Seish" effect).

TELEPHONES: May be arranged on board.

SHORE LEAVE: Crew members allowed ashore with shore-pass obtainable from Immigration Authorities.

AUTHORITY: The Port of Klaipeda Authority.

AGENTS: "Inflot" Agency. Address: Klaipeda, ul. Platchioy 18. Tel. 6-42-70, 6-32-36. Cables: Inflot, Klaipeda. Telex: 179.

LENINGRAD: 59.54 N. 30.15 E. (See Plan)

GENERAL: A Baltic Sea port, Leningrad is situated on the islands of the Neva Delta, at the head of the Nevskaya Guba (Neva Bay), in the Eastern extremity of the Gulf of Finland. Year-round navigation is possible with ice-breaker assistance from the end of November until about 20th April. Ice first begins to form in the middle of November, when usual Winter frosts come, and in January (time varies with the season) all the area becomes completely covered with fast ice.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

APPROACHES: The Kronstadt Korabelny Farvater (Kronstadt Ship's Channel) which is about 12 miles in length, extends from the port of Leningrad Entrance light buoy to the Leningrad Morskoi Canal, which is about 15 miles in length, and leads to the entrance of the sea commercial port of Leningrad. The least bottom width of about 80 m. is in the part of the Canal which is protected by 2 dams (moles).

PILOTAGE: Compulsory, ship shall inform Agent before approaching Leningrad entrance buoy, 60° 02′ N. 29° 26′ E. 96, 48 and 24 hours prior arrival. VHF with pilot boat, Channel 16, call signal "Pilot Leninets"; if bad weather pilot boat leads ships to Kronstadt road where Pilot comes aboard.

ANCHORAGE: Vessels approaching the port from seaward should take anchorage off the port of Leningrad Entrance light buoy. The depths in the roads are between 20–25 m. and the holding ground is mud and sand.

RESTRICTIONS: No restrictions night entry, no tide in Leningrad. Vessels with drafts 8.5 m. and more, and length 170 m. and more, must be towed into the harbour.

All vessels navigating within the port must keep strictly to the following regulations:

(a) Vessel's speed should not exceed 10 knots when navigating in the Kronstadt Korabelny Farvater and in the open part of the Leningrad Morskoi Canal (from the entrance up to the moles).

(b) When navigating in the channel between the moles of the Leningrad Morskoi Canal as well as in the Bolshaya Neva river from the Neva Gates up to Lieutenant Schmidt bridge and also in the Ekateringofka river, vessels speed should not exceed 6 knots.

(c) In the inner roads and in the port harbours, Masters should navigate with a speed ensuring the safety of vessel but never exceeding 6 knots.

MAX. SIZE: Draft restriction 10.5 m. No restrictions as to the length of a vessel.

HEALTH: Master coming from foreign port shall report every sick passenger or crewman; Health Authorities board together with Customs and Immigration and if find all in order grant free pratique. Each vessel shall produce Deratisation Certificate and Sanitary Patent.

RADIO: Cable Agent "Inflot" ETA, draft and other data, information required via Leningrad Radio Station. All vessels when approaching the port of Leningrad should establish radio contact via the coastal Leningrad Radio station operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of trans-mission*	*Time*
UDB	500	500	A1	H24
	484	480		
URD	6,354	6,273	A1	H24
	8,687.6	8,365		
	12,693	12,546		
URD	2,182	2,182		
LNG-Radio	8,767.2	—	A3	H24
LNG-Radio	—	8,236.4	A3A	HX
LNG-Radio (Port Control via CPR*)	160.95 mc/s	156.8 mc/s	F3	H24
LNG-Port (pilots watch)	156.45 mc/s 156.70 mc/s	156.45 mc/s	F3	H24
Leninets (pilot vessel)	156.8 mc/s	156.8 mc/s	F3	H24
Raskat	156.45 mc/s	156,45 mc/s	F3	H24
	156.65 mc/s			
	161.50 mc/s			
	161.80 mc/s			
Inflot (via CPR)	160.95 mc/s	158.8 mc/s	F3	H24

* CPR Central Port Radio Station.

Port radar station gives all possible information to any vessel navigating in the Kronstadt Korabelny Farvater and Leningradsky Morskoi Canal during restricted visibility, from the Leningrad entrance light buoy (Lat. 60° 02′ N., Long. 29° 26′ E.) up to the dams (moles) of the Leningrad Morskoi Canal. Navigation is usually controlled by a Pilot.

Signals regulating vessels traffic in the harbour gates, called the Nevskie Vorota (Neva Gates), as well as signals indicating that the Leningrad Morskoi Canal is closed for Westward bound traffic are hoisted at the Commercial port signal mast situated on Kanonersky Island, at the Western side of the Neva Gates. Storm signals are shown at the same mast.

Signals for vessels approaching the entrance to the Commercial port of Leningrad from seaward are hoisted at the pilot vessel.

Traffic prohibition signals, when the pilot vessel is absent from her usual position may be exhibited at a vessel specially designated for this purpose.

TUGS: Normally join incoming vessels at Inner Road. Ships lines usually used.

The number of tugs a Master should order for inward and outward towage as well as for shifting berths in the harbour depends on Pilot's advice.

BERTHING: Berths of the port, with depths alongside of up to 11.5 m. are equipped to handle general and bulk cargoes (coal, ores, grain, building material), sugar, metals, timber products, etc., as well as passenger vessels. Enclosed single and multifloor warehouses, cold stores and concrete floor sheds are available in the port.

Opening and closing of hatches is usually done by the ship's crew, otherwise according to the charter party conditions.

The port of Leningrad is equipped with modern cargo-handling facilities. There are floating, fixed and mobile shore cranes, fork lifts and other mechanical equipment.

TIDE: No tide at Leningrad but, considerable rises of water level may be caused by strong Westerly winds – and falls by Easterly winds. Usually the changes in water level are greater during the Autumn and Winter months. During Autumn and Winter the range of level may reach 1.2 m. from the mean water level and sometimes even more.

During Spring and Summer it is never more than 0.5 m. The greatest rises in the water level are observed in the Neva Bay. The extreme difference in level between the maximum rise and the minimum fall of these seasonal changes is about 3.5 m. At the mouth of the Neva river the greatest changes in the water level are caused by the S.W. Autumn gales. The difference in level usually reaches 0.2 m.–0.3 m. and only sometimes up to 1 m.

STEVEDORES: Ordered by Agent.

RADAR: Pilot in contact with radar service.
MEDICAL: Masters to advise Agent prior arrival if medical attendance required aboard.
DENSITY: Fresh water in port area.
FRESH WATER: Most berths supplied by shore installations, otherwise barges.
FUEL: All grades available.
FIRE PRECAUTIONS: No smoking allowed in port area, except in places specially allocated.
GANGWAY/DECK WATCHMEN: Not compulsory.
OPENING/CLOSING HATCHES: According to charter party.
CERTIFICATES:

- Passenger Ship Safety.
- Safety Equipment.
- Safety Radiotelephony.
- Safety Radiotelegraphy.
- Exemption certificate.

CUSTOMS ALLOWANCE: No restrictions on board.
IDENTIFICATION CARDS: Needed, will be given on arrival.
CONSULS: The Consulates of Czechoslovak Socialist Republic, Finland, France, German Democratic Republic, German Federal Republic, Iran, Japan, Polish People's Republic, People's Republic of Bulgaria, Republic of Cuba, Sweden and United States of America are situated in Leningrad.
REPAIRS: All types of repairs for vessels of up to 10,000 d.w.t. can be carried out in the port.
DRY DOCKS: Available.
TIME: GMT plus 3 hours, no alterations during year.
POLICE/FIRE/AMBULANCE: Police 9692; First-Aid from Port 503; from Town 03; Port Fire 8509, 8536, 8973; Town Fire 01.
AUTHORITY: Port of Leningrad Authority.
AGENT: Main Maritime Agency "Inflot". Postal address: 1 Gapsalskaya Str., Leningrad 198035, U.S.S.R. Tel.: 51-28-27. Telex: 505, 506.

MESANE, (Mezen): 65.53 N. 44.07 E.

GENERAL: A commercial seaport, Mezen is situated at a distance of 22 miles to the South of the mouth of the Mezen river flowing into the head of the Gulf of Mezen, in the White Sea.

The port area is bounded on the North by a line connecting the Ryabinov and the Nerpinsky points and on the South by the parallel of 65° 50′ N., Northward of the town of Mezen. The anchorage at the Kuloi river mouth is also included at the port of Mezen area.

Drift ice in the Gulf of Mezen appears in the first half of November. By the middle of February the Gulf becomes completely frozen over. Ice finally disappears in the first half of May.

The port is open for navigation about 6 months of the year, starting from the end of May or beginning of June)

Ice-breaker assistance cannot be effected in the outer roads in the event of fast ice.

Tidal streams are observed in the Mezen river. The tide is semi-diurnal with two high waters and two low waters a day.
DOCUMENTS: Refer to beginning of U.S.S.R. section.
PILOTAGE: Compulsory. Vessels met by pilot boat in area of pilot buoy (66° 12′ N., 44° 04′ E.) about 22 miles from port. No direct connection between ships and pilot station. Alternative area in event of bad weather Outer Roads of Mesane, entering direction 183°. These Roads used for boarding Pilot only on Pilot's option. Information to be in accordance with Soviet Wood Charter Party. Pilot boat equipped radio telephone (2182 kc/s, call name "Petchoretz Dva"), word "Pilot" painted on wheel house. Pilot boat to be given a good lee.

Pilotage cannot be effected at night.

A Pilot cannot board a vessel earlier than 2 hours before the high water in the Semzha river, and a vessel may be piloted into the port not later than 1 hour before the water in the river reaches its high level.

Pilots do not board vessels in rough water (if the wind is over Force 6 Beaufort scale).

In case Pilot cannot embark a vessel in the outer roads, Master should follow in the wake of pilot boat up to Tolstic Point (Lat. 66° 04′ N., Long. 44° 05′ E.) where a Pilot will board ship. After leaving the port Master should disembark Pilot on to pilot boat and then follow it up to the outer roads of the port of Mezen.

The pilot station is located at 1 cable length N.E. of the Semzha light mark.
ANCHORAGE: Depths at anchorages 5 - 7 m. Anchorage can be obtained in the outer roads and in certain places of the Mezen river situated between the outer roads and the Kamenka settlement.

The outer roads are situated at the Mezen river mouth. They are bounded on the South by a line connecting the Ryabinov and the Maslyany Points.

Vessels in the outer roads are subject to effects of the N.W. and N.E. winds and heavy waves caused by them. The depths in the outer roads are about 7 m. The holding ground is sand, mud and rocks. Anchorage can be obtained in the inner roads with depths at low water of up to 4.5 m. - 5 m. (length of area is 1.5 mile and width up to 150 m.).

The inner roads are situated opposite the Kamenka settlement. A good anchorage can be obtained there by two vessels simultaneously. The anchorage at Burnovsky point with depths from 4.5 m. - 5.5 m. can be used by two loaded vessels drawing up to 4.2 m.
RESTRICTIONS: Vessels may enter port only in daytime on high water. Masters have to pay full attention to Pilot's advice as river has varying bends.
MAX. SIZE: The permitted draft for the entry to the ports is announced monthly by the Port Authorities. It should not exceed 3.9 m. - 4.2 m. The maximum permitted length is 70 m.
HEALTH: As for "Archangel".
RADIO: Besides Murmansk and Archangel, messages may be routed through Mesane Radio (UZT, A1 500 kc/s, VHF Channel 16).

Vessels can establish radio contact through the port radio station Mezen Radio operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UZT	500 kc/s	500 kc/s	A1	HX
Dispetcher (Port Control of the cargo handling area)	160.65 mc/s	156.80 mc/s	F3	H24
Port (Harbour Master's Office)	156.70 mc/s	156.80 mc/s	F3	HX

BERTHING: The floating dams are used as mooring berths in the port. The depths alongside at low water are about 3.5 m. Vessels drawing over 3.9 m. are usually grounded while loading at low water (not always afloat but safe aground).

The port of Mezen specialises in timber exports but other cargoes are also handled at berths. Covered warehouses and open concrete floor sheds are available.

Tug assistance for mooring berths is not compulsory. Berthing is usually done in the daytime. Tugs, if necessary are ordered by Master.

Rendering of Notice of Readiness and opening and closing of hatches are usually done in accordance with the "Soviet Wood" charter party.

Loading of timber is done by ship's winches.
TIDE: The difference between high waters and low waters is small but the range of the tide is comparatively big. It reaches at mean neaps 2.8 m. and 3.1 m. at mean springs, except for the Sezmha river area where the mean spring tide reaches 7.7 m. Everywhere in the Gulf of Mezen the differences in the times of high and low water are large and in some places they may reach 5 hours.

Considerable changes in the water level are observed in the Spring. They are usually caused by the seasonal increase in the amount of water (due to melting snow) brought down by the rivers.
REPAIRS: Only minor repairs can be effected. There are no dry docks in the port.
FUEL: Supplies not guaranteed.
FRESH WATER: Fresh water can be supplied from the berths.
TIME: GMT plus 3 hours.
AUTHORITY: The Port of Mezen Authority.
AGENT: A branch of the Port of Archangel Main Maritime Agency "Inflot" at the Port of Mezen.

Port – "Inflot", Kamenka Settlement, Mezen, Archangel region, U.S.S.R. Cables "Inflot Mezen-Kamenka". Tel. The timber mill exchange – "Inflot".

MURMANSK: 69.00 N. 33.03 E. (See Plan)

GENERAL: A Barents Commercial Seaport and Fishing Port, Murmansk, is situated at the Eastern coast of the Southern elbow-shaped bend of the Gulf of Kolsky, between the Zeleny (Green) and Khaldeev Points. It is the last unfrozen port of the Northern seas route.

In very severe Winters the Southern and middle elbow-shaped bends of the Gulf get frozen over for a short period of time in February or March, during calm and frosty weather. In mild Winters drift ice is observed. The Northern part of the Gulf never gets frozen over. The port of Murmansk is open for navigation all the year round. In the event of ice conditions in the Gulf of Kolsky, ice-breaker assistance will be effected in compliance with the Harbour regulations in force.

The port area occupies nearly all Southern elbow-shaped bend of the Gulf of Kolsky. The port of Murmansk consists of 2 harbours: the Commercial and the Fishing Harbours. The Commercial Harbour is divided into 4 areas: The Rudny (Ore), The Ugolny (Coal), The Central, and Passenger Terminal.

The Fishing Port extends to the South of the Passenger Terminal.
DOCUMENTS: Refer to beginning of U.S.S.R. section.
PILOTAGE: Compulsory. Pilot station is situated at Tuva-Goobay in Kilsky Bay, position 69° 11′ 09″ N., 33° 34′ 08″ E. ETA to be given to Agents 96, 48, 24 and 12 hours before arrival. Pilot launch is distinguished by word "Pilot" in black letters on both sides. Pilots can be contacted on VHF Channel 16. Every vessel should drift whilst waiting for Pilot since depths in the Pilot station are too big to permit anchorage.

During rough sea Pilot is not able to board a ship at the Pilot station area. In this event vessel should follow the Pilot boat in the wake of it up to the Salny Island and embark a Pilot Southward of the Island at a place indicated by Pilot boat.
ANCHORAGE: At the Pilot station depths are too great to permit anchorage, but there is sufficient sea room for vessel to await Pilot with engines stopped. Anchorage with depths from 20 m.-35 m. is situated in the Southern elbow-shaped bend of the Gulf of Kolsky, Westward of the Kievaraksky leading line (the port outer roads). The holding ground is good.

Every vessel waiting for mooring berth should anchor Westward of the Kievaraksky leading line but not obstructing other vessels' traffic.

It is strictly prohibited to lie at anchor Eastward of the Kievaraksky leading line. If, in case of emergency, a Master has to lie at anchor in the prohibited area, he should immediately report the fact to the Harbour Master of the Commercial port of Murmansk.

RESTRICTIONS: Vessels can enter the inner roads of the port at any time of day or night.

The speed of vessels navigating within the limits of the Gulf of Kolsky is restricted by the following limits:

- *(a)* It shall not exceed 12 knots in the area bounded by the parallels of the Letinsky Point and the Northern side of the Salny Island.
- *(b)* It shall not exceed 10 knots in the area bounded by the parallels of the Northern side of the Salny Island and Pinagory Point.
- *(c)* It shall not exceed 6 knots in the area Southward of Pinagory Point.

MAX. SIZE: Vessels up to 32 ft. max. draft for berthing.

HEALTH: International quarantine signals to be used on arrival. No later than 6 hours before arrival at the inner area Master should radio Agents giving full details of state of health on board, and requesting pratique which will be given on arrival.

RADIO: Murmansk Radio operating 24 hours on 2182 kHz. Coastal radio station UMN operating 24 hours on 500 and 472 kHz. Coastal radio station UMV operating 24 hours on 13080 kHz.

Radio contact can be established through the port radio station Murmansk Radio, operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UMN	500	500	A1	H24
	472	468		
UMV	12,730	12,555	A1	H24
UMV	6,400	6,274.5	A1	HX
	8,690	8,368		
	*1660	16,716		
Murmansk-Radio	2,182	2,182	A3	H24
Murmansk-Radio	8,757.6	—	A3H	HX
	—	82,236	A3	HX
Rascat (Radar & Pilot Service)	161.50 mc/s	156.90 mc/s	F3	H24
	161.70 mc/s	157.10 mc/s	F3	H24
Port (CPR)* (Pilot Service)	160.95 mc/s	156.35 mc/s	F3	
	161.90 mc/s	157.30 mc/s		
	161.95 mc/s	157.35 mc/s		
"Inflot" (Shipping Agency)	156.70 mc/s	156.70 mc/s	F3	

*CPR – Central Port Radio Station

The pilot service operates through the "Port" (CPR) and "Rascat" (CPR) – Central Port Radio Station.

All vessels when at anchor or navigating in the Gulf of Kolsky must keep constant radio watch.

The port radar station gives all possible information to any vessel navigating in the Gulf in the restricted visibility. Radar navigation is usually controlled by a Pilot on board a vessel.

The storm and tide signals are made by the International Code of Signals by day and by Morse system at night from Murmansk storm signals station (lat. 68° 59′ N., long. 33° 03′ E.) located on the roof of the Harbour Master's office.

The signals shown at the Western yard-arm and storm signals at the Eastern yard-arm of the station.

Notice of Arrival: Every foreign vessel on approaching the Gulf of Kolsky must ask for entry permission into the Gulf from the Toros Island signal station by exhibiting her International Code Number by day and at night her call sign should be made in Morse code by searchlight.

VHF: Port VHF maintains contact between Pilots and ship within harbour limits, and between ship and shore. Calling on Channel 16 working channel will be according to instructions from shore.

TUGS: Normally join vessel in the inner area of the port. Tug's lines are used.

BERTHING: Main berths, depth alongside 32 ft. at low water. Average height of tide about 3.9 m. Vessels berth port or starboard side alongside at Master's and Pilot's discretion. The berths of the Commercial Harbour with depths alongside of up to 10.5 m. are equipped to handle general and bulk cargoes, metals, machinery, chemicals, foodstuff, etc.

There are enclosed mechanised warehouses for apatite including open concrete floor sheds.

It is prohibited to approach a berth without sounding a prolonged blast of the whistle. Same signal should be sounded when leaving an outer berth and the inner basin, as well as when passing a vessel lying at anchor in the outer roads.

Berths of the port are equipped with mobile electric cranes of up to 40 tons capacity. There are floating cranes with lifting capacity of up to 90 tons, and other cargo handling equipment and intra-port transport. Since loading/unloading is usually done by the port cranes, there are no specific requirements to vessels cargo gear.

STEVEDORES: Arranged by Agent on basis of Masters ETA. Loading and unloading is carried on throughout 24 hours a day including holidays.

MEDICAL: Hospital and medical facilities available. Vaccination can be arranged. If doctor required on board Master should inform Agents by radio or VHF.

DENSITY: At the berth varies between 1006 and 1025.

FRESH WATER: Available from most berths, otherwise supplied by barge. To avoid delay recommended to order before arrival.

FUEL: All grades available. Delivered by barge. Advance notice required.

DEVELOPMENTS: Reconstruction is being carried out in order to speed up loading of iron-ore and other cargoes.

GANGWAY/DECK WATCHMEN: Not obligatory.

OPENING/CLOSING HATCHES: Usually performed by ship's crew.

CERTIFICATES: At first Russian port of call certificates of tonnage and those required by International Convention will be required for examination.

CUSTOMS ALLOWANCE: No restrictions on crew's consumption of tobacco and alcohol on board. It is forbidden to take these items ashore.

CONSULS: There is no local representation.

REPAIRS: All kinds of repairs can be carried out for vessels of up to 40,000 dwt.

DRY DOCKS: Large dock; length 173 m., width 45 m. Small dock; length 141 m. width 30 m.

TIDE: Changes of the water level in the Gulf are due to the tides. The tide is semi-diurnal with two high waters and two low waters a day. The difference in time of high and low water is about 6 hours. The range of the tide at mean neap is about 2.4 m. and at mean spring 4.5 m. The extreme range of water level is usually observed during the Autumn months and the lowest during Spring.

TIME: GMT plus 3 hours.

TELEPHONES: Ambulance, tel. 003, 395 and 422; Fire service, tel. 252 and 524.

AUTHORITY: Murmansk Sea Trade Port.

AGENT: The Port of Murmansk Main Maritime Agency "Inflot", 19 The Port Settlement, Murmansk 24, U.S.S.R. Cables "Inflot Murmansk". Tel. 2-56-66; 2-51-97. Telex 128.

NAKHODKA: 42.47 N. 132.52 E. (See Plan)

GENERAL: A commercial port, Nakhodka is situated in Nakhodka Bay, in the N.W. part of the Japan Sea.

At first America Bay is covered with sludge or sometimes thin ice due to snow falling into the cooled water, After ice has formed, it is often broken up by winds into pieces of drift ice which is frequently driven out by strong winds from the bay into the sea.

Nakhodka Bay is occasionally covered with fast ice from the beginning of January until March.

The port is open for navigation all the year round with ice-strengthened tug's assistance during ice conditions.

The Northern part of Nakhodka Bay from the entrance up to the line connecting the Lindgolm and Basnin Points is occupied by the Commercial port. The Fishing port is situated Southward of this line.

The port of Nakhodka area is bounded on the East by a straight line connecting Astafyev and Shefner Points, on the S.W. by a straight line connecting Lindgolm and Basnin Points.

Part of America Bay water area bounded on the South by a line connecting the Povorotny (Turning) and Likhachev Points is also included in the port of Nakhodka area.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Notice of arrival is to be given in accordance with the general regulations. Pilotage in Nakhodka is obligatory for all vessels irrespective of flag or owner, except for vessels engaged in local navigation.

For foreign vessels approaching Nakhodka, there is an approach point of 42° 27′ 2″ N. and 132° 57′ E. They are advised to come up to the approach point on a course of 350.5° in the approach channel 1 to 2 miles wide to the right of the line dividing the port entrance from the manoeuvring area. In the region of the manoeuvring area, vessels should proceed anti-clockwise in the 2 mile wide approach channel. On leaving the manoeuvring area, vessels should line up with the buoys in the bay, and proceed to region No. 176 of the quarantine anchorage, to await boarding of pilots.

Vessels bound for the Novitski Bay, should follow the buoys of Nakhodka Bay to area No. 177 of the quarantine anchorage.

At the time of intended entry of a foreign ship, the Master should inform the port captain via "Inflot" Agency 48 hours prior to arrival.

Vessels leaving Nakhodka and Novitski Bay to the manoeuvring zone, should do so using reverse courses. After entering the manoeuvring zone, they should follow anti-clockwise the 2 mile wide approach channel. Having passed the manoeuvring zone, they should adopt course 180° and proceed for 8.2 miles in the approach channel – 1–2 miles wide – to the right of the manoeuvring area, as far as the exit point. In order to preserve hydro-technical port constructions, vessels must be brought to quays, and unberthed by parallel mooring, using capstan ropes. Main engines may not be used within a distance of 10 m. from the quay, and is only allowed in extreme emergencies for the purpose of avoiding vessel damage or fouling mooring equipment.

ANCHORAGE: Depths in anchorage area "A" are from 13-20 metres. Anchorage area "D" has depths of from 18-28 metres.

The holding ground in both anchorages is mud, sand with mud, stone.

"A" — Quarantine anchorage is limited by a line connecting the following positions:

42° 48′ 36″ N.,	132° 56′ 30″ E.
42° 48′ 36″ N.,	132° 58′ 06″ E.
42° 47′ 42″ N.,	132° 56′ 30″ E.
42° 47′ 42″ N.,	132° 58′ 30″ E.

The "A" area (Quarantine Harbour) serves as a Pilot-boarding zone and as an anchorage for dry cargo vessels over 3,000 g.r.t.

Anchorage "D" (area No. 177) is bounded by the following points:
42° 46′ 36″ N., 132° 54′ 30″ E.
42° 46′ 48″ N., 132° 54′ 30″ E.
42° 47′ 24″ N., 132° 55′ 18″ E.
42° 47′ 24″ N., 132° 55′ 36″ E.
42° 46′ 36″ N., 132° 55′ 36″ E.

Anchorage "D" is used by vessels proceeding to the Oil Harbour in Novitski Bay.

Temporary anchorage is allowed only in America Bay, Eastward of the line connecting Astafyev and Shefner Points not closer than 1 cable length from the entrance leading line, areas prohibited for anchorage excluded.

Temporary anchorage is allowed for vessels drawing up to 6 m. off the side of the fairway Southward of the Commercial port leading light marks.

To lie at anchor in the fairway and in the dredged harbours of Nakhodka Bay, except in emergency, is strictly prohibited.

RESTRICTIONS: Vessels may not enter port without first obtaining permission of port control. Anchorage of oil tankers is only allowed in area "D". Vessels can enter or leave the port at any time of day or night.

MAX. SIZE: The permitted draft for vessels proceeding to the Commercial port is 9.7 m., 9 m. for the Fishing port and 8.6 m. for the Passenger Terminal.

Vessels drawing over the permitted draft must obtain Harbour Master's permission prior to entry to the port.

HEALTH: Advise "Inflot" by radio in advance if there is any case of quarantine illness on board the ship. Smallpox vaccination is compulsory for all crew members. If vessel is arriving from a cholera area, then cholera inoculations are also required.

RADIO: Nakhodka Radio, call sign UKI, operating 24 hours on 500, kHz.

Call sign	*Working kc/s.*	*Channel*	*Calling kc/s*	*Channel*	*Type of trans-mission*	*Time*
UKI	500	—	500	—	A1	H24
UKK-3	8510	—	8448	—	A1	0200–1000H
	12990	—	12627	—	A1	0200–1500H
	6439	—	6339	—	A1	1500–0200H
	3270	—	4223	—	A1	1000–0200H
Port 5	160.65 mc/s	1	156.05 mc/s	1	F3	HY
Lotos (departures)	156.45 mc/s	9	156.45 mc/s	9	F3	H24
Golos 1 (port control)	256.80 mc/s	16	156.70 mc/s	16	F3	H24

The traffic and storm signals are exhibited at the Signal Station situated 2.5 cables Westward of Shefner Point.

TUGS: Tug and mooring launch assistance available. Tugs join the vessel in America Bay as directed by Master or Pilot. Ship's tow lines are used.

BERTHING: May be effected at any time of day or night. In daytime vessels mooring position will be marked by a flag and at night by a red lantern. These signals mark the point where the ship's bow should be at the mooring.

Quays at the first loading area with depths of 8.6 to 10.2 m. facilitate handling of potash, grain, equipment, cables, ropes, phosphorus metals and other goods.

The quays of the second loading region, with depths of 8.6 to 10.2 m. of water, provide handling facilities for wood, lumber, large-size containers, equipment, heavy machinery and other cargoes.

Passengers are handled at 2 passenger berths, with drafts of 8.8 and 6.7 m.

Electric cranes of up to 41 tons capacity are operated on the quays. There are also floating cranes with lifting capacity of up to 300 tons and other cargo handling equipment, intra-port transport included.

Loading and/or unloading is usually done in accordance with conditions and rates stipulated by Charter Parties and Sales Contracts.

STEVEDORES: Arranged through "Inflot".

MEDICAL: Medical service is free. All requirements should be ordered in advance through "Inflot".

FRESH WATER: Can be supplied at the berth or by barge.

FUEL: Available subject to advance notice. If fuel required by barge at the anchorage a written request to the Agent is required at least 24 hours in advance.

TANKERS: Slop reception facilities are available.

DEVELOPMENTS: Constructing new port at Urangel, 8 miles from Nakhodka, having: Coal pier, annual capacity 10 million tons. Coal conveyor, annual capacity 5 million tons. Wood chip conveyor system, annual capacity 800,000 tons. Container system.

OPENING/CLOSING HATCHES: May be opened and closed by stevedores at Masters request.

CUSTOMS ALLOWANCE: No restrictions on tobacco and alcohol on board ship. Only tobacco required for personal consumption may be taken ashore.

CONSULS: North Korea, tel. 55310. Japan, tel. 56360.

WIND: The most dangerous wind for vessels lying in Nakhodka Bay is the strong Southern wind of long duration caused by typhoons. The wind usually gives rise to water level and sends heavy waves of up to 4 m. height into the Bay.

REPAIRS: All kinds of repairs for vessels of up to 25,000 dwt. can be carried out.

REPATRIATION: Can be arranged during the Summer months provided passport and documentation in order. During Winter months there are no facilities for foreigners to reach nearest international airport so repatriation is only possible via infrequent passenger ships to Japan.

AIRPORT: Nearest international airport is at Khabarovsk, 1,000 kilometres away. Vladivostok is now closed to foreigners or international traffic, though sometimes used for air freight.

TIME: GMT plus 10 hours all the year round.

SHORE LEAVE: Permitted subject to police control.

AUTHORITY: Port Office.

AGENT: The Main Maritime Agency: "INFLOT". Postal address: 692900 USSR Primorski Kray, Nakhodka, ul Leninskaia 2. Telegraphic address: Nakhodka, Primirskovo Inflot. Telephones: 5-62-33, 5-61-55.

NARYAN-MAR: 67.38 N. 53.00 E.

GENERAL: A commercial port, Naryan-Mar is situated in the S.E. part of the Barents Sea, at a distance of 70 miles from the Pechora river mouth on the right bank of the Gorodetsky Shar Creek.

The port is open for navigation for a period of 100-110 days in the year, starting from July.

In the Pechora river inlet ice first begins to form between 20th and 25th October, but sometimes appears at the beginning of the month.

The inlet becomes completely frozen over at the middle of December. Ice finally disappears at the end of June or sometimes beginning of July. Changes in the water level in the Pechora Inlet, due to melting of ice in Spring, have not been observed.

The formation of ice in the rivers flowing into the Pechora Inlet usually depends upon the time of the appearance of ice in the Inlet itself. Rivers, as a rule, become frozen over by the middle of October. The ice in the rivers usually breaks up earlier than it finally disappears in the Pechora Inlet.

The Pechora river at the Kuya settlement area becomes frozen over at the end of October, and the ice there finally disappears by the end of May.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Besides information stipulated in Soviet Wood Charter Party, vessels approaching pilot buoy may contact Port Authorities or Pilot in first fifteen minutes of any odd hour from 0700 till 2300 hrs. (Moscow time), frequency 2182 kc/s. Signals for Pilot to be given in accordance with International Code. Pilot boat wooden, standard type, white painted, with word "Pilot" in black letters on wheel-house. Pilot usually boards vessel at the Pilot Anchorage light buoy (lat. 68° 30′ N., Long. 54° 32′ E.). In case of bad weather, and in extraordinary circumstances Pilot shall embark vessel in the Srednevskie Islands area. In this event a vessel approaching the port from seaward should follow pilot boat in the wake of it, up to the Srednevskie Islands leading line where Pilot will be able to board ship.

Master of a vessel proceeding to the port of Naryan-Mar should order a Pilot through the Harbour Master 24 hours prior to arrival at the Pilot Anchorage light buoy and advise more precise ETA not later than 4 hours before approaching it.

Master should order Pilot not later than 2 hours prior to shifting berth and/or leaving the port.

ANCHORAGE: Depths at anchorage 18—21 ft. Also Inner Roads where anchorage will be indicated by Pilot. A recommended anchorage for foreign vessels is situated in the area with the central point 68° 30′ N., 54° 33′ E. The depths in the anchorage are from 5.4 m. — 6.6 m.

An anchorage can be obtained at the right bank of the Pechora river off Urpinsky leading line No. 24. Depths are from 4 m. — 17 m. The bottom is sand and mud.

Good anchorages with depths from 5 m — 10 m. can also be obtained opposite Zakhrebetny Bay and N.E. of the town of Naryan-Mar.

All vessels arriving from abroad or leaving the port for abroad, must anchor opposite Zakhrebetny Bay for the performance of port formalities.

RESTRICTIONS: Vessels can enter or leave the port at any time of day or night.

The permitted draft for entry to the port is about 4.5 m. but it is usually advised by the Port Authorities at the beginning of navigation. The maximum permitted length of a vessel is 110 m.

Access to the port is by the fairway leading from the Pilot Anchorage light buoy across the Pechora river bar.

The bar itself is the extensive shoal water area extending Northward of the Bolvansky Nos. Point. Three channels are dredged across the bar: The Receiving Channel, the Bar Channel and the Povorotny Channel. The last one serves as turning-point from the Receiving Channel into the Bar Channel. Vessels drawing not more than 4.3 m. can pass across the bar only at high water level.

It is prohibited to enter or leave the port through the Bar Channel and/or Receiving Channel as well as to navigate in the port area during dense fog, heavy rain and snow falls, strong winds of over Force 6 and absence of floating marks.

With the appearance of ice in the Pechora Inlet and in the Pechora river, entry to the port is not allowed without Harbour Master's permission.

The speed of a vessel navigating from the Pilot Anchorage light buoy through the Receiving Bar Turning, Alekseevsky, Polovsky, Kuisky, Urpinsky and other Channels shall not exceed 6 knots, with the exception at the part of the Pechora river between the Zakhrebetny and Srednevsky Channels where it is allowed to navigate with speed not exceeding 12 knots.

When passing floating cranes nearby, lighters and vessels lying alongside the port quays, every ship should proceed at dead slow speed.

MAX. SIZE: Draft declared by Port Authorities after being checked in the beginning of the season, and is about 15 feet.

HEALTH: Vessels inspected by sanitary officer. If no diseases, vessel obtains free pratique. Pratique automatic when vessel arrives from another Russian port.
RADIO: Archangel and Naryan-Mar Radio (UOY, A, 500 kc/s.).

Call sign	*Working*	*Calling*	*Type of trans-Mission*	*Time*
UOY	500 kc/s.	500 kc/s.	A1	HX
Pogruzka (Port Control)	156-80 mc/s.	156.80 mc/s.	F3	HX
	156-45 mc/s.	156.45 mc/s.	F3	HX
UZ1-2 (Pilot Watch at the Zeleny/ Green/Island)	156.80 mc/s.	156.80 mc/s.	F3	HX

The Pechora storm signals station (Lat. 67° 39′ N., Long. 52° 59′ E.) is located on the roof of the Port of Naryan-Mar Authority Office.

Storm signals for vessels traffic in the Pechora Inlet are shown by day and night at the mast and yardarms of the station.

Notice of Arrival: Should be given in accordance with the "Soviet Wood" Charter Party conditions.
BERTHING: The port of Naryan-Mar specialises in timber exports. Depths at the berths are up to 6.5 m. There are enclosed warehouses and open concrete floor sheds.

The necessary number of tugs for entering or leaving the port as well as for shifting berth shall be agreed upon between Pilot and Master.

A mooring berth is usually indicated by a Pilot. Shifting berths without having obtained Harbour Master's permission is not allowed. Ship's tow lines are usually used during towage.

Diesel portable cranes of up to 4 tons capacity are operated on the quays. There are also track-laying cranes of up to 12 tons and floating cranes with lifting capacity from 5—40 tons.
STEVEDORES: As per Soviet Wood Charter Party.
MEDICAL: No advance notice required. Clinic and hospital available.
DENSITY: Fresh water irrespective of tide.
FRESH WATER: Delivered by tanker.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CERTIFICATES:

Seaworthiness.
Measurement.
Load line.
Cargo Equipment.
Safety Equipment.
Deratisation Certificates.

CUSTOMS ALLOWANCE: Tobacco/Wine. No quantity limits.
IDENTIFICATION CARDS: Only Seamen's Books.
CONSULS: No Consuls.
REPAIRS: Small repairs only.
DRY DOCKS: None.
REPATRIATION: Repatriation and crew changes require visa formalities.
AIRPORT: Airport served by regular lines and situated near town.
TIME: GMT plus three hours. No seasonal alterations.
TIDE: Changes in the water level in the port area depend upon tides and effects of the wind.

The tide is semi-diurnal with two high waters and two low waters a day. The range of the tide varies from 0.9 m. — 1.8 m. Changes in water level are caused by the effects of the wind and may reach 1 m. — 1.5 m.
HOLIDAYS: See "Archangel".
POLICE/AMBULANCE/FIRE: Police 02; Ambulance 03; Fire 01.
TELEPHONES: Can be arranged on board.
SHORE LEAVE: Each crew member properly signed in ship's Articles and having valid Seaman's Book is allowed ashore.
DELAYS: Caused by rains, when vessel loading cargo of sawn goods.
AUTHORITY: The Port of Naryan-Mar Authority.

AGENT: A branch of the Port of Archangel Main Maritime Agency "Inflot" at the Port of Naryan-Mar. Pechora Timber Mill Khatanzeisky, the Port of Naryan-Mar, Archangel Region, U.S.S.R. Cable "Inflot Naryan-Mar". Tel. "Inflot" via the timber mill switchboard.

NOVOROSSIYSK: (Including Sheskharis-Oil Harbour) 44.43 N. 37.48 E. (See Plan)

GENERAL: The port of Novorossiysk is situated in the N.E. part of the Black Sea, in the Bay of Novorossiysk, 60 miles S.E. of the Kerch Strait.

The port is open for navigation all the year round. Ice very seldom appears in the port area. Sometimes, in the very severe Winters particularly, a very narrow strip of thin ice (so called "zabereghi") may be formed on the coast line.

In Winter, strong, gusty N.E. winds (called "Bora"), reaching hurricane force at times, blow from the coastal mountains. Due to these winds, vessels lying at anchor in Novorossiysk Bay may very quickly become covered with ice when the temperature of the air is cooled below freezing-point.

It is impossible to enter the port when "Bora" blows, therefore, all vessels are recommended to leave Novorossiysk Bay for the open sea beforehand or lay at anchor in the Yuzhnaya Ozereika roads, at a distance of 8.5 miles Westward of the entrance to the port of Novorossiysk, until the weather improves.

The range of water level in Novorossiysk Bay caused by the effect of the winds, does not exceed 0.6 m. The changes of water level, due to variation in atmospheric pressure ("Seish" effects), are observed at times. The "Seish" may last up to several days. The maximum range of water level, due to the "Seish", observed in Novorossiysk Bay is 0.6 m.

The port consists of 2 harbours – the Dry Cargo Harbour and Oil (Sheskharis) Harbour.

The inner roads are situated at the head of Novorossiysk Bay and divided from the outer roads by the Western and Eastern Moles. The outer roads are situated between the moles and the Southern border of the port.

The Dry Cargo Harbour situated inside the inner roads is protected by 2 (Western and Eastern) moles.

2 passages, the Western and Eastern, divided by Penaisky Shoals, lead to the inner roads through the port area. The Western passage is wider in comparison with the Eastern, and vessels may enter outer roads passing through it by one course.
DOCUMENTS: Refer to beginning of U.S.S.R. section
Shipmaster's Report: (May, 1975) Notwithstanding the instructions for documentation for all U.S.S.R. ports referred to at the beginning of the section, the Novorossiysk Port Authorities require the following:

General Declaration (IMCO FAL form 1)	3 copies
Cargo Declaration (IMCO FAL form 2)	2 copies
Ship's Stores Declaration (IMCO FAL form 3)	2 copies
Crew Effects Declaration (IMCO FAL form 4)	2 copies
Crew List (IMCO FAL form 5)	6 copies
Passenger List (IMCO FAL form 6)	4 copies

PILOTAGE: Compulsory: 96 hours prior arrival cable Inflot giving ETA, name vessel, gross tonnage, exact draft, type of engine. Flag sound and Morse signal G. Pilot meets vessel at 44° 37′ N.: 37° 52′ E. Movement of vessel within inner harbour – only under Pilot guidance. If Pilot is not available vessel should anchor in area No. 52, opposite the Kabardinka settlement, recommended as an anchorage, and wait until Pilot arrives.
ANCHORAGES: 44° 37′ 7″ N.; 37° 52′ E.; depth up to 22 m.; Outer Roads anchorage unsafe during N.E. winds (gales). Master must keep engine ready or proceed for anchorage to S. Ozereika Roads under these sea conditions. Vessels obliged to receive daily weather message at 15.00 LT on 420 kc/s.

In the outer roads there are 4 recommended anchorages:

1. Anchorage No. 52 is situated Northward of Doob Point. Depths are from 12 m.–27 m., holding ground is mud. In the event of winds blowing from seaward vessels are recommended to leave this area for the inner roads.

2. Anchorage area No. 16 is situated 2.5 cables length Westward of Penai Point. Depths are from 13 m.–27 m. holding ground is mud, and mud with shell.

3. Anchorage area No. 63 – 8 cables length westward of Penai Point. Depths are from 13 m. to 27 m., the holding ground is mud and mud with shell.

4. Anchorage No. 51 – 6 cables length S.E. of entrance to the port. Depths are from 20 m. to 24 m.

Anchorage beyond the borders of the recommended areas is strictly prohibited.

Vessels approaching the port of Novorossiysk with N.E. gales ("Bora") blowing, or caught by the storm whilst lying in the outer or inner roads, or after having received storm warning, should use every opportunity to proceed to sea or lay at anchor in the Yuzhnaya Ozereika Roads, having the main engines ready and keeping constant anchor watch.

Under the circumstances, every vessel should keep regular radio contact with port radio station.

Masters of vessels lying at anchor in the outer roads and/or in the port, are usually warned beforehand about the forthcoming N.E. winds. Since these winds may reach hurricane force during a very short period of time, particularly in Winter, all Masters lying at anchor in Novorossiysk Bay are recommended to pay careful attention at every change of the weather, to watch position of vessel to be able to prevent her drifting about anchor and proceed to sea in due time.
RESTRICTIONS: No restrictions on night entry. Mooring and/or unmooring, both in the Dry Cargo Harbour and the Sheskharis Oil Harbour cannot be effected during Southerly or N.E. winds over Force 7.
MAX. SIZE: The permitted length for entry into port is 250 m., draft 11 m. for dry cargo vessels and 13.5 m. for tankers.
HEALTH: Free pratique automatic for vessels coming direct from U.S.S.R. port. From other countries, usual procedure of sanitary inspection applies.
RADIO: Vessels can establish radio contact through port radio station Novorossiysk Radio operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UDN	450 kc/s.	500 kc/s.	A1	H24
Novorossiysk Radio	2,182 kc/s.	2,182 kc/s.	A3	H24
Novorossiysk Radio	4,364.7 kc/s.	4,066.1 kc/s.	A3	H24
UFN	12,822 kc/s.	12,537 kc/s.	A1	H24
	17,100 kc/s.	16,730 kc/s.	A1	H24
"Tiraj" (Port Control)	156.45 mc/s.	156.45 mc/s.	F3	H24
"Lotsman" (Pilot Watch)	156.30 mc/s.	156.30 mc/s.	F3	H24
"Inflot (Shipping Agency)	156.80 mc/s.	156.80 mc/s.	F3	H24

The port signal station is equipped with radar which gives all possible information for ensuring safe pilotage, and also helps Pilots in shifting vessels within the port inner roads.

TUGS: The following number of tugs and their power are stipulated for mooring operations in accordance with size of vessels to be berthed:

Ship's length	*Number of tugs and power*
from 50 to 100 m.	1 tug, from 150 i.h.p. to 600
from 101 to 160 m.	2 tugs, from 600 i.h.p. to 1,200
from 161 to 200 m.	2 tugs, 1×2,300 i.h.p., 1×1,200 i.h.p. or 3×1,200 i.h.p.
from 201 to 250 m.	3 tugs, from 1,200 i.h.p. to 2,300
over 250 m.	4 tugs, from 1,200 i.h.p. to 2,300

Notes:

1. Exceptions to the above regulations are possible if the Ship Master consents to deviations and the Harbour Master grants permission for the same. But the deviations should not affect the safety of mooring operations.

2. While manoeuvring ships to the Sheskharis Berths or jetty No. 25 one more tug of 150 i.h.p. is engaged regardless of the ship's size in view of the constructive features of the berths.

BERTHING: When proceeding in inner harbour vessels must keep both anchors ready to let go; ships to be moored by safe ropes which to be kept tight at all times. Also be ready to use anchor chain over bollard according to Pilot's recommendation. Strictly prohibited to work with propellers lying alongside berth. All mooring ropes must be fitted with rat-guard plates.

The quays of the Dry Cargo Harbour with depths alongside of up to 11.5 m. are equipped to handle general and bulk cargoes (coal, ore), metals, timber, sugar, grain, cement, fruit and vegetables.

Berths of the port are equipped with modern cargo handling facilities. There are portal cranes of up to 40 tons capacity, a floating crane with lifting capacity of up to 100 tons, automatic and electric cargo lifters and other equipment.

Opening and closing of hatches is usually done by ship's crew with the help of portal cranes at dry cargo berths, if ordered by Master, grain berth excluded.

Ores are loaded in compliance with the Temporary Regulations for Carrying Ores handed over to the Shipmaster by Inflot Agents during inwards clearance.

Following are the basic requirements of above Regulations to the ores being loaded *(a)* moisture contents not higher than 12% (if other percentage is not stipulated by Charter Party); *(b)* angle of repose is not less than 35°.

Grain and other bulk cargoes are to be loaded in strict conformity with the International Convention.

STEVEDORES: All necessary services including stevedoring work available under Port Authority guidance. Port cargo-handling regions where ships berth managed by Port Authority and used for stevedoring, tallymen service, storage, etc. On the matters connected with services available, foreign vessels have to apply to Port Authority through Maritime Agency "Inflot".

MEDICAL: In case of accident (emergency), medical attendance rendered at any time. Hospital facilities available. Also inoculation, vaccination, etc.

TANKERS: Bearing in mind N.E. gales, oil carriers lying alongside oil pier must have boat-ropes lowered to water and illuminate them at night. All scupper holes on main deck must be closed tightly. Master responsible for overflow of oil in the vicinity of harbour and has to bear harbour cleaning costs. No repair work can be done on tankers lying alongside oil pier. No ballast water may be pumped out, no garbage or refuse thrown overboard. Ballast water to be pumped into shore slop tank.

The Sheskharis Oil Harbour is situated in the Eastern part of the outer roads, 2.2 miles N.E. of the Penai Point. It is protected by a mole from the North and oil jetty from the South. The base of the jetty is used as a berth for fire-fighting boats.

Large vessels are not recommended to approach the head of the oil jetty since the rock-bottom with depths from 12 m.–15 m. extends at 50 m. length Westward.

Since it is not safe to stay alongside berths in the Sheskharis Oil Harbour during strong winds blowing from any direction, all tankers, after having received a storm warning should take urgent measures to leave for sea.

Depths at the berths of the Sheskhari Oil Harbour are up to 14.5 m.

To ensure safe loading/unloading of oil products as well as to expedite the vessel's turn around time, every tanker should be equipped with cargo-receiving valves capable of fitting 8–12 in. shore-loading connections.

These valves should allow the upward connection with shore cargo flanges of not less than 1 m. in height and located on deck at 3 m.-5 m. length from side of vessel.

DENSITY: About 1010–1014.

FRESH WATER: Available from shore; minimum quantity invoiced at 15 tons.

FUEL: Most grades available. Fuel for tankers can be supplied ex-shore. Bunkers for dry cargo vessels are usually delivered by lighters.

FIRE PRECAUTIONS: All operations involving open fire and sparks are prohibited on oil pier. 2 fire-extinguishers, thick felt and sand must be ready beside hose connection.

GANGWAY/DECK WATCHMEN: Gangway watch compulsory and carried out by crew.

OPENING/CLOSING HATCHES: Normally by crew, otherwise according Charter Party.

CUSTOMS ALLOWANCE: No quantity limits but nothing allowed to be taken ashore.

IDENTIFICATION CARDS: Crew members get shore passes.

CONSULS: No Consulates in port or its vicinities.

REPAIRS: All kinds of repairs for vessels of up to 60,000 d.w.t. can be carried out.

Cargo Superintendent's Report: (September, 1975).

The Novorossiysk Shiprepair Yard is capable of carrying out any ship repairs, and is equipped with three floating docks. I was unable to obtain information on the size of these docks, but estimate they are capable of handling vessels in the 100,000 ton range.

REPATRIATION: No facilities exist for effecting crew changes. A crew member may be repatriated due to family reasons or sickness but repatriation requires visa formalities.

AIRPORT: Nearest airport (Krasnodar) served by regular internal lines is situated at 150 km. from port.

Cargo Superintendent's Report: (September, 1975).

Novorossiysk has its own airport, connected to the regular inland line's service. There are daily services to and from Moscow via Kharkov.

TIME: GMT plus 3 hours; no alterations during year.

HOLIDAYS: New Year's Day, 8th March (World's Women's Day); May 1st, 2nd (Labour Day); May 9th (Victory Day); November 7th, 8th (Great October Socialist Revolution Day); December 5th (U.S.S.R. Constitution Day). Cargo work can be arranged on those days.

POLICE/AMBULANCE/FIRE: Police, 02; Ambulance, 03; Fire, 01.

TELEPHONES: Can be arranged to be fitted on board.

SHORE LEAVE: Crew members are allowed ashore. Crew members of foreign vessels get shore passes which grant them permission to stay ashore till 2400 hrs. Crew members who lose their shore passes as well as those late from ashore, are not granted shore leave any longer in conformity with local regulations.

AUTHORITY: The Port of Novorossiysk Authority.

AGENT: Main Shipping Agency "Inflot", 13 Portovaja Str., Tel. 99-2-49, 99-2-85, 99-2-60. Cables: "Inflot" Novorossiysk. Telex: 171 FL.

ODESSA: 46.29 N. 30.44 E. (See Plan)

GENERAL: The port of Odessa is situated on the N.W. coast of the Black Sea in the S.W. part of Odessa Bay.

The port is open for navigation all the year round, but with ice-breaker assistance in severe Winters about 30 days of the year. Ice first begins to form in the second half of December and finally disappears in February. After ice has formed it is often broken up by strong winds and stormy weather. In mild Winters ice has not been observed in Odessa Bay.

Range of water level caused by winds depends on force and periods they blow, and may reach 2 m.

Atmospheric pressure has also a direct influence on the water level ("Seish" effect), but is weaker than effects of the wind. The "Seish" may last from a few minutes up to several days causing change of water level up to 0.58 m.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Arranged through Inflot, but vessel to give 96, 24 hours and 6 hours notice through Odessa radio. Pilot boat recognised by international pilot flag. Vessel requiring Pilot shows international flag "G". Pilot boards vessel in region of anchoring place No. 62 at a distance 2.5 miles E. off Vorontzov lighthouse. Fenders should be on side where Pilot boards.

Vessels leaving the port of Odessa for the port of Kherson should proceed there under control of a State Commissioned Pilot.

Area limited by a circle with a radius of 3 miles with its centre at the Vorontzov lighthouse, as well as anchoring place No. 64 are announced to be "Traffic control zone". Vessels approaching zone from the sea must communicate with "Odessa Port Control" on VHF, Channel 14 (156.7 mHz.) and act in accordance with its instructions.

ANCHORAGES: The Outer Roads, between the port and Severny Odessky Cape, depths up to 14 m. Open to winds from N.E. to S.S.E. Good holding ground.

On arrival at the outer roads, vessels should lie at anchor whilst waiting for a berth at the anchoring place No. 62 in accordance with instructions given by "Odessa Port Control".

RESTRICTIONS: Vessels enter only with Pilot and should have lights according to Pilot's instructions. Vessels berthed depending on kind of cargo carrying or loading.

Vessels can enter and leave the port at any time of day or night.

Medium size vessels when entering or leaving port must have keel clearance not less than 1 ft.; large vessels not less than 2 ft.

Vessels are allowed to moor at berth only after having obtained Harbour Master's permission, and when the corresponding signal is exhibited at the signal station.

The speed of a vessel shall not exceed 4 knots when passing through the channel and/or in the port water areas marked by navigational marks.

Large vessels laden with ballast water only, are allowed to moor to berths if winds do not exceed Force 6. A vessel of small size may be turned broadside on to a loaded vessel of a larger size, but not vice versa.

It is strictly prohibited to turn a third vessel broadside on to 2 other vessels having been turned broadside earlier. In the event of ice a vessel may turn broadside on to another vessel only after having obtained Harbour Master's special permission.

MAX. SIZE: The maximum permitted draft is 11 m. Length up to 230 m.

HEALTH: Free pratique given on berthing. In case of suspected disease Master must inform Inflot by cable. Free pratique cannot be granted automatically.

RADIO: Vessels can establish radio contact through the port radio station Odessa Radio operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UDE	500 kc/s.	500 kc/s.	A1	H24
UFB	8,685 kc/s.	8,361 kc/s.	A1	H24
	12,950 kc/s.	12,535.5 kc/s.		
Odessa Radio	2,182 kc/s.	2,182 kc/s.	A3	H24
	3,310 kc/s.	3,180 kc/s.	A3	H24
	17,258.5 kc/s.	—	A3H	HX
	—	16,463.5 kc/s.	A3	HX
	22,706 kc/s.	—	A3H	HX
	—	22,080.5 kc/s.	A3	HX
	4,364.7 kc/s.	—	A3H	HX
Odessa Radio	—	156.80 mc/s	F3	H24
Odessa Port Control	156.70 mc/s.	156.70 mc/s.	F3	H24
Odessa Pilot	156.70 mc/s.	156.80 mc/s.	F3	H24
Odessa Inflot (Shipping Agency)	166.65 mc/s.	156.00 mc/s.	F3	H24

Traffic and storm signals are exhibited at the port signal station located on quay No. 2 of Quarantine Mole.

RADAR: Shore-based radar provides positioning and radio-assisted pilotage in poor visibility for inward and outward going ships, on request.

TUGS: Tugs meet vessel in place indicated by Master through Pilot.

BERTHING: 38 berths available with depths alongside up to 12.0 m.

STEVEDORES: Portal electric cranes of up to 45 tons capacity are operated on the quays by the warehouses. There are grain-loaders and floating cranes with lifting capacity of up to 100 tons, other cargo handling equipment and intraport transport.

Opening and closing of mechanised hatches is always done by the ship's crew.

Opening of hatches on arrival and closing of non-mechanical hatches after loading of cargo has been completed, is done by ship's crew.

Opening and closing of non-mechanised hatches in the course of loading or unloading is done by port workers.

MEDICAL: Advance notice for medical attendance required. Notice should be given to Inflot. Hospital facilities available in case of emergency.

TANKERS: No reducing pieces necessary. Oil slop facilities available. The Oil Harbour is situated in the Northern part of the port (the inner roads), Northward of Rabochaya Harbour which is formed by a "T"-shaped mole extending E.S.E. off-shore. The bottom of the Eastern side of the mole is dangerous, therefore vessels are recommended not to approach it closer than 100 m.

DENSITY: Average density 1.0012 varying with season.

FRESH WATER: Fresh water may be supplied ex shore or ex water barge. Minimum quantity ex barge 15 tons.

FUEL: Bunkers can be supplied, and to be ordered 72 hours before arrival.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: By stevedores.

CUSTOMS ALLOWANCE: Tobacco. No limits on board vessel, but when going ashore not more than 1 or 2 packs. Wine and/or spirits not to be taken ashore.

CARGO GEAR: All cargo gear must have certificates for maximum weight capacity.

IDENTIFICATION CARDS: Necessary.

CONSULS:

Bulgarian Consulate tel. 2–45–72
Indian Consulate tel. 2–37–10
Cuban Consulate tel. 5–14–69

REPAIRS: All types of deck and engine repairs can be carried out.

DRY DOCKS: Available.

REPATRIATION: Can be arranged.

AIRPORT: Distance to airport 10 miles. Direct airlines with several socialist countries and with the rest of the world through Moscow. Planes fly to Moscow 3 times a day.

TIME: Local time GMT plus 3 hours.

HOLIDAYS: Work can be arranged on below mentioned holidays through Sovfracht, Moscow, at special rates. Holidays: 1st January, 8th March, 1st and 2nd May, 9th May, 7th and 8th November, 5th December.

POLICE/AMBULANCE/FIRE: Police (Militia), 02 from town; 902 from port.

TELEPHONES: Telephones may be installed on board.

SERVICES: Tank-cleaning equipment available.

SHORE LEAVE: Crew members allowed to stay ashore till midnight. Master without limitation.

DELAYS: Vessels berthed in turn.

AUTHORITY: The Port of Odessa Authority.

AGENT: The port of Odessa Main Maritime Agency "Inflot". Postal address: 1 Vakulenchuk Square, Odessa, V–4 U.S.S.R. Cables "Inflot Odessa". Tel. 22–39–02; Telex 185.

ONEGA: 63.54 N. 38.06 E.

GENERAL: The port of Onega is situated on the right bank of the Onega river (3–4 miles up from the mouth), flowing into Onezhsky Bay off the White Sea.

Port open for navigation for about 6–7 months per year, starting from May. In Autumn, when the river is covered with ice, assistance of ice-breaker is required but may not be rendered regularly.

Opening and closing of the port for navigation as well as turn and order of entering the port is usually regulated by the Port Authorities.

Changes of water level in the river depend on tide, spring floods and effects of the wind.

The tide is semi-diurnal with two high and two low waters a day. At the Onega river mouth the range of the tide at mean springs may reach 2.7 m.

The rises of the water level are due to North-westerly, Northern and North-easterly winds. The falls of the water level are usually caused by South-easterly, Southerly and South-westerly winds.

The Onega river becomes frozen over at the beginning of November. Ice begins to form in October and usually breaks up at the end of April or early May.

A vast area of shoal waters is situated at the mouth of the Onega river.

Access into the Onega river is by the Karelsky Fairway. Vessels drawing up to 4.8 m. may pass through it at high water.

Since depths in the river vary, Masters are recommended to get in touch with the Harbour Master to make enquiries about the existing least depth in the fairway before entering the river.

The port specialises in timber exports.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Pilot station can be called on 500 kc/s (call signal UQQ, watch hours 0400–0600, 0800–1000, 1200–1400, 1800–2000 GMT) and on 2182 kc/s. Information to be given in accordance with Soviet Wood Charter Party. Pilot boat wooden standard type, white painted with word "Pilot" in black letters on wheel-house. Signals to be made in accordance with International Code. Pilot taken on board near Letnij Orlov East light buoy (64° 55′ N., 36° 25′ E.). In case of moderate sea vessel to proceed 1 or 2 cable's lengths to South, keeping distance of 1 mile off shore. In respect of safe boarding Pilots require vessel to make a lee for pilot boat. Vessel awaiting Pilot may anchor to the South of the East light buoy at distance of 1 mile off shore.

ANCHORAGE: When sea is moderate or rough and winds are from N.W. quarter, recommended anchorage is in area of Solovetzky island under point Petchak, where vessel may approach shore as close as 1 mile and anchor at depths of 33 ft. Vessels lying on Karesky Roads recommended anchorage in event of storm from N.W. quarter is at Purnema area where a light anchorage buoy installed (64° 20′ N., 37° 27′ E.), depths are 6–10 m.

During Southerly winds of Force 5–6, a safe anchorage with depths of 10 m. can be obtained in the Konyukhov Inlet, 1 mile off-shore.

RESTRICTIONS: Vessels having draft not more than 3 metres may enter port at any time, but with draft more than 3 m. only 1 hour before high water.

MAX. SIZE: The max. permitted draft is usually announced at the beginning of the navigation season after sounding of the fairway has been accomplished. It varies from 5.1–6.4 m. Max. permitted length is 124 m.

HEALTH: Alongside or on the Roads all vessels coming from aboard inspected by Sanitary Office representative. If no diseases, vessel obtains free pratique. If vessel enters directly after calling at another Russian port, pratique automatic.

RADIO: Besides Murmansk and Archangel, Onega Radio (UZS), 500 kc/s.; VHF of pilot office at port of Onega (Channel 16).

Vessels can establish radio contact through the port radio station Onega Radio operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UZS	500 kc/s.	500 kc/s.	A1	HX
"Onega Port" (Port Control)	156.45 mc/s.	156.45 mc/s.	F3	H24
"Inflot" (Shipping Agency)	156.65 mc/s.	156.80 mc/s.	F3	HX
"Portnadzor" (Harbour Master)	156.65 mc/s.	156.80 mc/s.	F3	HX

The Onega storm signals station is located on the roof of the Harbour Master's office. Day signals warning about forthcoming storms and strong winds in the Onega Bay area are exhibited at mast of the signal station.

TUGS: If necessary, ordered by Pilot or Master and join vessel near berth. Usually ship's lines used.
BERTHING: Depths at the port berths are up to 6.5 m. There are enclosed warehouses and open concrete floor sheds.
STEVEDORES: No particular ETA advices to stevedores/shippers. Loading of timber usually carried out by ship's winches at average rate of 24 stds. per hatch per working day.
MEDICAL: Doctor and hospital facilities available.
FRESH WATER: Available. Usually delivered by tankers.
FUEL: Availability not guaranteed.
GANGWAY/DECK WATCHMEN: Usually by ship's crew.
OPENING/CLOSING HATCHES: Usually by ship's crew.
CUSTOMS ALLOWANCE: No restriction on quantity, but nothing to be taken ashore.
IDENTIFICATION CARDS: Only Seamens Books required.
REPAIRS: Small repairs only.
REPATRIATION: Subject to visa formalities.
AIRPORT: Nearest at Archangel.
TIME: GMT plus 3 hours.
HOLIDAYS: See "Archangel".
SHORE LEAVE: Allowed up to midnight.
AUTHORITY: The Port of Onega Authority.
AGENT: A branch of the port of Archangel, Main Maritime Agency "Inflot" at the port of Onega. Postal address: OLDK Office. Timber Mill No. 32/33 Settlement, Onega-2, Archangel Region, U.S.S.R. Cables "Inflot Onega". Tel. Timber Mill Switchboard 33–33, "Inflot".

POTI: 42.09 N. 41.39 E. (See Plan)

GENERAL: The port of Poti is situated 2 miles North of the Rioni river mouth and on the S.E. coast of the Black Sea.

Port open for navigation all the year round.

Changes of the water level in the port area are caused by the winds and usually reach 0.6 m.

The max. range of the water level observed in the river is 0.9 m.
DOCUMENTS: Refer to beginning of U.S.S.R. section.
PILOTAGE: Compulsory. Radio 96, 48 hours prior arrival to Port Controller and Inflot Agency advising ETA, description and quantity of cargo, location and weight of heavy lifts, if any, number of passengers, ship's length and draft, as well as any services required. Confirmation of ETA required 4 hours prior arrival. Inflot will arrange Pilot basis above information.

Pilot will board vessel in the outer roads at 5 cables length from the Poti light buoy.
ANCHORAGE: In outer port which is protected by Novy Severny, Yuzhny, and Zapadny Moles, and by Zapadny Breakwater. Safe anchorage for deep drafted vessels, except in periods when "Tyagun", a strong variable current with surge, occurs, with winds from N.W., W., and S.W.

The outer roads are bounded by two parallels – 42° 12′ N. and 42° 08′ N., by the meridian of 41° 35′ E. and the coast line.

The roads are open to winds blowing from the sea. Therefore, in the event of stormy weather vessels are recommended to leave anchorage in the outer roads for sea.

A good anchorage with depths of 10 m. to 30 m. can be obtained at a distance of 1.3 miles N.W. and 1.1 mile West of the head of the Western mole.

Vessels are prohibited from anchoring in the S.W. part of the Southern Harbour and in the centre of the Inner Basin.
RESTRICTIONS: Strong winds from W., S.W. and E. can make it difficult to enter port. At least 25 cm. keel clearance required to enter or leave port.

Vessels are prohibited from entering the port in case the entrance and the leading lights are covered with fog.

Vessels speed shall not exceed 4 knots in the port areas marked by navigation marks.

There are no restrictions for night entry.
MAX. SIZE: The max. permitted draft for entry to the port is 9.4 m. and the length from 170 m. to 190 m.
HEALTH: Free pratique automatic for vessels from another U.S.S.R. port. Other vessels are boarded on arrival.
RADIO: Vessels can establish radio contact through the port radio station Poti Radio operating 24 hours on the following frequencies:

Call sign	Working	Calling	Type of trans-mission	Time
UVB	421 kc/s.	500 kc/s.	A1	H24
"Zapad" (Port Control)	156.45 mc/s.	156.45 mc/s.	F3	H24
UFC	17,190.5 kc/s.	16,736 kc/s.	A1	XH
	4,295 kc/s.	4,185 kc/s.	A1	XH
	8,695 kc/s.	8,366 kc/s.	A1	XH

BERTHING: The port of Poti comprises three harbours: the Yuznaya (Southern), Severnaya (Northern) and Vnutrenniaya (inner) harbours. 15 berths in port, with depths up to 8.35 m. alongside.

Berthing in the port can be effected with tug assistance only.

The berths of the port are equipped to handle general and bulk (ore, coal) cargoes, mineral oil products, metals, fruits, vegetables, etc., as well as passenger traffic.

Portal electric cranes of up to 20 tons capacity are operated on the quays. There are also floating cranes with lifting capacity of up to 100 tons.
MEDICAL: Qualified medical service is available free of charge, including dispensary and hospital treatment.
STEVEDORES: Arranged by Inflot.
DENSITY: About 1015, variable with season.
FRESH WATER: Fresh water supplied ex shore to ship directly or ex water barge in boundaries of port. Min. quantity delivered by barge is 15 tons.
FUEL: All types of fuel available except marine diesel for bunkering. Quantities over 500 tons supplied only subject 4 to 5 days advance notice.
CUSTOMS ALLOWANCE: No restriction on quantities but nothing to be taken ashore.
CONSULS: See "Odessa".
REPAIRS: Floating cranes up to 100 tons capacity available. Only minor repairs can be effected. There are no dry docks in the port.
AIRPORT: Nearest at Odessa.
TIME: GMT plus 4 hours all year round.
HOLIDAYS: 1st January (New Years Day); 8th March (International Women's Day); 1st, 2nd May (Workers' International Solidarity Day); 9th May (Victory Day); 7th, 8th November (Anniversary of October Revolution); 5th December (U.S.S.R. Constitution Day).
POLICE/FIRE/AMBULANCE: Police service, tel. 0-2; Ambulance, tel. 0-3; Fire Service, tel. 0-1.
SHORE LEAVE: Crew members allowed ashore up to midnight.
AGENTS: Main Maritime Agents, Inflot, ul. Lenina, 50, Poti. Tel. 9 32 27. Cables, "Inflot" Poti.

RENI: 45.26 N. 28.18 E. (See Plan)

GENERAL: The port of Reni is situated at a distance 25 miles up from the Izmail Chatal Point on the left bank of the Danube river.

The port is open for navigation for about 317 days of the year. In severe winters ice-breaker assistance is required.

The Dunai river and Kilia Mouth become completely frozen over only in severe winters, at the end of December or early January. Ice finally disappears in February or early March.

Changes of the water level are due to effects of the wind and spring floods.

Maximum rises of the water level are usually observed in April, May and June, maximum falls August, September and October.

Maximum range of the water level observed in the river is 6 m.
DOCUMENTS: Refer to beginning of U.S.S.R. Section.
PILOTAGE: Compulsory. All vessels proceeding from the Izmail Chatal Point up to Reni and vice versa must navigate under control of a State Commissioned Pilot.
ANCHORAGE: Vessels should anchor in the port roads with depths from 10 m. to 20 m. The holding ground is clay and mud.
RESTRICTIONS: There are no time restrictions for the entry to the port. Both draft and length of vessels are limited by depths and width of the Sulin channel.
RADIO: Vessels can establish radio contact through the port radio station Reni Radio operating 24 hours per day on the following frequencies:

Call sign	Working	Calling	Type of trans-mission	Time
UJN–3 (Port)	489 kc/s.	468 kc/s.	A1	HX
"Reni" (Port)	161.90 mc/s.	157.30 mc/s.	F3	HX
"Vaza" (Port)	156.80 mc/s.	156.80 mc/s.	F3	HX

BERTHING: Tug assistance is not compulsory. Tugs are available if requested by Master.

The port is accessible for large ships. The berths with depths alongside of up to 8.25 m. are equipped to handle general and bulk cargoes, crude oil and oil products, grain and food products.

Cranes of up to 10 tons capacity are operated on the quays. Also there are floating cranes with lifting capacity of up to 100 tons and other cargo handling equipment.
FUEL: Available.
FRESH WATER: Can be supplied ex shore and by barges.
TIME: Local time: GMT plus 3 hours all the year round.
AUTHORITY: The Port of Reni Authority.
AGENT: The Port of Reni Maritime Agency "Inflot". Postal address: 192 Dunai Street, The Port of Reni, U.S.S.R. Cables "Inflot Reni". Tel. 3–47, 3–46.

RIGA: 56.57 N. 24.05 E. (See Plan)

GENERAL: A Baltic seaport, Riga is situated at the mouth of the Daugava (Western Dvina) river falling into the Gulf of Riga.

The water area of the port is formed by the lower part of the Daugava river from the mouth up to a railway bridge, thence by the Milgravis channel and Sarcandaugava Creek.

The roadstead of the port is situated at the mouth of the Daugava river.

The port is open for navigation all the year round, but ice-breaker assistance is required round about 4 months of the year.

The Gulf of Riga is frozen over for quite a long time. On the coast of the Gulf, ice first appears in December and finally disappears in April. The middle part of the Gulf gets frozen over only in severe Winters and for a short period. Usually ice in this area is mostly drift ice.

Considerable changes of the water level may be caused by strong winds and variation in atmospheric pressure ("Seish" effects).

The range of the water level caused by winds depends on the force of the wind, direction and period of time it blows.

Most sharp rises and falls of the water level are observed at the mouth of the Daugava river. They may reach at times 1.3 m.-1.8 m. higher and 0.9 m.-1.1 m. lower than the datum at Kronshtadt.

The level of the water in the port usually depends on the ordinary water level in the Daugava river.

The max. rise of the water level caused by winds may reach 2 m. higher and fall – 1 m. lower than the mean water level observed over a period of many years.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Inflot will arrange Pilot on receipt of ETA at Daugavgriva Buoy, which to be given 96, 48, 24 and 4 hours prior arrival. Also advise with ETA details of cargo, last port of call, passengers if any, ship's draft and length.

Pilot meets vessel at receiving light buoy No. 1 Daugavgriva. In case of bad weather, when Pilot is unable to come aboard, vessel should follow in the wake of a Pilot boat, up to the mouth of the river, where Pilot will board vessel.

Vessels leaving the port should navigate under Pilot control to receiving buoy No. 1 Daugavgriva.

ANCHORAGE: The best anchorage can be obtained in the port of Riga roads, at a distance 4 miles off the Daugavgriva lighthouse, bearing 310° Westward of light buoy No. 1. Depths in the anchorage are from 22 m. to 35 m. The bottom is mud and sand. It is not recommended to come closer to the shore without a Pilot on board.

The port of Riga roads are situated N.W. of the entrance to the mouth of the Daugava river.

The roads are open to winds blowing between S.W. and N.E.; therefore, in Autumn, when these winds prevail, anchorage there is unsafe.

In periods when heavy waves in the roads are caused by fresh Northerly winds, vessels are recommended to leave the roads for shelter in the port or go to the open part of the Gulf of Riga.

The depths in the roads are from 15 m. to 30 m. Holding ground is good.

RESTRICTIONS: Permitted draft for the entry into port is between 7.5 m.-9.5 m. at the mean water level.

Entry to the Daugava river and the port of Riga is accessible for vessels having drafts ensuring safe passage across the river bar.

As a rule, vessels passing along the channel are requested to have keel clearance not less than 0.45 m.

The speed of vessels navigating in the Daugava river should not exceed 6 knots.

There are no restrictions as to length of vessel and time of entry to the port.

MAX. SIZE: Max. permitted draft for vessels going to berths of the port for discharging is 9.75 m. in fresh water, if the water level is "O" datum at Kronshtadt.

Vessels having draft more than 9.75 m. are being discharged into barges in the inner road which has 2 mooring buoys, 3 miles from the mouth of the river. Max. permitted draft for vessels going to the inner road is 10.50 m. in fresh water, if the water level is "O" datum at Kronshtadt.

Also see "Shipmasters Report".

HEALTH: Pratique obtainable after vessels mooring when Health Officials visit vessel with Immigration and Customs Officers. Health Inspector to be informed of any medical assistance required.

RADIO: *Notice of Arrival:* In Winter when the Irben Strait and the Gulf of Riga are completely frozen over and ice-breaker assistance is required, vessels proceeding to the port of Riga should advise Harbour Master their ETA to the edge of the ice, vessel's ice classification and estimation in days for the expenditure of fresh water and fuel available on board to the moment of approaching the edge of the ice.

Vessels can established ship-shore radio contact via the port radio station Riga Radio, operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of trans-mission*	*Time*
UKB	500 kc/s.	500 kc/s.	A1	H24
UKB	489 kc/s.	468 kc/s.	A1	H24
UDH	4,236 kc/s.	4,184 kc/s.	A1	H24
	8,506 kc/s.	8,367 kc/s.		
	13,070 kc/s.	12,547.5 kc/s.		
	16,997 kc/s.	16,718 kc/s.	A1	H24
"Riga Radio"	—	4,066.1 kc/s.	A3H	HX
	436.7 kc/s.	—	A3H	HX
"Riga Radio" (SPR-Central Port Radio)	2,182 kc/s.	2,182 kc/s.	A3	H24
	156.80 mc/s.	156.80 mc/s.	F3	H24
"Port Riga" (Port Control)	156.70 mc/s.	156.70 mc/s.	F3	H24
	156.70 mc/s.	156.70 mc/s.	F3	H24

TUGS: Use of tugs is obligatory. The number of tugs depends on length of the vessel and place of berthing.

BERTHING: Berths of the port with depths from 7.5 m. to 9.7 m. alongside are equipped to handle general and bulk (ore, coal) cargoes, metals, timber, grain, food products and passenger traffic.

Number of tugs to be ordered for entry assistance or for shifting berth is decided by Master in accordance with Pilot's recommendation.

Cranes of up to 45 tons capacity are operated on the quays and by the warehouses. Also, there are floating cranes with lifting capacity of up to 100 tons, other cargo handling equipment and intra-port transport.

Opening and closing of hatches is usually done in accordance with conditions of Charter Party and B/L.

MEDICAL: All medical assistance available.

STEVEDORES: Arranged by Inflot who should be given necessary information in advance.

DENSITY: About 1002.

FRESH WATER: Available at quays.

FUEL: Fuel is usually taken at the oil jetties. Bunkers may also be delivered to the roads or supplied by lighters at a berth during loading/unloading of non-inflammable cargoes.

GANGWAY/DECK WATCHMEN: Recommended. These duties normally performed by crew.

OPENING/CLOSING HATCHES: Normally by ship's crew.

CUSTOMS ALLOWANCE: No restriction on quantities, but nothing may be taken ashore.

IDENTIFICATION CARDS: Seaman's Book required.

CONSULS: None.

REPAIRS: Repairs possible for hull, machinery, radio and navigational equipment. Floating crane available, capacity 100 tons. All kinds of repairs for vessels up to 30,000 d.w.t. can be carried out.

REPATRIATION: Only subject to visa restrictions.

TIME: GMT plus 3 hours all year round.

HOLIDAYS: 1st January, 8th March, 1st and 2nd May, 9th May, 7th and 8th November, 5th December.

POLICE/FIRE/AMBULANCE: Advise Inflot.

SHORE LEAVE: Crew allowed ashore.

SHIPMASTER'S REPORT: (January 1976):

On approaching the area where Irbenskiy Lt./Vl should have been placed, it was found that the Lt./Vl and buoys had been removed for the Winter season and replaced by spar buoys, although these could not be observed on the radar or visually due to the adverse weather.

Two other vessels were waiting for daylight transit of the channel, I also decided to wait for daylight due to a 5 fathom bank being recorded on the chart.

On entering the channel it appears to be very much wider than indicated on the chart also where the chart has the channel buoys in a straight line this was not so, although the alteration of the channel could have been due to the use of the Winter buoys only.

In Baltic Pilot Vol. II vessels are allowed to enter at 26 ft. 3 in. This is incorrect as the maximum draft is now 32 ft. Vessels up to 37 ft. were at the anchorage, where they are lightened up to 32 ft. before proceeding into the harbour.

Two berths were being used for the discharge of grain, by shore cranes into wagons.

In the early hours of Sunday morning, 4th January, the temperature being −14° C, a thin film of ice formed in the harbour, this had disappeared by mid-afternoon. Except for this occasion no ice was seen at all in the Baltic, although the climate was very cold.

The Bond was not put under seal, but they were very strict on currency list, 3 copies being required, also the total amounts of each different currency is required.

AUTHORITY: Port of Riga Authority.

AGENT: The Port of Riga Main Maritime Agency "Inflot". Postal address: 6 Latsis Street, Riga–33, U.S.S.R. Cables "Inflot Riga". Tel. 33-15-37; 33-97-03. Telex 1157.

SOCHI: 43.34 N. 39.43 E. (See Plan)

GENERAL: The port of Sochi is an ice-free port, situated at the mouth of the Sochi river, S.E. of the Uch-Dere Point, in the Eastern part of the Black Sea.

The port is protected by the Caucasian chain of mountains from cold N.E. winds but it is open to winds blowing from Southerly and Westerly directions when heavy waves may roll over the port moles causing heavy swell in the harbour.

The port mostly handles passenger traffic.

There are passenger terminals, one of which serves hydrofoil ships only. About 3 million passengers visit the port yearly.

A cargo pier is equipped to handle fruit, building materials and cars. There are enclosed warehouses on the cargo pier and on one of the passenger terminals.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Pilot boat usually meets vessel at a distance of about 1 mile from the port. In the event of bad weather or restricted visibility, vessel should anchor or drift at a safe distance from the port until Pilot arrives.

ANCHORAGE: Deep drafted vessels may obtain anchorage in the outer roads Westward of the Northern mole, in the area encircled by a 9 cables length radius with the Sochi lighthouse as centre of circle. The depths in the roads are from 11 m. to 13 m., where there are mooring buoys.

Anchorage may also be obtained in depths of about 10 m. at 5 cables length from the shore.

Anchorage can also be obtained at 1.3–1.5 mile distance S.S.W. of the Sochi lighthouse. Depths there are about 29 m. The bottom is mud with sand, and small stone closer to the shore.

Anchorages are open to winds blowing from the sea.

Area No. 141 prohibited both for anchorage and fishing is situated at a distance of 1.3 miles S.W. of the light located on the Northern Mole. It extends for 9 miles to N.W.–S.E. The area is shown on charts.

RESTRICTIONS: There are no time restrictions for entry to the port.

In case of stormy weather entry to the port is difficult due to the swell caused by heavy waves in the approach and in the narrow entrance to the port.

The maximum permitted draft is 8 m., length 180 m.

In the event of heavy surf vessels must anchor in the outer roads since entry to the port is impossible.

During the Autumn-Winter period the port of Sochi cannot be used as shelter port, because lying in the port is dangerous due to the strong variable current ("Tyagun") usually caused by gales blowing between S.E. and N.W.

Under these circumstances the Port Authorities cannot guarantee safety to a vessel which, after having received a storm warning, did not make for sea, and bear no responsibility for the consequencies.

RADIO: Vessels can establish ship-shore radio contact through the port radio station Sochi Radio, operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UZB	516 kc/s.	500 kc/s.	A1	H24
Port Control	156.80 mc/s.	156.80 mc/s.	F3	HX
Pilot Watch	156.30 mc/s.	156.30 mc/s.	F3	HX
"Inflot" (Shipping Agency)	156.80 mc/s.	156.80 mc/s.	F3	HX

A signal station is located at the Sochi lighthouse.

BERTHING: Tug assistance for vessels over 2,000 g.r.t. which enter or leave the port is compulsory.

A vessel intending to enter port with tug assistance should keep the Sochi mid-channel leading marks in line ahead and stop the main engines in due time to allow vessel to come to the state of "no motion" at a distance of 1 mile from the port entrance.

Only under these conditions is a tug allowed to approach a vessel and receive or cast off the tow rope.

A 5-ton crane is operated on the cargo berth. There are also truck-layer cranes with lifting capacity of 10 tons, diesel cranes and other cargo handling equipment.

FUEL: Not available.

FRESH WATER: Can be supplied by pipe-lines at nearly all berths.

REPAIRS: Not available.

TIME: GMT plus 3 hours all the year.

AUTHORITY: The Port of Sochi Authority.

AGENT: A branch of the port of Novorossiysk Main Maritime Agency "Inflot" at the port of Sochi. Postal address: 1 Voykov Street, Sochi, U.S.S.R. Cables "Inflot Sochi". Tel. 99-05-86; 996-62-70. Telex 128.

SUKHUMI: 42.59 N. 41.01 E. (See Plan)

GENERAL: A Black Sea passenger port Sukhumi is situated at the head of the Sukhumi Gulf, 2 miles E.N.E of the Sukhumi Point. The port is open for navigation all the year round. Both the port itself and the Gulf are open to winds blowing from the sea.

Several berths of the port are equipped to handle passenger traffic.

The port area is bounded on the S.W. by the line of the Sukhumi leading light marks, (bearing 105°–285°) extended up to the shore.

The port is visited by regular and cruise passenger vessels.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: A Pilot meets a vessel in the outer roads.

ANCHORAGE: Anchorages are situated in the outer roads on the Northern coast of the Sukhumi Gulf, opposite the mouth of the Beslet river.

A good anchorage can be obtained at the line of the Sukhumi leading light marks. Depths are from 12 m. to 50 m. The bottom is mud.

Master should watch carefully the Sukhumi leading light marks when approaching the anchorage and cast anchor only at the moment when the leading light marks are in line or some small distance closer to the shore.

At 2 cables length seaward of the leading line, the depths increase sharply and reach 130 m.

Whilst waiting for a berth vessel should lie at anchor at the line of the Sukhumi leading light marks. This anchorage is unsafe during gales blowing from the sea.

RESTRICTIONS: Vessels may enter or leave the port at any time of day or night.

MAX. SIZE: The max. permitted draft is 7.6 m., length 180 m.

RADIO: Ship-shore radio contact can be established via the port radio station Sukhumi Radio operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UFF	458 kc/s.	500 kc/s.	A1	H24
Sukhumi Radio	2,182 kc/s.	2,182 kc/s.	A3	H24
"Zarya (CPR)"* Port	160.95 mc/s.	156.35 mc/s.	F3	H24
	156.80 mc/s.	156.80 mc/s.	A3	H24
"Zarya" (Pilot Watch)	156.60 mc/s.	156.60 mc/s.	F3	H24

* CPR–Central Port Radio Station.

Storm signals are exhibited at a signal mast located on the roof of the Port Authority's office.

BERTHING: Vessels are not allowed to moor to berths during dense fog and in restricted visibility when navigational lights and the current indicator on the passenger berth are not visible. In this event vessel should anchor and disembark passengers in the outer roads.

When mooring, Master should bear in mind the direction of the current and the effect on the mooring angle of vessel.

By day, the direction of the current indicated by a sparbuoy located at the head of the passenger pier, and at night, by lights exhibited from the elevation of the front leading light.

A green light shown lower than the front leading light indicates Easterly current, and a red light, current of Westerly direction.

The rate of the current is usually determined by the Master himself.

Due to the constant influence of the current, mooring is usually effected without tug assistance.

There are no portal cranes on the passenger pier. Handling of cargo is done by the truck-layer cranes with lifting capacity of 10 tons.

FUEL: Can be supplied by lighters.

FRESH WATER: Supplied ex-shore.

TIME: GMT plus 4 hours all the year.

AUTHORITY: The Port of Sukhumi Authority.

AGENT: A branch of the Port of Batumi Main Maritime Agency "Inflot" at the Port of Sukhumi. Postal address: The Port of Sukhumi, U.S.S.R. Cables "Inflot Sukhumi".

TALLINN: 59.27 N. 24.45 E. (See Plan)

GENERAL: A Baltic seaport, Tallinn is situated in Tallinn Bay on the S.W. coast of the Gulf of Finland. Year-round navigation is possible. Tallinn Bay is usually frozen over in severe winters only. In the Winter months the port of Tallinn is kept open for navigation by ice-breakers. The tidal range in Tallinn Bay is of very small account. The difference of the water level in the Bay is due solely to the effects of the wind. A rise of the water about 0.4-0.5 m. from mean water level is observed during N.W. and Westerly winds. The fall of the water is caused by S.E. and Easterly winds. It usually reaches 0.2-0.4 m. below the mean water level.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Advise Agent of vessel's ETA 96, 48 and 24 hours before arrival. If the time of passage to the port is less than 48 hours, ETA should be given no later than 1 hour after departure from previous port.

Radio Agent 4 hours before arrival requesting a Pilot. Pilotage is compulsory, 24 hour service. Pilot boards at Western Tallinamadal bank, approximate position 59° 42′.5 N., 24° 38′.0 E.

International code signals may be used to call Pilot who will come out in a motor-boat as ordered by Agents on basis of Masters ETA. Pilot boat can be contacted on VHF Channel 16.

N.B. Vessels should proceed to Tallinsky Bay through the Northern Passage. The Straits of Sooripy are temporarily closed to navigation.

ANCHORAGE: Vessel awaiting Pilot may anchor in pilot boarding zone. The main anchorage for Tallinsky Bay is situated to the East of Tallinsky light and limited by a line connecting the following positions: 59° 28′.5 N., 24° 47′.1 E. 50° 28′.7 N., 24° 48′.8 E. 59° 28′.5 N., 24° 49′.1 E. 59° 27′.8 N., 24° 47′.7 E.

Anchorage is not protected from the seaward side, depths from 12.5 to 26 m. Anchorage is forbidden in other parts of Tallinsky Bay.

RESTRICTIONS: Entrance to the harbour inside the breakwaters is through the North or the South entrance. Maximum permitted draft for both entrances is 23 ft. At South entrance depths vary according to current and tide. Pilot will advise regarding depth available. At the Northern entrance a submarine cable is laid, and vessels passing through are required to have both anchors secured. Entry and departure can be effected by day and night. Movement of ships through both entrances is controlled by a signal exhibited at the head of the North pier.

MAX. SIZE: Vessels up to 23 ft. draft can enter harbour. Tankers with cargo to discharge are limited to maximum length 100 m. Vessels arriving for bunkering or supplies are not required to enter harbour.

HEALTH: International quarantine signals to be used on arrival. No later than 6 hours before arrival at the inner area Master should radio Agents giving full details of state of health on board, and requesting pratique which will be given on arrival.

RADIO: All vessels when approaching the Port of Tallinn should establish radio contact via Tallinn Radio port radio station which operates 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UNS	500 kc/s.	500 kc/s.	A1	H24
UAH	6,485 kc/s.	6,276.75 kc/s.	A1	H24
UAH	8,476 kc/s.	8,369 kc/s.	A1	HX
	12,723 kc/s.	12,541.5 kc/s.		
	17,077 kc/s.	16,732 kc/s.		
Tallinn Radio	2,182 kc/s.	2,182 kc/s.	A3	H24
"Tallinn Port" (Port Control)	156.80 mc/s.	156.80 mc/s.	F3	H24
	156.45 mc/s.	156.45 mc/s.	F3	H24
"Portnadzor" (Harbour Master)	156.80 mc/s.	156.80 mc/s.	F3	H24

Vessels entering and leaving the Old Harbour should watch signals exhibited at the signal station situated at the Northern Gates (the North Entrance) to the port.

TUGS: Tugs assistance available for berthing subject to Pilots advice. Tugs can be ordered through Agents. Ship's lines normally used. When tugs are ordered in advance the cost will be charged to the vessel whether tugs are used or not.

BERTHING: Vessel will not be allowed to berth unless main engines and steering mechanism are in good working order. All vessels in port are required to fly their national flags between 0800 hrs. and sunset. On holidays and special occasions vessels may be expected to dress their ships if requested by Port Authorities.

The berths of the port with depths alongside up to 8.25 m. are equipped to handle general bulk and liquid (chemical products) cargoes, sugar, cement, metals, foodstuff, etc., as well as passenger traffic. Covered warehouses with mechanical equipment and concrete floor sheds are available.

STEVEDORES: Arranged by Agent on basis of Master's ETA. Loading and unloading is carried on throughout 24 hours a day including holidays.

Loading and unloading is usually done by shore mobile electric cranes of up to 10 tons capacity, by floating cranes of up to 100 tons capacity and by other cargo handling equipment.

TANKERS: Tankers moor at berth No. 19, length 207 m., depth alongside 9 m. No slop facilities available. Tankers are normally required by the charter party to reserve a slop tank on board. Discharge of tank washings prohibited within 100 miles of the coast.

FRESH WATER: Supplied by pipe-lines at all berths.

FUEL: Bunkers are available and can be taken from the quays or delivered by lighters.

FIRE PRECAUTIONS: Masters of tankers are presented with a copy of Safety Regulations by the Agent on arrival.

GANGWAY/DECK WATCHMEN: Compulsory to maintain a gangway watch by ship's crew.

OPENING/CLOSING HATCHES: Normally opened and closed by ship's crew. In bad weather hatch covers are put on by stevedores.

CERTIFICATES: At first Russian port of call, certificates of tonnage and those required by international convention will be required for examination.

CUSTOMS ALLOWANCE: No restrictions on crew's consumption of tobacco and alcohol on board. It is forbidden to take these items ashore.

CONSULS: No local representation.

REPAIRS: Only minor repairs may be effected at machine shop ashore.

TIME: GMT plus 3 hours all the year round.

HOLIDAYS: All holidays are worked by stevedores.

TELEPHONES: Connection on board vessels can be made free of charge at berths number 7, 8, 9, 10, 13, 14, 15 and 16.

AUTHORITY: Tallinn Sea Port.

AGENT: "Inflot", 7, ul. Uus-Sadama. Telephone: 48825, 48512. Telex: 107. Cables: "Inflot", Tallinn.

TUAPSE: 44.06 N. 39.04 E. (See Plan)

DESCRIPTION: The port of Tuapse is situated between the mouths of the rivers Tuapse and Pauk at the head of Tuapse Bay and on the Caucasian coast of the Black Sea. Year-round navigation.

The port is protected by the Western, S.W. and Pervomaisky breakwaters and by the Southern mole.

The Western part of the port, called the Old Port, is used by fishing trawlers, and the Eastern part of the New Port by cargo vessels.

The entrance to the port, about 220 m. wide, is situated between the heads of the S.W. breakwater and the Southern Mole.

A part of the port area bounded by the shore and navigational marks is considered as the port inner roads.

Despite the fact that the harbour is protected by breakwaters and a mole, lying in the port is not always safe due to heavy waves caused by Southerly gales.

Waves may roll over the breakwaters when strong winds blow and may cause heavy swell in the harbour.

During strong winds blowing from directions between the S.E. and N.W. and, at times, even without winds, lying in the port is dangerous due to strong variable current with surge (called "Tyagun"). In this event vessels are recommended to leave the port for the sea.

Changes in the water level in the port area are caused by the effects of the wind. Maximum range of the water level observed is 0.6 m.

Also, the changes in the water level may be caused by variation in atmospheric pressure ("Seish" effect), which may last from a few minutes up to several days.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Vessels wait for Pilot at anchorage. Compulsory in and out. Master to advise Port Controller and Inflot Agency ETA, 96 hours in advance (confirm 4 hours before arrival; 2 hours before, apply for entry permit), description of cargo, location and weight of heavy lifts, number of passengers, ships draft, length and services required.

Pilotage is effected, in turn, in accordance with sequences of vessels orders received by the "Port Control".

In the event of bad weather (wind Force 6 and over) when Pilot is unable to board vessel in the outer roads, Master should either lie at anchor or wait with engines working at speed ensuring safety of the vessel until weather improves.

ANCHORAGES: Available in depths up to 23 m. Vessel arriving at anchorage should inform time anchored, time required for deballasting ashore, overall length, deepest draft as per seasonal marks, and await berthing orders. Despite jetties and breakwater, anchorage not always secure since S.W. winds bring confused swell or variable current with surge called "Tyagun", during which vessels sometimes swept from moorings. Advisable put to sea during strong S.W. winds and "Tyagun".

Area No. 142 prohibited for anchorage and fishing, is situated opposite entrance to Tuapse Bay. Borders of the area are shown on charts.

There are two anchorages situated in the outer roads S.W. of the S.W. breakwater. Depths there are from 13.6 to 24 m. The bottom is fine sand and shell.

The outer roads of the port extend S.W. of the breakwaters up to the border of area No. 142. The outer roads are bounded on the South by the meridian of the base of the Southern Mole.

During winter, all vessels lying at berths should constantly be ready to leave the port for sea after having received a storm warning.

RESTRICTIONS: There are no time restrictions for entry to the port.

The entrance channel, 100 m. wide starts at 0.9 cables length off the Western side of the head of Pervomaisky breakwater and extends to W.N.W. for 2.7 cables length. The depth in mid channel, all the way through, is 13.7 m.

Every vessel should lie at anchor in the outer roads whilst waiting for Pilot and mooring berth.

Every Master when navigating along the leading line and in the inner roads, should proceed at moderate speed ensuring the manoeuvrability of vessel.

MAX. SIZE: The max. permitted draft for entry to the port is 12 m.

HEALTH: Sanitary officer boards on arrival or when berthed. No automatic pratique.

RADIO: Ship-shore radio contact can be established through the port radio station Tuapse Radio operating 24 hours a day on the following frequencies.

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UVW	430 kc/s.	430 kc/s.	A1	H24
"Tuapse Radio"	2,182 kc/s.	2,182 kc/s.	A3	H24
"Firma" (Port Control)	156.70 mc/s.	156.70 mc/s.	F3	H24
	161.80 mc/s.	157.20 mc/s.	F3	H24
"Lotsman" (Pilot Watch)	156.60 mc/s.	156.60 mc/s.	F3	H24
"Inflot" (Shipping Agency)	156.80 mc/s.	156.80 mc/s.	F3	H24

Entry permit and Pilot should be asked for by radio through the "Port Control" 2 hours prior to approaching the port.

TUGS: Compulsory. Ship's lines.

BERTHING: Berthing at any time. 14 berths with depths up to 10.8 metres. Mooring can be effected during winds up to Force 6. Cranes of up to 10 tons capacity are operated alongside the quays and by the warehouses. There are Floating cranes and other cargo handling equipment, intra-port transport included.

Opening and closing of hatches is usually done by the ship's crew if not otherwise stipulated in a Charter Party.

Loading and/or unloading of cargo is usually done by shore cranes.

RADAR/VHF: VHF only. Channel 16. Communication with Inflot on VHF available. Business radio messages from vessels at anchorage also permitted. International radio watch should be kept by vessels at anchorage for business purposes.

MEDICAL: All patients to visit polyclinic on weekdays only, to be reported by Masters to sanitary doctor on arrival.

DENSITY: 1010/1015.

FRESH WATER: Available from any berth. Boiler water can be delivered by barges to the outer roads.

FUEL: Only heavy fuel oil and gas oil. Available at oil berths. Also available ex-lighters. Masters giving 48 or at least 24 hours notice.

FIRE PRECAUTIONS: Smoking strictly prohibited on all decks of any vessels moored to oil piers. Naked lights and flashlights strictly prohibited. No work that can produce a spark is allowed.

During bad weather essential shore leave should be granted only to limited part of staff and crew to ensure that sufficient crew on board at all times to shift vessel at short notice in case of emergency.

Plug holes. Flame arresters must be placed in all plug holes during loading; and all scuppers must be plugged.

When receiving bunkers remember that in all cases orders to stop pumping oil upon completion of bunkering should be given from ship with 5 or 10 minutes standby notice to pier workmen.

GANGWAY/DECK WATCHMEN: Not required.

CUSTOMS ALLOWANCE: No restrictions.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: All kind of repairs for vessels of up to 10,000 d.w.t. can be carried out.

Main engine should not be immobilised when alongside berth without special permission by Harbour Master through Agent.

REPATRIATION: Possible in emergency.

AIRPORT: 5 hours by train.

TIME: GMT plus 3 hrs.

HOLIDAYS: 1st January, 8th March, 1st, 2nd May, 9th May, 7th, 8th November, 5th December.

TELEPHONES: Only available for tankers.

GENERAL: Ballast: No ballast water, clean or dirty, to be pumped overside in Roads and in harbour. Deballasting into shore storage compulsory and cost and time for Ship's account.

Photographing: Photography within harbour or installations, railway bridges, etc., except regular views in town, prohibited.

Ratguards: All mooring lines should be provided with ratguards immediately upon mooring, otherwise fine is imposed without notice.

Smoke: The emission of dense smoke from vessel's funnel in harbour is prohibited and subject to fine without notice, as well as sparking from funnel.

Boats: Vessels not allowed to use their boats, while at anchorage, and swimming prohibited. Gangways should be lowered only for officials.

Intoxicated seamen not allowed on oil piers and medical attendance to them is rendered by Sobering Station for special charge.

No articles should be taken from and to ship without Custom's permission. No import or export of Soviet currency is allowed.

Painting of shell plating is allowed in daytime and only from quay.

No garbage or refuse should be thrown overboard, and all outlets facing quay to be closed or protected by shields.

SERVICES: Compass adjusting.

SHORE LEAVE: Crew allowed ashore to midnight. Master no restrictions.

AGENT: Maritime Agency "Inflot". Telex: 865. Tel: 322,427. Postal address: 25 Gagarin Street, Tuapse, Krasnodarsky Krai, U.S.S.R. Cables: "Inflot Tuapse."

VENTSPILS: 57.24 N. 21.31 E. (See Plan)

GENERAL: A Baltic Sea port, Ventspils is situated at the mouth of the Venta river. Navigation is all year round.

There are periodical alterations in the water level of the Venta river, chiefly due to the effects of the wind. The rise of the water level is usually due to moderate Westerly winds, and the fall is caused by Eaeterly winds.

The maximum rise of the water level in the Venta river is at the time of Spring floods.

The port of Ventspils area includes the Avantport and the Commercial port. A fairway, 330 m. wide, leads to the port from seaward. The draft of vessels passing through the fairway should not exceed 9.4 m.

Vessels with drafts over 9.4 m. leave the port by another fairway, depth 11.4 m., width 80.0 m., which branches off the approach fairway at a distance of 3 cables to the N.W. from the entrance to the Avant-port, and extends in true line bearing 306.5° up to mid-channel Receiving light-buoy No. 2.

Vessels can enter the port by this channel only after having obtained the Harbour Master's permission.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Vessels approaching port apply for Pilot through Maritime Agency "Inflot" (Telegr. Inflot Ventspils, Telex 86122, Tel. 6213, 51369 or by R/T on 2182 kc/s., or on Channel 16 short range VHF), reporting 96 hours, 48 hours and 24 hours and 4 hours ETA. Pilotage compulsory for all merchant vessels. Pilot boat has word "Pilot" painted in large letters on each side and carries a pilot flag or signal at masthead. Sound signal for Pilot is "G". Pilot boat has radio telephone, Channel 16 short range VHF. Pilot taken on board in area of anchorage. In bad weather Pilot can board inside of breakwater by prior arrangement with Harbour Master through Inflot.

Pilot service is available by day and night. Pilot usually boards a vessel at Ventspils Reception Buoy No.1.

ANCHORAGES: The Avant-port is protected by the Northern and Southern moles. The anchorage in the Avant-port, with depths from 3 to 10 m., is not safe during strong Westerly winds.

Recommended anchorages for vessels with medium drafts are situated at a distance of 3-4 miles Westward of the port of Ventspils. Depths are from 15-18 m. The holding ground (sand) is good.

RESTRICTIONS: Vessels exceeding 140 m. length and 25 ft. draft enter harbour with Pilot on board only in daytime.

A valid ice-class certificate is required for entry to the port when the fairway is covered with ice.

When proceeding along the fairway and in the Venta river from the entrance to the Avant-port up to the railway bridge speed not to exceed 5 knots.

MAX. SIZE: Length 220 m. and draft 36 ft. for Tankers, and 180 m. length and 29 ft. draft for other ships. Breadth not limited.

HEALTH: Pratique obtainable after mooring. Sanitary Inspector visits vessel after mooring together with Immigration and Custom House Officer. If medical care required the Sanitary Inspector has to be informed.

RADIO: Radio contact should be established via the Ventspils Radio port radio station which operates 24 hours a day on the following frequencies;

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UNI	500 kc/s.	500 kc/s.	A1	H24
"Ventspils Radio"	2,182 kc/s.	2,182 kc/s.	A3	H24
"Ventspils Radio"	156.8 mc/s.	156.8 mc/s.	F3	H24
"Nadzor" (Pilot Watch)	156.8 mc/s.	156.8 mc/s.	F3	H24

Vessels' traffic both in the roads and in the harbours is controlled by signals exhibited at the Signal Station located on the Pilot tower, at the base of the Southern mole.

TUGS: Tugs normally join vessel inside breakwater using ship's lines only. Masters must order tugs in the following circumstances.

1. When a vessel is in ballast and her length is over 120 m. or when a vessel is fully loaded and her length is over 100 m.

2. Master of a fully loaded vessel, the length of which is less than 100 m., or in case of a vessel laden with ballast when her length is less than 120 m., should order tugs in accordance with the Pilot's recommendation, weather conditions and the vessel's manoeuvrability.

3. As a rule, Masters should order two tugs when mooring at a berth.

Normally tugs join vessels within the port.

BERTHING: The commercial port is situated along the Venta river front and extends for about 2 miles up to the mouth of the river. The width of the mouth is about 100 m. Depths in the Commercial port area are from 6 to 10 m. The river becomes wider farther up from the mouth and reaches 150 m. in the area of the town of Ventspils.

There are two harbours – Rybnaya (Fish Harbour) and Zimnyaya (Winter Harbour) on the left bank of the river at 3 cables length from the mouth.

Berths with depths of up to 11.5 m. are equipped to handle general, bulk (coal, minerals, building materials) and liquid (oil, oil products), cargoes, timber, metals, etc.

There are enclosed warehouses, open concrete floor sheds and a grain elevator.

Quays are equipped with electric cranes of up to 45 tons capacity. There are floating cranes of up to 100 tons capacity, pipe lifters and other cargo handling equipment and machinery.

Opening and closing of hatches is normally done by the ship's crew.

STEVEDORES: Master's and/or shipowner's information of cargo details, stowage – especially for ships with inward general cargoes – is required in proper time. Information has to be addressed to Inflot Ventspils.

MEDICAL: Hospital facilities available. Advance notice desirable, however depends on kind of sickness. Particular inoculations, vaccination/fever certificates etc. not required.

TANKERS: All grades oil loaded by shore loading hoses in diameter of 200, 250, 280, 300 and 350 mm. Total 4 berths all fitted with deballasting installation for slops. Max. draft from 30 up to 36 ft.

DENSITY: In port about 1,002.

FRESH WATER: Fresh water available, delivered from shore or by barge. Min. for 15 tons vessels are charged if supplied by barge.

FUEL: All grades available subject to prior inquiry. Bunkers can be taken from the oil-jetty or supplied by lighters.

GANGWAY/DECK WATCHMEN: Service of watchmen recommended; however, Captain's option.

OPENING/CLOSING HATCHES: Opening and closing of hatches normally is carried out by crew; however, at the Master's request may be carried out by shore men.

CERTIFICATES: Required to be on board:

Intern. Tonnage.
Intern. Class.
Load-line.
Safety Equipment.
Intern. Radio.
Certificates of Deratisation.

CUSTOMS ALLOWANCE: There is no restriction for crew use and bond locker is not sealed.

IDENTIFICATION CARDS: Seaman's Book required.

CONSULS: No Consulates.

REPAIRS: Small deck and engine repairs can be carried out.

DRY DOCKS: None.

REPATRIATION: Repatriation of crew left behind a vessel in hospital is arranged by other tramp-ships with Captain's consent. No facilities exist for effecting crew changes.

TIME: GMT plus 3 hours. No alterations during year.

HOLIDAYS: 1st January (New Year's Day); 8th March (International Women's Day); 1st and 2nd May (May Day Holidays); 9th May (Victory Day); 7th and 8th November (The Great October Socialist Revolution Day); 5th December (The U.S.S.R. Constitution Day). Cargo work never stopped on Holidays.

POLICE/AMBULANCE/FIRE: If required have to be ordered through Maritime Agency "Inflot".

TELEPHONES: No arrangements exist for placing telephones on board.

SERVICES AVAILABLE: Tankers' deballasting installation for slops; service for radar and VHF repairs; compass adjusting; workshop for ordinary deck and engine repairs; ship chandler service; bunker supply.

SHORE LEAVE: Crew members allowed ashore.

SHIPMASTER'S REPORT: (March, 1976):

Anchorages:

Tanker: bounded by positions,

57° 28.4′ N.	21° 27.3′ E.
57° 29.7′ N.	21° 29.2′ E.
57° 28.2′ N.	21° 31.2′ E.
57° 27.2′ N.	21° 29.3′ E.

Cargo:

57° 25.3′ N.	21° 26.8′ E.
57° 28.0′ N.	21° 26.4′ E.
57° 26.1′ N.	21° 29.0′ E.
57° 26.7′ N.	21° 25.8′ E.

Buoyage:

No. 2 B.W. Conical Fl. 5 sec. (Approx. pos. 57° 25.7′ N. 21° 29.85′ E. to be expunged.

New Buoys:

No. 2 Fl.W. 5 sec. Pos. 57° 25.6′ N. 21° 28.3′ E.
No. 3 Fl.W. 3 sec. Pos. 57° 24.1′ N. 21° 30.65′ E.
No. 4 Fl.R. 3 sec. Pos. 57° 25.16′ N. 21° 30.82′ E.′ In harbour; No. 4 Fl.R. Con. and Red Conical Buoy about 2 cables E × S to be expunged.

Oil Piers: 3 in number.
No. 1 pier, berths Nos. 28 and 29 light outer end Qk. Fl.W.
No. 2 pier, berths Nos. 30 and 31 light outer end Qk. Fl.Or.
No. 3 pier, berths Nos. 32 and 33 light outer end Qk. Fl. Blue.

Depths alongside:		
	Berth 28:	10.0 m.
	Berth 29:	10.5 m.
	Berths 30/33	11.5 m.

After dredging in channel is completed to 12.5 m., depth at berth 32 and 33 will be 12.5 m.

Oil Pier No. 3 (Bearings, distances and positions here not confirmed). Existing dock face continued 24.5° approx. 1,100 ft. to join Northern breakwater.

No. 3 runs 283° for 1,100 ft. from position 24.5°, 2,000 ft. from Fl. R.Lt. in 57° 01′ N. 21° 33.5′ E.

Northern Breakwater: Inner extension from pos. 57° 24.69′ N. 21° 32.2′ E. 012° for 890 ft. to join main breakwater.

Under Construction: 3 berths for Petro-chemical industry along inner face of Northern breakwater, depth alongside to be 12.5 m.

Small harbour beside Pilot station, Southern side, completed and in use by small craft and fishing vessels. Small repairs in operation. Depth said to be 3.5–4 m.

Port operation in foggy weather said to be controlled by radio and millimetre (aircraft) type radar installation, one scanner of which is situated on tower near root of Southern breakwater.

Tugs: Alleged that 5 are available; 1 icebreaker type of 2,500 h.p. 2 medium size, and 2 small, 1 at least of which was propelled by Voith-Schnieder gear of about 750 h.p.

Pilots: To call Pilots, use Channel 16 and call Ventspils radio who make arrangements with harbour office and Agents (INFLOT).

During time vessel de-ballasting and loading; any problems can be resolved by call to Agents through Ventspils Radio.

Regulations: Fire Officers demand that suitable bonding wire be fitted (supplied by ship). No shore facility available.

Facilities: No. 1 pier has (building) tower crane for handling hoses. Nos. 2 and 3 berths are fitted with loading arms hoses and towers. Fresh water available. Bunker fuel available but not necessarily Marine Diesel.

Cargo Berths: There are believed to be 8 dry cargo berths, within the river port area, some with cranes, suitable for general cargo, together with storage buildings. Refrigerated/chilled cargoes have been handled.

Max. Size: Pilot stated that tankers of up to 60,000 tonnes displacement were possible at present, and that after dredging it should be possible to take up to 100,000 tonnes displacement.

To contact Agents, call Ventspils radio on Channel 27 and they make arrangements.

AUTHORITY: The Port of Ventspils Authority.

AGENT: The Port of Ventspils Martime Agency "Inflot". Postal address: 18 Dzintaru Street, Ventspils, U.S.S.R. Cables: "Inflot Ventspils". Tel. 6-12-13; 5-13-69. Telex: 122.

VOSTOCHNY: 42.44 N. 133.03 E.

New port being constructed. Log-loading berth understood to be in operation and a chip berth completed. Container and coal berths to be constructed and completion expected 1976–77, depths up to 17 m.

VYBORG: 60.43 N. 28.44 E. (See Plan)

For Saimaa Canal see Index.

GENERAL: A Baltic Sea port Vyborg is situated at the head of the Gulf of Vyborg in the N.E. part of the Gulf of Finland.

There are 2 harbours in the port: the Southern Harbour and the Harbour of the Vyborg Hydro-base.

The Southern harbour is situated on the Western side of the peninsula between Krepostnoy Bridge, at the Fortress of Vyborg in the North, and Smolyanoy Point in the West (Lat. 60° 43′ N., Long. 28° 44′ E.).

The Harbour of the Vyborg Hydro-base is situated 2.5 cables N.W. of Smolyanoy Point. It is protected by a "T"-shape pier.

The port is open for navigation from April up to the middle of December. Ice in the Gulf of Vyborg begins to form normally about the middle of November. The Gulf usually becomes frozen over by the middle of December and the last ice finally disappears in April.

Whilst tidal range in the Gulf of Vyborg is of small account, considerable changes in the water level may be caused by strong winds (up to 1.6), variation in atmospheric pressure (up to 1 m.), and the seasonal increase of the amount of water brought down from the land. The rise of the water level is usually caused by Southerly, S.W. and sometimes by Northerly winds. The maximum range of the water level in the Gulf is about 2.0 m.

The Vyborg Fairway (least depth 7.3 m.) leads from the entrance to the Gulf of Vyborg across the Transund roadstead up to the entrance of the Inner Vysotsky Roads. The Vyborg Sea Channel (least depth 6.1 m.) leads from the Inner Vysotsky Roads into the port, situated at the head of the Gulf. Both of these and the Fairway and the Channel, are open for navigation any time of day or night.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Pilot is ordered through "Inflot". Notice of arrival to be given 96 hours in advance and confirmed 4 hours before arrival. Pilot station "Vikrevoz" can be contacted on VHF Channel 16.

Vessels proceeding to the Port of Vyborg from the Gulf of Finland take Pilots at Vikhrevoy Island (Whirlwind Island), Lat 60° 34′ N., Long. 28° 27′ E.

Vessels proceeding from the port of Vyborg to the Gulf of Finland may take Pilots either at the Brusnichnoe Lock of the Gulf of Novinsky or at Maly (Small) Vysotsky Island, or in the Port of Vyborg, depending on the location of the place where a vessel's movement commences.

In the event of bad weather when a Pilot is not able to board or leave a vessel at Vikhrevoy Island, the position of embarkation or disembarkation may be changed to a point Eastward of the Island, with Master's consent.

In case a Master cannot embark or disembark a Pilot Eastward of Vikhrevoy Island, he shall:

(a) When approaching the port from seaward either lie at anchor or return to sea until the weather improves.

(b) While proceeding along the Vyborg Fairway or the Vyborg Sea Channel, lie at anchor in the area indicated by Port Control and wait for the time when a Pilot is able to board.

ANCHORAGES: There are several anchorages at Vyborg Fairway and at Vyborg Sea Channel areas.

These anchorages are bounded by the following points:

Anchorage No. 1. Large Transund Roadstead
(1) 60° 35′ 34″ N., 28° 30′ 18″ E.
(2) 60° 35′ 17″ N., 28° 30′ 54″ E.
(3) 60° 35′ 00″ N., 28° 30′ 21″ E.
(4) 60° 35′ 17″ N., 28° 29′ 43″ E.

Anchorage No. 2. Large Transund Roadstead
(1) 60° 36′ 54″ N., 28° 28′ 40″ E.
(2) 60° 36′ 31″ N., 28° 29′ 30″ E.
(3) 60° 36′ 05″ N., 28° 28′ 42″ E.
(4) 60° 36′ 29″ N., 28° 27′ 49″ E.

Anchorage No. 3. Small Transund Roadstead
(1) 60° 37′ 34″ N., 28° 31′ 40″ E.
(2) 60° 36′ 05″ N., 28° 32′ 30″ E.
(3) 60° 36′ 05″ N., 28° 31′ 42″ E.
(4) 60° 37′ 29″ N., 28° 30′ 49″ E.

Anchorage No. 4. South-eastward of the Sea Channel
(1) 60° 39′ 16″ N., 28° 36′ 52″ E.
(2) 60° 38′ 59″ N., 28° 37′ 28″ E.
(3) 60° 38′ 41″ N., 28° 36′ 54″ E.
(4) 60° 38′ 58″ N., 28° 36′ 18″ E.

Anchorage No. 5. North-westward of the Sea Channel
(1) 60° 40′ 56″ N., 28° 39′ 18″ E.
(2) 60° 40′ 46″ N., 28° 39′ 30″ E.
(3) 60° 40′ 41″ N., 28° 39′ 08″ E.
(4) 60° 40′ 50″ N., 28° 39′ 55″ E.

The holding ground in the anchorages is sand, mud, stone and clay. The depths are from 11 to 17 m.

RESTRICTIONS: Maximum permitted speed in the Vyborg Fairway and in sections No. 1 and No. 3 of the Vyborg Sea Channel is 6.5 knots. In other sections of the Vyborg Sea Channel and through the Saimaa Canal, the maximum permitted speed is 5 knots. (For Saimaa Canal, see Index.)

MAX. SIZE: The maximum permitted draft for entry to the port is 5.8 m., length 120 m. at mean water level. Vessels with draft exceeding 5.8 m. are allowed to enter port only after having obtained Harbour Master's permission.

HEALTH: International code quarantine signals to be shown on arrival. Vessels placed in quarantine will be instructed where to anchor by the Pilot station.

RADIO: Radio contact can be established through the Vyborg Radio port radio station operating 24 hours daily on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UNN	500 kc/s.	500 kc/s.	A1	H24
	444 kc/s.		A1	H24
Vyborg Radio (Port Control via CPR*)	156.8 mc/s.	156.8 mc/s.	F3	H24
Vyborg Radio (Pilot Service of the Saimaa Canal)	156.6 mc/s.	156.6 mc/s.	F3	HX
Ostrov Vikhrevoy (Whirlwind Island) Pilot Station.	156.6 mc/s.	156.6 mc/s.	F3	HX
Zaliv Novinskogo Gulf of Novinsky Pilot Station	156.6 mc/s.	156.6 mc/s.	F3	HX
Vyborg Radio (Inflot Agency)	156.8 mc/s.	156.8 mc/s.	F3	H24

* CPR – Central Port Radio Station.

Traffic in the Vyborg Sea Channel and Saimaa Canal is controlled by the signals exhibited at the signal masts located on the Northern side of Vysotsky Island and on the roof of the Gulf of Novinsky Pilot Station.

Every vessel whilst proceeding along the Fairways and the Channel must have VHF radio-telephone in good working order, being able to ensure a reliable radio contact with the port of Vyborg and between vessels. If a vessel is not equipped with VHF radio, a Master can hire a VHF portable radio-set from a Pilot station (via Pilot) for a fixed charge.

TUGS: Available, ordered through "Inflot".

BERTHING: Can only be effected with Pilot on board. Berths of the port with depths alongside of up to 8.25 m. are equipped to handle general and bulk cargoes, timber, etc., as well as passenger traffic. There are enclosed warehouses and open concrete floor sheds.

Berths are equipped with electric cranes of up to 10 tons capacity. There are floating cranes of up to 15 tons capacity and other cargo-handling equipment and machinery.

Opening and closing of hatches is usually done by the ship's crew, but if required it can be done by port labour for vessel's account.

MEDICAL: "Inflot" to be advised in advance if any medical attention required.

DENSITY: Salinity 5%.

FRESH WATER: Available. Can be supplied by pipe-lines at all berths or delivered by barges.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Usually opened and closed by crew. Can be operated by stevedores on request.

CUSTOMS ALLOWANCE: No control on board the vessel. It is forbidden to take alcohol off the ship.

REPAIRS: Minor repairs can be effected.

TIME: GMT plus 3 hours all year round.

HOLIDAYS: Cargo operations can be carried out on all holidays.

TELEPHONE: Connection to vessels is not possible.

SHORE LEAVE: Permitted subject to police control.

AUTHORITY: The Port of Vyborg Authority.

AGENT: The Port of Vyborg Maritime Agency "Inflot". Postal address: Inflot, PO Box 40, Vyborg, U.S.S.R. Cables "Inflot Vyborg". Tel. 12-86,37-33. Telex 521.

YALTA: 44.30 N. 34.10 E. (See Plan)

GENERAL: An ice-free Black Sea passenger and commercial port, Yalta is situated at the head of Yalta Bay and on the Southern coast of the Crimea Peninsula.

The port is open for navigation all the year round.

The port is formed by a harbour protected by a mole. Depths in the harbour are up to 10 m.

Yalta is mainly a passenger port, but it is equipped to handle dry cargo vessels.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Pilot meets vessel in the outer roads, at a distance of 1 mile S.E. of Yalta lighthouse.

ANCHORAGES: Vessels can obtain anchorage at a distance of 1-2 miles, bearing 180 m. to 20 m. Holding ground is good.

The port outer roads are situated in Yalta Bay S.E. and Southerly of the port entrance. They are open to winds blowing between E.N.E. and S.W. At times vessels may be turned broadside to waves caused by Southerly winds.

A good anchorage may also be obtained at 5.5 cables length S.S.W. off the head of the New Mole with depths from 15 m. to 17 m. The bottom is mud.

RESTRICTIONS: Vessels may enter or leave the port at any time of day or night. Vessels entering or leaving the port must have keel clearance of not less than 0.2 m.

MAX. SIZE: Permissible draft is 9 m., length 215 m.

RADIO: Ship-shore radio contact can be established through the port radio station Yalta Radio operating 24 hours a day on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UCO	500 kc/s.	500 kc/s.	A1	H24
Yalta Radio	2,464 kc/s.	2,100 kc/s.	A1	HX
Lazur (Port Control)	156.80 mc/s.	156.80 mc/s.	F3	H24

BERTHING: Cranes of up to 7 tons capacity are operated along cargo quays.

Handling of cargo at the passenger terminal is usually done by ship's cargo gear. A 5-ton shore crane may be ordered, if necessary.

TUGS: Tug assistance for mooring is compulsory. Masters of vessels entering the port must order at least 1 tug when mooring.

Masters of deep-drafted vessels must order a tug-boat when unmooring from berths Nos. 1, 3 and 5 if it is impossible to leave berth by drifting with the assistance of off-shore blowing wind.

FUEL: Not available.

FRESH WATER: Can be supplied by pipe-lines at all berths.

REPAIRS: Not available.

TIME: GMT plus 3 hours.

AUTHORITY: The Port of Yalta Authority.

AGENT: A branch of the Port of Odessa Main Maritime Agency "Inflot" at the Port of Yalta. Postal address: 5 President F. D. Roosevelt Street, Port of Yalta, U.S.S.R. Cables "Inflot Yalta". Tel. 2-46-91. Telex 815.

ZHDANOV: 47.06 N. 37.35 E. (See Plan)

GENERAL: A sea port of Azov port, Zhdanov is situated 14 miles Northward of the entry into the Taganrog Gulf, at the Western end of it and at the mouth of the Kalmius river.

All-year round navigation is possible but during 30-90 days period of ice conditions with ice-breaker assistance for ice-strengthened vessels only.

Ice usually begins to form at the end of November or the beginning of December, and 3-4 weeks later the Gulf becomes completely frozen over. The increase of fast ice usually lasts up to the first half of February. As a rule the ice usually breaks up in the middle of March. It finally disappears at the end of March or, as an exception, in the first half of April.

The port of Zhdanov consists of the Outer and Inner Roads, the Ugolnaya (or the Coal) Harbour, the Grain Harbour, the Ship-repairing Basin, the Schmidt Harbour at the mouth of the Kalmius River, and the port of Azovstal situated Eastward of the mouth of the river.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Inform Kerch Harbour Master ETA 96, 24 and 6 hours, off Kerch Strait. On arrival Kerch Pilot Buoy No. 21 (Lat. 45° 13′ 37″ N. Long. 36 ° 27′ 45″ E.), drop anchor and await Pilot; also keep continuous radio watch. 48 hours prior arrival, advise Port Controller and "Inflot" Agency, ETA description and quantity of cargo, location and weights of heavy lifts (if any), number of passengers, draft and length, and declare services required, 24 hours at latest but giving more precise information 4 hours prior to arrival at mouth Zhdanov canal. Entering and sailing day and night.

Not later than 4 hours prior to arrival at the mouth of the Coal Harbour approach channel, buoy No. 16, a Master should order a Harbour Pilot.

ANCHORAGE: With protection from seaward by moles, the port is a safe anchorage. Outer Zhdanov Roads depth up to 8.2 m. Limits of Roads on Eastern side are meridian of Kosa Liapina (headland), on Northern side – the five m. isobath. At anchor in Roads Master should bear in mind that Roads are open to winds veering from N.E. via S. to S.W. and in Autumn the water level is subject to falls and rises on account of winds. The bottom holds anchors well. Inner Roads are within port's aquatorium and protected by dike erections.

RESTRICTIONS: Vessels can enter or leave the port at any time of day and night. All vessels entering or leaving the port should have keel clearance not less than 0.5 ft. (15 cm).

The max. allowed speed in the approach channels is 4.5 knots and in the part of the Coal Harbour approach channel, protected by a wooden dam, only 3 knots.

The speed of a vessel may be increased in case of necessity to keep her course along the leading line or prevent her drifting off the channel due to the effect of current or wind.

MAX. SIZE: Draft 7.7 m., length/breadth no restrictions.

HEALTH: After presenting Vaccination Certificates free pratique obtained. After proceeding from one port of U.S.S.R. to another free pratique obtained automatically.

RADIO: Vessels approaching the port of Zhdanov should establish radio contact through Zhdanov Radio port radio station operating 24 hours daily on the following frequencies:

Call sign	*Working*	*Calling*	*Type of transmission*	*Time*
UDC	500 kc/s. 416 kc/s.	500 kc/s.	A1	H24
UBN	12,732 kc/s. 17,085 kc/s.	12,550 kc/s. 16,734 kc/s.	A1	HX
UBN	22,616 kc/s.	22,247.5 kc/s.		
UBN	8,620 kc/s.	8,363 kc/s.	A1	H24
Zhdanov Radio	2,182 kc/s.	2,182 kc/s.	A3	H24
Port Control	156.45 mc/s.	156.80 mc/s.	F3	H24
Port Nadzor	156.70 mc/s.	156.80 mc/s.	F3	HX

RADAR: The port of Zhdanov radar station gives all possible information to any vessel navigating along the Coal Harbour approach channels in the restricted visibility and during the absence of the floating navigation marks.

Radar navigation is controlled by a Pilot in charge.

Storm signals are exhibited at a signal mast located at the Dividing Pier.

TUGS: Available. Use ship's lines. Tug assistance for shifting berths is compulsory. Number of tugs to be ordered shall be advised by Pilot.

BERTHING: The berths of the port with depths of up to 7.7 m. are equipped to handle general, bulk and liquid cargoes, timber, metals, food stuff, fruit, vegetables, etc., and passenger shipping as well. There are enclosed warehouses, open concrete floor sheds and a grain elevator.

On the quays there are electric cranes of up to 15 tons capacity, coal and grain loaders. There are floating cranes with lifting capacity of up to 100 tons and other cargo handling equipment.

The Grain Harbour is bounded by two piers – by the Dividing Pier from S.W. and by the Eastern Pier from N.E.

It is protected from S.E. winds by the Inner Roads Breakwater. There are numerous piles and dolphins along the Eastern Pier. The depths in the central part of the Grain Harbour are from 8.7 m. to 9.1 m.

The Schmidt Harbour is situated at the right bank of the mouth of the Kalmius River, at the S.E. outskirts of the town of Zhdanov. It is used by small vessels. The access to the Schmidt Harbour is by an approach channel dredged in the coastal shoal water. Navigation along the channel is ensured by leading lights.

Storm signals are shown at the station situation Southward of the entry to the Schmidt Harbour.

The Coal Harbour approach channel is the main fairway for entry to the port of Zhdanov. It passes through a coastal shoal then enters the Southern part of the Coal Harbour.

Navigation along the Avant-port and the Coal Harbour approach channels is also ensured by leading lights, light buoys and spar buoys.

The access to the port of Azovstal is by a channel branching off N.E. of the Coal Harbour approach channel.

MEDICAL: Masters to advise by radio prior arrival of medical attendance required on board. Hospital facilities available. Vaccination Certificates to be presented.

DENSITY: About 1005.

WEATHER: Changes of the water level in the Taganrog Gulf are caused by strong winds and variation in atmospheric pressure ("Seish").

Rise of water level is due to S.W. winds. Fall of the water level is usually caused by Easterly and N.E. winds. Range of water level is about 1 m.

Max. range of water level due to variation in atmospheric pressure observed in August is about 0.6 m. The "Seish" usually starts in calm weather and may last for several days.

FRESH WATER: Delivered at berth. Also delivered by lighters.

FUEL: Only heavy fuel and gas oil available. Supplied from the quays, and also delivered by lighters.

OPENING/CLOSING HATCHES: Crew allowed open and close, stevedores placing beams.

CERTIFICATES: Registered Tonnage Certificates required.

CUSTOMS ALLOWANCE: No quantity restrictions. Nothing to be taken ashore.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: The ship-repairing Basin is situated in the Northern part of the Inner Roads. It is bounded on the S.W. by the Eastern Pier and on the East by the Eastern Dam. The entrance to the Basin is situated between the heads of the Eastern Pier and the Eastern Dam. The depths in the Basin are from 6.1 m. to 9.9 m.

All kinds of repairs for vessels of up to 9,000 tons dwt. can be carried out.

DRY DOCKS: 2,500 and 5,000 tons.

REPATRIATION: All facilities for repatriation subject to visa formalities.

AIRPORT: 15 km. from port with regular airlines.

TIME: Local time GMT plus 3 hours.

HOLIDAYS: 1st January; 1st, 2nd, 9th May; 7th, 8th November; 5th December.

AMBULANCE/FIRE: Ambulance 025; Fire 01.

TELEPHONES: Can be placed on board.

AUTHORITY: Manager of Sea Trading Port Zhdanov.

AGENTS: Zhdanov Main Maritime Agency "Inflot" head office in port Zhdanov, branches in port Berdjansk and Kerch. Post address: Portovaya 99, Zhdanov, U.S.S.R. Tel. 3-95-271, 3-95-415. Cables: Inflot. Telex: 195.

NOTES

Please also advise Shipping Guides (Services) Ltd.

United Arab Emirates

ABU AL BU KHOOSH: 25.26 N. 53.08 E. (See Plan)

LOCATION: The terminal is bounded by the following co-ordinates South of Sassan Oil Field.

(a) 25.31 N. 53.05 E.
(b) 25.29 N. 53.12 E.
(c) 25.26 N. 53.05 E.
(d) 25.26 N. 53.12 E.

Anchoring is prohibited within this area.

OPERATORS: Total ABK - Abu Dhabi. Telex AH 2347.

DOCUMENTS: Total ABK do not act as Agents. Vessels must have an Agent in Abu Dhabi in case of injuries or illness.

Early departure procedure: At the Master's option, he may, in order to expedite the turn-round of vessels and avoid undue delays caused by weather or other circumstances, use the early departure procedure. In this case Masters are requested to sign blank cargo documents.

Normally completed cargo documents required by the Master will be placed on board prior to sailing. If this is not possible without incurring delays of undue nature, the relevant documents will be airmailed to the Master to await the vessel's arrival at discharge port.

The official cargo, quantity loaded, will be transmitted by radio whilst unmooring. In the event of a dispute, the receipt of a letter of protest will be acknowledged by the Mooring Master.

Any protests by the Master concerning the quality of cargo should be made before departure and any resulting investigation should be made before the vessel sails.

Outward clearance: A tanker will be considered clear to depart Total ABK Terminal when the crude oil loading documents have been delivered to the Master, or in the case of E.D.P., clearance will be given through the Mooring Master.

Mail: Official ship's mail and the crew's personal mail will be handled by Total ABK and shipowner's debited accordingly.

PILOTAGE: Compulsory within the Terminal limits. Vessels to be moored at Total ABK Terminal will be boarded by a Total ABK Mooring Master in the anchorage area. The Mooring Master will advise the ship's Master on approaches to the storage tanker, mooring and unmooring, connecting and disconnecting hoses and all other operations within the Terminal area including all manoeuvring of the vessel. A qualified deck officer must be on watch at all times while the vessel is alongside the storage tanker.

ANCHORAGE: An area immediately South of Terminal limits is designated as the Anchorage Area, centred on position: 25° 26′ N., 53° 08′ E. This co-ordinate represents the centre of a circle with a radius of 0.5 mile which must be used by vessels requiring to wait at anchor. Anchoring within the Terminal limits is strictly prohibited.

NAVIGATION AIDS: The S.P.M. is fitted with a white light flashing the morse letter "U" every 30 seconds visible for a distance of 5 miles. A platform AK1 is situated in position 25° 29′ 30.5″ N., 53° 09′ 02.3″ E. and another in position 25° 29′ 37.5″ N., 53° 08′ 43.4″ E. which shows 2 flares in the N.E. direction (approximately) 10 m. and 600 m.

MAX. SIZE: Length 300 m., breadth 43.40 m. max. d.w.t. 150,000 tons. Max. size will probably be increased at some future date. Depth of water 30 m.

RADIO: Initial communication between vessels and Total ABK should be via Bahrain Radio (call sign GOU) which operates on a 24-hour basis. ETA in GMT to be sent 72, 48 and 24 hours prior arrival, through Bahrain Radio.

Communications within 60 miles of Terminal: Once ships are within 60 miles of ABK Terminal, communication may be established by radio telephone on International Marine VHF Channel 8. This frequency is monitored continuously.

Once contact has been made on Channel 8, further conversation should be conducted on either Channel 14 (156.7 mc/s), Channel 12 (156.60 mc/s) or Channel 6 (156.3 mc/s).

Communications after Total ABK Mooring Master has boarded: A Total ABK Mooring Master will board incoming tankers in the anchorage area and will bring with him portable VHF radio telephone units. From that time onwards, all and any communications between ship and the storage vessel will be conducted by the Mooring Master.

Radio transmissions for advice of tanker arrivals: Telegram to be sent by the storage tanker to the export tanker about 80 hours before her arrival:

Please advise your ETA in GMT 72, 48 and 24 hours before arrival to Total ABK Abu Dhabi, Telex AH 2347, via Bahrein Radio stop Cargo requirements stop Deballasting time if any stop Maximum loading rate acceptable stop Distance in metres from bow to manifold stop Flange dimensions of vessel's manifold connection stop 50 miles before arrival please contact terminal by VHF Channel 8 to receive berthing instructions stop Total ABK.

Mooring instructions: If vessels are obliged or instructed to anchor, they should do so in the recommended area about 3 nautical miles from the storage vessel.

READINESS: After arrival at the anchorage area and when the tanker is ready in every respect to load, the Master may tender his notice of readiness.

Notices of readiness will be accepted provided one or other of the following events shall have transpired: (a) the Master shall have received the Mooring Master on board, or (b) the Master shall have dropped anchor in the anchorage area.

Port closed: Notices of readiness will not be accepted during periods when the port is closed. The port is closed when the weather is such that it is too rough for incoming tankers to berth. The decision regarding the opening and closing of the port will rest with the ABK Terminal Superintendent or his deputy.

MOORING: Weather permitting, Total Abu Al Bu Khoosh Terminal operates only from sunrise to sunset, 7 days a week. Vessels moor port side to the storage tanker "Jaranda" equipped with 5 Yokohama fenders on her starboard side, which is moored to the S.P.M. Launch may assist in berthing vessels under the direct control and supervision of the Mooring Master.

Preparation for mooring: Vessels are requested to have, on their starboard side, a Pilot ladder and/or Pilot hoist or accommodation ladder safely and securely rigged for immediate use and long enough to reach the Mooring Master's launch. Vessels will provide a lee for the Mooring Master on the starboard side both when boarding and leaving.

For vessels with a freeboard of 30 ft. or more, the accommodation ladder shall be rigged out, lowered down so the platform is not more than 10 ft. from the water level and a short pilot ladder, rigged to cover the access to the platform. Tankers are requested to have ready on the forecastle, 2 head lines, polypropylene if possible.

Tankers are requested to have ready on the port side amidships a derrick rigged and ready to pick up the hoses (16 in. diameter).

Hoses: The hoses shall be hoisted by the storage tanker's crane, but connected by ship's crew. The Mooring Master will advise the ship's Officer in charge concerning lifting techniques.

LOADING: All communications relative to the loading of the vessel shall be routed through the Mooring Master who will remain in contact with the storage tanker constantly via portable VHF units. In case of temporary breakdown of the portable VHF circuit, contact may be continued on International Marine Channels 16, 14 or 8.

Failure of communications: Should all communications with the storage tanker fail, loading will cease immediately.

Emergency shut down: An emergency cessation of loading may be effected by use of the ship's VHF Channel 16.

Loading rates: Maximum loading rate will be 6,000 m.t.p.h.

Gases: ABK crude oil contains H_2S (sulphurated hydrogen). This gas quickly deadens the sense of smell so that a dangerous concentration cannot be detected by odour. During loading, gas should be vented off through the tanker's normal venting system. Personnel engaged in ullaging tanks should keep to windward and avoid breathing fumes as much as possible. Resuscitators, breathing apparatus and life-lines should be readily available.

Valve closure against high-speed loading; No valve which will stop or seriously impair or reduce the flow rate of oil from the storage tanker are to be operated without prior agreement with the Mooring Master. The practice of throttling back on the ship's cargo valves is to be avoided. If a lower rate is required, the storage tanker is to be advised and the pumping rate will be reduced to the required level. The Master will be held liable for any damage arising from the sudden cessation of flow caused by default of the ship. It cannot be over emphasised that to do so can be extremely dangerous and cause extensive damage to equipment.

BALLAST: Due to the exposed location of the crude oil loading berth, vessels are required to carry sufficient ballast for safe handling, having due regard to existing weather and sea conditions. A vessel found by the Mooring Master to be not adequately ballasted will be rejected.

Clean ballast; As there are no ballast discharging facilities, vessels must arrive at the Terminal with clean ballast, ensuring that all pipe-lines, pumps and strainers have been flushed out prior to arriving. The Mooring Master will inspect ship's ballast on boarding and has the power to reject any vessel that he thinks would cause pollution of the sea area, in which case vessel must proceed to sea and return only when ballast is completely free of oil. Any vessel rejected because of dirty ballast will automatically nullify its Notice of Readiness and will lose any priority of position for loading. Ballast discharge should not be commenced without the prior agreement of the Mooring Master.

Inspection during loading: At night the sea around the vessel shall be adequately lit, as frequent inspection by the Mooring Master will be made during the discharge of ballast. Any pollution whatsoever will be cause for rejection. Similarly, any hull leaks causing pollution during loading will be cause for rejection and the vessel will not be re-accepted unless satisfactory evidence of repairs has been certified by a qualified surveyor.

MEDICAL: Medical and dental services are not available at the Terminal. In emergencies requiring hospitalisation, the patient will be hoisted to the helideck on the storage tanker and flown by helicopter to Dubai or Abu Dhabi.

FRESH WATER, FUEL, ETC.: Bunkers, fresh water, stores, boats for hire, repair facilities, facilities for changing ship's crew are not available at the Terminal.

SHORE LEAVE: Not possible.

GENERAL:

Radio equipment: Radio, radar or other electric equipment must not be energised while the vessel is alongside the SPM except VHF radios, telephone and communications equipment approved by the Terminal.

Repairs; While berthed at the Terminal, the ship's boilers, main engine, steering machinery and other equipment essential for manoeuvring shall be maintained in a condition to permit the ship to move away from storage vessel at short notice. Repairs or other work which may immobilise the ship should not be undertaken without prior arrangement with the Terminal.

SHIPMASTERS REPORT: February 1977: The following information may be of value to other Masters:

a The holding ground in the anchorage is very bad, this vessel dragged her anchor (10 shackles out) in a Force 5 from the N.W.

b Only documents supplied on departure were Bills of Lading, no port clearance documents supplied.

c No Customs or Immigration Officials at terminal therefore no documents required.

d Storage tanker holds 80,000 metric tons. If any more oil is required vessel has to go back to anchor until storage tanker is ready again. She loads at 11,000 tons per day, from SPM.

DAS ISLAND: Abu Dhabi, 25.09 N. 52.52 E.

(See Plan)

Note: Shipping operations Das Island governed by Abu Dhabi (Port of Das Island) Regulation, 1963 (Queen's Regulation No. 2 of 1963). Owners recommended provide Masters in advance with copies of Regulations obtainable from H.M. Stationery Office.

DESCRIPTION: Das Island some 160 miles S.E. of Bahrain and is part of State of Abu Dhabi, largest of Arab Emirates. The Island is base for off-shore drilling and export of crude oil by Abu Dhabi Marine Areas Limited – ADMA.

DOCUMENTS:

Bills of Health for Ports visited on voyage.
2 Crew Lists.
3 Manifests (1 original and 2 copies).
1 International Maritime Declaration of Health.

APPROACHES AND PROHIBITED ANCHORAGES: Umm Shaif and Zakum drilling areas situated some 20 miles East and 48 miles S.E. of Das Island together with pipe-line to Das Island from Zakum field are marked on Admiralty Charts. Only selected towers equipped with lights, all other wellheads, drilling rigs and towers within drilling areas are unlighted. Wellheads in Umm Shaif field telemetered and controlled by microwave radio beams transmitted from radio tower on Das Island. Unburied pipe-lines from wellheads to Island also in this area and *it is essential* that vessels do *not* steam into or anchor in it. Cautions have been issued in Notices to Mariners warning vessels against entering both Umm Shaif and Zakum areas and against anchoring in vicinity of Zakum Pipe-line.

Southern Route. Vessels should normally approach port from South and must pass not less than 3 miles South of drilling rigs and towers in Umm Shaif area, thence towards S.E. corner of Island. Vessels must leave port by this route unless they have to use Northern buoyed channel.

Northern Route: Using N.E. Buoyed Channel.

Is via buoyed channel, recently re-routed, details of the buoy stations and positions are:

Buoy No.	*Colour and Daymark*	*Position:*	*Light Characteristic:*
1	Black Conical	25° 27′ 27″ N. 53° 23′ 12″ E.	Fl. W. ev. 5 secs.
2	Red Can	25° 25′ 49″ N. 53° 23′ 25″ E.	Fl. R. ev. 5 sec.
2A	Red Can	25° 24′ 49″ N. 53° 17′ 12″ E.	Gp. Fl. (2) R. ev. 10 sec.
3	Black Conical	25° 25′ 13″ N. 53° 12′ 21″ E.	Qk. Fl. W.
4	Red Can	25° 24′ 14″ N. 53° 12′ 43″ E.	Fl. R. ev. 2 sec.
5	Black Conical	25° 23′ 54″ N. 53° 10′ 26″ E.	Fl. W. ev. 5 sec.
6	Red Can	25° 21′ 52″ N. 53° 09′ 59″ E.	Fl. R. ev. 5 sec.
7	Black Conical	25° 20′ 35″ N. 53° 04′ 54″ E.	Qk. Fl. W.
8	Red Can	25° 19′ 09″ N. 53° 06′ 02″ E.	Fl. R. ev. 2 sec.
9	Black Conical	25° 14′ 12″ N. 52° 56′ 48″ E.	Gp. Fl. (3) W. ev. 8 sec.
10	Red Can	25° 14′ 49″ N. 52° 58′ 54″ E.	Fl. R. ev. 3 sec.
11	Black Conical	25° 09′ 47″ N. 52° 54′ 06″ E.	Fl. W. ev. 2 sec.
12	Red Can	25° 11′ 11″ N. 52° 55′ 07″ E.	Qk. Fl. Red.

In addition to the buoys in the channel an additional buoy has been established approximately 1.6 miles North of Jazirat Das to mark the oil flare pipe complex. Details are:

Flare	Black Conical	25° 11.5′ N. 52° 52.3′ E.	Fl. W. ev. 5 sec.

Northern Route – Approach Das Island from Northwards. Keeping 4 miles to Westward and 5 miles to Southward until arrival Pilot station situated 2 miles S.E. of Southern loading terminal. Beware of submerged wreck with least depth 35 ft. over it in 25° 04′ N. 52° 52′ E.

PILOTAGE: Berthing Master will undertake pilotage, berthing and unberthing of tankers save that Master shall remain solely responsible on behalf of owners for safety and proper navigation. Berthing Master will normally board vessels approaching Das Island by Southern Route approximately 2 miles S.E. of Southern extremity of Das Island. When approaching Das Island by Northern Route via buoyed channel Berthing Master will board from position 030° 3 miles from Das Island Light. If adverse weather prevents boarding in this position Berthing Master will board in lee of Das Island. Vessels requested not to navigate at greater distance than 1.5 miles off Das Island when passing through cautioned area Eastwards of Das Island where anchoring is prohibited.

ANCHORAGES: Main anchorage for dry-cargo vessels is in about 40 ft. of water, approximately 0.5 mile from Harbour South of tanker loading berth. Other anchorages for dry-cargo vessels lie to S.W. and West of the Island. Tankers should normally anchor approximately 1.5 to 2 miles S.E. of the Southern loading platform, should a berth not be immediately available.

Vessels should avoid anchoring in vicinity of submarine pipelines established to Eastward of Das Island.

Sea bed all round Island is rock, covered with a few inches of loose sand. Holding is poor and vessels are advised to pay out at least 60 fathoms of chain. Vessels at anchor, awaiting berths, lighters or any services provided by the port must at all times keep a listening watch using Channel 16 where possible. If a vessel is not equipped to operate on this Channel then any of the frequencies may be used by arrangement.

MAX. SIZE: No. 1 Tanker Berth is suitable for berthing tankers in ballast condition up to 90,000 Summer d.w.t. and when fully loaded up to 50,000 d.w.t. Minimum depth of water alongside the berth is 55 ft.

No. 2 Tanker Berth is suitable for berthing tankers in ballast condition up to 260,000 Summer d.w.t., fully loaded tankers of up to 130,000 d.w.t. and partially loaded tankers of up to 165,000 tons displacement with mean draft not exceeding 56 ft. Minimum depth alongside is 67 ft.

No. 3 Tanker Berth is suitable for berthing tankers in ballast condition up to 300,000 d.w.t. and with a loaded draft not exceeding 78 ft.

No. 4 LNG/LPG Tanker berth is suitable for berthing vessels up to 100,000 tons displacement with a mean draft not exceeding 47 ft.

Minimum depth of water alongside is 49 ft. The liquid part of the loading platform has 16 in. loading arm and an 8 in. bunkering point.

LNG loading rate 4,000 t.p.h. max. through 2 lines.
LPG loading rate 2,000 t.p.h. max. through 1 line.
Pentane Plus loading rate 2,000 t.p.h. through 1 line.
There are 7 mooring dolphins fitted with triple release hooks.
There are 6 berthing dolphins fitted with double release hooks.
Each hook being of 100 metric tons capacity.

WEATHER AND TIDE: Prevailing winds are from the N.W. The rise of the tide can be up to 5 ft., usual variation is 3 ft.

HEALTH: Vessels arriving at Das must carry the usual Bills of Health for ports visited on the voyage. Masters of vessels are requested to inform ADMA if there is any person ill on board or if there has been sickness within the week prior to arrival. Pratique is granted by the Port Medical Officer through the Berthing Master or Agency Clerk.

RADIO: Das Marine listens on VHF Channel 16.

Ship-to-Shore Radio communication from visiting vessels is channelled through Das Marine via. VHF Channels 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 and 22. All other communication other than terminal VHF should be directed through Bahrain's Cable and Wireless Station.

All vessels bound for Das Island should give 72 hours notice of ETA via. Cable & Wireless Bahrain.

Das Island Radio Mast: A new radio mast has been installed on Das Island.

Geographical: Latitude 25° 08′ 30.396″ N.
Longitude 52° 52′ 43.903″ E.

Red lights visible all round the horizon have been established on the top of mast.

A navigation light similar to that which existed on the old radio mast will eventually be installed on this mast.

The original radio mast on the N.E. corner of Das Island has been demolished.

Arrival Messages: In the event of difficulties this information should be transmitted to Das via the Cable Wireless Station at Bahrain. As soon as direct contact is established between a vessel and ADMA Radio Station, the latter will advise the route to be followed in approaching the Island.

Tankers when arriving to berth at the SBM from N.E. Buoyed Channel will receive from Das Marine a cable worded as follows: "Approach Das Island via. N.E. Buoyed Channel and when clear of Inner Buoys proceed direct to Pilot station situated 2 miles S.E. of South loading platform. Ship's derrick should be rigged on the portside. Advise soonest SWL of hose handling derrick or crane also confirm that you have a suitable fairlead forward of at least 14 in. all round clearance. Have ready on forecastle head one ships mooring rope, 120 fathoms in length. Ship's manifold should be ready to connect 2 × 16 in. BS cargo hose and 1 × 10 in. BS bunker hose.

Boat rope required along portside at manifold position. Accommodation ladder rigged starboard side. Mooring and hosing up by ship's crew. We request that cabin is available for Berthing/Loading Master who will remain on board throughout period in port. Mooring and hosing equipment is lifted on board when Berthing Master boards. Please ensure crew and port derrick ready and good lee is given. VHF Channel 16 available".

TUGS: Tugs provided by ADMA must be used by all tankers when berthing and unberthing.

BERTHING: Full power must be available on main engines during berthing operations. Berthing Masters will not berth vessels if not properly equipped with satisfactory mooring lines, or if deck appliances inoperable, or if steering gear, telegraphs and whistles not in an efficient condition. Master should notify Berthing Master of any defects or peculiarities of vessel.

No. 1 Berth: No. 1 Tanker Berth approximately 0.75 mile off East coast of Das Island is served by submarine pipe-line from tankage on Island. Tankers berth against 4 flexible dolphins which protect berth operating platform. Six mooring dolphins are each provided with twin bollards. Hooks for backsprings located on operating platform are each equipped with 48 ft. length of 18 in. cable-laid manilla spring. Loading installation comprises 4 booms each equipped with 10 in. bore flexible hose for loading crude oil. Two similar booms available for loading and discharging bunkers. Fittings available to connect these hoses to 8 in., 10 in. and 12 in. manifolds to ASA 150 or BS 1560 – 1968, ASA 300 or BS. "H" details.

No. 2 Berth: No. 2 Tanker Berth is sited to the North of No. 1 Tanker Berth. It is of similar construction to No. 1 berth except that quick release hooks are provided on the mooring dolphins and on the breasting dolphins for securing vessels' backsprings. Permanent mooring wires are provided on the 4 inner mooring dolphins. The loading installation comprises 3×16-in. booms with 12-in. hoses for crude oil loading, 1×16-in. boom with 12-in. hose for crude oil loading and bunker discharging, and 2×12-in. booms with 10-in. hoses for bunker loading. Fittings are available to connect to 4-in., 5-in., 6-in., 8-in. and 10-in. manifolds for crude oil loading with flanges to BS., ASA and metric standard details.

No. 3 Berth: No. 3 Berth is a Single Point mooring buoy and is situated approximately 7,500 ft. East of the East coast, in position Lat. 25° 08′ 53″ N., Long. 52° 54′ 07″ East.

The moorings for tankers are comprised of 2×15-in. circumference floating nylon ropes, terminating in a 3-in. dia. stud link chafing chain which is secured to the tankers forward mooring bitts using a 15-in. circumference nylon snotter. This equipment is provided by the Company.

The loading installation comprises 2×20-in. diameter floating hose strings terminating in 16-in. diameter tail hose for crude loading. For bunker loading and discharge 1×16-in. floating hose string, terminating in 1×10-in. tail hose, is provided. The flanges are to BS 1560.

Vessels using this berth will be required to be fitted with a bow fairlead on or near the centre line to accept the chafing chain. The minimum aperture dimensions are 24 in. horizontally and 18 in. vertically to permit direct connection. Alternative arrangements are provided for mooring vessels with smaller size apertures.

Vessels also require a derrick or crane capable of plumbing at least 2 ft. outboard of the ships side over the entire length of the port manifold (including the bunker connection if required). SWL of the crane/derrick to be in accordance with the following requirements:

Less than 45,000 tons S. d.w.t.	7 tons SWL
45,000 – 100,000 tons S. d.w.t.	8 tons SWL
Over 100,000 tons S. d.w.t.	10 tons SWL

Berths cannot be occupied during adverse Easterly weather. Loaded tankers only berthed at discretion of Port Officer and delays from tidal conditions, awaiting daylight, etc., may be incurred. Minimum acceptable length overall 525 ft. Vessels other than craft must not approach nearer than 2 miles to premises without a Berthing Master on board unless otherwise instructed by Port Officer. In approaching and leaving berths it is essential to avoid anchoring in area of submarine pipe-lines which run in approximately East and West direction some 2,500 ft. North of No. 2 berth. Weather and other conditions permitting, tankers can berth and unberth at all times. Every vessel berthing must fit adequate rat guards to all mooring ropes and wires.

GENERAL CARGO OPERATIONS:

(a) Declaration of Dangerous Cargo: Attention is drawn to Section 58 of the Queen's Regulation whereby any dangerous cargo, whether intended for Das Island or not, must be declared to the Port Officer, on arrival.

(b) Discharge or Loading of Dry Cargo: Cargo vessels discharge in the anchorage into barges using their own gear, and should arrive with derricks rigged.

A series of dumb barges (average capacity 120 tons d.w.t.) are normally available for landing all cargo. Charges are usually made for stevedoring services up to under ship's tackle and for supplying tally clerks on board the vessels.

For the handling of cargo, a labour force of up to 50 men is usually available.

Whenever possible, the Island craft will come alongside immediately a vessel anchors and the Cargo Superintendent will board and discuss handling procedure with the Chief Officer. Discharge of cargo is carried out continuously provided weather and other conditions permit.

Vessels may be asked to provide winchmen.

(c) Cargo Manifests: 1 original and 2 copies of general cargo manifests are required.

LOADING: 2 grades of crude are available on each berth. Zakum Crude average API 40.5 and Umm Shaif Crude with average API 37.5.

Loading: Loading will not commence until the ship's loading officer reports the ship ready for loading and the shore loading staff are satisfied with the connections and preparations made for loading.

Loading and Discharging Rates:

No. 1 Berth

Crude oil loading maximum 5,000 t.p.h. with a maximum of 1,250 t.p.h. through each hose

Bunker discharging	1,800 t.p.h. approximately
Bunker Loading	650 t.p.h. approximately

No. 2 Berth

Crude Oil loading	10 – 12,000 t.p.h. approximately
Bunker discharging	2,000 t.p.h. approximately
Bunker loading	750 t.p.h. approximately

No. 3 Berth

Crude Oil loading	10 – 15,000 t.p.h. approximately
Bunker discharge	
Bunker loading	1,000 t.p.h. approximately

The permissible maximum loading rate is entirely at the Company's option and will vary according to the circumstances and the type of tanker concerned, subject always to the Master's over-riding discretion.

Pumping Signals: Pumping Operations are controlled by a cable signalling system between the berth operating platform and the Control Room on the Island. The platform is also linked to the Island Automatic Telephone Exchange.

At No. 3 Berth, pumping operations are controlled by portable VHF radio telephone between the vessel and the Control Room on the Island.

BALLAST: There are no facilities for receiving vessels ballast ashore for treatment. All vessels must have clean ballast for overboard discharge.

Vessels using No. 3 Berth will be required to deballast and load simultaneously so that in normal circumstances they will not be flying light whilst moored at the buoy. It is therefore essential that the Company be promptly informed should the vessel be unable to deballast and load simultaneously without risk of admixture.

MEDICAL: Medical Officer resident on Island and ADMA maintain small hospital. Medical attention only available in case of serious illness or emergency.

FRESH WATER: Not available.

FUEL: Medium fuel oils available from shore storage. Average API 17.5 and maximum viscosity 1,500 seconds Redwood. Diesel available.

FIRE PRECAUTIONS: Three fire-fighting tugs available.

GANGWAY: Shore gangways provided on No. 1 Tanker Berth and the new LNG/LPG berth.

CUSTOMS ALLOWANCE: No restrictions for tobacco. Conveyance of alcoholic liquor from any vessel to the shore or from the shore to any vessel, or from one vessel to another, is prohibited without the appropriate written permits from the Political Agent and the Port Officer.

CONSULS: HBM Hon. Consul, Marine Department, ADMA Ltd., Das Island, Abu Dhabi. Tel. 546, Cables, Admarine Das Bahrain.

REPAIRS: Not available.

DRY DOCKS: None.

REPATRIATION: Medical cases only.

AIRPORT: ADMA operated private Airport.

TIME: GMT plus 4 hours.

HOLIDAYS: 1st January; Easter Sunday; 25th December and Moslem holidays.

POLICE/AMBULANCE/FIRE: Tel. Police 385; Ambulance 300; Fire 400.

SHORE LEAVE: Not permitted.

AUTHORITY: Marine Superintendent Das, ADMA Ltd., Das Island.

AGENT: (Protecting only) See "Mina Zayed".

DUBAI: 25.16 N. 55.18 E.

ALSO SEE "PORT RASHID".

COURTESY FLAG: Dubai flag resembles an "H" or pilot flag, and this could be shown until Agent's representative brings one on board.

PROHIBITED AREA: Work on the construction of the Dubai dry dock has commenced and all shipping is warned to keep clear of an area contained within a line drawn from Port Rashid Main Light (Lat. 25° 16.0′ N., Long. 55° 16.2′ E.) to a position (Lat. 25° 16.2′ N., Long. 55° 15.1′ E.) i.e. 272-1,850 m. from this light thence to the shore line on a Bearing of 180°. This has been declared a prohibited area.

Small craft, dredgers and hooper barges will be operating within this area. The main breakwater will consist initially of an island with the breakwater extending both seawards and shorewards from it.

White flashing beacons will be positioned at 400 m. intervals along the breakwater and in addition various construction lights will be exhibited.

Legal steps will be taken against any negligence whatsoever from Masters.

DOCUMENTS: Following should be airmailed to Agent prior ship's arrival: 6 copies Dangerous Cargo List, Stowage plan in duplicate, Hatch list in duplicate, 7 copies of cargo manifests, 1 copy of each Bill of Lading. On arrival, 3 crew Lists required.

APPROACHES: Open roadstead. Cargo discharged into barges.

ANCHORAGE: Marked by light buoy in position 310°, 1.06 miles from Nayif Tower. Recommended anchor to N.E. of light buoy in approx. position 25° 17′ 4″ N., 55° 16′ 16″ E. Depth 36 to 40 ft., holding ground considered poor, bottom sand and coral. The closer ships are able to anchor to the buoy, the faster turn-around on barges will be attained. *Warning:* Occasional strong N.W. winds, known as "Shamal" will make discharging impossible and *it is very important* that ships have engines on "stand-by" during such times. Ships allowed enter and leave anchorage at any time of day or night. Launch service through Agent's ship to shore from anchorage, and ship's own boats can also be used without Authorities' permission.

PILOTAGE: None.

RESTRICTIONS: All cargo discharged into barges at anchorage. Coasters with drafts of 11 ft. 6 in. or less can enter creek and discharge alongside. Such vessels usually require a tug boat to pilot them into the creek. Tugs available through Agent. Importation of artificial pearls is prohibited. Purchase of liquor forbidden except by permit.

HEALTH: Prior arrival, Masters are required to send a cable to the Port Health Dept. addressed "Quarantine-Municipality-Dubai" on the following lines:

(Vessel's name). . . ETA . . . Hour . . . Date . . . .
Crew all healthy request free pratique
Master

Normally all vessels declared healthy by the Master are automatically allowed to berth immediately on arrival, and Health Dept. personnel will board vessels after berthing.

Arrival: Ships boarded immediately upon arrival weather permitting, and Masters then have to complete a short Arrival Report. No formalities of any kind with Port Authorities and ships allowed to arrive and sail at any time.

Departure: No port clearance is issued in Dubai. A letter will be issued by Agent which may be produced at next port of call instead of usual departure clearance.

RADIO: No port radio station. Cables from vessels outside Gulf may be routed through Muscat Radio, and from inside Gulf through Bahrain Radio. Vessels should advise Agent of ETA 72, 48 and 24 hours prior arrival. Some Agents also equipped with VHF calling Channel 16. Ship's radio station may be operated at anchorage.

Nearing Dubai and approximately 8-10 hours prior to arrival, vessel should switch on VHF Channel 16 and call Agent. On contact, change to one of Channels 14, 13, 12, 9 or 6 for further communication. Regular contact then maintained until departure from Dubai.

DISCHARGE TURN: Priority of discharge given to ships carrying mail and/or passengers for Dubai. Ships carrying less than 100 weight or measurement tons have priority and are supplied with one barge for discharge of cargo immediately on arrival, whether turn is in force or not. Should there be congestion, Agents require Stowage Plan showing clearly that all Dubai cargo is freely available and Master's signature on a request for discharge turn. Based on this, vessels will be registered for turn. Registration can only be performed during office hours.

After confirmed registration, at which will be given a deadline for turn, ships may proceed to other ports for discharge, but must return Dubai prior time and date given, otherwise turn is lost. Particular cargoes for H.H. The Ruler have priority. This should be evidenced by Manifests which will be produced to Customs Authorities in Dubai for approval. The cargoes must be accessible for immediate discharge, which should be verified by stowage plan.

STEVEDORES: Loading/Discharging Rates: Stevedores, tally clerks, supervisors, etc., will be supplied from shore at the same time as ships are supplied with barges. These people working under vessels' supervision and responsibility.

First Shift: from 0800 hrs. to 1800 hrs. Second shift: from 1800 hrs. to 2400 hrs. Third Shift: from 0000 hrs. to 0800 hrs. Very difficult to get stevedores to work third shift unless ship will complete within a reasonable time into the third shift. First 2 shifts always worked.

Drinking water must be supplied by ship free of charge to all men from shore but food to supervisors, tally clerks, watchmen and foremen.

Expected outturn working three hooks:

Bagged cargo	400–500 tons
Cased cargo	150–200 tons
Timber on deck	300–350 tons
Timber in hatches	200–250 tons

Usually five ships can work at one time.

MEDICAL: Qualified doctors available ashore and also a hospital. Most medicines available at fairly low prices. Dentist also available. Walking cases should be brought ashore *in the morning* for treatment, but in emergency, a doctor will board the ship.

TANKERS: See "Port Rashid".

FRESH WATER: Can be supplied at Dubai anchorage at following rates (approx.): quantities 600 tons, 75 tons, or 25 tons at one time.

FUEL: See "Port Rashid".

FIRE FIGHTING: No facilities available at anchorage.

DEVELOPMENTS: Three dry docks for vessels up to one million tons d.w.t. under construction. Dimensions as follows: Length 1,230 ft., breadth 230 ft. for vessels up to 500,000 tons d.w.t.

Length 1,361 ft., breadth 262 ft. for up to 500,000 d.w.t. and for vessels of special design, such as shallow-draft tankers.

Length 1,722 ft., breadth 410 ft. for 1,000,000 tons d.w.t.

In addition to the 3 dry docks, there will be 11 berths and 5 moorings for handling all types of repair fabrication and maintenance work. The agreement for the construction of this complex was signed in September 1973, and when fully operational the facility is expected to employ about 4,000 people.

CUSTOMS ALLOWANCE: *Tobacco:* 1,000 cigarettes or 200 cigars or 1 kilo of tobacco. *Perfumes:* 1 litre of toilet water (Eau de Cologne) and not more than 150 grams of perfume. *Currency:* Unlimited. *Alcoholic Liquor:* 1.5 litres of wine and 1.5 litres of other alcoholic beverages provided that the arriving passenger is a non-Muslim.

CONSULS: The British Embassy, the Kuwait Embassy, the Indian Consulate and the Pakistan Consulate.

REPAIRS: Fully equipped engineering workshops capable of carrying out fairly extensive repairs available.

DRY DOCK: See "Developments".

REPATRIATION: Official signing-off and signing-on can be made only for British flag vessels as no other country represented in Dubai. However, crew change can be effected through Agent. Arriving or departing crew do not require visas but must hold valid Seaman Books. The Seaman Book will substitute the visa which otherwise is compulsory.

AIRPORT: Regular international scheduled flights. Also domestic flights within Gulf area.

TIME: GMT plus 4 hours.

HOLIDAYS: Every Friday which is Muslim Sabbath. Banks closed on this day. During the year there are the following Idd Holidays: Idd al Adha (about end February); New Year's Day (19 March); Idd al Fitr (about beginning December). Holidays shift according to the Muslim Year.

SHORE LEAVE: Officers and crew may come ashore during daylight hours for shopping and recreation. They shall then carry a valid passport, ID-card or Seaman Book, which will be placed at the Immigration Office when landing. The passport, ID-card or Seaman Book will be returned upon returning to ship. No alcoholic beverages allowed to be brought ashore.

GENERAL: Dunnage – not available. Heavy lifts – not available at anchorage. Shore cranes have lifting capacity up to 30 tons.

LAUNDRY: Available but about 2-3 days required.

PROVISIONS: Fresh vegetables, frozen stuff, bonded stores, etc., available. Requirements should be given immediately on arrival. (The liquor and beer prices are high.).

SURVEYORS: Lloyds.

AUTHORITY: Port and Customs Dept. Dubai Port Authority.

AGENT: Gulf Agency Co. (Dubai) Ltd. POB 2404, Dubai, U.A.E. Cables: "Confidence", Dubai. Tel: 31300. (24 hours service). Telex 5541 and 5448 (answer-back: "Confid DB") Radio: Marine VHF radio, stand-by on Channel 16 (156.8 mHz) Callsign "Confidence, Dubai".

Operators of ship-servicing and supply organisation: Crew-changes, mail spares and/or delivery of provisions undertaken at sea without deviation to serviced vessel.

FATEH TERMINAL (offshore Dubai). (See Plan)

Oil Loading Terminal of the Dubai Petroleum Company.

Note: All tankers loading Fateh Terminal cleared by Dubai Petroleum Company, taking care of all necessary documentation concerning cargo. DPC does not charge owners/operators for this service. However, for all other agency services DPC refers owners/operators to regular shipping agents in Dubai.

According present oil company regulations vessels not allowed receive any deliveries or any launch alongside while loading at Terminal. Deliveries of mail, spare parts and performance of crew changes will, therefore, take place at Terminal anchorage, Dubai anchorage, or at a rendezvous point.

Weather permitting, Fateh Terminal operates 24 hours a day, 7 days a week and provided berth not occupied, tankers will be berthed upon arrival, day or night.

LOCATION: Fateh Terminal consists of the crude oil production and export facilities of the Fateh and S.W. Fateh Fields offshore Dubai, United Arab Emirates. The Terminal Limits are bounded by the following co-ordinates:

(1)	25° 40′ N.	54° 30′ E.
(2)	25° 40′ N.	54° 26′ E.
(3)	25° 33′ N.	54° 15′ E.
(4)	25° 30′ N.	54° 15′ E.
(5)	25° 28′ N.	54° 17′ E.
(6)	25° 28′ N.	54° 30′ E.

Within this area the anchoring of vessels is prohibited and the Terminal Safety Regulations have effect.

NAVIGATIONAL AIDS: Both SPMs are fitted with a white light flashing the Morse letter "U" every 30 seconds visible for a distance of 5 miles.

The three submerged oil storage tanks, platforms, bridges and production units exhibit lights flashing "U" in Morse and are also equipped with foghorns sounding "U" in the Morse Code every 30 seconds. Various working lights are also shown.

The two oil storage vessels Majmaa I and Majmaa II are fitted with a white light flashing the Morse letter "U" every 30 seconds visible for a distance of 5 miles.

Each vessel is also equipped with a continuously operating foghorn sounding the letter "U" in Morse at intervals of 30 seconds.

The Central Production and A Platforms exhibit lights flashing "U" in Morse and a foghorn every 30 seconds sounds the letter "U" in Morse.

Various working lights are also shown from the well platforms within the area. All are fitted with a white light flashing the Morse letter "U" every 30 seconds.

Each well platform is fitted with foghorns sounding "U" in Morse Code every 30 seconds.

Four flares in position:

(1)	25° 35′ 50″ N.	54° 25′ 50″ E.
(2)	25° 35′ 56″ N.	54° 25′ 20″ E.
(3)	25° 35′ 48″ N.	54° 25′ 18″ E.
(4)	25° 29′ 44″ N.	54° 18′ 29″ E.

give an orange light which may be visible at a great distance from the Terminal, depending on atmospheric conditions, in addition the flare structures show a white light flashing "U" in Morse every 30 seconds visible for 5 miles.

Numerous small unlit buoys for the use of working craft may be encountered within the Terminal area.

APPROACHES: On approaching Terminal, Masters of incoming tankers should head for Anchorage Area (see "Anchorage") where, under normal conditions, their vessel will be boarded by a DPC Mooring Master.

ANCHORAGE: An area immediately East of Terminal Limits is designated as the Anchorage Area, centred on position as follows:

25° 36′ N. 54° 31′ E.

This co-ordinate represents the centre of a circle with a radius of approximately 1 mile which must be used by vessels requiring to wait at anchor. Anchoring within the Terminal limits is strictly prohibited. For reference purposes, the anchorage area bearing from Port Rashid (Dubai) Light is 298° true, distance 44.6 miles and from Jazirat Sirri Light 187.5° true, distance 17.5 miles.

If a tanker is not scheduled to berth on arrival (e.g. another vessel is in the berth, or the port is closed on account of adverse weather conditions, etc.) Masters will be advised by radio and requested to anchor.

FACILITIES: For the export of crude oil 2 single point mooring buoys have been installed in positions:

(1) 25° 35′ 12″.6 N. 54° 25′ 46″.3 E.
Bearing 261° true 4.8 miles from anchorage.

(2) 25° 35′ 12″.6 N. 54° 24′ 35″.0 E.
Bearing 262° true, 5.7 miles from anchorage.

READINESS: After arrival at the Anchorage Area and when the tanker is ready in every respect to load, the Master may tender his Notice of Readiness.

Notices of Readiness will be accepted provided one or other of the following events shall have transpired:

(a) The Master shall have received the Mooring Master on board or;

(b) The Master shall have dropped the anchor in the Anchorage Area.

Port closed: Notices of Readiness will not be accepted during periods when the port is closed. The port is "closed" when the weather is such that it is too rough for incoming tankers to berth. The decision regarding the opening and closing of the port will rest with the Fateh Terminal Superintendent or his Deputy.

Order of Berthing: Vessels will normally berth in order of arrival.

DOCUMENTATION: *Documentation and ship's agency:* In the normal course of events, DPC acts as tanker Agent and prepares all crude oil loading documents. For these services no charge is made.

Early Departure Procedure: At the Master's discretion. In order to expedite turn-round of vessels in this port and avoid undue delays caused by weather or other circumstances, Masters of vessels on arrival are requested to sign blank cargo documents.

Normally, completed cargo documents required by the Master will be placed on board prior to sailing. If this is not possible without incurring undue delays, the relevant documents will be airmailed to the Master to await the vessel's arrival at her discharge port.

The official cargo, i.e. quantity loaded, will be transmitted by radio whilst unmooring. In the event of a dispute, the receipt of a Letter of Protest will be acknowledged by the Mooring Master. Any protests by the Master concerning the quality of cargo should be made before departure and any resulting investigation should be made before the vessel sails.

Outward Clearance: A tanker will be considered clear to depart Fateh Terminal when the crude oil loading documents have been delivered to the Master, or in the case of early departure, clearance will be given through the Mooring Master.

Mail: Official ship's mail and crew's personal mail will be handled and shipowners debited accordingly.

PILOTAGE: Pilotage is compulsory within the Terminal limits. Vessels to be moored at Fateh Terminal will be boarded by a DPC Mooring Master in the Anchorage Area. The Mooring Master will advise the ship's Master on approaches to the SPM, mooring and unmooring, connecting and disconnecting hoses and all other operations within the Terminal area including all manoeuvring of the vessel. The Master or one of his qualified deck officers must be on the bridge at all times while the tanker is being manoeuvred.

The services of a Mooring Master are provided without charge, upon the express understanding and condition that when any Mooring Master furnished by DPC goes aboard a vessel for the purpose of assisting such a vessel, he becomes for such purposes the servant of the owners of the vessel and DPC shall not be liable for any damage or injury resulting from the advice or assistance given or made by such Mooring Master while aboard or in the vicinity of the assisted vessel.

MOORING: *Preparation for Mooring:* Vessels are requested to have pilot ladder, hoist and/or accommodation ladder safely and securely rigged for immediate use and long enough to meet the Mooring Master's launch. Vessels will provide a lee for the Mooring Master on the port side both when boarding and leaving.

For vessels with a freeboard of 40 ft. or more, the accommodation ladder shall be rigged out, lowered down so the platform is not more than 10 ft. from the water level and a short pilot ladder rigged to cover the access to the platform.

Tankers are requested to have ready on the forecastle head the following:

(a) 2 towing ropes, polypropylene if possible.

(b) 2 messenger ropes, minimum lengths of 300 ft.

Tankers are requested to have ready on the port side amidships the following:

(a) Derrick rigged and ready to pick up from a launch.

(b) Mooring shackles.

(c) Wire strops and hose connection gear.

Securing of the Terminal's Nylon Ropes: On the near approach to the buoy, a launch will attach a ship's line to one of the Terminal's floating nylon ropes. This will be hove aboard and secured to the towing bracket if the ship is so fitted, or otherwise secured by a ship's or Terminal mooring wire previously passed aboard. The same operation will be repeated with the second nylon rope.

LOADING: *Lifting Hoses:*

SPM I: Two 16 in. diameter hoses will be lifted by ship's gear on the port side. Each lift is 5 tons.

SPM II: Two 16 in. diameter hoses will be lifted by ship's gear on the port side. Each lift will be 7 tons.

The hoses shall be hoisted and connected by ship's crew. The Mooring Master will advise the ship's officer in charge concerning lifting techniques.

Sundry Hose Connecting Equipment: Tankers shall be equipped with the necessary blocks, tackle, wrenches, gaskets, bolts, nuts, etc., to efficiently effect the hose connection.

Flange sizes: 16 in. – 12 in. reducers will come on board the tankers with the mooring gear thus enabling tankers with either 16 in. or 12 in. ASA 150 lb. flanges to connect directly to the Terminal hoses. Flange size 16 in. – 12 in., 16 in. – 10 in. reducers with ASA 150 lb. flanges are available if required to enable tankers with 12 in. – 10 in. manifold connections to connect to the Terminal hoses.

Communications During Loading: (See Radio). All communications relative to the loading of the vessel shall be routed through the Mooring Master who will remain in contact with the Production Platform constantly via portable VHF units. In case of temporary breakdown of the portable VHF circuit, contact may be continued on International Marine Channels 16, 14 or 8 if the vessel is so fitted.

Failure of Communications: Should communication with the Production Platform fail, loading will cease.

Emergency Shut down: An emergency cessation of loading may be effected by the ship's VHF Channel 16.

Loading rate: At SPM No. 1 the maximum loading rate will be 40,000 barrels per hour. At SPM No. 2 the maximum loading rate will be 100,000 barrels per hour.

RADIO: *Communications with DPC:* Cable Address: Dupetco, Dubai. Telex: DB 423.

Initial Communication: Initial communication between ships and DPC should be via Bahrain Radio (call sign GOU) which operates on a 24-hour basis.

Communications within 60 miles of Terminal: Once ships are within about 60 miles of Fateh Terminal communication may be established by radio telephone on International Marine VHF Channel 16 (156.8). This frequency is monitored continuously. Once contact has been made on Channel 16, further conversation should be conducted on either Channel 14 (156.7 mc), Channel 13 (156.65 mc), Channel 12 (156.60 mc), or Channel 8 (156.40 mc).

Communications after DPC Mooring Master has Boarded: A DPC Mooring Master will board incoming tankers in the anchorage area and will bring with him portable VHF radio telephone units. From that time onwards all communications between ship and platform will be conducted by the Mooring Master via the portable VHF units, unless owing to failure of portables it is necessary to revert to mains VHF Channels.

Advice of Tanker Arrivals:

Initial Estimated Time of Arrival (ETA): When a tanker bound for Fateh Terminal is within 72 hours of arrival at Fateh Terminal, the Master should notify DPC by cable via Bahrain Radio giving the following information:

(a) Name of tanker.

(b) ETA in GMT (Dubai time is GMT+4 throughout the year).

(c) Quantity of cargo required.

(d) Maximum loading rate.

(e) If the ship's hose connections are different from 16 in. or 12 in. standard ASA 150 lb. type, the size should be stated.

Subsequent ETAs: Sections *(a)* and *(b)* of the above message should be repeated via Bahrain Radio when the tanker is within 24 hours and again when within 12 hours of arrival at the Fateh Terminal.

Unreasonably insufficient or inaccurate ETA messages may alter the order of berthing of ships to the disadvantage of those ships giving sufficient and accurate ETA messages.

Radio Telephone Communication when Approaching Fateh Terminal: When about 60 miles off the Terminal contact may be made by radio telephone on International Marine VHF Channel 16, and communications should continue via this method until a DPC Mooring Master boards.

BALLAST: *Precautions Regarding Pollution:* It is the responsibility of the ship's Master to see that no crude oil (or bunkers', diesel or bilge) or dirty ballast is pumped or spilled overboard from his ship whilst in the area. Drip pans should be used, especially when disconnecting hoses in order to prevent spillage overboard.

Scuppers to be Plugged: Before loading commences, all overside scuppers shall be made oil-tight.

No facilities for Receiving Dirty Ballast: At Fateh Terminal there are no slop tanks or facilities for receiving dirty ballast. Tankers must arrive with clean ballast. In the event a tanker does have dirty ballast it will not be allowed to be pumped overboard. The dirty ballast will be collected into one tank, measured and left aboard.

Discharging Ballast at Night; During the discharge of ballast in darkness, the sea shall be adequately lighted in the area of discharge.

MEDICAL: At Fateh Terminal medical and dental services are not available. In emergencies requiring hospitalisation, the patient will be taken by boat from the tanker to the production platform.

hoisted to the upper deck of the platform and flown by helicopter to Dubai. The shipowner will be charged for all expenses incurred.

FUEL: Bunker "C" is available at the Fateh Terminal Anchorage from an awaiting bunkering tanker, providing sufficient notice has been given. Arrangements should be made through local shipping agents in Dubai.

GENERAL: The following are not available at Fateh Terminal: fresh water, stores, boats for hire; repair facilities; facilities for changing ship's crew.

There is no shore leave.

AGENT: Gulf Agency Co. (Dubai) Ltd., POB 2404, Dubai, U.A.E. Cables: "Confidence", Dubai. Tel. 31300, (24 hours service). Telex 5541 and 5448. (answerback: "Confid DB").

VHF Radio: standing by on Channel 16 (156.8 mHz) communicating on Channels 14, 12 or 6, call sign "Confidence Dubai".

SSB Radio: standing by on 6910 mHz lower side band, communicating on frequencies 3539, 6910 and 7010 mHz. Call sign "Confidence Dubai".

JEBEL DHANNA, Abu Dhabi: 24.11 N. 52.38 E.

(See Plan)

COURTESY FLAG: Vessels calling at ports in the State of Abu Dhabi should fly the flag of the United Arab Emirates, and the flag of the State of Abu Dhabi.

APPROACHES: *(Inward Passage).*

Outer Route between Jazirat az Zarqa and Ghasha Tower Beacon marked by 2 light floats and 4 buoys. The 2 light floats are both port hand marks, and the buoys starboard hand, as indicated by shape, colour and light characteristics.

Inner Channel, from Ghasha Tower to berths at Jebel Dhanna marked by 21 light buoys. Least depth in this channel is 46 ft. and min. width of 800 ft. between Nos. 7 and 10 buoys.

(Outward Passage)

After clearing berth an outward bound vessel should steer to pass midway between Nos. 13 and 20 buoys, leaving Alaq Island to starboard. From Nos. 13 and 20 buoys the same track is followed as for inward passage.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
2 Manifests.
1 International Maritime Declaration of Health.

READINESS TO LOAD: Notice of Readiness will be received by the Company Representative provided the vessel is ready to load. Lay time will commence 6 hours after receipt of Notice of Readiness, berth or no berth.

The Company will make every effort to load the tanker on arrival provided a berth is available and weather permitting.

EARLY DEPARTURE PROCEDURE:

A. Early Departure Procedure is presently in effect at Jebel Dhanna.

B. This procedure will be offered to Masters on a voluntary basis but will exclude voyages of less than 10 days' duration.

C. Official declaration indicating acceptance/non acceptance will be signed by the Master on arrival.

D. If EDP is requested, Bill of Lading and Manifest will be prepared in advance except for cargo figures and be presented to Master for signature. Master may authorise Agent to sign all other documents on his behalf.

E. Bills of Lading and Manifest will be retained on board as indicated by documentation.

F. On completion of loading, the Terminal will endeavour to present completed cargo documents on board prior to sailing. In the event that the vessel sails before documents are completed vessel to maintain continuous radio watch after sailing, until cargo loaded quantities have been passed to the vessel by the Agent via Bahrain Radio. Advice of cargo loaded quantities should be transmitted to the vessel within 2 hours of sailing, and the quantities so advised should be inserted on Bills of Lading and Manifests.

G. In case of disagreement on Cargo figures, Master may authorise Agent to serve an official Letter of Protest.

H. All ship's documents, sent to London office under this procedure must be endorsed "EDP applied".

This procedure is used by all vessels loading at Jebel Dhanna terminal, but the oil company pointed out that a very limited use of this procedure is actually made inasmuch as all ship's documentation is generally put on board by the time a vessel has disconnected hoses, unmoored and is ready to sail.

PILOTAGE: Give 48 hours notice of ETA, etc., to Agent via Cable and Wireless, Bahrain. On confirmation of ETA on VHF Channel 16 either to "Jebel Dhanna Radio" or "Jebel Dhanna Pilots", Pilot will meet and board inward bound ship to West of Ghasha Tower Beacon on request and will conduct through Inner channel to berth. Pilots act as Mooring Masters and direct loading operations. Pilots disembark off Ghasha Tower outwards.

TIDES: In outer approaches, i.e. from Zarqa to Ghasha Tower, tides almost purely diurnal, but semi-diurnal effect becomes more evident as Dalma is approached and is (comparatively) most marked at Jebel Dhanna. However, this semi-diurnal effect not of great significance and for all practical purposes it can be taken that there is only one high water and one low water per day throughout length of approach and at Jebel Dhanna, but times of high and low water at various control points are not coincident.

High water at 01 buoy occurs on average about 1.5 hours before high water at Jebel Dhanna, but differences may be from about half-an-hour up to 2.5 hours.

Tidal Streams. In berth area, streams generally do not exceed 0.25 knot and are predominantly confined to S.E. and S.W. quadrants. In outer approaches, streams appear to attain a maximum of 1 knot approximately along line of route, but this information should be regarded with caution as it depends on limited observation.

ANCHORAGES: If berth not available, or if ships cannot sail immediately after loading, they can anchor in an area South of Buoys Nos. 13 and 20 and North of Berths. This area marked by No. 15 buoy to West, No. 22 buoy to East and by berths to South. Alaq Island lies in the middle of this area and is marked by 2 buoys No. 17 and N. Alaq and by S. Alaq Beacon.

RESTRICTIONS: Vessels must receive clearance from Jebel Dhanna Terminal to enter channel. This is to ensure that all outward-bound vessels are aware of traffic movements in channel. Mooring, loading and unmooring carried out by day and night.

MAX. SIZE: (Also see "Berthing"). Max. length: 1,100 ft.; Max. breadth: 180 ft.

Note: Draft of laden tankers leaving Jebel Dhanna controlled by depth in Inner Channel between Nos. 7 and 10 Buoys. This is 46 ft. below Chart Datum and Zero of predictions. An allowance of 3 ft. under keel is considered sufficient for vessels up to 100,000 tons. 4 ft. required for vessels in excess of 100,000 d.w.t., and 5 ft. for vessels over 225,000 d.w.t.

With 3 ft. under keel general limitations as follows:

(a) Ships drawing 44 ft. may sail at any time on any day.
(b) Ships drawing 45 ft. will rarely have to use tides.
(c) Ships drawing 46 ft. will usually have to use tides.
(d) Ships drawing 47 ft. will *always* have to use tides.
(e) Ships drawing 48 ft. will *occasionally be neaped.*
(f) Ships drawing 49 ft. will be neaped 294 days ± per year. The best months are June, July and August.

EQUIPMENT: Port and Starboard anchors to be fitted with anchor buoys and sufficient line to facilitate recovery of anchor in the event of loss.

4 good mooring lines of not less that 120 fathoms each and of a suitable size for the vessel. 2 additional 120 fathoms lines securely tailed to the first lines for occasions where 120 fathoms may not reach the stern buoys initially.

For vessels of 50,000 d.w.t. and larger, power mooring winches with 200 fathoms wire mooring rope are recommended.

Suitable new rope stoppers to be available forward and aft.

2 good stoppers for use on 5.5 in. circumference wires. Preferably patent carpenter's stoppers.

2 good boat ropes 4.5 in. circumference of at least 200 ft. long.

A clean, safe pilot ladder of adequate length battened so as to prevent turning. A suitable line to be ready for hauling gear on board, such as hose clamps, reducers and elbows. A lifebuoy should be placed handy to this ladder.

Tankers of 40,000 d.w.t. and over should have rigged, when in ballast, an accommodation ladder lowered to about 12 ft. above water. This can be adjusted to suit the conditions. A pilot ladder should be rigged immediately abaft the accommodation ladder, to within 2 ft. of the water. This will enable the Pilot and others when the vessel is moored to ascend the pilot ladder clear of the launch and then step on to the lower platform of the accommodation ladder.

Deck machinery must be available at all times.

Whistle or siren must be available at all times.

Adequate deck lighting should be provided for night-time operations, with special emphasis on the following areas:

1. Overside at boarding position for Pilot.
2. Overside abreast of manifold, for hose lifting.
3. Working area around manifold.
4. Poop working area, for handling mooring ropes and wires.

Note: "Aldis" type signalling lamp to be available when mooring.

HEALTH: International Maritime Declaration of Health. In case of suspected disease Agent to be informed on VHF Channel 16. Smallpox and cholera inoculation required.

RADIO: Vessels bound for Jebel Dhanna should give 48 hours notice of their ETA Ghasha Tower Beacon to their Agents via Cable & Wireless Bahrain, also advise the quantity of cargo required, SWL of derricks, number of hours ballast, maximum loading rate and whether an inward Pilot is required or not.

A continuous listening watch is maintained on Channel 16 – 156.80 Mc/s. by the Terminal at Jebel Dhanna, call sign "Jebel Dhanna". Vessel's ETAs should be confirmed using Channel 16, and if no inward Pilot is required, clearance obtained from Jebel Dhanna Terminal to enter the Channel without Pilot. Thereafter Channel 16 should be left "Open".

The ship's Agents and "Jebel Dhanna Pilots" also maintain a listening watch on Channel 16. By calling "Jebel Dhanna Pilots" before arrival, arrangements can be made by radio regarding mooring, loading hose connections, etc., so that unnecessary delays to the vessel may be avoided.

TUGS: No tugs available.

BERTHING: Berthing is by mooring to 2 anchors and stern buoys. Arrangements in advance by contacting Jebel Dhanna Pilots on Channel 16.

Berths are approached on W.S.W. course passing S.E. of Alaq Island. Leading lights have been established which will lead ships on the line of the 2 anchors when in berth. A small marker buoy has been established to assist the Mooring Master in placing starboard anchor in correct position. Vessels berth heading N.W. Holding ground good. Bottom consists of clayey silt.

Sea Line Loading Berths. 4 sea-line berths Nos. 1, 2, 3 and 4. Nos. 1 and 2 supplied by single 36-in. lines, and Nos. 3 and 4 supplied by 42-in. lines, each terminating in a header which passes under vessel in berth.

Berth	*Draft Accept-able*	*Approx. d.w.t. accept.*	*Max. loading rate*	*Strings of flexible hoses*	*Length of sea line*
No. 1	45′	83,000	6,000 t.p.h.	2×12″, 2×16″	16,269′
No. 2	46′	85,000	6,000 t.p.h.	2×12″, 2×16″	16,427′
No. 3	49′	90,000	10,000 t.p.h.	Four 16″	19,000′
No. 4	49′	90,000	9,000 t.p.h.	Two 16″	17,200′

*Deadweights shown for vessels loading full cargoes. Part Cargoes may be greater. Nos. 2, 3 and 4 Berths can accommodate VLCC's but No. 2 berth is restricted to vessels having a max. LOA of 1,100 ft.

Least depth of water available in berth, and swinging circle, after deducting 6 ft. for height above sea bed of sea line cradle is as follows:

No. 1 Berth, 51 ft.; No. 2 Berth, 52 ft.; Nos. 3 & 4 Berths, 55 ft.

Swinging circle defined as 1.5 ship's lengths from dropping position of ship's inshore anchor.

Seawards ends of pipe-lines, terminate in 12 in. or 16 in. flexible hoses, there being 4 such strings of hoses at each berth. 2 taken up on each side of vessel.

Additional information obtainable from Jebel Dhanna Pilots on Channel 16 prior to vessel's arrival.

HOSES: Derricks or cranes must be capable of lifting a string of hoses from the sea-bed to a height of 30 ft. above the deck. For lifting 16 in. diameter hoses, the lifting gear should have a SWL of not less than 10 tons and for 12 in. diameter hoses a SWL of not less than 5 tons.

Gear should be rigged on both sides of the vessel in order to lift hoses on either side or both sides simultaneously as required.

It may be convenient to handle blank flanges, reducers, etc., with the derrick or crane. Reducers or adaptors should be bolted to the ship's flanges, so as to take 12 in. or 16 in. hose as may be necessary.

Note: Where a vessel has 2 or more loading connections, those used should not be less than 7 ft. apart.

Hose Hang off bitts are required at about 10 ft. from the ship's rail at the loading manifold to secure the submarine hoses on both sides.

LOADING: *Flash Point:* The flash point of Murban Crude is below 32° F.

Crude Oil Temperatures: While every effort will be made to keep the loading temperatures of export crude below 150° F., there may be times when this temperature is exceeded.

Whenever possible Masters will be advised when this temperature increase is likely to occur, but in Jebel Dhanna the temperature ashore varies according to loading rate, production rate, changes in production pattern from the field, tank levels, etc., and the temperature difference between shore and ship varies according to loading rate, quantity of cargo taken, berth occupied and when last used, etc., thus the ship's temperature obtained on a previous voyage may be substantially different to that obtained on the current voyage and the previous vessel's temperature can be taken as an approximate guide only.

The ADPC will not accept any responsibility for the failure by the Master of any tanker loading at Jebel Dhanna to take appropriate action to receive hot oil, prevent any damage to his vessel and/or injury to his crew.

H_2S Content: Murban crude contains concentrations of H_2S (Sulphuretted Hydrogen). Hydrogen sulphide has a disagreeable odour characteristic of rotten eggs which quickly deadens the sense of smell so that a dangerous concentration may be present which cannot be detected by odour. It is, therefore, important that when the presence of the gas is detected the area or compartment concerned should be left with all possible despatch until adequate ventilation can be carried out. The combustible gas indicator may not detect this type of gas. The foregoing must be dealt with in the light of experience where large quantities of crudes of this type have been carried without accident and we do not wish to exaggerate the dangers. However, the under-noted precautions have been evolved as necessary to provide against a possible accident and should be strictly observed.

During loading gas should only be allowed to escape via the agreed venting arrangements.

When ullaging or sampling, personnel should stand facing at right angles to the wind direction and so avoid inhaling gas. If H_2S is inadvertently inhaled the man should leave the area and not return until his sense of smell has been restored which means that at least two people should attend the operation.

No one should enter any pump room or any compartment where gas could collect unless another person is standing by.

Life lines, breathing apparatus and resuscitator should be readily available.

As a precautionary measure, the gas ejector for pump room should be put into operation at any time entry is made into this space whilst the possibility of H_2S gas entering pump room from cargo or empty tanks exist.

Loading Operations: The advice from the vessel which states she is ready to receive cargo is considered as final, and as indicating that every operation necessary aboard the vessel has been completed. As soon as possible after such a signal has been received, and without further advice, loading will commence. Damage to hoses can occur if ship's valves are not open at the start of loading. The Mooring Master will not transmit any loading instructions to the shore until the officer-in-charge of the deck has satisfied him that the hoses are connected correctly and that all valves have been set for receiving cargo.

While in berth, ships should be ready to move under their own power in the event of their breaking adrift, catching fire, fire in adjacent berths or other emergency. No repairs are to be carried out while in berth which would immobilise the ship or impair her fire-fighting efficiency.

The Mooring Master will instruct the Master of the Ship as to any signals needed for local requirements.

The Mooring Master will bring a portable radio to the ship.

The radio may not be used for private conversation. Use of the ship's radio while at the loading berth is strictly prohibited.

When loading, the cargo being received shall be frequently measured, thereby preventing loss of oil through a leaking hose. This particularly applies at night, as seepage of oil is practically invisible on the water during darkness.

Caution: The oil loading rates to ships are controlled on shore and an extremely dangerous situation can arise if a ship's valves are closed against the flow of oil.

Particular care must be exercised by ship's personnel to ensure that the Terminal is given timely advice should any reduction be required in the loading rate and adequate "Stand-by" notice must be given before the Final "Stop". At all times the Terminal must be advised when an increase in the loading pressure can be expected due to switching tanks, topping up, etc. To prevent excessive pressure from surge on ship/shore connections, ship's valves should be closed slowly.

The Terminal facilities at Jebel Dhanna have been designed so that tankers can be loaded by turbine driven loading pumps at max. rates up to 7,500 t.p.h. in berths 1 and 2, 10,000 t.p.h. in berth 3, and 9,000 t.p.h. in berth 4. Availability of max. loading rates is dependent on the number of berths occupied.

If vessel is unable to accept the max. loading rate available, then ADPC will be grateful if you will give a brief explanation of the reason for the limitation and we suggest some of the reasons which may govern your restrictions:

(a) Inadequate venting system.
(b) Condition of ship's lines and valves.
(c) Inexperience of crew.

and there may be other reasons.

We are anxious to obtain this information in order to assist in formulating plans for future development.

The quantity of cargo received on board is the responsibility of the ship and no overage may be sent back ashore.

When loading is completed, hoses will be disconnected and lowered to the sea bed, under the supervision of the Mooring Master.

Ships will then proceed to an anchorage allocated by the Mooring Master or direct to sea.

BALLAST: No facilities for disposal of slops or dirty ballast.

When a vessel enters port waters in ballast, the ballast water for overside discharge must be clean and a declaration signed by the Master and delivered to the representative of the Terminal to this effect. Ashes, oil, oily water or other refuse must not be discharged overboard in port waters. Vessel's scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard whilst in port waters.

It is essential that vessel is adequately ballasted to ensure safe handling and manoeuvring. Please comply with the Mooring Master's requests as to ballast quantity and disposition.

Jebel Dhanna is an open roadstead and subject to sudden changes in weather. On occasions it is of great advantage to commence loading whilst discharging ballast or prior to completely deballasting to avoid having the vessel in a flying light condition.

There must be no cleaning of boiler tubes whilst ship is in port. All pumproom sea valves must be closed before commencement of loading.

DENSITY: Specific gravity 1.031.

FRESH WATER: Not available.

FUEL: Bunkers are not available at Jebel Dhanna. A vessel proceeding to a nearby bunkering port should repeat her ETA to Jebel Dhanna Terminal for information.

If Abu Dhabi Petroleum Company Limited have sufficient information concerning expected arrivals, taking into consideration time taken to bunker, they will advise Masters when they consider that probable delay at Jebel Dhanna can be avoided by the vessel loading cargo before proceeding to the bunkering port.

Similar advice may be given in exceptional circumstances when there is a possibility that unduly large stocks of oil may necessitate shutting down the field.

FIRE PRECAUTIONS: As laid down in the Abu Dhabi (Port of Jebel Dhanna) Regulations 1967. Also IOTTSG Safety Guide.

GANGWAY/DECK WATCHMEN: Not necessary.

CUSTOMS ALLOWANCES: Tobacco: No restrictions in quantity on board but must not be conveyed ashore or from one vessel to another without appropriate written permit from Customs Authorities and Port Officer. Wine and/or Spirit: Conveyance of alcoholic liquor from any vessel to the shore or from the shore to any vessel, or from one vessel to another, prohibited without appropriate written permits from Port Officer.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS/DRY DOCKS: No facilities.

REPATRIATION: With sufficient notice, Agents will assist in any repatriation. Valid Seaman's Book essential. If urgent, via Abu Dhabi, but facilities are limited and if possible crew changes should be made at other ports.

AIRPORT: One mile distant, small air strip owned by Abu Dhabi Petroleum Company for private use. Nearest International Airport is Abu Dhabi the capital of the State.
TIME: Local time GMT plus 4 hours. No alterations made to clocks during year.
MEDICAL: A male nurse can occasionally be obtained from LAMNALCO, the piloting company, upon request of ship's Agent, but in case of extreme emergency an aeroplane can be chartered from Bahrain or Abu Dhabi to pick up the patient at Jebel Dhanna for transfer and treatment in Abu Dhabi, Bahrain or Dubai.
POLICE/AMBULANCE/FIRE: No Fire or Ambulance facilities available.

The Abu Dhabi Defence Force, Oilfield Security Section maintains a police post at Jebel Dhanna and is responsible to act in case of accident or other emergency, whether ashore or in territorial waters.
TELEPHONES: None.
SERVICES: None.
SHORE LEAVE: Crews not allowed ashore.
REGULATIONS: The Abu Dhabi (Port of Jebel Dhanna) Regulation 1967.
AUTHORITY: Port Officer.

AGENT: National Shipping Gulf Agency Co. (Abu Dhabi) Ltd., Jebel Dhanna, U.A.E. Cables: "Confidence Abu Dhabi". Tel.: Jebel Dhanna Hotel. Radio: Marine VHF radio, stand-by Channel 16 (156.8 mHz) call sign "Confidence Jebel Dhanna".

KHOR FAKKAN: 25.22 N. 56.22 E. (See Plan)

DEVELOPMENTS: The development plan calls for the construction of a large container port, to be followed by a deep-water harbour suitable to accommodate vessels that are too deep in draft to be accepted at ports within the Gulf.

Khor Fakkan, which is a possession of the State of Sharjah, is situated on the East Coast of the Arabian Peninsula and faces the Gulf of Oman. The port is already connected by first-class roads with all the States within the United Arab Emirates and Oman.

The initial work on the construction of the new port will consist of a 1,500 ft. breakwater along which will be built a 1,000 ft. wharf having an alongside depth of 40 ft. Two large rail-cranes will be positioned on the wharf.

The intention is, that the cranes will unload containers straight on to trucks, which will then travel direct to the new airport at Sharjah for air-freighting to destinations within the Gulf, or to Port Khalid for loading upon smaller container vessels transhipping to other Gulf ports, or direct by road to other Gulf States. It is envisaged that the containers will be shifted quickly enough to obviate the need for transit facilities and sheds at Khor Fakkan.

As and when required, the breakwater may be extended to provide additional berthing space.

Khor Fakkan possesses a natural deep-water harbour, but development proposals call for expansion of the harbour, and the necessary work is expected to commence in the near future.

MINA ZAYED (Abu Dhabi): 24.29 N. 54.20 E. (See Plan)

COURTESY FLAG: Vessels calling at ports in the State of Abu Dhabi should fly the flag of the United Arab Emirates as a courtesy flag, and *not* the flag of the State of Abu Dhabi.
DOCUMENTS: 8 copies of Cargo Manifest are required, with full cargo particulars, such as Bill of Lading number, marks/numbers, description, weight and measurement. It is essential that all this information is given on the manifest for each consignment, and the manifests should reach the Agent prior to arrival of vessel in order to be submitted to the Port/Customs Authorities 48 hours before the ship is berthed.

Also stowage particulars should be given in full in order for Agent to advise the Port Authorities the equipment and labour required for efficient handling of the vessels.
REGISTRATION: The Ministry of Communication, Ports Department, Abu Dhabi, have issued the following information regarding the registration of vessels for berthing at Abu Dhabi:

"As from the 8th May, 1973 ships may register themselves with the Port Authority and then decide, if they wish to proceed to another port reporting back on the given approximate date of berthing.

"Ships with any tonnage of cargo may register subject to proof being given to the Port Authority that the Abu Dhabi cargo is immediately available.

"As the registration of ships is a new procedure at this port, the Port Authority reserves the right to impose or alter any restrictions that may be found necessary in the light of the practical experience gained in its operation.

"Furthermore, only an approximate date of berthing can be given until such time as the port is fully supplied with its cargo handling equipment, and the Port Authority cannot be held responsible for any delays that may occur after the vessel's return, although every endeavour will be made to keep the agencies fully informed of the situation."
PILOTAGE: Pilotage into Mina-a-Zaid compulsory, but not to the outer anchorage situated in the area around position 24° 34′ N., 54° 19′ E.

Ships should wait for Pilots in the area stated above and not enter the channel unless instructions to the contrary are given, and hoist the international pilot signal.

Ships should have ready an efficient pilot ladder complying with the international convention of safety of life at sea and properly lit at night. Ships should afford the Pilot a good lee.
RESTRICTIONS: Port and starboard hand buoys have been established marking the new channel approaches to Abu Dhabi Harbour. The channel is dredged to 31 ft. and is 500 ft. wide.

In the first instance and until further notice, ships will only enter or leave during daylight hours. Max. draft 32 ft.
ANCHORAGE: Position 24.27 N., 54.17.6 E., 4.5 miles off shore. Depth at anchorage about 5–6 fathoms. Holding ground good but anchorage exposed to North and Westerly winds when precautions to be taken against anchor dragging.
RADIO: Ships should inform their Agents, 48 hours prior to arrival, of their ETA and draft, and confirm 12 hours before arrival. They should also contact "Abu Dhabi Pilots" on VHF Channel 16 earliest possible, with the above information.
TUGS: It is a requirement that 2 tugs are required on every ship when berthing and unberthing at this port. Any reduction in this number will be solely at the discretion of the Pilot.
BERTHING: Anchors and mooring ropes and wires should be ready for making fast before entering.

There are 6 berths each of 600 ft. length with depth of 32 ft. at 5 (Berths No. 5-9) of the berths and 34 ft. at the other berth (Berth No. 4). A further 6 berths (Berths No. 14-19) will be ready December 1976.

Presently there are 31 mobile cranes of sizes varying from 5 tons capacity to approx. 45 tons capacity and 1 of 70-tons capacity as well as in the storage area.

6 electric cranes 5×5 tons and 1×10 tons.
STEVEDORING: Arranged through Agent. Labourers work under direct supervision of vessel and her officers. Stevedores do not accept any responsibility for loss or damage to cargo, nor for stevedores' damages to vessel. 1 gang consists of 2 Serangs, 1 Tindal, 2 winchmen and 15 labourers. Local custom proclaims that ship's responsibility for cargo ceases only after cargo landed ashore. No special regulations for dangerous cargoes but vessels having such cargoes aboard expected anchor at safe distance from other ships at anchorage. No floating-cranes for heavy lifts but mobile crane of 45 tons capacity available for hire on shore work.

Official port working hours are from 0700 to 0400 hrs. from Saturday to Thursday and Friday from 0700 to 2200 hrs.

Discharging rates are presently: Generals 60/80 tons per day/per hook; pipes 120/150, and bagged cargo 80/100; but are to be improved as result of increased cargo-handling facilities.
MEDICAL: Fully equipped Government Hospital. Qualified personnel, and most medicines available.
TANKERS: See "Das Island" and "Jebel Dhanna".
FRESH WATER: Available at all berths as availability of distillate plants permit.
FUEL: Diesel oil and gas oil is available by barge.
LAUNDRY: Reasonably good laundries available at moderate rates.
PROVISIONS: May be arranged subject 48 hours notice to Agent.
AIRPORT: Regular scheduled international flights, also domestic flights within Gulf area.
TIME: GMT plus 4 hours.
HOLIDAYS: Friday is weekly holiday. Otherwise usual Muslim holidays observed. Cargo work generally not affected by holidays.
SHORE LEAVE: Permitted. A permit can be obtained from Immigration Department. Absolutely necessary that every crew member be in possession of valid seaman's book.
CLEARANCE: Port clearance must be obtained prior to departure.
DEVELOPMENTS: 13 additional berths under construction. 34 berths to be built, construction to commence shortly and the first phase expected to be completed in 3 years.
AUTHORITY: Govt. of Abu Dhabi, Port Department.

AGENT: National Shipping, Gulf Agency Co. (Abu Dhabi) Ltd. POB 377, Abu Dhabi, U.A.E. Cables "Confidence", Abu Dhabi. Tel. 43008/9. Radio: Marine VHF radio, stand-by on Channel 16 (156.8 mHz). Call sign "Confidence, Abu Dhabi". Telex, 2248 ("Gacship AH 2248).

MUBAREK TERMINAL: 25.49 N. 55.11 E. (See Plan)

LOCATION: The Mubarek Oil Terminal is situated off the island of Abu Musa, and is under the jurisdiction of the Emirate of Sharjah and operated by the Crescent Petroleum Company.
DOCUMENTS: One Crew List and valid Health Certificate.
EARLY DEPARTURE PROCEDURE: In force. Vessel's Agent signs all documents on behalf of the Master.
PILOTAGE: Vessels to be moored, anchored or manoeuvred at Mubarek Oil Terminal will be boarded by Company Mooring Master in the close vicinity of the suggested anchorage area. Vessels must not enter the restricted limits of the terminal unless a Company Mooring Master is on board.

Ships are requested to have a pilot ladder safely and securely rigged and ready for immediate use and long enough to reach the Company Mooring Master's launch. A combination of pilot ladder and ships accommodation ladder so arranged that personnel can first use pilot ladder until part way up the vessel's side and then transfer to the accommodation ladder is recommended, especially on very large ships. A light line should be ready to take aboard the

Company Mooring Master's portable radio. There should be adequate lighting at night. Vessels will provide a lee for the Company Mooring Master's launch when boarding and leaving.

The Company Mooring Master may require the vessel to anchor at any time he deems it necessary for the safety of the vessel or moorings or both or for infringement of the terminal regulations.

The Company Terminal Superintendent shall be the sole authority as to when the terminal is open or closed for normal working due to weather conditions.

NAVIGATION AIDS: A floating barge named *Baraka 1* (82,000 d.w.t.) 546 ft. long, used for storage of crude oil and for accommodation and headquarters of terminal personnel lies permanently moored in position 25° 49′ 43″ N., 55° 11′ 49″ E. approximately 065° 6,000 ft. from the terminal's single buoy mooring. *Baraka 1* is equipped with normal navigational warning lights and aids as required by convention.

A permanent fixed oil production platform, incorporating crude oil treating facilities, rises approximately 50 ft. above water at 25° 50′ 43″ N., 55° 11′ 49″ E., approximately 000° 6,079 ft. from the aforementioned *Baraka 1*. Also a tripod drilling platform rises approximately 50 ft. above water at 25° 51′ 44″ N., 55° 12′ 55″ E., approximately 044° 1.7 miles from the production platform. Said structures are equipped with 1 clear light flashing "U" code on each corner and a fog horn operating 2 seconds on and 18 seconds off. A permanently fixed flare structure (tripod) rises 150 ft. (flare tip) above water at 25° 50′ 56″ N., 55° 12′ 00″ E., approximately 037°, 1,716 ft. from the oil production platform.

READINESS: Notice of Readiness will not be accepted as at time of arrival unless the vessel is in all respects ready to load. Arrival time will be considered the time the Company Mooring Master boards the vessel, or the time the vessel is within the approved anchorage area, whichever occurs first. Notice of Readiness is to be in English.

ANCHORAGE: An anchorage area diameter 6,000 ft. has been established with the centre in position 25° 46′ 45″ N., 55° 13′ 13″ E.

When arriving by day display flag "Q"; by night display Red Light over White Light for Quarantine Service.

RESTRICTED AREA: A restricted area of approx. 38 sq. miles has been established with a boundary formed by an imaginary line from:

(*a*) 25° 54′ 26″ N. 55° 13′ 49″ E. in a W.S.W. direction
(*b*) 25° 15′ 14″ N. 55° 07′ 19″ E. thence in a S.S.E. direction to
(*c*) 25° 46′ 33″ N. 55° 09′ 37″ E. thence in a E.N.E. direction to
(*d*) 25° 49′ 44″ N. 55° 16′ 08″ E. thence in a N.N.W. direction to the position above.

HEALTH: Customs, Federal Police and Immigration Officials will board the vessel as soon as possible after arrival to give inward clearance and "pratique" service. When arriving fly "Q" flag by day. And red over white light at night.

RADIO: Initial communication by radio between ship and Crescent Petroleum Company should be via Bahrain Radio, call sign "A9M", which operates on a 24 hours basis and by HF/SSB International Maritime Radiotelephone Service to Mubarek Oil Terminal.

Company Mooring Master will have sole control of radio installations during the period a vessel is manoeuvring or moored, and no radio transmissions will be permitted on board ship except by the express permission of the Mooring Master in each case, only the Mooring Master may transmit on Channels 12 and 6 during the period he is on board. He will have a VHF radio telephone with him.

Mubarek Oil Terminal Radio Station call sign "Crescent-2" particulars are as follows:

Operated by Crescent Petroleum Company, Sharjah, position Lat. 25° 49′ 43″ N., Long. 55° 11′ 49″ E.
Frequencies: Channels 69 and 73 on VHF.
Hours of operation: 24 hours per day.

Mubarek Oil Terminal Control Centre keeps continuous watch on VHF radio telephone Channel 16. Vessel approaching the terminal should make contact on Channel 16 when the terminal will request her to switch to an alternate channel.

Channel 6 is reserved for communications between ships in moorings and Mubarek Oil Terminal Movements Control Centre. This is a safety measure since oil flow to ships is controlled through Channel 6, which therefore must be clear at all times in case of need to stop oil flow for any cause.

Channel 16 is for calling and safety use only.

In emergency failure of Radio and/or Radio Telephone communication daylight lamp signalling may be used with the Oil Movements Control Centre located on "*Baraka 1*".

It is most important that ships establish communications with the terminal not less than 72 hours prior to arrival at the terminal giving ETA. Further ETA signals should be sent when the vessel is 24 hours, 12 hours and 4 hours distant, or any time a change of 1 hour in original ETA occurs. These messages should state specifically whether ETA is given in GMT or Local Time. The 72 hour signal should include the following:

ETA.
Last Port of Call.
If any Sickness on Board.
If vessel has Clean Bill of Health.
Cargo quantity and Grades expected to be lifted in long tons.

The 12 hour signal should include definite indication as to whether the vessel is ready to load or not and should also include information on the time she will require to discharge ballast after arrival. Precise time of arrival should be given when the ship is 4 hours distant from the terminal.

Unreasonable insufficiency or inaccuracy in ETA messages may alter the order of berthing of ships to the advantage of those ships giving sufficient and accurate ETA messages. Acceptance of Notice of Readiness will also be affected by such insufficiency or inaccuracy.

On receipt of first signal from a vessel, terminal will transmit a message to her giving preliminary requirements of terminal. Masters are urged to comply with this in all details in order to facilitate vessel turnaround and government formalities.

TUGS: The Company maintains launches to assist in mooring and unmooring vessels. These are under the direct supervision and control of the Company Mooring Master.

BERTHING: Vessels to load crude oil cargo will be normally accepted and berthed in chronological order of arrival provided such vessels have current nomination for cargo valid at the time of tender, carry clean ballast if any, and have cargo tanks in a fit condition to receive cargo. Also, they must be in all respects properly equipped and ready to moor. Should berthing be delayed on account of bad weather, vessels will keep their position in line.

Vessels required to leave the terminal area on account of bad weather should keep in contact with the terminal via the Company radio station at Mubarek Oil Terminal, call sign Crescent-2, in order that they may be available when the weather is fit for resumption of operations. The Company reserves the right to load vessels out of turn following the return of good weather, to the extent that such loading "out of turn" does not materially delay the loading of other vessels in line. Further the Company reserves the right to decline to moor a specific vessel if its condition or facilities are unsafe for mooring or loading even though the terminal may be open to other vessels.

The Company Terminal Superintendent's decision on this will be final.

S.P.M.: The single point buoy mooring berth (SBM), 11 m. in diameter and located in 163 ft. of water, is designed to handle tankships in the 350,000 d.w.t. class, but fitted at present with hoses for vessels of 250,000 d.w.t. ASA 150 pound flanged connections and one 20 in. floating hose, reduced to 12 in. Tanker Rail Hose for connection to export tanker's loading manifold, the length of hose being 940 ft.

Average loading rate is 16,000 b.p.h. The SBM is also provided with one permanently attached 21 in. circumference synthetic fibre floating mooring lines.

EQUIPMENT: Vessels must have suitable winches or capstans in good operating condition on the forecastle deck. Constant tension type winches may not be used except when they can be solidly locked and the constant tension feature not used.

All vessels should have ready messenger lines on forecastle head for bringing 2 mooring lines aboard from single point mooring (SBM).

Mooring winches on forecastle head for handling two 10 in. circumference synthetic fibre floating pick-up lines from SBM.

Adequate chafing gear to prevent damage to mooring lines.

Adequate mooring bitts to secure mooring lines.

Hose lifting winch, derrick and gear rigged for 7.5 tons.

HOSES: After the vessel is securely moored the cargo hose will be hoisted on the port side. The hose is lifted by ship's gear and crew, and all connecting of the hose will be done by them. The lifting derrick, equipment tackle, etc., should be topped off and ready on arrival. Terminal loading hose is fitted with ANSI 150 pound flat face flange and ships should have adapters and fittings to enable this hose to be connected to the ship's manifold. The Company Mooring Master advises the ship's personnel in hose lifting and connecting procedure; however, a deck officer must be present and must direct the ship's crew in all handling. The Company Mooring Master may reject a ship for unsatisfactory hose handling.

Do not close valves against crude flow.

Emergency flow stop signal if all communications fail will be a continuous sounding of the ship's whistle from either export tanker or *Baraka 1*.

CARGO SPECIFICATIONS:

Approx. Mubarek crude specifications:

Gravity	36 A.P.I. (approx.)
Sulphur	0.6%
B.S.&W.	Two tenths of one per cent or less by volume.
Metals	Not in excess of trace (100 PPM).
Viscosity T	52 SSU at 120° F.
Flash Point	Below ambient temperature.
Pourpoint	30° F.
H_2S	Nil

FRESH WATER: Not available.

FUEL: Not available.

CONSULS: Various consulates are located in Abu Dhabi and Dubai.

REPAIRS: No repairs, painting, etc., are to be made while berthing unberthing or in the berth.

CUSTOMS: Cigarettes, cigars, tobacco, matches, spirits, wines, beers, perfume, arms, ammunition and possibly other items have to be locked up under Customs seal from time of arrival of ship until time of leaving territorial waters.

TIME: Local time is GMT plus 4 hours throughout the year.

SERVICES: No supplies of any kind and no medical services (except in case of emergency and subject to a doctor being available), or other services are available at Mubarek Oil Terminal.

SHORE LEAVE: Not permitted.

GENERAL: *Light Dues:* The Middle East Navigation Aids Service (MENAS) charges light dues according to the size of the vessel and the number of visits to the Gulf during the year. At the present time these dues are charged at the rate of stg. £0.26 per 100 n.r.t.

Positively no provision is made for dirty ballast: Any ship arriving with dirty ballast will be rejected and all costs accruing therefrom will be to the ship's account. Notice of Readiness shall not be accepted until vessel returns with clean ballast and tanks fit to receive cargo. She will on second arrival tender a new notice of readiness to load.

Fire towing wires required fore and aft.

No swimming permitted whilst vessel in berth.

No fishing permitted at the berth or within the restricted navigation area.

AUTHORITY: Crescent Petroleum Company.

AGENT: Gulf Agency Co. (Sharjah) Ltd. P.O.B. 435, Sharjah. Cables "Confidence", Sharjah. Telex 8019 ("8019 Confid SH"). Telephone: 22163, 23503.

MUBARRAS ISLAND, Abu Dhabi: 24.28. N. 53.22 E (HALAT AL MUBARRAS) (See Plan)

FLAG: All vessels calling at Mubarras are required to fly the national flag of The United Arab Emirates which is available from ship's Agent.

LOCATION: Mubarras Island is located approximately Lat. 24° 28′ N., Long. 53° 22′ E., some 55 miles W. of Port of Abu Dhabi.

The island constitutes export terminal of crude oil produced by Abu Dhabi Oil Company Limited (Japan). Crude oil produced from the Company's Mubarras oilfield is transported to Central Facilities Platform (CFP) situated approximately 19 miles E.N.E. of Mubarras Island by 4″ to 14″ flowlines, thence relayed by a 18″ transmission line to the Island. The Company has tank storage for 1,548,000 barrels of crude oil on the island.

Tanker loading is accomplished by means of a single-buoy-mooring (SBM) system installed about 8 miles offshore East of the Island.

Average API Gravity of crude oil to be located is 38 degrees and flash point is below 35 degrees Fahrenheit.

PORT LIMITS: The port area of Mubarras and its approaches cover the area bounded by straight lines connecting the following points:

(a)	24° 30.0′ N.	53° 36.0′ E.
(b)	24° 24.0′	53° 36.0′
(c)	24° 24.0′	53° 27.0′
(d)	24° 26.7′	53° 21.7′
(e)	24° 30.0′	53° 21.7′

Masters of all vessels entering the Port must follow instruction from the Company's Port Master as to approaches, anchoring, berthing and unberthing.

APPROACHES:

Buoys have been laid as follows to mark the channel leading to the Oil Loading Terminal which is established at Halat Mubarras.

Buoy Name	*Latitude North*	*Longitude East*	*Buoy Colour*	*Light Character*
Mubarras Approach	25° 01.00′	53° 37.92′	Red	Fl. R. ev. 5 sec.
Mubarras Entry	24° 53.67′	53° 28.32′	Black	Fl. W. ev. 10 sec.
1.	24° 43.55′	53° 28.10′	Black	Fl. W. ev. 2 sec.
3.	24° 38.25′	53° 32.03′	Black	Fl. W. ev. 3 sec.
5.	24° 33.93′	53° 40.12′	Black	Fl. W. ev. 5 sec.
6.	24° 31.87′	53° 40.58′	Red	Fl. R. ev. 2 sec.
7.	24° 31.93′	53° 40.20′	Black	Fl. W. ev. 2 sec.
8.	24° 30.81′	53° 40.93′	Red	Fl. R. ev. 5 sec.
9.	24° 30.33′	53° 40.43′	Black	Fl. W. ev. 3 sec.
10.	24° 29.97′	53° 40.72′	Red	Fl. R. ev. 3 sec.
11.	24° 27.33′	53° 38.17′	Black	Fl. W. ev. 5 sec.
12.	24° 28.93′	53° 40.43′	Red	Fl. R. ev. 5 sec.
13.	24° 26.38′	53° 36.63′	Black	Fl. W. ev. 3 sec.
14.	24° 26.17′	53° 37.00′	Red	Fl. R. ev. 3 sec.
15.	24° 26.00′	53° 33.00′	Black	Fl. W. ev. 2 sec.

In the section of the channel from the Approach Buoy to No. 5 buoy the depth reduces from 85 ft. to 55 ft. Between No. 5 Buoy and No. 14 Buoy the channel requires to be navigated with care, the least depth being about 48 ft. with a least width between the paired buoys,

(a) No. 7 and No. 6
(b) No. 9 and No. 10
(c) No. 13 and No. 14

of about 3 cables. After passing Nos. 13 and 14 buoys the channel deepens to 50 to 55 ft.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
2 Manifests.
1 International Maritime Declaration of Health.

PILOTAGE: Pilot is provided by the Company free of charge at the request of the vessel's Master based on express understanding and condition that he is aboard the vessel for the purpose of assisting the Master and becomes, for such purpose, the servant of the owners of the vessel.

It is recommended that the Master of the vessel calling at Mubarras for the first time requests Pilot to go aboard the vessel for both inward and outward passage of the channel. The Pilot will normally board the vessel in the vicinity of No. 5 Buoy and will advise the Master on approaches to the berth and he will remain on board to act as Mooring Master and direct loading operations.

Mooring Master: The Mooring Master provided by the Company will undertake pilotage, mooring and unmooring of the tankers.

The Mooring Master shall board vessels to be moored at SBM in the anchorage area or in the vicinity of No. 15 Buoy. The Mooring Master will advise the Master of vessel on approaches to the SBM, mooring, unmooring, connecting and disconnecting hoses and all other operations within the port area. All manoeuvring of vessels within the port area shall be done only in accordance with the advice of the Mooring Master, subject to the understanding that in all cases and circumstances the Master of the vessel shall remain solely responsible for the safety and proper manoeuvring of the tanker. Master or one of his qualified deck officers must be on the bridge at all times while the vessel is being manoeuvred.

ANCHORAGE: The tanker anchorage is within 2 miles radius of Lat. 24° 26′ 8″ N., Long. 53° 34′ E. Depth of water varies from 15.5 to 18 metres (51 to 59.5 ft.) The sea bed all around the anchorage is coral with a few inches of loose sand. Holding is poor and a vessel is advised to pay-out at least six shackles of chain.

Vessels will be advised by radio of a suitable anchorage if above anchorage and the berth are not immediately available. Vessels shall not anchor or wait at the South area of Lat. 25 N. without obtaining any information from the Port Master.

Anchorage for Dry-cargo Ships: Anchorage for dry-cargo ships is directed by Port Master by VHF radio.

Prohibited Area for Navigation and Anchorage: The area within 1.5 miles radius from CFP is prohibited for navigation and anchorage. No vessels shall anchor within the range of 1.5 miles from submarine pipe-lines.

MAX. SIZE: See "Approaches" — depth over shoal areas; also see "Tides".

HEALTH: Vessels arriving at Mubarras Terminal must carry the usual Bills of Health for ports visited on the voyage. Masters of vessels are requested to inform the Company if there is any person ill on board or if there has been sickness within the week prior to arrival.

Pratique is usually granted by Port Medical Officer through the Mooring Master or Agency Clerk.

RADIO: Tankers bound for Mubarras should advise their ETA and other information at least 72 hours before arrival, confirming the ETA again at least 24 hours before arrival.

Vessels may find it helpful to route their first message through Singapore, Bombay or Bahrain Radio Station. All cables should be addressed to the Company through ship's Agent.

The first message should be sent according to the following form, but any items which are the same with a recent previous voyage to this port may be omitted.

(1) ETA Mubarras.
(2) Last Port.
(3) Next Port.
(4) Deballasting time.
(5) Quantity of cargo required.
(6) Maximum loading rate.
(7) Diameter of cargo manifold.
(8) Distance from manifold to ship's side.
(9) Derrick capacity.
(10) Diameter of fairlead.
(11) Name of Master.
(12) Number of crew.
(13) Whether Pilot is required or not.

Radio Station in Mubarras Terminal Office.

Short-range communication to Mubarras Terminal office can be made by calling "Mubarras Terminal" on VHF or SSB radio telephone. Vessels should inform the office with their ETA preferably when they pass the Strait of Hormus. After anchoring, vessels should advise anchoring time and maintain a listening watch on Channel 16 until Mooring Master boards.

Call Sign: "Mubarras Terminal".

Frequency:	*Reception*	*Transmission*
F3	Ch. 16	Ch. 10, 12, 14
A3	2182 kc/s.	2638 kc/s.

Operating Periods: Round the clock.

BALLAST: All vessels arriving at this port are required to have on board sufficient clean ballast to give a safe draft for manoeuvring purposes. Vessels arriving with insufficient ballast may be required to increase the quantity, should the Mooring Master consider that it would not be safe to berth the vessel for loading. As a general rule, vessels shall not start discharging ballast until mooring is completed.

Upon completion of deballasting the Mooring Master will inspect the tanks. If the tanks are not satisfactory, he may require further pumping until such time as they meet the required standard.

It is strictly prohibited to discharge oil, oily water or other refuse that may result in pollution of the sea. International oil pollution regulations must be strictly observed by all vessels. *The terminal does not have facilities to receive oily ballast.*

TUGS: Following vessels are always available for use for marine operations at this port.

Name of Vessel	*G.R.T.*	*B.H.P.*	*Spd. (kt)*
No. 1 Union (Tug/workboat)	499	1,120×2	12
No. 2 Union (Speedboat)	50	480×2	21
No. 3 Union (Mooring boat)	25	195×2	11
No. 4 Union (Mooring boat)	5	30×1	7

BERTH: *Position of Buoy:* Lat. 24° 25′.98 N. Long. 53° 31′.54 E. *Depth of Water,* 15.5 m. (51.6 ft.).

The berth is a single-buoy-mooring system consisting of a buoy 44.32 ft. (13.5 m.) in diameter, moored to 6 pendant legs of 3 in. high strength chain shackled to anchor piles at a radius of 855 ft. (260 m.), and having a rotating deck carrying the pipe-line and mooring connections.

One 32 in. crude oil line has been laid approximately 52,500 ft. (16 km.) from the shore to a position close under the buoy. From the underwater manifold the crude oil goes to the buoy through a 24 in.

underwater hose. The connection between turntable piping of SBM and tanker manifold consists of 1 hose string of 840 ft. long, 720 ft. of 24 in. hoses terminating in 2×16 in. hoses of 120 ft.

LOADING: The maximum loading rate of crude oil is 40,000 bbls./hr. or 6,400 kl/hr.

Notice of Readiness: The Master of each vessel should present a Notice of Readiness to load to the Company's Mooring Master who will sign it on behalf of the Company.

The Notice of Readiness should be tendered at the time of the vessel's arrival at the tanker anchorage area, which is, in principle, understood to be either the time of dropping the anchor in the anchorage, or, if the vessel does not anchor, the time that the Mooring Master boards to commence berthing.

Notice of Readiness will not be accepted during periods when the port is closed. The port is "closed" when the weather is such that it is too rough for incoming tankers to berth. The decision regarding the opening and closing of the port will rest with Port Master.

When the vessel is ready in all respects for loading the ship's officer must inform the Mooring Master who will transmit the necessary messages to the control room on shore. Mooring Master is authorised to control all the loading operations.

All cargo documents and shore figures are usually prepared on board and the Mooring Master will sign the documents on behalf of the Company.

MOORING: *Preparation:* Before Mooring Master boards, vessels should have ready the following:

(*a*) Jacob's ladder at lee side.
(*b*) Hawser 1 each at fore and aft deck, polypropylene if possible.
(*c*) 1 steel crowbar.
(*d*) Port derrick with double wire rigged for min. lift 5 tons.

After vessel is anchored, the Company's mooring and hose connection crew will board and pick up mooring and hose connection materials from tug/workboat. Vessel is requested to provide windlass and winch operators.

Mooring Master: Unless pilotage is required the Mooring Master will board the arriving vessels in the anchorage area. Vessels are requested to have pilot ladder safely and securely rigged ready for immediate use and long enough to meet the Mooring Master's launch. Vessels should have their crew standing by ready to receive mooring and hose connection materials and should maintain a lee until this is completed. Mooring Master will instruct the crew in the setting up of the forward mooring.

Moorings: 2 bollard ropes are made fast round the port bitts with their attached shackles about 5 ft. inboard from the fairleads as far forward as possible. The size of the fairlead opening should be at least 300 mm. (12 in.) to prevent chain from jamming in the fairleads.

Attached to the mooring connections on the buoy are two 18 in. nylon ropes (144 mm. dia., breaking strain 250 tons). These ropes are 160 ft. (48 m.) long, and have at their free end a length of stud link chain which includes enlarged end link for receiving the shackles used on the deck of the tanker. From the outer end of this chain there are connected 2 mooring lines consisting of pick-up wires, pick-up ropes and a towing rope (port side only). The nylon rope is supported by "doughnut" floats and the chain is hung by large plastic buoys 5 ft. in diameter and coloured red and yellow.

Hose Connection: After completion of mooring the boat which has been holding the hoses clear during berthing will bring the floating hose to the ship's side and connect the derrick runner to the balance buoy. These are lifted aboard one by one and connected by distance piece which was already connected to vessel's manifold by hose connection crew during mooring operation.

Unmooring: After the hose disconnection is completed, mooring ropes are slacked off and then dropped into the water. Tug/workboat will come alongside either before or after the vessel backs off the berth, whichever is convenient, and will receive mooring and hose connection materials.

TIDES: The maximum tidal range in this area is 6 ft., the average tidal range at the Spring tide 3 ft. and the Chart Datum is 0.7 ft. below ISLW. Tidal stream is variable according to the place and the lay of the land. But the flowing tide usually runs South-Eastwards and ebbing tide North-Westwards. Speed of a current is around 2 knots at the highest.

"Tide and Current Table" is published annually by the Company, applicable to Mubarras and the surrounding area, and will be obtained on application to the Company.

WEATHER: Local weather at Mubarras is almost similar to that of Jebel Dhanna and Abu Dhabi town, being extremely hot and humid in Summer. Temperature sometimes soars as high as 50° Centigrade with almost 100 per cent humidity in July and August.

MEDICAL: The Company does not operate a clinic and hospital at Mubarras. But when necessary, Master may obtain medical attention for ship's personnel from the ship's Agent who may in the case of serious illness or injury recommend treatment at the Abu Dhabi government hospital. The ship owner will be charged for all expenses incurred.

FRESH WATER: Not available at Mubarras except in case of extreme emergency.

FUEL: Not available.

CONSULS: No consular business is available at Mubarras. However, various countries have representations in Abu Dhabi.

REPAIRS: There are no repair facilities at Mubarras. However, radar and electronics repairs are available in Abu Dhabi and technicians can be sent to Mubarras for repairs through notifying the ship's Agent.

SURVEYORS: Lloyds, ABS, Veritas surveyors are available in Bahrain and they can be brought if ample notice is given to ship's Agent.

CUSTOMS: Under normal circumstances Customs officers do not board tankers at this port but upon arrival the Master is required to submit to the Customs through the ship's Agent a manifest of any cargo to be landed at Mubarras.

After loading is completed the Mooring Master will sign on behalf of Customs an outward manifest and issue the port clearance. These will be handed to the Master by the Agent.

REPATRIATION: Repatriation of ship's personnel may be accomplished by special arrangements through the ship's Agent who should be informed well in advance of the vessel's arrival. Launch or helicopter fare in case of repatriation will be charged to Owners.

TIME: Local standard time at Abu Dhabi is GMT +4 hours throughout year.

FIRE-FIGHTING: Tug/workboat "No. 1 Union" stationed at Mubarras Island is equipped for fire fighting. She is capable of pumping 1,700 gallons of water per minute from 3 nozzles and is usually on emergency stand-by during tanker loading operations.

GENERAL: *Engine:* The main engines and all gear must be in an operable condition and in a state of immediate readiness whilst the vessel is on the berth.

Stores: Provisions and deck stores not available.

Divers: The services of the Company diver may be available to vessels where it is essential that a diver's services are required to enable a vessel to sail. All requests for such services should be routed through the ship's Agent to the Port Master.

Mail: Mail can be received and sent through ship's Agent.

Dry Cargo Discharge: A "T"shaped jetty at Mubarras Island can accommodate a vessel with maximum 12 ft., of draft. Discharge of dry cargo must be arranged well in advance through ship's Agent in Abu Dhabi who will supply labour and barges from Abu Dhabi. No gear whatsoever is available at Mubarras.

CHARGES: To cover the cost of mooring/unmooring, towage, hired launch and maintenance of channel light buoys the following port charges are collected by the Company from all tankers entering the port.

A basic charge of U.S.$380 per vessel plus U.S.$4.60 per 100 net registered tons with maximum charge of U.S.$3,680 per call.

A standard Agency Fee of U.S.$280 per visit is charged for tankers by ship's Agent.

Port Dues are levied by the Abu Dhabi Government in the amount of B.D. 0.060 (sixty fils) per ton of gross registered tonnage of each tanker.

In case the tanker loads crude oil less than its deadweight tonnage the port dues will be determined by calculating the amount of cargo actually loaded as a percentage of the deadweight tonnage of the tanker and by applying the above rate with reference to the following table:

Percentage of deadweight tonnage loaded	*Percentage of port dues*
From 0 to 40	40% of the GRT
More than 40 to 50	50% of the GRT
More than 50 to 60	60% of the GRT
More than 60 to 70	70% of the GRT
More than 70 to 80	80% of the GRT
More than 80 to 90	90% of the GRT
More than 90	100% of the GRT

AUTHORITY: Abu Dhabi Oil Co. Ltd. (Japan).

AGENT: National Shipping/Gulf Agency Co. (Abu Dhabi) Ltd. are appointed by Abu Dhabi Oil Co. Ltd. (Japan) as exclusive shipping Agents for all vessels calling at Halat Al Mubarras Terminal. The address particulars are as follows:

National Shipping, Gulf Agency Co. (Abu Dhabi) Ltd., POB 377, Abu Dhabi, United Arab Emirates, Cables: "Confidence", Abu Dhabi. Telex: AH 2248. Tel.: 43008, 43009.

Bank: The British Bank of the Middle East, Account No. 23049, Abu Dhabi, United Arab Emirates.

ETA messages shall be sent to National Shipping/Gulf Agency Co. (Abu Dhabi) Ltd., cable address: "Confidence", Abu Dhabi, via Bahrain Radio.

Vessels can otherwise communicate with NSGAC, Abu Dhabi, over Marine Radio HF, frequencies: standing by on 2182 kc/s. and transmitting on 2182, 2301, 2368, 2738, 2003, 2126 and 2406 kc/s., call sign "Confidence", Abu Dhabi.

Vessels equipped with SSB radios can also communicate with NSGAC, Abu Dhabi, on the frequencies, standing by on 6910 mHz lower side band and transmitting on 3539 and 6910 mHz, call sign "Confidence", Abu Dhabi.

Under favourable weather and transmitting conditions communication can also be performed over the VHF radio on the following frequencies: standing by on Channel 16 (156.8 mHz) and transmitting on Channel 9, 10, 12, 13 and 14, call sign "Confidence", Abu Dhabi.

PORT RASHID, Dubai: 25.16 N. 55.16 E. (See Plan)

FLAG: U.A.E. and Dubai.

DOCUMENTS: The following should be airmailed to Agent prior to ship's arrival.

6 Dangerous Cargo Lists.
2 Stowage Plans.
2 Hatch Lists.
7 Cargo Manifests.
1 each Bill of Lading.
3 Crew Lists required (on arrival).

APPROACHES: Fairway buoy black and white spherical, flash white, every 1.5 seconds. In January 1977 the buoy will be positioned 4,000 ft. due North of the new entrance to the Port and on the centre line of the approach channel.

PILOTAGE: Compulsory. Pilot will board from a launch and a Pilot ladder should be provided and a lee given. Large vessels calling at the dry dock should provide an accommodation ladder with its lower platform within about 12 ft. of the waterline and a pilot ladder rigged on ship's side adjacent to the accommodation ladder platform.

Pilot will board twenty four hours a day, seven days a week, except on religious holidays.

RESTRICTIONS: White oil tankers will not be berthed during the hours of darkness. Vessels will not be allowed to remain alongside berths when not working cargo.

MAX. SIZE: Tanker berth draft 37 ft., length 850 ft. Commercial berths 1 to 15, 35 ft. Commercial berths 16 to 37, 38 ft. (to be completed progressively over 3 years).

TUGS: Two 2,000 h.p. and one 2,500 h.p. are available, the practice being to secure alongside with 2 tug ropes therefore gangway and derricks should be secured in-board.

Tugs are fitted with VHF.

RADIO: The Port Signal Station (call sign 'Dubai Port Control') is fully equipped with VHF radio and watch is maintained 24 hours per day on Channel 16, switching to Channels 14, 12, 9, 6, 67, 32 port operations are controlled on Channels 65A and 66A; the Signal Station is fitted with VHF direction finding and recording equipment to assist in prosecuting stations contravening international radio procedure and regulations.

The Signal Station is situated at the seaward end of No. 1 berth at a height of 57 ft. above sea level.

Vessels should contact Dubai Port Control requesting berthing instructions.

Vessels should advise their Agents the arrival time, LOA, draft and position of bunkers, connections if bunkers are required and advise amended ETA where possible by VHF. They in turn will pass the information on to the Port Authority.

HEALTH: Normal quarantine regulations apply and pratique can be given by the Pilot on cargo vessels, always subject to the Health Authorities approval. Health Authorities only board when the vessel is alongside, except in the case of a suspected ship.

BERTHING: All berths alongside quays in enclosed harbour.

Quay No. 1 comprises of 4 berths for all classes of traffic.
Berth No. 5: Max. length 540 ft.
Quay No. 2: 5 dry cargo berths.
Quay No. 3: 5 dry cargo berths.
Berth No. 16: Max. L.O.A. 650 ft.
Quay No. 4: 21 berths (under construction).

A container crane is in operation at berth No. 10.

FRESH WATER: Available at all berths.

FUEL: Marine fuel oil, gas oil, diesel oil and thin fuel oil are available at berths 1 to 4, 6 to 9 and 17 to 32.

Maximum loading rate:	Fuel oil	300 t.p.h.
	Diesel oil	300 t.p.h.
	Gas oil	150 t.p.h.

Gas oil is available for small craft in the Coaster berth.

TANKERS: A tanker berth operated by Shell Markets (M.E.) Ltd. who have exclusive bunkering rights in Port Rashid is capable of taking vessels up to 850 ft. in length and draft not exceeding 37 ft. Vessels in excess of 37 ft. and not exceeding 38 ft. draft may be berthed by arrangement with the Harbour Master at or near high water, subject to weather conditions.

CARGO HANDLING: *Shore:* Normal port working hours.

1st shift	0700 hrs – 1400 hrs.
2nd shift	1800 hrs. – 0200 hrs.
3rd shift	0001 hrs. – 0600 hrs.

Special shift 1400 hrs. – 1800 hrs. on request.

The Port Manager may order full night working.

Each berth is provided with fork-lift trucks and trailers. Pallets to assist cargo handling are available without charge. Cargo is discharged direct to sheds (400 ft. by 200 ft.) or to storage areas where mobile cranes varying from 5 to 40 tons lift operate.

Ship: Ships gangs are available for distribution to vessels through Agents, vessels should advise their requirements before arrival. The gangs board and operate under the supervision of ship's officers. No quay cranes are provided, so ship's derricks/cranes must be used, together with cargo handling equipment. A close liaison should be maintained with the Cargo Superintendent or Shed Supervisor at all times.

Lighterage; When berths are fully occupied, vessels may discharge/load ex-lighters at anchorage.

STEVEDORES: Gangs available, ordered by Agent before vessel's arrival. Gangs board and operate under supervision of ship's officer. Ship's gear used. Working hours: See "Cargo Handling".

MEDICAL: Qualified doctors and hospital available at Dubai also Dentists.

TELEPHONES: Situated in sheds, no connection made to vessels.

SHORE LEAVE: Agents collect all passports on vessel's arrival, together with 3 copies of crew list. Temporary shore leave passes are issued by the Immigration Office (situated at the Southern end of Shed No. 4) against passports and Crew Lists.

GENERAL: Refer to "Dubai" for all general information.

DEVELOPMENTS: *Dry Dock:* The Dry Dock will be in operation in 1978, 3 dry docks will be available.
Dock 1 – max. size: 500,000 d.w.t.
Dock 2 – max. size: 1,000,000 d.w.t. or 2×500,000 d.w.t.
Dock 3 – max. size: 500,000 d.w.t.
Depth over dock sills – 10.5 m.

Tugs of up to 4,000 h.p. will be available for docking vessels.
Tanker berth with tank cleaning facilities will be available,
Lay-by berths for floating repairs will be available. Syncro lift, for vessels up to 3,000 tons.

Some General cargo vessels will be berthed in the Dry Dock area, prior to the commencement of dry docking operations.

Jabal Ali: Work on the construction of a new deep water harbour commenced in August 1976. Intended depths alongside will be 48 ft. at all 74 berths. Slipway facilities will be available.

It is expected that the first 2 berths will be available for use in February 1978.

AUTHORITY: Port Manager. Dubai Port Services.

AGENT: See "Dubai".

RAS AL-KHAIMA: 25.45 N. 56.01 E.

No deep-water harbour at present. Deep-sea vessels are required to anchor off, and discharge into lighters which are unloaded at either Khor Khowair or Ras al-Khaima.

There is a jetty, length 100 m., suitable for berthing smaller vessels, which is protected by a breakwater, and development plans include dredging the inlet to enable vessels with a draft of up to 25 ft. to berth.

DEVELOPMENTS: *New Port – Mina Sakr:* New deep-water harbour under construction, completion expected 1978. Facilities will include 5 general cargo berths, length 200 m. depth 12.2 m. 1 Roll-on/Roll-off berth, depth 12.0 m.

AGENT: See "Dubai".

SHARJAH: (Mina Khalid) 25.22 N. 55.24 E.

(See Plan)

DOCUMENTS: The following documents must be in the possession of the ship's Master on arrival or must be forwarded to ship's Agent prior to ship's arrival:

Immigration:
2 Crew Lists.
2 Passenger Lists.

Customs:
2 Crew Lists.
2 Passenger Lists.
2 List of Alcoholic beverages.
2 Cargo manifests.

Port Operations:
2 Cargo Manifests.
2 Dangerous Goods List.
2 Stowage Plans.
Certificate of Registration.
Classification Certificates.

PILOTAGE: Pilotage is compulsory for all ships entering and leaving the deep water harbour. On entry, Pilots will board to seaward of the fairway buoy; a pilot ladder should be provided. Port Khalid will operate a twenty-four hour, seven-day week pilotage service.

ANCHORAGE: The fairway buoy in position Lat. 25° 23.5′ N. Long. 55° 19.5′ E. is a black pillar buoy flashing white every 1.5 seconds. Vessels approaching should await pilot to seaward of fairway buoy, anchoring if necessary.

Protected Anchorage:

A limited number of vessels may anchor at moorings within the deep water harbour with prior approval of the Port Operator.

MAX. SIZE: Max. draft entering and leaving is 8.7 m. (28.5 ft.). Tidal range 1.2 m. (4 ft.).

The port will accommodate vessels of 12,000 d.w.t. and 600 ft. length.

HEALTH: Normal quarantine regulations apply.

Radio pratique will be granted on receipt of radio message from Master, via his Agent, stating that no serious illness has occured during the preceeding thirty days. All crew members must be in possession of valid smallpox and cholera certificates. The Health Officer will only board when the vessel is alongside.

RADIO: *Notice of Arrival:*

Vessels should advise their Agent ETA Port Khalid, giving draft, L.O.A., and intended cargo operations to be performed, at least 72 hours prior to arrival.

Agents should arrange berthing and labour with the Port Operator. Vessel should contact Port Khalid signal station VHF channel 16 when within range.

VHF: Sharjah Harbour Office can be contacted on Channels 16, 12, 9 and 6.

TUGS: Tug services are available for all ships entering the deep water harbour. At the discretion of the Port Operator ships may be obliged to use the services of a tug or tugs.

Tugs are fitted with VHF.

The harbour tugs are fitted with fire fighting hoses and monitors and foam tanks.

BERTHING: Arrangements made with Harbour Master by ship's Agent for necessary berthing as required.

Berth No.	*Depth at LW*	*Date in Operation.*
1	30 ft.	In operation
2	30 ft.	In operation
3	30 ft.	December 1976.
4	30 ft.	1977
5	30 ft.	1977
6	30 ft.	1977

Total length No. 1 and 2 berths 1,192 ft. (363 m.). Total length No. 3, 4, 5, and 6 berths 2362 ft. (720 m.).

Equipment Available: The Sharjah Container Terminal (SCT) which comprises berths 1 & 2 in the deep water harbour is equipped with Tango gantry cranes. These berths also are equipped with specialized equipment to handle containers in the storage area. Each berth is provided with fork lift trucks, trailers and yard hustlers to facilitate the movement of cargo. Pallets are available to assist cargo handling. Two heavy lift mobile cranes of forty and ninety-ton capacity are available on request from the Port Operator. Other equipment, including cranes, trailers, etc., will be made available upon request to the Port Operator with twenty-four hours notice.

Lighterage; Lighterage services are available.

Storage Facitlities: Storage facilities consists of six sheds (two of which are located in the Container Terminal area) having an area under roof of 28,000 sq. m. (300,000 sq. ft.). In addition, hard surfaced yards and Sharjah Container Terminal Stacking/Packing area provide extensive storage capacity.

STEVEDORES: The port will operate on a twenty-four, seven-day week basis ashore and afloat. Additional charges will apply outside normal working hours which are defined as follows:

Saturday to Thursday except public holidays.
First shift 0600 to 1500 hrs.(1 hour meal break)
Second shift 1500 to 2400 hrs.(1 hour meal break)

Normal working hours are subject to change during Ramadan, when working hours will be at the discretion of the Port Operator. Requirements for port labour must be submitted by ship's Agents to the Port Operator by 1200 hrs. for work during the first shift on the following day and by 0900 hrs. for work during the second shift.

MEDICAL: Upon application to ship's Agent, medical examination of crew members can be arranged. Personnel will either be sent to private Doctor or to Public Health Department, as circumstances dictate. Serious cases will be referred to Government Hospital Doctor.

TANKERS: No facilities.

DENSITY: 1025/1028.

FUEL: Deliveries of fuel oil, gas oil or blends may be arranged through vessel's Agents. Marine lubricants will be delivered to ship's side. Both services require 48 hours notice.

FRESH WATER: Fresh water is obtainable. Agents must notify the tonnage required 48 hours prior to ship's arrival.

REPAIRS: Good facilities for repairs.

DRY DOCKS: None.

SURVEYORS: Services are available upon request.

REPATRIATION: Proximity of the new Sharjah International Airport will permit efficient crew changes and repatriation. Off-shore crew changes facilities can be arranged.

Transit visas are not required for crew changes. Ships passengers require a valid visa for transit or temporary stay.

AIRPORT: Dubai and Sharjah.

TIME: GMT plus 4 hours. Permanent.

SHORE LEAVE: Shore leave is permitted for crew members provided identification card or seaman's papers are deposited with Immigration office situated in the port and collected upon return.

GENERAL: *Pollution:* The provisions of the Sharjah Maritme Law shall apply with respect to the operation of vessels in Sharjah Coastal Waters. Garbage disposal services are provided by the Port Operator and are compulsory.

Ships Chandlers: Complete ship chandling facilities are available, handling provisions, laundry and bonded stores.

DEVELOPMENTS: The next development phase will allow the harbour to be extended to 11 berths with facilities for one tanker berth.

AUTHORITY: Sharjah Port Authority.

AGENT: Gulf Agency Company (Sharjah) Ltd., POB 435, Sharjah, U.A.E. Cables: "Confidence" Sharjah, Tel.: 22163, 23503. Telex 8019 ("Confid SH"). Radio: Marine VHF radio, stand-by on Channel 16 (156/8 mHz). Call sign: "Confidence" Sharjah.

Air-freighted spare parts and ships' mail to Sharjah should be addresed to GAC Sharjah, but sent to Daubai Airport marked "In Transit for M/S . . ." Certificate of Origin should follow the airway bill or in cases of emergency be sent to GAC Sharjah, soonest after shipment. Cable "Confidence" Sharjah, of flight details and Air Waybill number.

NOTES

Please also advise Shipping Guides (Services) Ltd.

United Kingdom

ABERDEEN: 57.09 N. 02.03 W. (See Plan)

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ship's Report by Master.
1 Home Office Form 1B6.
1 Stores List.
1 Certificate of Deck Cargo Tonnage.
1 Light Certificate.
1 Port Dues Certificate.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate – for British ships only.
Load-line Certificate.
Safety Equipment Certificate.
Lloyds Certificate.
Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.

In addition, Manifests and Bills of Lading are usually sent to Agent direct from loading port.

PILOTAGE: Aberdeen has a compulsory pilotage district and there are 9 licensed Pilots. Boatage service, although not compulsory, is available. There are 8 licensed boatmen.

There is a navigation control service equipped with harbour surveillance radar which is operated by Navigation Control officers who operate on a 24-hour basis.

RESTRICTIONS: Navigation channel. max. designed width 110 ft., max. designed depth at HWOST 34 ft. Traffic signals regulate the movement of vessels in the Navigation Channel.

Entrance to Victoria Dock, depth at HWOST 26 ft., clear width at entrance 62 ft. 6 in.

Entrance to Upper Dock, width of entrance 67 ft.

MAX. SIZE: The port can normally accommodate a vessel of up to 525 ft. in length, 80 ft. in beam and drawing 30 ft. 6 in. of water, and at the various berths in tidal waters can handle expeditiously bulk containers and general cargoes. A vessel of length 545 ft. has been handled.

HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a port doctor or an officer of H.M. Customs depending on where the ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present Declaration in all cases; when there is sickness on board the Port Health Authority must be informed preferably not more than 12 hours and not less than 3 hours before arrival.

RADIO: There is a VHF radio communications system which operates on Channels 6, 11, 12 and 16.

BERTHING: Tidal:

Tidal Harbour	length 3,461 ft.	Depth 26–34 ft.	HWOST
Albert Basin	,, 5,586 ft.	,, 25–29 ft.	,,
River Dee (Navigable)	,, 1,884 ft.	,, 25–28 ft.	,,
River Dee Dock	,, 1,398 ft.	,, 28–31 ft.	,,
Upper Dock	,, 1,950 ft.	,, 18–30 ft.	,,
Victoria Dock	,, 4,326 ft.	,, 22–28 ft.	,,

Deep-water Berths:

No. 1 Atlantic Wharf. This is 480 ft. long with 30 ft. water at low tide and 42 ft. 9 in. at HWOST. Two-storey transit shed. Two 3-ton electric portal cranes. Excellent road and rail connection.

No. 2 Pacific Wharf. This is 525 ft. long with 32 ft. of water at low tide and 44 ft. 9 in. at HWOST. Open quay. 2 × 6 ton and 1 × 50 ton electric Portal cranes capable of handling heavy lifts and containers.

FRESH WATER: This service is provided by the Corporation of Aberdeen and is available at all quays.

REPAIRS: Ship-repairing facilities and shipping supplies are offered by a number of private firms and individuals with premises beside the harbour.

DRY DOCKS:

	Overall length (ft.)	*Breadth at entrance (ft.)*	*Depth on blocks (ft.)*	*Lifting capacity*
No. 1	180	29	16	700 tons
No. 4	180	38	18	1,000 tons

There are also 2 privately owned slipways and 1 drydock.

MEDICAL: Doctors and hospitals facilities available. Agents should be advised in advance of any medical attention required.

CUSTOMS ALLOWANCE: At the discretion of Local Customs Inspector. Normal allowances are equivalent to 8 oz. of tobacco per man and equivalent to 1 bottle of wine per man. Allowances may be halved for home trade vessels. Vessels in port for more than 3 or 4 days may receive extra allowances.

CONSULS:

Belgium	G. D. G. Mackinnon, 23 Market Street
Denmark	R. P. H. Pirie, 62 Marischal Street
Finland	D. G. R. Stroud, 62 Marischal Street
France	G. D. G. Mackinnon, 23 Market Street
Germany	A. H. S. Lewis, 186 Albert Quay
Iceland	Awaiting appointment
Netherlands	R. Clark, 3 Bedford Road
Norway	D. G. R. Stroud, 62 Marischal Street
Portugal	Awaiting appointment
Spain	D. G. R. Stroud, 62 Marischal Street
Sweden	R. P. H. Pirie, 62 Marischal Street

AIRPORT: International airport nearby at Dyce. There are frequent daily jet services to London operated by British Airways, and in addition British Airways also operate services to Edinburgh, Glasgow, Prestwick, Wick, Orkney and Shetland. There are also services to Manchester and Birmingham.

Air Anglia operate direct services from Aberdeen to Amsterdam, Bergen, Stavanger, Edinburgh, Jersey, Leeds/Bradford, Newcastle, Norwich, Isle of Man and Teesside.

TIME: BST is GMT plus 1 hour. GMT during Winter months.

HOLIDAYS: 1st and 2nd January; Spring Holiday (variable date); Summer Holiday (variable date); September Holiday (variable date); Christmas Day (25th December).

POLICE/AMBULANCE/FIRE: Dial 999 from any telephone and ask for service required.

TELEPHONES: There are berths at which GPO telephone service can be made available to vessels. All operational posts are linked by telephone network.

DEVELOPMENTS: Roll-on/Roll-off berth under construction.

AUTHORITY: Aberdeen Harbour Board.

ARDROSSAN: 55.38 N. 04.49 W.

DOCUMENTS: Normal documents required:

Customs Documents.
Health Documents.
Crew List.
Passenger List.
Ship's Papers, etc.

PILOTAGE: Telegraphic address – "Harbour" Ardrossan. VHF Channels 16 and 12. Pilot boat "Crinan" (30 ft. length). Signals for Pilot – flag, lamp or sound letter "G". Pilot taken on board approximately 0.75 miles S.W. of Breakwater Light.

24 hours notice required and amendment if ETA changes.

ANCHORAGE: 12 to 15 fathoms 1 mile S.W.

RESTRICTIONS: Two balls by day, or two red lights vertically by night, from a flagstaff at Montgomerie Pier, at elevations of 66 ft. and, 60 ft. indicate that vessels must not enter.

MAX. SIZE: Eglinton Dock approx. 420 ft. by 57 ft. by 16 ft./18 ft. (depending on tide). North Montgomerie Pier Tanker Berth – max. length 575 ft., max. draft, up to 70 ft. beam, 23 ft./26 ft.; over 70 ft. beam, 22 ft./25 ft.

HEALTH: All vessels requiring attention of Medical Officer shall show flag signal ZW by day, or between sunset and sunrise, either morse signal ZW by lamp, or a red light over a white light, not more than 6 ft. apart. Other vessels shall show flag signal "Q" by day, or between sunset and sunrise either morse signal Q by lamp or a red over a white light, not more than 6 ft. apart.

Certificate of Pratique will be issued by Customs Boarding Officer on receiving a satisfactory and fully completed Maritime Declaration of Health. No further formalities required at subsequent ports of call in the U.K.

RADIO: VHF Channels 12 and 16. Radio telephone per Portpatrick.

TUGS: As for Pilotage. (If second tug required orders to be given not later than 1600 hours and by 1530 hours on Friday for week-end work.) Tug's lines used – no additional charge.

BERTHING: No special requirements except with draft over 16 ft. when vessel may be delayed waiting for tide.

STEVEDORES: Orders to be given by 1130 hrs. previous day.

MEDICAL: No advance notice required unless medical attention is necessary immediately on vessel's arrival. No hospital facilities in Ardrossan, nearest hospital being at Irvine, 6 miles and Kilmarnock 16 miles.

TANKERS: Hoses 8in. Berths (1) Up to 3,000 d.w. (2) Up to approximately 20,000 d.w. Max. draft 22 ft./26 ft. depending on beam and tide.

DENSITY: Sea water 1025.

FRESH WATER: Available continually at all berths.

FUEL: Marine oils available ex pipeline, or by road tanker.

FIRE PRECAUTIONS: Patrolman required for hazardous cargoes.

DEVELOPMENTS: Roll-on/roll-off berth for specialised traffic.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Opened and closed by crew.

CERTIFICATES: Following Certificates are requested: Load Line, safety radio, safety equipment, safety construction, deratisation, and Current Trinity House Light Bills.

CUSTOMS ALLOWANCE: Standard U.K. allowances.

IDENTIFICATION CARDS: Not required.

CONSULS: Norwegian Vice Consulate, Danish Vice Consulate: R. L. Alpine & Co. Ltd., Winton Buildings, Ardrossan. Tel. Ardrossan 3065.

REPAIRS: Limited repair facilities.

REPATRIATION: Customs Boarding Officer acts for Immigration Dept. and arrangements for repatriation can be arranged in conjunction with ship's Agent.

AIRPORTS: Prestwick 18 miles. Glasgow 25 miles.

TIME: BST, that is GMT plus 1 hour. GMT in Winter months.

HOLIDAYS: 1st and 2nd January; Easter Monday; Third Monday in July; First Monday in October; and Christmas Day. Cargo work may be available on certain holidays by special arrangement.

POLICE/AMBULANCE/FIRE: Police tel. Saltcoats 63966; Ambulance, Fire: Ask telephone operator.

SHORE LEAVE: No restriction.

AUTHORITY: Ardrossan Harbour Company Limited.

AYR (including Troon): 55.28 N. 04.38 W.

DOCUMENTS: *Customs Require:*
2 copies Form XS1.
Ship's Register.
Load-line Certificate.
Safety Radio Certificate.
Passenger List.
Pratique.
Crew List.
Port Health require:
Derating Certificate.
Agents require:
1 copy Form XS4.
Bills of Lading.
2 copies Manifest.

PILOTAGE: 24 hours notice of ETA required for Pilot via Agent or Dock Authority.

ANCHORAGE: To Pilot's advice.

RESTRICTIONS: Draft restriction at LW. Enter on Pilot's advice.

MAX. SIZE: 300 ft. in length and 18 ft. draft – depending on berth.

HEALTH: Pratique granted by Customs on arrival.

RADIO: Local station, call sign GPK on 2381 kc/s. VHF radio only, operating on Channel 14 and listening on Channel 16.

TUGS: No tugs available.

STEVEDORES: 24 hours notice of ETA should be given to stevedores.

MEDICAL: Hospital facilities nearby in town.

DENSITY: Varies according to weather.

FRESH WATER: Available at all berths, rates upon application.

FUEL: All grades available, 24 hours notice.

GANGWAY/DECK WATCHMEN: Deck watchman required; may be supplied by arrangement with stevedores.

OPENING/CLOSING HATCHES: Performed by ship's crew.

CUSTOMS ALLOWANCE: 0.25 lb. of tobacco or equivalent cigarettes, and one-sixth of a gallon wine/spirits per man.

IDENTIFICATION CARDS: Seamen's identity cards should be carried.

REPAIRS: Most engine and deck repairs available.

DRY DOCKS: Two at Troon, max. length 400 ft., breadth 50 ft.

AIRPORT: Nearest at Prestwick, 7 miles away, mostly International flights.

TIME: GMT plus 1 hour, reverting to GMT in Winter months.

HOLIDAYS: Official holidays: First 2 working days in January; Easter Monday; Ayr Races (2 days in third week in September); Christmas Day. No work at all on these days.

POLICE/AMBULANCE/FIRE: Dial 999, and ask for service required.

TELEPHONES: No connection on board vessel.

SERVICES: Special arrangements can be made for tank washing and compass adjusting through Glasgow.

SHORE LEAVE: No restrictions on shore leave.

AUTHORITY: British Transport Docks Board.

BARROW-IN-FURNESS: 54.07 N. 03.14 W. (See Plan)

PORT LIMITS: The seaward boundaries of the port are a line joining Westfield Point (Lat. 54° 05′ 33″ N., Long. 03° 11′ 10″ W.) with Scar End Point on Walney Island (Lat. 54° 03′ 31″ N., Long. 030° 12′ 17″ W.).

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Health Declaration.
Ship's Certificates and Cargo Documents.

PILOTAGE: Pilot boards at Lightning Knoll Buoy, using pilot cutter, usually 2 or 3 hours before high water.

The Lightning Knoll pilot vessel and the Heysham Lake pilot vessel listen on 2,182 kHz (MF) and are also equipped with VHF listening on Channel 16. The working frequencies are 2,241 and 2,246 kHz and Channels 6, 12 and 14 respectively. The Lightning Knoll vessel listens continuously when on station and the Heysham Lake vessel listens from 5 to 15 minutes past the even hours from 0805 to 2015 hrs. local time. As the Lightning Knoll vessel only goes on station when ships are expected, ships which are suitably equipped should pass their ETA through any United Kingdom Post Office Coast Station to their Agent 24 hours before arrival.

ANCHORAGE: At Lightning Knoll Buoy, depth of 10 m. at LW. In adverse weather conditions vessels proceed to Ramsay Bay, 16 km. away, for shelter. Piel Harbour to North of Piel buoy.

RESTRICTIONS: No docking after HW. Tidal range 6.4 m. – 9.76 m. Deduct 0.5 m. from height of high water to allow for invert at dock entrance. Access to the port, which is protected from the prevailing Westerly winds by Walney Island, is gained from the Irish Sea through the harbour along the well-defined Walney Channel. The depth of water on the Ramsden Dock entrance sill can range from 10.06 m. at high water springs to 6.4 m. at high water neaps.

MAX. SIZE: Length 183 m. Beam 23 m. Draft according to tide.

HEALTH: Vessels arriving from abroad are given pratique by Customs Boarding Officers. In case of suspected disease or fever on board notify Agent prior arrival. Agent will advise Port Health Authorities.

RADIO: Local stations: Anglesea Radio, and/or Port Patrick Radio.

VHF: 'Port' VHF service. Call sign 'Ramsden Radio'. Channel 16 (156.8 mHz) Calling and Safety. Channel 12 (156.6mHz) Port Operations.

TUGS: Liverpool tugs available on request. Notice required.

BERTHING:

Docks	*Water area in Hectares*	*Width of entrance*
Ramsden	24.8	30.48 m.
Buccleuch	12.6	30.48 m.
Devonshire	12.0	24.4 m.

Walney Channel Deep-water Berth: 259.10 m.×30.48 m.×10.06 m. depth.

Ramsden includes: Ramsden Dock Basin with three berths equipped for handling bulk cargoes with a total quayage of 378 m., taking vessels of up to 9.15 m. draft, and Anchor Line Basin with three berths 256 m., 152.4 m., and 274.3 m., long respectively, taking vessels of up to 7.3 m. draft. Anchor Line berth equipped for Ro/Ro traffic.

STEVEDORES: All quayside labour and stevedoring is undertaken by the British Transport Docks Board. Handling woodpulp – 200/300 tonnes per gang per day.

DENSITY: Salt water 1025.

FRESH WATER: Available from quayside hydrants.

FUEL: No stocks at Barrow. Can be supplied by road or coastal tanker.

GANGWAY/DECK WATCHMEN: Compulsory.

OPENING/CLOSING HATCHES: Handled by ship's crew.

IDENTIFICATION CARDS: Seaman's Book or Passport required by non-British crew.

CONSULS: Norway, Portugal, Spain. Tel. Barrow 22323.

AIRPORT: Nearest at Manchester, 100 miles distant. Flights to all parts. Local Airport facilities by arrangement.

TIME: As for other UK ports.

HOLIDAYS: As for other ports in England, plus New Year's Day (1st January).

POLICE/AMBULANCE/FIRE: Police: Tel. Barrow 24532; Ambulance: Tel. Barrow 24201, 21035 and 21363; Fire: Tel. Barrow 21363.

SHORE LEAVE: No restrictions.

AUTHORITY: Docks Manager, British Transport Docks Board.

BARRY: 51.24 N. 03.16 W. (See Plan)

DOCUMENTS: See "Cardiff".

PILOTAGE: Telegraphic address of pilot station: S.E.W.P.A. Pilots, Pier Head, Barry Docks. Amount of advance notice of ETA required: 24 hours. Final confirmation to be given by VHF or RT when within 2 hours of pilot station. VHF channel or frequency to be used when contacting pilot boat or pilot station: VHF Channel 16 thence working Channels 6, 8, 10, 11.

Pilot boat: motor launch black hull with "S.E.W.P.A. Pilot" in white on same. Brown superstructure. Light or sound signals to be made by vessels requiring a Pilot: flag G over numeral 6 flown by day, or 6 sounded on whistle or siren; flashed by lamp at night.

Exact area where pilot boat is located normally between Nash Point and Breaksea L.V. Smaller vessels may be boarded in Barry Roads.

ANCHORAGE: Barry Roads, 10 fathoms, safe anchorage. Large vessels should anchor West of Breaksea L.V. Small vessels 0.75 mile S.E. of Barry Dock Entrance.

RESTRICTIONS: Entrance only before HW to 4 hours after HW.

MAX. SIZE: 575 ft. × 75 ft. × 31 ft. draft.

HEALTH: Pratique granted by Customs on arrival.

RADIO: Barry Docks Radio, Channel 22.

VHF: Channel 22, frequencies 157.10–161.70.

TUGS: Join vessel at Barry Road. Tug's or ship's lines utilised.

BERTHING: The port is fully equipped to receive all types of oil chemicals, including LPG. Also modern facilities exist for handling all types of bulk as well as conventional cargoes. A roll-on/roll-off berth is available. Container traffic is not a feature of the port.

BRIDGES: Bridge swung to vessel's requirements.

STEVEDORES: An early ETA essential. Enables planning to be effected in conjunction with other work in port.

MEDICAL: Hospital facilities available. Advance notice desirable.

TANKERS: 6 tanker berths, maximum draft 31 ft.

DENSITY: Density 1020.

FRESH WATER: 15/20 t.p.h. per hose.

FUEL: All grades ex stock.

GANGWAY/DECK WATCHMEN: The services of watchmen provided at discretion of Shipowner or Agent.

OPENING/CLOSING HATCHES: Work normally undertaken by ship's crew but the port will, if requested, provide a crane to assist in this work on completion of a "Hatch beam form". Riggers may be employed on this work at request of shipowner.

CUSTOMS ALLOWANCE: 1 oz. tobacco per day per man. 0.25 pt. wine or spirits per day per man.

IDENTIFICATION CARDS: Not needed by Port Authority.

CONSULS: None. Majority located at Cardiff 8 miles East of Barry.

REPAIRS: All types of repair undertaken by private ship repairers.

DRY DOCKS: One 940 ft. × 78.5 ft.

REPATRIATION: All facilities available.

AIRPORT: Glamorgan (Rhoose) Airport, 4 miles, served by regular airlines.

TIME: British Standard Time, GMT plus 1 hour. Reverting to GMT in winter months.

HOLIDAYS: Bank Holidays. Arrangements made to work if essential.

POLICE/AMBULANCE/FIRE: Call operator by dialling 999.

TELEPHONES: At main berths.

AUTHORITY: British Transport Docks Board.

AGENT: Cory Brothers Shipping Ltd., Cory's Buildings, 57 Bute Street, Cardiff, CF1 1SZ. Cables: "Cory Cardiff." Telex: 49300. Tel: Cardiff 31141.

BELFAST: 54.36 N. 05.56 W. (See Plan)

DOCUMENTS:

1 Passenger and Crew List for Immigration.
1 Crew Declaration C142 (for HM Customs).
1 List of Ship's Stores (for HM Customs).
1 Maritime Declaration of Health.
1 Cargo Manifest.

PILOTAGE: Pilot station is situated on end of East pier at Carrickfergus. It is manned continuously. Vessels requiring a pilot should give as much advance notice as possible of ETA, but in any case not less than 1 hour. Pilots may be ordered through:

(i) Pilot Station Carrickfergus, tel. Carrickfergus 2329.
(ii) Port Operations Station, tel. Belfast 34422 Ext. 330, or Belfast 59107.
(iii) Belfast Harbour Office, tel. Belfast 34422 Ext. 225, 0900-1700 hrs. Monday-Friday.

There are two motor launches servicing pilots. "Eleanor Laura" is 51 ft. 6 in. long and "Mabel Helen" is 46 ft 8 in. long. Both vessels are painted black with word Pilot in white letters on each side.

Pilot launches may be contacted on VHF Channel 16 and working frequency Channel 6.

Usual international signals should be made for a Pilot. Pilots board from 1.5 to 2 miles S.E. of Carrickfergus. In poor visibility the pilot launch makes a sound signal of 4 short blasts. Vessels may be led into calm water before boarding.

ANCHORAGES: Safe anchorages, according to draft and size of vessel are available through Belfast Lough East of a line from Carrickfergus to Grey Point.

RESTRICTIONS:

Intended depths in the entrance channels: Victoria Channel, sea to Refinery berths – 30 ft. below datum. Refinery to Thomson wharf – 26 ft. below datum.

Musgrave Channel, 21 ft. below datum.

Herdman Channel, 21 ft. below datum.

MAX. SIZE: Vessels' size is restricted only by depth of water available. See "Restrictions", "Berthing", and "Tankers".

HEALTH: Use International Code quarantine signals. Master of a ship approaching a port in Northern Ireland from a foreign port other than an excepted port must ascertain state of health of all persons on board, and must fill in and sign Declaration of Health. It should be completed and ready to deliver to the Customs Officer, or authorized officer of the Port Health Authority, whichever first boards the ship.

If any suspected diseases on board, free pratique will not be granted by Her Majesty's Customs until the ship has been visited by the Port Medical Officer. Therefore in these cases notify PORTELTH BELFAST by radio in advance.

RADIO: The best station for messages, cables, etc., is Port Patrick call signal GPK.

VHF: Belfast Port Operation and Information service is situated at N.W. corner of East Twin dock. A continuous watch is maintained on VHF R/T on Channel 16. Working Channel is 12. Call sign is Belfast Harbour Radio.

TUGS: Tugs are owned by Cory Ship Towage Ltd., Tel. No. Belfast 743278. They are fitted with VHF Channels 16, 14, 12, 8 and 6. Tugs normally meet inward bound vessels in vicinity of number 20 beacon. Use of tugs' lines is optional. Charge for use of each tug line is £5.

BERTHING: The following berths are equipped for handling containers or drive-on, drive-off traffic:

Berth	*Max. draft (ft.)*
Donegall Quay 3 (1×25 tonne derrick crane)	14
Donegall Quay 4 (2×7.5 tonne portal crane)	14
Donegall Quay 5 (No cranes)	14
Donegall Quay 6 (No cranes)	14
Ballast Quay & Spencer Dock (3×25 tonne derrick cranes) (1×15 tonne derrick crane)	16
York Dock A (No cranes)	24
York Dock 1 (1×35 tonne derrick crane)	24
Herdman Channel West (2×30 tonne transporter cranes)	18
Gotto Wharf (2×30 tonne transporter cranes)	21
Pollock Basin 3 (6 tonne portal crane)	21
Pollock Dock 7 (10 tonne portal crane)	28
Stormont Wharf 2 (200 tonne cantilever crane)	28
Albert Quay 6 (30 tonne crane)	18

Unitank Storage Co. Ltd. have constructed a bulk liquid terminal for the storage of petroleum, chemical products, etc. Special tankers ship liquid gas to the storage installation of Calor Kosangas (Northern Ireland) Ltd. at Musgrave Channel.

STEVEDORES: Two schooling times per day for stevedoring gangs – 0800 and 1300 hrs. Gangs for all week-end work are schooled at 1300 hrs. on Fridays.

MEDICAL: All kinds of medical treatment are available. Agent should be given as much notice as possible for arrangements to be made. International vaccination certificates for smallpox are required.

TANKERS: Tankers have to observe (i) Belfast Harbour Commissioners By-Laws for loading, discharging, etc., of petroleum spirit. (ii) Chamber of Shipping Tanker Safety Code.

Capacity for 6,000 tons of tank washings to be processed at B.P. Refinery.

Tanker berths: B.P. oil refinery 35 ft. No. 1 oil jetty 28 ft. No. 2 oil jetty 28 ft. 6in.

DENSITY: Average density of water in Inner Harbour is about 1012, and Outer Harbour is about 1024.

FRESH WATER: Available at almost all berths. Delivery is by hose at a rate of approx. 30 t.p.h. Arrangements can be made through Dept. of Environment (Water Services Division). Tel. 749402.

FUEL: All grades of fuel oil are available. 48 hours advance notice of requirements should be given.

FIRE PRECAUTIONS: Ships have to observe (i) Belfast Harbour Commissioners By-Laws for regulating the use of fires, lights and electrical apparatus. (ii) Chamber of Shipping Tanker Safety Code.

Special precautions for vessels carrying petroleum, explosives, calcium carbide and dangerous goods are set out in the appropriate by-laws. A copy of general port fire notice, delivered to all ships on arrival.

GANGWAY/DECK WATCHMEN: Normally, a member of ship's company acts as watchman. Shore watchmen may be obtained through Agent.

OPENING/CLOSING HATCHES: Conventional beams and hatches and slab hatches are opened and closed by stevedores. McGregor or patent steel hatches are worked by ship's personnel. Ship's personnel are required to work all types of hatches at grain silos.

CERTIFICATES:

Register. Radio Certificate. Load Line Certificate. Safety Equipment Certificate. Safety Construction Certificate. Light Bills. Passenger Certificate if applicable. Chain Register. Derat Station Certificate.

CUSTOMS ALLOWANCE: Tobacco: 8 oz. tobacco are permitted per man and issues are made at 8 day intervals. Wine and/or Spirits: Wine, beer and spirit issues are made, in moderation, at 4 day intervals.

IDENTIFICATION CARDS: Seamen's identity cards required.

CONSULS:

Belgium	Hillsborough 682671
Denmark	Belfast 30581
Dominican Republic	Belfast 31265
France	Belfast 660325
Germany	Ballymena 41412
Italy	Belfast 778353
Netherlands	Belfast 43126
Norway	Belfast 24909
Spain	Belfast 27571
Sweden	Belfast 29281
Switzerland	Belfast 669651
Turkey	Belfast 25865
U.S.A.	Belfast 28239

REPAIRS: All types of deck and engine repairs are possible.

DRY DOCKS: East Twin dry dock, length of floor 1,100 ft. breadth of floor 167 ft., breadth of entrance 165 ft., level of sill 26 ft. 6 in. below datum.

Harland and Wolff building dock, length of floor 1,825 ft., breadth of floor and entrance 305 ft., level of sill 16 ft. 10 in. below datum.

Five other dry docks available.

REPATRIATIONS: Crew may be changed and repatriations arranged. Immigration must be informed.

AIRPORT: Aldergrove airport is approximately 17 miles from Belfast. There are daily flights to all parts of United Kingdom.

TIME: British Standard Time is kept, that is GMT plus 1 hour. Reverting to GMT in Winter months.

HOLIDAYS: Stevedore holidays are 1st January, 17th March, Easter Monday and Easter Tuesday, 12th and 13th July and 25th and 26th December.

POLICE/AMBULANCE/FIRE: All can be contacted by phoning 999 and ask for services required. Additionally: Fire Brigade Belfast 22222; Ambulance Belfast 41212; Harbour Police Belfast 23555; or through Belfast Harbour Radio on VHF/RT Channels 16 and 12.

TELEPHONE: Telephone can be placed on board at certain berths.

SERVICES: All principal makes of radio, radar and gyro equipment can be serviced. Compass adjusting and D/F calibration can be carried out.

SHORE LEAVE: Normally no restrictions on shore leave.

AUTHORITY: Belfast Harbour Commissioners.

BLYTH: 55.08 N. 01.30 W. (See Plan)

DOCUMENTS:

Certificate of Registry.
Load Line Certificate.
Wireless Telegraphy and/or Safety Radio Certificate.
Safety Equipment.
Ship Construction.
Light Dues Payments.
Bills of Lading, Manifest and Stowage Plan usually sent in advance of vessel.
List of members of crew (of ship arriving in U.K.) who are aliens or were engaged outside U.K. (Home Office Form I.B.6A). Passenger form to be completed when reporting vessel's arrival from foreign ports.

PILOTAGE: Call by R/T when within 50 miles of port, and VHF when approx. 1 hour off port. Pilot boats black hull with words "Pilot" on Hull or Superstructure. Letters in white. Fly international Pilot Flag at masthead and at night show international light signals for pilot boat on station.

Vessel requiring Pilot sounds 2 short and 3 long blasts or exhibits International Code Flag "G". By night flashes International Code Signal "G" or "PT". Pilot boats operate and will board within radius of 2 miles of East Pier Lighthouse, or further weather permitting. Pilots board at Pier end area during adverse weather.

ANCHORAGES: No anchorages within harbour – in good weather vessels can anchor off port East of Fairway Buoy.

RESTRICTIONS: No night restrictions. Entry according to draft. Channel dredged to 7.7 m. LAT and approaches 8.6 m. LAT. Upper River and South Harbour 6.8 m. LAT. Rise of tide 4.3 m. springs, 2.1 m. neaps.

MAX. SIZE: Bulk carriers up to 22,500 d.w.t. discharge at Alcan (U.K.) Limited Terminal. Max. draft 9.8 m.

For other berths max. length 190.5 m., draft 8.5 m.

HEALTH: International quarantine signals to be used. Pratique will be granted by Customs or Port Health officer if Maritime Health Declaration is clean. If suspected diseases on board radio "PORTELTH BLYTH" in advance advising details.

RADIO: Cullercoats Radio.

VHF: Details of movements within port given over VHF from port control office. Calling Channel 16, working Channel 12.

TUGS: Normally join vessel at harbour entrance. Extra charge for use of tugs lines.

BERTHING: Alcan Bulk Alumina Terminal, depth alongside 10.4 m. LAT.

North Quay, South Harbour, depth alongside 6.8 m. LAT. Coal-loading berths and waiting berths, 5.2 m. to 8.6 m. LAT. West Quay, dredged depth 5.2 m. LAT. South Side Berths, dredged depth 8.6 m. LAT. Wimbourne Quay dredged depth 6.8 m. LAT.

STEVEDORES: Blyth Harbour Commission, Traffic Department. South Harbour, Blyth. Tel. Blyth 3611/2. ETA requested day before arrival.

MEDICAL: Notice not necessary but advisable. Hospital facilities available. Inoculation, vaccinations and/or certificates not specifically required.

DENSITY: Sea water. Fresh water effect negligible.

FRESH WATER: Obtainable from shore hydrants. Rate of delivery approximately 20 t.p.h.

FUEL: BHC operate a bunkering Agency on behalf of Shell Mex & B.P. Ltd. 24 hours notice usually required. Grades gas oil and marine diesel.

GANGWAY/DECK WATCHMEN: Not usually employed as these duties are carried out by the crews.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCE: Tobacco: 50/250 grammes. Wine/Spirit: Wine up to 0.75 litres. Spirits up to 0.375 litres.

IDENTIFICATION CARDS: Seaman's Book or Passport desirable.

CONSULS: Denmark, Norway, Netherlands.

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: 3 dry docks available No. 1 L 467 ft. 10 in. × B 60 ft. 9 in., No. 2 L 338 ft. 9 in. × B 44 ft. 10 in. No. 3 L 311 ft. × B 46 ft.

REPATRIATION: Can be arranged by H.M. Immigration Office, Blyth.

AIRPORT: 24 km. Served by regular airlines.

TIME: BST is GMT plus 1 hour. GMT in Winter months.

HOLIDAYS: Christmas Day; New Year's Day; Good Friday; Easter Monday; Spring Bank Holiday and Late Summer Holiday. Cargo work can be arranged on these days by request.

POLICE/AMBULANCE/FIRE: Tel. 999.

TELEPHONES: Can be fixed aboard by arrangement.

AUTHORITY: Blyth Harbour Commission.

BRIDLINGTON: 54.05 N. 00.12 W.

DOCUMENTS:

Crew List.
Passengers List.
Ship's Register.
Customs Documents.
Manifests.
Bills of Lading.
Ship's papers.

PILOTAGE: Vessels approach within 0.25 mile, flying G Flag. Local fishermen act as Pilots and board approx. 1 hour prior to berthing time.

ANCHORAGES: For small vessels of not more than 12 ft. draft, 1 mile S.E. of harbour. Deeper-drafted vessels 3 miles East of Harbour. Good holding grounds except in heavy weather from East to South.

RESTRICTIONS: In accordance with state of tide and draft restrictions.

MAX. SIZE: Max. permissible length 149 ft. Draft 13 ft. on spring tides.

HEALTH: Pratique required from all vessels other than from a British port. Q Flag to be flown.

RADIO: Humber Radio Station is the best for a vessel to route ETA, etc.

TUGS: None available.

MEDICAL: Agents require advance notice of required medical attention. Hospital facilities available. Relevant medical information, i.e. fever, etc., required.

DENSITY: Sea water.

FRESH WATER: Unlimited quantity available. Delivery from shore pipe-line at the rate of 10 t.p.h.

FUEL: All grades available. Delivery by road tankers.

OPENING/CLOSING HATCHES: Normally carried out by crew.

IDENTIFICATION CARDS: Not required.

CONSULS: No local Consuls. Nearest port of availability, Hull, Yorks.

REPAIRS: Limited engine and deck repairs.

REPATRIATION: No facilities exist for crew change.

AIRPORT: Yeadon, 45 miles, served by regular airlines.

HOLIDAYS: Normal Bank Holidays. Cargo can be worked on these days.

POLICE/AMBULANCE/FIRE: Police Bridlington 2222; Ambulance 0482–881198; Fire 3585.

TELEPHONES: No arrangements exist for placing telephones aboard.

SHORE LEAVE: Crew members allowed ashore.

AUTHORITY: Bridlington Harbour Master: Harbour Commissioners.

BRISTOL: 51.27 N. 02.35 W. (See Plan)

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ship's Report by Master.
1 Home Office form I.B.6.
1 Stores List.
1 Certificate of Deck Cargo tonnage.
1 Grain Certificate.
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List.
1 Landing Card for each passenger.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate (British ships only).

In addition, Manifests and Bills of Lading are usually sent to Agent direct from loading port.

PILOTAGE: Telegraphic address, Brispilot Avonmouth. Notice required, not less than 12 hours (preferably more) before arrival Breaksea Light Vessel. VHF Channel, calling 16, working 6. A 58 ft. motor pilot boat, black hull, "Bristol Pilot" in large white letters amidships.

Position: One pilotage station. Western station at Breaksea extends from a line drawn 180° from Sully Island. Weather and other circumstances permitting the motor pilot boat operates from Barry Harbour to board vessels expected to dock at Bristol.

Pilot boats in Bristol Channel have adopted distinctive pilot signals, made audibly during foggy weather when the fog signal for a vessel is heard, and by morse lamp at night in clear weather. The distinctive signal for Bristol pilots is the International Morse Code Number 2, viz ..---Vessels desiring to embark or disembark a pilot are invited to adopt a similar procedure.

ANCHORAGES: Barry Road affords good anchorage in moderate weather for vessels awaiting a Pilot. Walton Bay affords good anchorage within 6 miles of Avonmouth.

RESTRICTIONS: Avonmouth Docks. No restrictions at night. Sill clearance of 4 ft. for all vessels with a maximum draft of 34 ft. 6 in. salt water. There are restrictions on draft during neap tides to possible 28 ft. Range of high water – 33 ft. to 48 ft.

Portishead Docks. Sill clearance of 5 ft. for vessels up to 55 ft. beam. Sill clearance of 6 ft. for vessels up to 60 ft. beam.

MAX. SIZE: Avonmouth Docks. Max. length 690 ft., beam 95 ft., draft 34 ft. 6 in. salt water.

Portishead Docks. Max. length 415 ft., beam 60 ft., draft 26 ft. (normal tides).

HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either the Port Doctor or an officer of HM Customs depending on where the ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area and coastal arrivals need not present Declaration, but when there is sickness on board Port Health Authority must be informed.

RADIO: Niton Radio, Lands End Radio, Portishead Radio.

RADAR/VHF: No port radar service, but an extensive VHF coverage exists from West of Barry Roads, to all dock entrances.

TUGS: Vessels docking on flood tide normally join at old oil jetty to Northward of the entrance lock. Vessels docking on ebb tide, tugs join between Firefly and Cockburn Buoys. Ship's line always used.

BRIDGES: Avonmouth Docks. Junction between Avonmouth Dock and Royal Edward available at all times if necessary by arrangement with Dock Master.
STEVEDORES: At least 24 hours notice required in order that necessary labour may be allocated.
MEDICAL: Absolutely necessary for Agent to have as much notice as possible of any medical attention required. All facilities available.
DENSITY: Avonmouth Docks: Average density 1,012 to 1,015; in the river fluctuates according to tides. Portishead Docks: The density is 1,015.
FRESH WATER: Avonmouth and Portishead Docks: available at all berths, 24 hours a day from hoses connected to standpipe. Delivery rate 25–30 t.p.h.
FUEL: Most grades available – 24 hours notice required.
FIRE PRECAUTIONS: According to local laws, available on request.
DEVELOPMENTS: A new 70-acre dock, West Dock II, is under construction on land directly opposite Avonmouth Docks. The new dock will have a lock 1,200 ft. × 140 ft. wide, a turning circle for ships of 1,400 ft. with 45 ft. of water along the 3 × 2,000 ft. of developed quays. Ships of up to 70,000 tons d.w.t. will be accommodated. The dock should be operational towards the end of 1976.

At the Oil Basin, a bulk liquid storage installation for petroleum, molasses and chemicals has been constructed. Major development schemes now operational include reconstructed and modernised grain discharging berths at the Royal Edward Dock.
GANGWAY/DECK WATCHMEN: Not absolutely necessary – Available if required.
OPENING/CLOSING HATCHES: If crew open hatches on the first day then they must continue to do so whilst vessel is discharging/loading, otherwise dockers attend to this.
CERTIFICATES:

- Load Line Certificate.
- Safety Equipment Certificate.
- Lloyd's Construction Certificate.
- Derat Certificate.
- Ship's Register.
- Light Bills.
- Safety Radio Certificate.

CUSTOMS ALLOWANCE: Foreign trade – equivalent of 45 grams tobacco. Wine and/or Spirits: Equivalent to 0.25 of a bottle per day.
IDENTIFICATION CARDS: Not necessary unless being repatriated.
CONSULS:

Belgian Consul
Danish Consul
French Consular Agent
Finnish Vice Consul
German Consul
Icelandic Consul
Italian Consular Agent
Netherlands Vice Consul
Norwegian Vice Consul
Portuguese Vice Consul
Spanish Vice Consul
Swedish Vice Consul

REPAIRS: All types of repairs are carried out.
DRY DOCK:

	Total length	Length over blocks	Width of Entrance	Depth of water on sill
Avonmouth Docks	875 ft.	850 ft.	100 ft.	32 ft.

REPATRIATION: Repatriation can be effected to all parts of world.
AIRPORT: Local airport approximately 12 miles away. London can be reached in 2 hours by train.
TIME: BST is GMT plus 1 hour. GMT in Winter months.
HOLIDAYS: Easter (varies); Spring Bank Holiday (last Monday in May): August Bank Holiday (varies, usually last Monday in August); Christmas Day (25th December); Boxing Day (26th December). Work can be arranged on these holidays, although unusual to work 25th/26th December.
POLICE/AMBULANCE/FIRE: Avonmouth Docks. A fire pillar system is installed giving direct contact to Authority's police for all emergency services. Can also be contacted by telephoning Avonmouth 2591.

Portishead Docks. Emergency services obtained through Authority's Police, tel. Portishead 2381.
TELEPHONES: Can be put on board at most berths.
AUTHORITY: Port of Bristol Authority.

AGENT: Cory Brothers Shipping Ltd., Portview Road, Avonmouth, Bristol, BS11 9YX. Cables: "Cory Bristol". Tel. Avonmouth 5081. Telex 44129.

BRIXHAM: 50.24 N. 03.30 W.

PORT LIMITS: The area below the level of high water enclosed by:—

(a) An imaginary line drawn from Shoalstone Point in the Parish of Brixham, extending in a west/north/westerly direction for a distance of 6,500 ft. or thereabouts, until it intersects the imaginary line next described:—

(b) An imaginary line drawn from the centre of the Old Quarry at O.S. Ref. SX91445723, in a north-easterly direction for a distance of 3,000 ft., or thereabouts, until it intersects the imaginary line first described, and:—

(c) The land line of the coast from the centre of Old Quarry aforesaid to the said Shoalstone Point.

DOCUMENTS:

1 Crew List,
1 Passenger List,
2 General Declarations (Customs),
1 Health document,
1 Manifest,
1 Each bill of Lading,
1 Ships papers,
1 Ships Certificate,
or
as for other Small U.K. Ports.

PILOTAGE: Trinity House Pilot, tel. Brixham 2214.
DEEP SEA AND COASTAL PILOTAGE: Pilots for Channel, North Sea, British Coast and Baltic. 48 hours before arrival radio "HUTCHINSON GRAVESEND" stating ETA off Brixham and port(s) of destination. On approaching Brixham contact Brixham Pilots on VHF Channel 16 and 9. Pilots board by motor-launch 1 mile N.E. off Berry Head. Pilot boats, length 40 ft. flying "G" flag and flashing "H". Pilots can also board at any British or Continental port as required.
Also see "London" — Pilotage.
ANCHORAGES: In Torbay. Middle of Bay on line Brixham (Victoria) Breakwater and entrance to Torquay Harbour. 6 fathoms chart datum.
MAX. SIZE: Depending on draft (36 ft. to 50 ft.).
HEALTH: Normal Pratique procedure.
VHF: Berry Head Coastguard station and Torbay and Brixham Shipping Agents on VHF Channel 16.
TUGS: None.
BERTHING: Small coastal vessels in Inner Harbour by arrangement with Harbour Master. Vessels up to 500 ft. (draft 26 ft.), at Jetty, on Brixham breakwater by arrangement with Brixham Bunkering and Devon Marine Ltd., (Telephone Brixham 2250), or with Harbour Master.
MEDICAL Contact Brixham and Torbay Shipping Agents.
DENSITY: Salt water. 1025.
FRESH WATER/FUEL: Available from Brixham Bunkering and Devon Marine Jetty on Breakwater.
REPAIRS: Engine welding, plumbing by local firms.
SURVEYORS: Lloyds Agent – Mr. J. S. Churchill, 25 Fore Street, Brixham, telephone 2171.
REPATRICATION: No facilities.
AIRPORT: Exeter, 35 miles away.
POLICE/AMBULANCE/FIRE: Brixham 2231 or 3065 or 999.
SERVICES: No tank cleaning. Compass adjusting with arrangement with Harbour Master.
SHORE LEAVE: Allowed.
AUTHORITY: Harbour's Administrator, Torbay Borough Council, and Harbour Master.

BUDE: 50.50 N. 04.33 W.

GENERAL: Port little used by commercial shipping.
DOCUMENTS/HEALTH/CONSULS: Port not equipped to accept vessels from abroad.
PILOTAGE: Not normally available (special arrangements may be made).
ANCHORAGES: Outer Harbour dries out at half tide.
Inner Harbour (Canal) 8ft. draft maximum.
MAX. SIZE: Inner Harbour (Entry via Lock) length 90 ft. Beam 25 ft. Draft 8 ft.
RADIO: MF Ilfracombe Radio. VHF Severn & Celtic.
FRESH WATER: Available via 0.5 in. hose pipe.
TELEPHONE NUMBERS: Harbour Master Bude 3111 (Office), Bude 3531 (Home), Coastguard Harland 235, Police Bude 2131.
SPECIAL REGULATIONS: Entry to the Harbour is made by leaving Chapel Rock (linked to the Main Land by a Breakwater) to starboard. Head towards the Lock in the Channel marked by 2 pairs of Leading Beacons.

The outer pair of Beacons, bearing 075° 30′ (T) consist of a front mark – white Spar with Red Diamond Topmark, rear mark – white flag staff, both on cliff top on North side of Harbour.

The inner pair of Beacons, bearing 131° 30′ (T) consist of a front beacon – white Pile Beacon with Red Triangle Topmark, rear beacon – white spar with Red Triangle Topmark, placed 0.5 cable West of Lock Entrance.

The approach to Bude, either from the North or South, should be made from a S.W. direct direction in line with the first pair of Leading Marks.

Immediately on passing Barrel Rock (0.5 cable North of Chapel Rock and marked by a Beacon Barrel) turn to starboard and pick up the inner pair of Leading Marks from which the Lock is clearly visible.

Entry to the Harbour at night not recommended.

Heavy ground swell and breaking seas may prohibit entry and exit.

The Harbour dries out at each Tide and entry of vessels is normally restricted to 2 hours either side of High Water.

For Locking, 18 ft. minimum of water above Chart Datum is required to Lock. A heavy swell may also prohibit the operation of the Lock.

Prior notification of arrival should be made to the Harbour Master if possible.
AUTHORITY: North Cornwall District Council.

CALEDONIAN CANAL: 57.27 N. 04.18 W.

PORT LIMITS: Craft are considered to be within the Canal when they have entered the sea lock structures.

DOCUMENTS: Masters of craft on through passage must report to the Sea Lock Office at Corpach with the ship's measurement certificates to enable toll declaration to be made. Masters of craft on partial passage starting and returning to the East coast should report to the Clachnaharry Canal Office.

PILOTAGE: Approach pilotage compulsory at Inverness end. Contact Inverness Pilots by Link Call through Kessock 217 (Ships of NRT under 100 tons are exempted). Pilotage within the Canal and West approaches optional. For Pilotage into Corpach from the West contact Mr. H. McKinnon at Corpach by Link Call to Corpach 304 and for Canal Pilotage, by Link Call to Caledonian Canal Office, Inverness 33140.

RESTRICTIONS: Entrances to sea locks restricted for 2 hours either side of low water Springs. There is generally no restriction at low water Neaps. The Canal is operated on normal manning from 0800 until 1700 hrs. (Sundays excepted).

MAX. SIZE: 48.770 m. (160 ft.) length overall × 10.670 m. (35 ft.) beam × 2.740 m. (9 ft.) draft fresh water or, alternatively, 45.720 m. (150 ft.) × 10.670 m. (35 ft.) × 4.110 m. (13 ft. 6 ins.) draft fresh water.

Corpach sea lock will admit craft to the Corpach Basin only of size 61.870 m. (203 ft.) length overall × 10.670 m. (35 ft.) beam × 4.110 m. (13 ft. 6 ins.) draft fresh water.

All dimensions are overall and *NOT* moulded.

HEALTH: Craft from foreign ports will be boarded by the Customs/Immigration/Health at the sea locks and they should fly the appropriate international flags on approach.

RADIO: Western approaches via Oban radio. Eastern approaches via Wick or Stonehaven.

VHF: None.

RADAR: None.

TUGS: A Canal tug is available if required. Service should not be required on normal passage.

BERTHING: At Corpach Old and New Wharves (limited Customs approval). At Inverness Glenmhor and Glen Albyn Wharves below Muirton and Upper Muirton Wharf at the top of Muirton. Water depth available for craft having 4.110 m. (13 ft. 6 in.). Normally ships gear or road mobile cranes used. Corpach New Wharf equipped with 2 × 7-ton Derrick Cranes owned and operated by Scottish Pulp and Paper Mills.

BRIDGES: Road and rail swing bridges are operated to permit the passage of craft. Headroom restricted to 36.576 m. (120 ft.) by overhead electric cables near Inverness.

STEVEDORES: Traffic to Scottish Pulp and Paper Mills at Corpach unloaded by Pulp Mill gangs. Elsewhere arranged through Shipping Agent.

MEDICAL: Normal General Practioners service available at main centres along the Canal. Full Hospital facilities at Inverness.

FRESH WATER: Fire hose supply available at Glen Albyn Wharf, Inverness. Small domestic supplies available at the main lock flights. Hydrant supply at 30 p. per 100 gallons.

FUEL: Available by road tanker from principal oil companies by telephoning Shell, Inverness 38850 or Fort William 2404; Esso, Inverness 37222 or Fort William 2903.

REPAIRS & DRY DOCK: Limited repairing facilities at the Thornbush Slipway and Engineering Company Limited, Inverness.

AIRPORT: Highlands and Islands domestic flights from Inverness (Dalcross).

POLICE/FIRE/AMBULANCE: Emergency calls to these services on 999.

DEVELOPMENTS: Likely future headroom restriction to approximately 28.960 m. (95 ft.) over H.W. Springs in about 1980 upon construction of the new Kessock Bridge at Inverness.

GENERAL: The Caledonian Canal is part of the Customs Port of Inverness.

AUTHORITY: British Waterways Board. Caledonian Canal Office, Clachnaharry, Inverness.

CAMPBELTOWN: 55.26 N. 05.36 W.

DOCUMENTS: 2 Crew Lists; 2 Passenger Lists; 1 Store List; 1 Personal Effect List; Ship's Register; 1 Manifest or Bill of Lading.

PILOTAGE: Although *not* in Clyde Port Authority area, where large vessels are concerned, it is advisable to have the services of a qualified Clyde River Pilot or where applicable a Certificated Naval Pilot. As neither are based in Campbeltown, it is essential that at least 24 hours notice be given to Agent, when required.

ANCHORAGE: For large vessels in 6 to 10 fathoms in the area between the Orange leading lights and the Methe bank buoy, for smaller vessels a wider area can be used but south side of loch best holding.

HEALTH: Normal UK Port requirements. In event of disease or fever prior notice should be given to Agent.

RADIO: All messages through normal coastal stations or by radio telephones via Portpatrick Radio when nearer port. Cables should be addressed to Agents as "Coal, Campbeltown".

RADAR/VHF: No port radar service. Direct contact with Harbourmaster and Agent still under consideration. P.O.L. Depot, Campbeltown can be called on 30 - 40 mile radius on Channels 6, 12, 18. Same channels for tugs, lying off port, when arranged previously.

TUGS: Must be ordered at least 24 hours beforehand as they come from Glasgow area further north on River Clyde. Precise requirements concerning arrival/departure times requested owing to heavy costs entailed for waiting time.

BULK CARGO FACILITIES: Berth for vessel up to 230 ft. in length with maximum permissable draft 12 ft. (Salt water). Discharge by shore crane, Maximum lifting 5 tons.

SPECIALISED CARGO-HANDLING FACILITIES: One berth for roll-on/roll-off ferry inside harbour, max. draft of vessel 8 ft., general cargo discharged.

STEVEDORES: Agents arrange all cargo discharges through another dept. of D. McNair & Son, including mechanical handling. Portable cranes only available. Ship's gear used when available to minimise costs.

MEDICAL: One casualty hospital available. Serious casualties transferred to Glasgow either by Air or road, according to condition. Four local doctors.

TANKERS: All intended arrivals should be notified to Officer-in-Charge, P.O.L. Depot, Campbeltown (Tel. No. 0586/2226) at earliest.

P.O.L. Jetty, minimum depth, 40 ft. One discharging berth available.

FRESH WATER: Available at all times, delivery by hose, cost per ton 10p.

FUEL: Marine Gas Oil supplied on commercial quay. Naval requirements by arrangement with P.O.L. depot.

REPAIRS: Minimal repairs only. Notify Agent as early as possible.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Ship's option.

CARGO GEAR: See "Stevedores". Ship's gear preferred where possible.

REPATRIATION: Air service available once daily in forenoon, except Sunday.

AIRPORT: Machrihanish – 3 miles distant.

TIME: G.M.T.

HOLIDAYS: New Years Day (1st January) Christmas Day & Boxing Day, 3 Statutory Local Holidays, Annual Holidays 1st fortnight August.

Work can be carried out by arrangement with Stevedores.

POLICE/AMBULANCE/FIRE: Dial 999.

TELEPHONES: By arrangement.

SERVICES: Laundry/Dry Cleaner, Minimal Radar/Radio, VHF Repairs. No tank-cleaning equipment available or compass adjusting.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.

IDENTIFICATION CARDS: Not required. P.O.L. Depot request production of Seamen's Cards.

GENERAL: Basin of the Clyde Lat. 55° 25′ 30″ N., Long. 5° 35′ 30″ W.

Tides: Spring rise 8.9 ft; Neap rise 7.5 ft.; depth at sea entrance, 12 ft. low water spring tide; there is a rise of 8 ft. in spring tide in harbour.

AUTHORITY: Commercial, Harbour & Loch Area – Strathclyde Regional Authority, c/o Harbourmaster, Campbeltown.

P.O.L. Depot, Campbeltown. Officer-in-Charge, Kilkerran Road, Campbeltown.

AGENT: McNair & Son, Kinloch Road and 27a Longrow, Campbeltown. PA28 6EG Tel. Nos. 0586/2020 or 2039. Cables – "Coal, Campbeltown". after hours – 2039 – Mr. Shaw.

CARDIFF: 51.29 N. 03.10 W. (See Plan)

PORT LIMITS: A vessel is considered as "arrived" when it is in the lock.

DOCUMENTS:

1 Crew List.

1 Health Form.

1 Port Immigration, i.e. Crew List, and where applicable, a passenger list.

Pratique issued by Customs.

1 List of Consumable Stores (tobacco, snuff, alcohol, etc.).

3 Bills of Lading (one original and two copies).

PILOTAGE: Channel pilotage and dock pilotage not compulsory except for vessels carrying passengers. Pilots embark from pilot cutters operating from Barry Harbour.

Pilot Cutters are marked on each side "Pilots" and operate radio continuous watch on VHF. Signal for pilot cutter – numeral 7 on whistle or siren. Telegraphic address Carpil Barry. Minimum of 24 hours notice required of ETA. VHF Channels 16, 9, 14 and 11.

ANCHORAGE: Barry Roads: afford good anchorages in moderate weather in depths from 5 to 6 fathoms (9.1 to 11 metres) about 0.5 mile S.W. of the entrance to Barry Docks. Clay bottom.

RESTRICTIONS: Entry to docks restricted to a period of 4 hours before and 3 hours after high tide, according to size and draft of vessel.

Entrance lock 850 ft. length, 90 ft. wide.

MAX. SIZE:

Queen Alexandra Dock. LOA 660 ft., beam 88 ft., max. draft 34 ft.

Roath Dock. LOA 650 ft., beam 86 ft., max. draft 33 ft.

Vessels near max. dimensions may be accepted on certain tides after consultation with the Dock Master.

HEALTH: Maritime Declaration of Health to be made to Port Authority or Customs Officer, whoever boards ship first. In event of contagious fever on board, Port Health Authority must be advised by radio before arrival. No pratique necessary if vessel is entering port from another port in U.K.

RADIO: Ilfracombe Radio and Portishead Radio.
VHF: A port operation VHF service maintained at dock entrance during tidal hours. Call sign "Cardiff Radio" calling on Channel 16 and operating on Channel 14. There is also "Severn Radio".
TUGS: Tugs normally join vessel 0.5 mile to seaward of Outer Wrach Channel Buoy, and arrangements for attendance of tugs should be made through ship's Agent.
BERTHING: Arranged through Dockmaster, and berths within docks are flat quays. Rise and fall usually varies between 3 and 4 ft.
SPECIALISED CARGO HANDLING FACILITIES:

Grain: Spillers berth, 2 Suction Plants. Average discharge 900 tons per day (450 tons per 8 hours per gang).

Iron and Non-ferrous Ores: Dowlais Wharf (British Steel Corporation) 5 kangaroo cranes. Average discharge 10,000 tons per day (2,500 tons per 8 hours per gang).

Coal (Imports): Pontoon berth, Roath Dock. Self-discharging vessels. Average discharge 4,000-5,000 tons per day (2,000-2,500 tons per 8 hours per gang).

Suction Plant: Roath Dock. Average discharge 300-400 tons per day (150-200 tons per 8 hours per gang).

Petroleum Products: 5 Petroleum berths (2 in Roath Dock; 2 in Queen Alexandra Dock and 1 in Penarth Harbour). Average discharge approximately 448 cu.m. per hour.

There are no specialised berths equipped for containers, roll-on/roll-off traffic, liquid chemicals, LPG carriers, fertilisers, sulphur, etc.

BRIDGES: Bridges throughout the port can be operated at any time.
STEVEDORES: Arrangements for employment of stevedores undertaken by Docks Board through ship's Agent.
MEDICAL: All facilities available. Agents should be advised in advance if medical services required.
TANKERS: Three tanker berths available, one in Queen Alexandra Dock, two in Roath Dock where there is also a tanker-cleaning berth. Special instructions are issued to Master on arrival at port.

Penarth. One berth, 500 ft. long.

DENSITY: 1018..
FRESH WATER: Available 24 hours daily from quayside, delivery 20 t.p.h. maximum.
FUEL: Fuel of all grades available.
FIRE PRECAUTIONS: For tankers, strict fire precautions required in accordance with latest safety procedures.

Emergency Action – Fire: In the event of an outbreak of fire (no matter how small) immediately dial 999 on the ship-to-shore telephone. When the operator answers, say "Fire", and wait until you are connected to the Fire Station Control. Then repeat: "Fire at the Petroleum Berth, Roath Dock". In event of the ship-to-shore telephone being inaccessible or out of order, use GPO call box situated on dockside road to stern of the vessel.

GANGWAY/DECK WATCHMEN: Performed by ship's crew and necessary for tankers.
OPENING/CLOSING HATCHES: Carried out by ship's crew.
CUSTOMS ALLOWANCE: Tobacco, 1 oz. per day per man, max. 8 days. Wine/Spirits, 0.25 pint spirits per man per day every 4 days.
IDENTIFICATION CARDS: Not needed.
CONSULS: Ships should contact Agent.
REPAIRS: All types of repairs possible.
DRY DOCKS: Dimension of largest dry dock 635 ft. × 75 ft. Dimension of smallest dry dock 600 ft. × 71.5 ft.
REPATRIATION: Facilities exist to exchange crews and repatriate to any part of world.
AIRPORT: Airport 11 miles from Cardiff, serving other airports to all parts of world.
TIME: Local time is British Standard Time, GMT plus 1 hour. GMT in Winter months.
HOLIDAYS: Good Friday; Easter Monday; Whit Monday (Spring Holiday); August (Summer Holiday) one day; Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Dial 999 on public telephone service and ask for service required.
TELEPHONES: Ship/Shore telephone supplied at certain berths – service organized through ship's Agent.
GENERAL: Cardiff is a port which has very big range of tides and important that accurate ETA's and max. drafts supplied by ship's Master in order that Agent may place orders for tugs and Pilots in sufficient time to be in attendance when required.
AUTHORITY: British Transport Docks Board, Cardiff Docks.
AGENT: Lambert Brothers Ship Agencies Ltd., Exchange Buildings, Cardiff. Tel. 25201. Telex: 49348, Cables: "Lambert Cardiff".

CARRICKFERGUS: 50.43 N. 05.48 W.

PORT LIMITS: No. 1 Buoy Belfast Lough.
DOCUMENTS:

2 Crew Lists,
2 Passenger Lists,
1 Store List,
1 Personal effect List,
Ships Register,
1 Manifest or Bill of Lading.

PILOTAGE: Port Pilotage not compulsory but advisable. Pilots based at Carrickfergus Harbour. All Pilotage carried out by Belfast Pilots. Pilots board at No. 1 Buoy, Belfast Lough. Pilots can be contacted by VHF Channel 16.

ETA Messages: Advise Agents at least 24 hours before arrival through any British Coast Station. Pilots not less than 1 hour. ETA No. 1 Buoy (B) ETA GMT or BST (C) Draft SW.

ANCHORAGE: Midway between Harbour and Greypoint.
HEALTH: No Certificates required, in event of disease contact Agents.
RADAR/VHF: Port Radar Service Nil. Harbour VHF Channels 14 and 16 operated approximately 3 hours before H.W. to 1 hour after if ships are due.
TUGS: No tugs in Harbour but if required can be ordered from Belfast.
BERTHING: *Harbour Tidal:*

Depth alongside all berths MHWST	4.88 m.
Depth alongside all berths MLWST	1.83 m.
Max. draft of vessels	4.88 m.
Max. Beam of vessels	12.20m.
Width at entrance	16.20 m.

Quays:

Length of Commercial Quay	321 m.
No. 1 Berth (Caustic Acid)	61 m.
No. 2 Berth (Tanker Berth)	74 m.
No. 3 Berth (Most bulk cargoes)	76 m.
No. 4 Berth (Coal,Sulphur, Meal, etc.)	75 m.

Vessels discharging take bottom on soft mud.

Average Discharge 2 Grabs 150 t.p.h. at No. 3 and 4 Berth.

STEVEDORES: Provided by Messrs. John Kelly Ltd., Tel. 63612. Telex 74210.
TANKERS: Discharge controlled by Texaco Ltd., as plant is owned by them privately. Rate of discharge approximately 200 t.p.h. two 8 in. diameter pipes and one 6 in. pipe.

Usual safety precautions prevail.

Tankers not to enter Port without permission of Harbour Master.

Max. draft MHWST 4.88 m.

MEDICAL: One hospital available.
DENSITY: 1024.
FRESH WATER: Supplied alongside Quay approximately 10 t.p.h. Charge 10p. per ton.
FUEL: Supplied by Road Tankers. All grades available from major Oil Companies.
GANGWAY/DECK WATCHMEN: Not compulsory.
OPENING/CLOSING HATCHES: All vessels by crew.
CERTIFICATES: Ships Register on arrival.
CUSTOMS ALLOWANCE: 200 cigarettes each crew member, spirit, wine, etc., at discretion of Water Guard.
CARGO GEAR: Two crawler mounted diesel grab cranes. One 3100 KGs.,one 3045 KGs.
IDENTIFICATION CARDS: Not required.
CONSULS: None. Most countries are represented at Port of Belfast approximately 9 miles from Harbour.
REPAIRS: Light repairs and welding only major repairs can be arranged at Belfast.
DRY DOCKS: None. Nearest at Belfast.
REPATRIATION: Good facilities for crew changes. Good railway and bus services.
AIRPORT: Belfast Airport approximately 22 miles served by regular lines.
TIME: GMT, plus 1 hour in summertime.
HOLIDAYS: New Years Day, Easter Monday and Tuesday. 12th and 13th July, Xmas Day and Boxing Day.

Port Stevedores cease work Friday before 12th July for a period of 14 days.

POLICE/FIRE/AMBULANCE: Carrickfergus 62021.
TELEPHONES: Not possible to place on board. Good phone service convenient to ships.
SERVICES: All services readily available from Port of Belfast.
SHORE LEAVE: After clearing inwards no restriction on shore leave.
SURVEYORS: Most classification Societies based at Belfast.
AUTHORITY: Carrickfergus Borough Council and Harbour Master.

COLCHESTER: 51.54 N. 00.55 E. (See Plan)

PORT LIMITS: Brightlingsea anchorage.
DOCUMENTS: As normal British port.
PILOTAGE: Part of Trinity House London District. Sunk Pilot Cutter cruises near the Sunk light vessel. Give as much notice as possible by radio telephone or VHF Channel 16. River pilots are ordered by local Agents and board vessels at Brightlingsea anchorage.
ANCHORAGES: Off Brightlingsea, in 3 to 4 fathoms.
RESTRICTIONS: Vessels with deck cargoes of timber, and vessels which are large for the port not worked at night.
MAX. SIZE: Max. length at Colchester, 200 ft. Max. length at Rowhedge and Wivenhoe, 250 ft. Max. draft at Colchester, 12 ft. 06 in. Spring tides, 8 ft. 06 in. neap tides. Max. draft at Rowhedge and Wivenhoe, 14 ft. 06 in. Spring tides, 10 ft. neap tides.
HEALTH: Normal procedure. Any abnormal conditions advise Harbour Master. Pratique automatic if from U.K. port.
RADIO: North Foreland Radio, Humber Radio or Niton Radio. 2182 kc/s.
VHF: 'Colchester Harbour Radio', VHF Channel 14, Office hours watch plus tide time watch when ships expected. Vessels should call when approaching port anchorage, giving deepest draft, and keep listening watch on Channel 14 when manoeuvring.
RADAR: None.
TUGS: Small motor tug available through Harbour Master.

BERTHING: 1,000 ft. of private quays. 3,200 ft. of public (corporation) quays. All berths use shore equipment and handle all cargoes. Port dries at LW. (Berths at Wivenhoe 450 ft., at Rowhedge 500 ft. additional to above.)
CRANES: A number of 4/6 ton mobile cranes.
BULK CARGO FACILITIES: Bulk cargoes handled at most berths, 3 grain silos.
STEVEDORES: Arranged by Local Agents. Average rate for all cargoes 50 metric t.p.h.
MEDICAL: Advance notice if possible. Hospital available.
TANKERS: One oil depot for discharging only, light fuels handled. No slop facilities.
DENSITY: Density varies with tide, average 1015.
FRESH WATER: Fresh water points on quays, rate approximately 9 metric t.p.h, cost approximately £1 per tonne.
FUEL: All fuel deliveries by road tanker.
FIRE PRECAUTIONS: None.
CONSULS: None.
REPAIRS: Repairs can be carried out. One shipyard (J. W. Cook) at Wivenhoe.
SURVEYORS: Lloyds Agent can arrange.
GANGWAY/DECK WATCHMEN: Not normally required.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCES: British standard allowances.
CARGO GEAR: Shore gear, no heavy lifts.
REPATRIATION: Arranged by Agents.
AIRPORT: London 70 miles.
TIME: GMT.
HOLIDAYS: Normal British holidays, work sometimes arranged.
POLICE/AMBULANCE/FIRE: Tel. 999.
TELEPHONES: None.
SERVICES: Compass adjusting arranged by Agents.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Not required.
DELAYS: Normally tidal delays only.
AUTHORITY: Colchester Borough Council and Harbour Master.

COWES (including Newport, Isle of Wight): 50.46 N. 01.18 W.

DOCUMENTS: As for "Portsmouth".
PILOTAGE: See Southampton entry for sea pilotage. As Cowes is within the Isle of Wight Pilotage District, a Sea Pilot must be employed by all vessels subject to compulsory pilotage. Trinity House Cowes Pilots conduct vessels between the anchorage area and berths in Cowes Harbour and Newport, 5 miles further up the River Medina. Pilots board from launches *Thosbro* or *Tantalus*, which are equipped with VHF, Channels 16, 12, 9 and 6. A Pilot can always be obtained by making a link-call to Cowes 3812 (24 hours service) or via Southampton Pilots VHF Channel 16.
ANCHORAGES: Vessels waiting to proceed to Cowes or Newport should anchor within the area bounded by Old Castle Point, "Prince Consort" light-buoy and the harbour entrance light-buoy. The prohibited anchorage on either side of the leading line must be respected, and vessels must not obstruct the fairway into Cowes, nor the deep water channel used by large vessels bound for Southampton. The mooring buoys are reserved for hovercraft and the Trinity House lighthouse tender. Mooring chains run East and West for 500 ft. from each of these mooring buoys. Tidal streams in the anchorage are strong. Cowes is an international yachting centre, and the anchorage is often crowded with small craft, especially during July, August and September.

Cowes Roads anchorage, North of the deep water channel, is used by large vessels waiting to berth in Southampton Water, taking bunkers or changing crews.
MAX. SIZE: Cowes – 300 ft. long, 17 ft. draft at high water springs. Vessels must expect to take the bottom in soft mud at low water. Newport – 150 ft. long, 8 ft. draft. Newport Harbour practically dries out at low water.
RESTRICTIONS: Tankers may load and discharge at all times, subject to the Petroleum Acts.

A channel marked by small orange buoys is reserved for the use of hovercraft. Other vessels using the area should do so with caution.

Overhead cables at Kingston; 115 ft. above MHWS.
FLOATING BRIDGE: A chain ferry plies between East and West Cowes. An all-round amber light is shown from the leading end of the bridge when under way. Approaching vessels should sound 1 prolonged blast on the whistle when not less than 0.5 mile away. The bridge gives way to all river traffic. The chains of the ferry are at least 2 ft. above the river bottom in mid-channel at all times.
HEALTH: See "Portsmouth".
RADIO: See "Southampton" entry for Sea Pilot communications. See "Pilotage" entry for local communications.

Southampton Port Radio, the port operations and radar station for the port of Southampton, will often help out in cases of difficulty, although there is no obligation for them to do so and they accept no responsibility. Southampton Port Radio VHF Channels 16, 14, 12, 11, 10, 18, 20 and 22. Medium frequency through Nitonradio.
TUGS: Tow-boat launches are available to assist vessels.
BERTHING: *Shepards Wharf.* Vessels up to 150 ft. length, bulk cargoes of stone, grain, bagged fertilisers.

Medina Wharf. Vessels 17 ft., spring draft, length 270 ft. OAL. Loading and unloading bulk cargoes of stone, coal, fertilisers, grain, etc.

Kingston Wharf. As for Medina Wharf, above.
STEVEDORES: By arrangement with Agent and wharf owners. Normal working hours: 0800–1700 Monday to Friday. Overtime on Saturdays, etc., by arrangement. No work on public holidays.
MEDICAL: All medical facilities are available. Agent should be given advance notice of requirements. If call is solely to land sick personnel, see "Southampton" entry.
DENSITY: Cowes – 1025 salt water.

Newport – varies according to amount of recent rainfall and state of tide.
FRESH WATER: Available on all commercial wharves.
FUEL AND DIESEL OIL: Available by arrangement with Agent.
CRANAGE: Hammerhead crane at J. S. Whites, 50 tons. Shepards Wharf: mobile cranes, 1.5 tons. Medina Wharf: 2 grabbing cranes of 4.5 tons for bulk cargoes.
OPENING/CLOSING HATCHES: By ship's crew.
REPAIRS: All hull and engine repairs undertaken to vessels capable of Cowes entry. Graving dock for ships up to 200 ft. in length and 14 ft. draft.
SERVICES: Compass adjuster, radar and radio mechanics available from Southampton. Charts and general stores available locally.
OIL POLLUTION: Cowes and the Solent are world-famous yachting centres. Pollution is dealt with severely.
AUTHORITY: Cowes Harbour Commissioners. Harbour Master.

DARTMOUTH: 50.21 N. 03.34 W. (See Plan)

PORT LIMITS: A line from Inner Froward Point to Combe Point.
DOCUMENTS: Normal documents for U.K. ports.
PILOTAGE: No direct radio contact with Pilots. Contact local Agent or Berry Head Coastguard Station who will telephone Pilot.

Pilot station 5 cables S.S.E. Castle Ledge Conical Buoy.
ANCHORAGE: Vessels can anchor in 5 fathoms, 7 cables 150(T) from Kingswear Lighthouse. Or in a position as above, for Pilot.
RESTRICTIONS: Vessels up to 27 ft. draft can enter at any time.
MAX. SIZE: Max. length 600 ft., max. draft 27 ft.
HEALTH: Pratique granted by Customs on arrival.
RADIO; Route cables, etc., through Niton or Lands End Radio Stations.
TUGS: Tugs are not normally available.
BERTHING: All berthing on midstream buoys.
MEDICAL: All medical services are available; if possible give notice of requirement.
DENSITY: Normally salt. 1025.
FRESH WATER: Available only for small vessels.
FUEL: Not available.
FIRE PRECAUTIONS: Normal.
GANGWAY/DECK WATCHMEN: It is advisable to have watchmen.
OPENING/CLOSING HATCHES: Crew open.
CARGO GEAR: Ship's gear.
REPAIRS: All repairs unless of a major or underwater type can be carried out.
REPATRIATION: Facilities exist.
AIRPORT: 35 miles from Exeter airport. Internal and short range Continental flights.
TELEPHONES: Not normally available, except for HM ships.
HOLIDAYS: Not applicable.
POLICE/AMBULANCE/FIRE: Dial 999 for emergencies. Local hospital adjacent to Harbour Office.
SHORE LEAVE: Permitted. Seaman's book adequate.
GENERAL: Dartmouth does not now operate as a commercial port except for small vessels up to about 800 d.w.t. en route to Totnes, although the harbour is suitable for ships of 10,000 d.w.t., and mooring buoys are available for such vessels.
AUTHORITY: Dart Harbour and Navigation Authority.

DOUGLAS: Isle of Man: 54.09 N. 04.28 W. (See Plan)

PORT LIMITS: Douglas Bay inside a line between Douglas Head and Banks Howe and Douglas Harbour proper.
DOCUMENTS: Same as for all U.K. Ports.
PILOTAGE: Not compulsory. Arrangements usually made at least 24 hours before vessels' arrival, through Ships' Agent, or to Harbour Master, Douglas – Telephone: 23813. Call Douglas Radio on Channel 16 and then transfer to Channel 12 for instructions 1 to 2 hours before ETA Douglas Bay.
ANCHORAGES: In Douglas Bay:

Douglas Head	bearing	196° T	7 cables in 6 fathoms.
,, ,,	,,	199° T	9.3 cables in 7 fathoms.
,, ,,	,,	200° T	8 cables in 6.5 fathoms
,, ,,	,,	212° T	7.9 cables in 10 fathoms

RESTRICTIONS: Enter only on Harbour Master's instructions.
MAX. SIZE: Max. size of Cross Channel Vessels 350 ft. LOA, draft 13 ft.

Max. Size of Cargo Vessels 190 ft. LOA, draft 12 ft. Spring tides 9 ft., neaps to inner Harbour, dries out at LW.

Max. size of Tankers 230 ft. LOA, draft 13 ft. at LWOST.
HEALTH: Same as for all U.K. Ports.
RADIO: Port Patrick for vessels coming from North. Anglesey for vessels coming from South.
VHF: Douglas Radio manned when vessels expected. Channel 16 and 12 only.
RADAR: Port Radar available for use in fog or when required. Used with Channel 12 VHF.

TUGS: None.

BERTHING: Passenger vessels – 6 berths for vessels of 350 ft. in length, 13 ft. draft LWST at Victoria Pier and King Edward Pier.

Isle of Man Steam Packet Company Cargo berth – vessels 225 ft. LOA draft 13 ft., dries out at LW. Served by 28 ton crane for container traffic.

Cargo Vessels – Battery Pier (22 ton crane on 25 ft. radius) berth vessels 180 ft. LOA with draft 12 ft. aft, 8 ft. forward at LWST.

Coffee Palace berth will accommodate vessels of 190 ft. LOA draft 12 ft. Springs, 9 ft. Neaps, dries out at LW.

Market berth same as Coffee Palace berth.

Battery Pier – Tankers up to 230 ft. LOA, draft 13 ft. at LWOST. Gas Tankers can berth at inner end of Battery Pier, vessels of up to 180 ft. LOA, draft 12 ft. aft, 8 ft. forward at LWST. Discharging of Cargo vessels and Container vessels can be done by shore crane.

All berths at Douglas are salt water.

CRANES: One 22 ton crane on 25 ft. radius at Battery Pier. The other cranes are 5 ton mobile cranes, capable of lifting about 2–3 tons when working at full radius. One mobile grab crane.

BULK CARGO FACILITIES: Bulk cargoes of coal and scrap metal are handled at Coffee Palace and Market Berths described above.

Rate of discharge for coal about 60–70 t.p.h. by Grab crane.

SPECIALISED CARGO-HANDLING FACILITIES: No Ro/Ro berths. Containers are handled at Isle of Man Steam Packet Company berth and at 22 ton crane at Battery Pier

L.P.G. cargoes are handled at inner end of Battery Pier as described above.

BRIDGES: Swing Bridge only to Inner Harbour.

STEVEDORES: Advice required to Ship's Agent. Rate of discharge – cement 60 t.p.h.; coal 60 – 70 t.p.h.

MEDICAL: Advise Agent when possible, alternatively contact Harbour Master with advance warning. Hospital available.

TANKERS: Tankers pipe-lines 6 in. 2 Tanker berths at Battery Pier – Max. draft. 16 ft. to be taken in on flood tide only. 13 ft. only at LW Spring tides. Discharging rate 180–200 t.p.h.

DENSITY: Density of water salt (1025).

FRESH WATER: Fresh water available on request to Agent or Harbour Master.

FUEL: Fuel delivered by Road Tanker only. Contact Manx Petroleums or Esso.

FIRE PRECAUTIONS: Fire precautions as normal.

CONSULS: None.

REPAIRS: Limited facilities only.

DRY DOCKS: None.

SURVEYORS: None.

GANGWAY/DECK WATCHMEN: Could be arranged by Agent.

OPENING/CLOSING HATCHES: Handled by crew.

CUSTOMS ALLOWANCE: Same as U.K.

CARGO GEAR: Cargo can be discharged by ships own gear or Mobile cranes. 22 ton crane at Battery Pier.

REPATRIATION: Repatriation only done through arrangement with Agents.

AIRPORT: Ronaldsway Airport 8 miles from Douglas and served by regular air lines.

TIME: Same as U.K.

HOLIDAYS: Good Friday, Easter Monday, Spring Holiday, T.T. Friday (1st week in June), Tynwald Day (5th July), August Holiday, Christmas Day, Boxing Day, New Year's Day, 2nd January.

TELEPHONES: No connections to ships.

POLICE/AMBULANCE/FIRE: Police phone, 4616; Ambulance phone, 3661; Fire Brigade phone, 333.

SERVICES: None.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: Identification cards not required for British Ships. Same as U.K.

REGULATIONS: No unusual regulations.

DELAYS: Delays can be expected due to tidal conditions, or awaiting a berth; also delays caused by strong Easterly winds, which make Douglas Outer Harbour untenable.

DEVELOPMENTS: Developments are planned in future for Ro/Ro berths.

AUTHORITY: Chief Harbour Master, Isle of Man Harbour Board.

DOVER: 51.07 N. 01.18 E. (See Plan)

DOCUMENTS: Required on arrival:

Declaration of Health (one copy) for H.M. Waterguard.
Crew List H.O. Form I.B.6. for H.M. Immigration.
Crew Declaration Form C.142 for H.M. Waterguard.
Deratisation Certificate.

It is required to report and clear a vessel at Customs House if remaining in port more than 24 hours for loading and discharging cargo or embarking and disembarking passengers, with following:

Passenger List. Cargo Manifests. Ship's documents.

PILOTAGE: Requests for Pilot normally made by local Agent.

Vessels from Westward obtain Pilot from Pilot station, Folkestone.

Vessels from Eastward obtain Pilot from position approx. 1 mile S.E. of Dover Harbour Eastern Arm Head.

Vessels approaching Dover Harbour Entrances should do so with caution in accordance with instructions from Port Control. Masters are warned of the high frequency of cross channel vessels and hovercraft entering and leaving by both entrances.

Port Control: Signal Station situated at end of Eastern arm operates VHF Channels 6, 12 and 16. Motor launches serving Pilots are also fitted with VHF Channels 6, 12 and 16.

DEEP SEA AND COASTAL PILOTS: For Channel, North Sea, British Coast and Baltic.

Contact agency 36 hours before arrival by radio, giving ETA Dover and destination port(s).

Agencies are: "Hutchinson Gravesend" and "Hammond Dover".

On approaching Dover contact Port Control by VHF for instructions and: For "Hutchinson" Pilot – hoist, flash or sound No 1. For "Hammond" Pilot – hoist, flash or sound "B".

Pilots will also board at any UK or continental port as required.

ANCHORAGE: Limited space available in Outer Harbour. Contact Port Control in advance for instructions.

RESTRICTIONS: Attention is drawn to the strict requirement of obtaining permission to enter or leave the harbour. It will be noted that although the traffic control signal may be exhibited for entry/departure, every vessel manoeuvring to enter or leave the port is required to obtain specific permission to enter or leave, as the case may be.

Vessels awaiting permission to proceed should keep at a safe distance and clear of the entrance until so authorised. Responsibility for entering or leaving with caution and the safe navigation of each vessel subsequent to the receipt of permission to proceed continues to remain the responsibility of the Master.

Explosives – dangerous cargo: Declaration to be made and permission obtained prior to entering the harbour. Board not compellable to receive within the harbour any articles which in their opinion would endanger safety of harbour or vessels or goods.

HEALTH: Vessels arriving in Dover Outer Harbour are boarded by Water guard who grant pratique on arrival. Coastwise vessels from U.K. ports have automatic pratique.

RADIO: Vessels from East use North Foreland Radio call sign GNF and vessels from Westward use Niton Radio call sign GNI.

RADAR/VHF: Port Control is fitted with radar and VHF, and Masters can make initial contact with Port Control VHF Channels 12, 6, and 16.

TUGS: 2 tugs of 1,200 h.p. Tugs normally join vessels inside Dover harbour, but meet vessels outside by arrangement. Charges £60–£75 per movement. Tug's ropes normally used at a charge of £2 per rope.

BERTHING: All berths in Outer Harbour can be reached at all times. Those in dock can be reached from 2 hours before until up to 1 hour after each high water. All berthing requirements are allocated by Port Control.

Spring rise 19.4 ft. (5.9 m.). The Outer Harbour which comprises an area of approx. 600 acres with depths of water up to 30 ft. (9 m.) at MLWS is bounded by the Southern Breakwater (detached mole), the Eastern Arm and the Admiralty Pier. Anchorage restricted to limited area as shown on Admiralty Charts – normally used by vessels awaiting to berth or enter dock.

Western Docks: Comprising the Admiralty Pier, the Train Ferry Dock, the Inner Harbour, Tidal Basin, Granville and Wellington Docks.

Admiralty Pier: Length 4,140 ft. (1,260 m.), protects the Harbour from the West. There are 4 deep water berths with depths from 17 to 26 ft. (5.2 m. – 7.9 m.) at MLWS. The 3 inner berths are used for Cross Channel traffic, 2 berths being for passenger ferries only, and the third for roll-on/roll-off traffic.

Prince of Wales Pier: This separates the Inner and Outer Harbours and offers 1,600 ft. (488 m.) of berthing for vessels up to 23 ft. (7.0 m.) at MLWS. It should be noted that berthing on Prince of Wales Pier is only permitted by special arrangement with the Harbour Master.

Train Ferry Dock: Adjacent to Admiralty Pier is operated by British Rail. Trains run direct into the ferries which operate daily services of Passengers and Freight to Dunkirk throughout the year.

Tidal Basin: Forming the entrance to the Wellington and Granville Docks is entered between the Admiralty and Prince of Wales Piers. It comprises an area of approximately 12 acres, the channel partly drying at low water. The entrance is 140 ft. (42.7 m.) wide with a depth of 19 ft. (5.8 m.) at MHWS. There are 2 berths in the Tidal Basin with quay frontage of 300 and 360 ft. (91.4 m. and 109.7 m.) respectively, at which vessels take the ground at low water. These berths are principally used for the discharge of stone, slag and aggregates.

Granville Dock: (Approach channel with depth of 21 ft. (6.4 m.) at MHWS).

This dock is non tidal and comprises an area of 4.5 acres with depths of water of 21 ft. (6.4 m.) at MHWS, 17 ft. (5.2 m.) at MHWN with a total quay frontage of 1,850 ft. (564 m.). The entrance is 65 ft. (19.8 m.) wide and depth on the sill at MHWS is 21 ft. (6.4 m.). Electric portal cranes of 3 tons are installed and 3 ton mobile cranes are available. Transit sheds and open storage space are available at the dockside.

Wellington Dock: Non tidal and comprises an area of 8 acres with depth of water of 15 ft. (4.6 m.) at MHWS, 11 ft. (3.4 m.) at MHWN. Total quay frontage of 2,500 ft. (762 m.). The entrance is 70 ft. (21.3 m.) wide and depth on sill at MHWS is 15 ft. (4.6 m.). Transit shed and open storage are available at the dockside. 3 ton mobile cranes are available. Patent slipway 567 ft. (173 m.) in length is capable of taking vessels on its cradle of up to 175 ft. (53. 3 m.).

Eastern Docks: The docks comprise the Eastern Arm, the Camber, Car Ferry berths and Hoverport.

The Eastern Arm: Length 1,700 ft. (518 m.) protects the Harbour from the East. Berthing for vessels up to 27 ft. (8.2 m.) at MLWS.

The Camber: A tidal basin divided from the Outer Harbour by the South Jetty and Pier "A", it comprises an area of 21 acres with a depth of water of 15 ft. (4.6 m.) at MLWS. A "Roll-on/Roll-off" freight berth operated by Townsend Car Ferries Ltd. provides daily freight services to Zeebrugge, with additional berthing accommodation for vessels with drafts from 10 to 14 ft. (3.0 m. – 4.3 m.) at MLWS

Car Ferry and Freight Terminal: Operated by Dover Harbour Board. Berths 1 and 2 are situated in the Camber, Berths 3 and 4 being situated to the Westward between Pier "A" and Pier "B". The Car Ferry/Freight Berths provide berthing for vessels up to 400 ft. (122 m.) in length with depths of water of 19 ft. (5.8 m.) at MLWS. Berths are connected with loading bridges to enable cars, coaches and freight vehicles to drive direct on board the vessels operating to Calais, Boulogne, Ostend and Zeebrugge. Shore facilities provide modern Reception Buildings, Customs Clearance Halls, Restaurant, Banking facilities, Shipping Operators' Offices, Freight Compound and Assembly Area, Forwarding Agents' Offices. Spacious Assembly Car Parks for vehicles. 2 Container Gantries each with a lifting capacity of 20 tons which have a combined lifting capacity of 40 tons are available at the Freight Terminal.

Hoverport: Situated to the Westward of Pier "B". Regular services by S.R.N.4 Hovercraft for Passengers and Accompanied Cars operate daily to Calais and Boulogne, the service being provided by "Seaspeed", British Rail Hovercraft Ltd.

CARGO-HANDLING FACILITIES: Seven berths equipped for handling roll–on/roll–off traffic. Additional berth under construction.

STEVEDORES: No particular ETA required as ship's Agent makes all necessary arrangements. *Packaged Goods.* Approximately 25 tons per gang per hour average discharging rate.

MEDICAL: Medical assistance can be arranged by Agent to vessels passing Dover Harbour. Doctor will board a vessel in English Channel or on arrival at anchorage in Outer Harbour. Hospital facilities are available.

DENSITY: 1020.

FRESH WATER: Available to all vessels by pipe-line 25 t.p.h.

FUEL: Gas oil available from Shell Mex & B.P. Ltd., and Esso. 24 hours notice required.

GANGWAY/DECK WATCHMEN: Supplied on request.

OPENING/CLOSING HATCHES: By crew.

CERTIFICATES: Certificates to be obtained for foreign clearance, Register, Load Line, Safety Construction, Passenger and Safety Equipment.

CONSULS:

Belgium	Dover 203 203	Netherlands	Dover 201 201
Denmark	,, 201 201	Norway	,, 201 201
Finland	,, 201 201	Portugal	,, 201 201
France	Folkestone 52561	Spain	,, 201 201
Germany	Dover 201 201	Sweden	,, 201 201
Italy	Folkestone 53692		

REPAIRS: Facilities available for minor engine repairs.

REPATRIATION: All facilities exist.

AIRPORT: Most repatriations by air through London Airport.

TIME: Local time BST 1 hour in advance of GMT. Reverting to GMT in Winter months.

HOLIDAYS: Official holidays: 1st January; Good Friday; Easter Monday; Spring Holiday (end May); August Bank Holiday; Christmas Day; Boxing Day.

POLICE/AMBULANCE/FIRE: Dover 999.

TELEPHONES: Not available.

SERVICES: Repairs to radar equipment, compass adjusting, supply of charts and crew changes can be arranged outside Dover Harbour in the English Channel at all times.

SHORE LEAVE: Allowed.

AUTHORITY: Dover Harbour Board.

AGENT: P.D. Wharfage and Transport Ltd., The Clock Tower, Esplanade, Dover, Kent. Cables "Shipbroker Dover". Telex 96130. Tel. Dover 2755 and 2766.

DUNDEE: 56.28 N. 02.57 W. (See Plan)

PORT LIMITS: A vessel is considered to be an "arrived ship" when:
(a) For berthing turn-arrival at Fairway Buoy.
(b) For Laytime – usually "off or at the berth" and subject to Charter-Party terms.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
1 Tobacco Manifest.
1 Health Declaration.
Cargo Manifests.
Bills of Lading.
Derat.
Lights Certificate.

PILOTAGE/VHF: Port Control Service, call sign "Dundee Harbour Radio", maintains a 24 hour listening watch on VHF Channel 16 (156.8 mc/s and also operates on Channels 12 and 11 156.6 mc/s and 156.5 mc/s).

Pilotage is compulsory in Dundee Pilotage District. Pilots board incoming vessels within a 3-mile radius seaward of Tay Fairway Buoy or as close to as weather permits. The pilot boat is only on sea station when shipping is expected and accurate ETAs are essential.

ETA should be given 6 hours before arrival either by radiotelephone link call to Dundee Port Control 24121 or by radiotelegram to "Port Control" Dundee. Amendments may be made up to 2 hours before the original ETA. When within VHF range (approx. 25 miles from Tay Fairway Buoy) ETAs may be confirmed by contacting "Dundee Port Control" on Channel 16 and transferring to Channel 12 to pass messages.

Pilot boats, when on station, keep a listening watch on Channel 16 and transfer to Channel 6 (156.3 mc/s) to pass messages.

ANCHORAGES: Pilots are instructed where to anchor vessels. There are 3 deep-water anchorages to accommodate vessels up to 28 ft. draft. 2 to accommodate vessels up to 22 ft. draft, and other minor anchorages.

RESTRICTIONS: Tide and draft 28 ft. at MHWS. Vessels enter 2 hours before HW. 26 ft. at MHWN. Vessels enter 2 hours before HW.

MAX. SIZE: Length 600/700 ft., beam 90 ft., draft 28 ft.

HEALTH: Health declaration on arrival – if clean, automatic pratique. Suspect disease as per international requirements. Pratique automatic if already called at another port.

RADIO: Any UK coast station. Nearest stations – Stonehaven and Cullercoats.

VHF: Tugs operate on Channels 16, 12 and 6. Also see "Pilotage".

TUGS: Tugs join vessel in vicinity of West Ferry. Tug lines optional, charge made if tugs lines used.

BERTHING: Deep-drafted vessels must arrive fairway buoy at least 2 hours before HW to berth on same tide.

King George V Wharf: grabbing cranes (fertilisers, coal), General cargo and tanker berths. 28 ft. MLWS.

Eastern Wharf: roll-on/roll-off berth. General cargo. 20 ft. MLWS.

Camperdown Dock/Victoria Dock: general cargo, live cattle quarantine station. 16 ft. draft.

No container or liquid chemical facilities.

STEVEDORES: One ETA to Agent or port suffices for all services.

MEDICAL: If vessel arrives from a suspect port (e.g. India/Pakistan) doctor will board and request smallpox certificates. Advance notice required for ordinary medication for arrivals week-ends. Hospitals and casualty stations available.

TANKERS: Diameter of hoses – 8 in. Slop discharge facilities not available. 2 tanker berths – 28 ft. draft. Discharge only.

DENSITY: 1005 oz. at MLWS. 1002 oz. at MHWS.

FRESH WATER: Available, 24 hour service. Delivery, hose from quays. Rate, 30 t.p.h.

FUEL: Small quantities gas oil by road tanker. Large quantities any type by coastal tanker, subject 3 or 4 days notice.

FIRE PRECAUTIONS: Regulations are handed to Master on arrival.

GANGWAY/DECK WATCHMEN: Recommended for large vessels.

OPENING/CLOSING HATCHES: Stevedores will give weather cover only.

CERTIFICATES: As required by Board of Trade (Lifesaving, Radio, Registry, Medicines, Crew Agreement, Load Line) also derat.

CUSTOMS ALLOWANCE: Foreign-going, 25 cigarettes or 1 oz tobacco per day. 8 days allowance granted. Home trade, same as for foreign-going but only 4 days allowance granted. Spirits, quarter pint per day for 4 days, further issue granted after 4 days for foreign-going only.

CONSULS:

Belgium	23044	Netherlands	22267
Denmark	23044	Norway	23044
Finland	23111	Portugal	22131
France	26061	Sweden	25512
Italy	25174		

REPAIRS: Engine and deck repairs by Robb/Caledon Shipyard and Kestrel Tayside Marine.

DRY DOCK: Dry dock available for vessels of up to 500 ft. length, 46 ft. beam, draft 13 ft. 6 in. Springs.

SURVEYORS: Lloyds and DTI.

REPATRIATIONS: Facilities exist.

AIRPORT: Only U.K. flights available.

TIME: British Standard Time (GMT plus 1 hour). GMT in Winter months.

HOLIDAYS: 1st and 2nd January; 2nd Monday April; Last Monday July; 1st Monday October; Christmas Day. Cargo can be arranged for all days except Christmas Day.

POLICE/AMBULANCE/FIRE: Tel. 999.

TELEPHONES: Quay telephones installed.

SHORE LEAVE: At the discretion of the Master.

IDENTIFICATION CARDS: Not required.

REGULATIONS: Absolutely no smoking, penalty £50.

AUTHORITY: Dundee Harbour Trust.

FALMOUTH: 50.09 N. 05.04 W.

DOCUMENTS:
1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ship's Report by Master, or Authority X S 4.
1 Home Office Form 1S6.
1 Stores List.
1 Certificate of Deck Cargo Tonnage.
1 Light Certificate.
1 Port Dues Certificate
Ship's Certificate of Register.
Mercantile Marine Office Certificate – for British ships Only.
Load-line Certificate.
Safety Equipment and Construction Certificates.
Lloyds Certificate.
Derat Certificate.
Ship's Register.
Light Bills.

PILOTAGE: This is a compulsory pilotage district. The Pilot will board from a cutter which cruises 2 miles South of St. Anthony's Lighthouse. In poor visibility a ship requiring a Pilot uses the distinguishing signal of "G" to which Pilot Cutter will reply with "5". Pilots operate R/T on Channel 16 and 2182 kHz if required.

ANCHORAGES: Vessels in excess of 665 ft. usually anchor in Falmouth Bay. Other vessels in outer harbour.
MAX. SIZE: See "Tankers".
HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a port doctor or an officer of H.M. Customs depending on where the ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present Declaration in all cases; when there is sickness on board the Port Health Authority must be informed preferably not more than 12 hours and not less than 3 hours before arrival.
BERTHS: There is a large and 3 smaller dry docks and in addition, Shell Mex and B.P. maintain a bulk storage plant. 13 deep-water berths. Combined frontage 8,000 ft. Vessels of 818 ft. have been accommodated. Draft LWOST 18 ft.-27 ft. depending on berth.
TUGS: Available. On call during working hours and outside of hours when required if advance notice given. Tug's lines are to be used.
STEVEDORES: Employed through National Dock Labour Board. 36 hour's notice recommended.
TANKERS: Tankers berth at Eastern Breakwater provided draft not more than 27 ft. berthing at H.W. Max. length 550 ft. Coast Lines Berth: Max. draft 16 ft. There is a tank-cleaning installation available. Tankers of 840 ft. with draft 17 ft. forward and 23 ft. aft have been accommodated at Eastern wharf.
FUEL AND FRESH WATER: All classes of fuel oil and diesel oil are available and water is piped on the Dock Company wharves. At the repair berths, or in Carrick Roads, bunkers and water must be delivered by barge. Water by tug in Carrick Roads.
CONSULS: Denmark, France, Greece, Netherlands, Norway, Sweden and Spain.
GANGWAY/DECK WATCHMEN: Available in shipyard on request.
OPENING/CLOSING HATCHES: Normally carried out by crew.
AIRPORTS: London (Heathrow and Gatwick) 5.5 hours via Reading, or Bristol, St. Mawgan, 35 miles.
MEDICAL: Doctors and hospital facilities available. Agents should be advised in advance of any medical attention required.
CUSTOMS ALLOWANCE: At the discretion of Local Customs Inspector. Normal allowances are equivalent to 0.5 lb. tobacco per man and equivalent to 1 bottle of wine per man. Allowances may be halved for home trade vessels. Vessels in port for more than 3 or 4 days may receive extra allowances.
REPAIRS: All ship repairs can be carried out by local repair yards.
DRY DOCKS: Falmouth Docks and Engineering Co.

Queen Elizabeth Dock:	length	850 ft.	width	130 ft.
Falmouth Docks, No. 1:	,,	555 ft.	,,	75 ft.
Falmouth Docks, No. 3:	,,	750 ft.	,,	88 ft.
Falmouth Docks, No. 4:	,,	648 ft.	,,	86 ft.

TIME: British Standard Time is GMT. British Summer Time – GMT plus 1 hour (Summer).
HOLIDAYS: 1st January; Good Friday (variable date); Easter Monday (variable date); Spring Bank Holiday (variable date); August Bank Holiday (variable date); Christmas Day (25th December); Boxing Day (26th December).
POLICE/AMBULANCE/FIRE: Dial 999 from any telephone and ask for service required. Or County Police, Falmouth 312821; Dock Police, Falmouth 311400; County Fire Service, Falmouth 314274; Docks Fire Service, Falmouth 311400; Ambulance, Truro 2349.
TELEPHONES: Can be placed on board in dry dock and most repair berths but not at Eastern Oil Wharf.
SHORE LEAVE: Granted.
AUTHORITY: Falmouth Harbour Commissioners.

AGENT: G. C. Fox & Company, 48 Arwenack Street, Falmouth. Tel: 311300. Telex: 45–237. Cables: "Fox Falmouth".

FAVERSHAM: 51.19 N. 00.54 E.

DOCUMENTS: See "London".
PILOTAGE: Not compulsory. Advisable to engage local man by arrangement with Agent or contact Medway Port Operations and Information Service.
ANCHORAGE: The Swale (East) 1 mile (approx.) upstream of the Sand End buoy.
RESTRICTIONS: No night restrictions. Tidal creek – vessels enter from 1.5 hours before High Water according to draft.
MAX. SIZE: 140 ft. LOA, 25 ft. beam, 9 ft. draft, on Spring tides only.
RADIO: North Foreland.
VHF/RADAR: See "Medway".
TUGS: None available.
BRIDGES: Maximum size of vessels proceeding to basin above Faversham Swing Bridge – 140 ft. length, 23 ft. beam. Draft – the minimum clearance for vessels up to 110 ft. in length is 1.5 ft. over the sill, and for longer vessels 2 ft. over the sill.
MEDICAL: Notify Agent of any medical treatment required.
FRESH WATER: Available on some berths.
FUEL: No local installation. Bunkers may be obtained by road tanker – contact Agent.
REPAIRS: Minor repairs can be carried out locally. For nearest grid, slipway and dry dock facilities see "Rochester" and "Sheerness".
AUTHORITY: Medway Ports Authority, Sheerness Docks, Sheerness.
Local: River Inspector (Faversham).

FELIXSTOWE: 51.57 N. 01.21 E. (See Plan)

DOCUMENTS:
Stores List.
Crew List.
Health Declaration.
Manifests.
Bills of Lading.
Ship's papers, including Register, Load-line Certificate, Safety Equipment Certificate, Radio Certificate, U.K. Light Dues, if any.
PILOTAGE: Cork or Sunk Pilot station, Master's option. 12 hours notice ETA vessel Cork or Sunk Pilot Cutters to be given via G.P.O. Coastal Station (Northforeland, Humber Radio) stating g.r.t., max. draft, and port of destination. Cables: "Sunk Pilot Vessel" – Northforeland Radio within MF range. Sunk Pilot Cutter 2182 kc/s, VHF range 156.8 mc/s, VHF Channel 16 then transfer to 156.3 mc/s, VHF Channel 6.
ANCHORAGES: At Cork Light Vessel; Quarantine anchorage off Harwich Road; "Northshelve" off Harwich; and in River Stour.
RESTRICTIONS: All vessels up to 25 ft. draft can enter Harwich Roads day and night on any state of tide. Max. draft for Container Quays and Oil Terminal 30/33 ft. depending on tides. At least 3 ft. keel clearance required at all times between channel bed and keel of vessel.
MAX. SIZE:
(a) General cargo vessels: Dock Basin 145 ft. wide entrance. Depth 18 ft. LWOST. No lock gates. Suitable vessels able to leave on any state of tide.
North Quay: 640 ft. in length.
South Quay: 610 ft. in length.
East Quay: 430 ft. in length.
North Development: Depth 33 ft. LWOST.
(b) Container vessels. Container Terminal depth: 33 ft. LWOST. Approach Channel Harwich Harbour Estuary: 23.5 ft. LWOST.
(c) Roll-on, roll-off vessels; Ferry Terminal: Vessels up to 450 ft. overall. Depth 22 ft. LWOST. No. 3 Roll-on/Roll-off Bridge: vessels up to 500 ft. LOA. Depth 24 ft. LWOST.
No. 4 Roll-on/Roll-off Bridge: Depth 33 ft. LWOST.
(d) Tankers. Oil Terminal: Vessels 600 ft. overall. Depth 33 ft. LWOST.
HEALTH: Pratique flag in daylight and lighted signals in darkness to be displayed by vessel on arrival. Health Declaration to be given in writing or verbally by Master on arrival. If disease suspected, then report to pilot station who will advise Health Authorities.
RADIO: Northforeland, Humber, Niton (or any other radio station convenient to vessel's position).
RADAR/VHF: Masters of all vessels are advised to read Notice to Mariners No. 5 of 1976 which outlines requirements and gives general directions for navigation in Harwich Harbour.

A new Operations Service jointly operated by the Harwich Harbour Conservancy Board and the Trinity House Pilotage Service, is provided from Harbour House, Harwich, and the Trinity House Pilotage Operations Service.

The new Service is provided by Harbour Board Officers and Trinity House Duty Pilots, co-operating mutually, on a continuous twenty-four hours a day basis to provide vessels using the Port with information and advice.

The following Communication facilities are available:

1. *VHF Radio Telephone*

Channel 16	Calling and safety.
Channel 12	Secondary Harbour Working frequency.
Channel 14	Prime Harbour Working frequency.
Channel 20	Harbour Board Radar information frequency.
Channel 11	Harbour Service frequency.
Channel 9	Pilotage Service frequency.
Channel 38	Trinity House frequency.

2. *Land Line communications*
   (i) *Telephones*
   Harbour operations: Harwich 6535/6
   Pilotage service: Harwich 3129 and 6300
   (ii) *Telex*
   Trinity House Pilotage
   Service and Harwich
   Harbour Joint Operations Service: 98472

3. *Other Equipment*

The centre is provided with a standard Harbour Surveillance Radar 2, 16 in. conventional marine displays; also provided is an electronic tide gauge, wind direction and force instruments.

All vessels should provide timely advice of their arrivals and departures to and from the Port Complex and report their movements through the Harbour and its approaches as directed.

TUGS: Stationed at Felixstowe, join vessels Harwich approaches or where ordered by Pilots. Vessels to use tug lines at additional cost. Tugs on VHF Channel 16 (24 hours) Channels 6, 8, 9 or 12 working.
BERTHING: Regulated by Harbour Master through pilot stations and tugs. Vessels able berth within restrictions of individual berths.

	Depth of water at LWOST	*Length of quay in feet*
Transatlantic Container Terminal	dredged annually to 33 ft.	2,040. Three container berths and 1 Roll-on/Roll-off berth
Dock Basin	18 ft.	East Quay 430; North Quay 640; South Quay 610. Vessels up to 350 ft. in length are accepted

	Depth of water at LWOST	*Length of quay in feet*
Ferry Terminal	22 ft.	360. Vessels up to 450 ft. in length are accepted
Northern Development	dredged annually to 24 ft.	No. 3 Roll-on/Roll-off bridge 450. Vessels up to 500 ft. in length are accepted
	dredged annually to 33 ft.	Dual purpose berth for General Cargo and No. 4 Roll-on/Roll-off bridge 1,100 ft.

CARGO HANDLING FACILITIES: *General Cargo Division:* Mobile pneumatic grain discharger, discharge rate 30 t.p.h. into silo with capacity of 6,400 tons.

Mobile cranes, capacity 30 tons. Scotch derrick crane, capacity 32 tons at 90 ft. radius.

Roll-on/Roll-off Division: No. 1 Berth: Transport Ferry Terminal. Upper and Lower deck loading ramps. Electric travelling crane, capacity 32 tons at 110 ft.

No. 2 Berth: One hydraulic loading ramp designed to carry loads up to 140 tons.

No. 3 Berth: Hydraulic loading ramp designed to carry two lanes of traffic with loads up to 140 tons. Electric travelling crane with capacity of 35 tons at 95 ft. radius.

No. 4 Berth: Allows a combination of Roll-on/Roll-off and conventional vessels to be accommodated. The hydraulic loading ramp is designed to carry two lanes of traffic with loads of up to 140 tons.

Container Division: The Container Terminal South of the Ferry Terminal is equipped with one 40 ton and two 30 ton Portainer cranes capable of handling 20, 30, 35 and 40 ft. containers on automatic spreaders.

STEVEDORES: 24 hours notice required by Agent to advise stevedores of vessel's ETA, in order to arrange berthing and allocation of labour. All stevedoring arranged between Dock Company and vessel's Agent.

MEDICAL: Prior notice desirable through Agent to arrange attention. All services available.

TANKERS: 4-in. and 6-in. connections. No slop facilities. No facilities for gas freeing alongside or in harbour.

One tanker berth available. Vessels up to 600 ft. overall, max. draft 31 ft.

DENSITY: 1025 salt water.

FRESH WATER: Pipe-line connections to all quays. Delivery approx. 50 t.p.h. Barge service available for supplies to vessels at anchor.

FUEL: Only gas oil available, 35 sec. pipe-line and barge delivery. 24 hours notice required.

FIRE PRECAUTIONS: Standard precautions at all berths.

GANGWAY/DECK WATCHMEN: Not compulsory. If required, cost negotiable.

OPENING/CLOSING HATCHES: Work undertaken by crew.

CERTIFICATES:

Valid Derrick and Rigging Certificates.
Ship's Register.
Load-line.
Safety Equipment.
Radio.
Derat.
Construction.
(Light Dues Receipts).

CUSTOMS ALLOWANCE: 100 cigarettes or equivalent in tobacco or cigars per man. 1 bottle spirits.

IDENTIFICATION CARDS: Not necessary if in possession of Seaman's Book or Passport.

CONSULS: Royal Norwegian Vice-Consul Ipswich (9) 59281; Royal Swedish Vice-Consul Felixstowe 78621, Icelandic Vice-Consul Felixstowe 5651/4.

REPAIRS: Facilities exist for small repairs only.

DRY DOCKS: None available.

REPATRIATION: All facilities available.

AIRPORTS: Southend – 70 miles; Heathrow – 90 miles. International flights.

TIME: GMT. In Summer months, April to October, time advanced 1 hour.

HOLIDAYS: All normal Bank Holidays, but official notification of port closures for such holidays is given well in advance of relevant dates.

POLICE/FIRE/AMBULANCE: Emergency points on all quays. Tel. 300 or, outside dock area, 999.

TELEPHONES: Shore connections available by prior arrangement for vessels on regular trades.

GENERAL: ETA to Agent required 72 hours, 48 hours, and 24 hours prior arrival.

SERVICES: Most services available for dry cargo vessels, but no special tank cleaning or tank washing facilities for tankers.

SHORE LEAVE: No restrictions.

AUTHORITY: Felixstowe Dock & Railway Co.

AGENT: Cory Brothers Shipping Ltd., Powell Duffryn House, Dock Estate, Felixstowe, Suffolk. Tel. 5671. After office hours: Felixstowe 2508; Ipswich 59117; Needham Market 523. Telex 98434. Cables: "Cory Felixstowe".

FISHGUARD: 52.01 N. 04.58 W. (See Plan)

DOCUMENTS: as for "Cardiff".

PILOTAGE: Local Pilot available on request. Pilotage compulsory.

ANCHORAGES: Eastward of a line joining Northern and Eastern breakwaters.

MAX. SIZE: Max. draft 19 ft.

RADIO/VHF: Fishguard Radio, VHF Channel 16.

TUGS: None.

FACILITIES: Stern loading, car and roll-on/roll-off Ferry Port.

STEVEDORES: No stevedores – vessels worked by British Railway staff.

MEDICAL: Doctors available. Hospital facilities 16 miles away.

DENSITY: 1025.

FRESH WATER: Available alongside quay.

FUEL: Available with prior warning.

GANGWAY/DECK WATCHMEN: Ship's crew.

OPENING/CLOSING HATCHES: Crew.

REPAIRS: Minor repairs by BR workshops and contractors.

AIRPORT: Cardiff and Swansea.

POLICE/FIRE/AMBULANCE: Dial 999. British Rail police on duty 24 hours.

SHORE LEAVE: Allowed.

AUTHORITY: Shipping and Port Manager.

FLEETWOOD: 53.55 N. 03.00 W.

DOCUMENTS:

Manifests.
Bills of Lading.
Ship's papers.
Crew Lists.
Customs Documents.
Health Documents.

PILOTAGE: Pilot to be picked up off No. 1 Fairway Buoy. Ordered through ship's Agent giving 24 hours notice of ETA.

ANCHORAGES: Good anchorage in outer limits of harbour in Lune Deeps in 14 fathoms.

RESTRICTIONS: Vessels under power must not navigate any portion of this harbour above No. 9 Buoy at a greater rate of speed than *five knots*, also on passing other vessels, either steam or sail, hopper barges, pontoons in tow, etc. in the channels outside the above-mentioned No. 9 Buoy, and within harbour limits due care must be taken to pass them at a rate of speed that will not cause risk from displacement, or what is commonly called "backwash", and that all vessels must be navigated in this harbour strictly in conformity to the Collision Regulations and Signals of Distress.

Vessels bound into Fleetwood must not enter the river without being sure they have sufficient depth of water to ensure their getting to the quays or piers to which they are bound.

In the event of any vessel grounding on the "Tiger's Tail" or in any other part of the Fleetwood Harbour, the Master shall not attempt to refloat the vessel by reversing the engines, or by any other means whatsoever, until all incoming vessels following have passed the stranded vessel and the channel is clear of shipping.

MAX. SIZE: (Within enclosed docks): 350 ft. LOA: 46 ft. 6 in. beam.

So far as draft is concerned, allowances have to be made for clearing the lock invert. These allowances vary according to the beam of the ship and the following scale may be taken as a guide:

Beam of Vessel		*Clearance Required*	
ft.	in.	ft.	in.
37	0	2	3
44	0	4	0
45	6	6	0
46	0	7	3
46	4	9	3
46	6 max.	10	3

HEALTH: Pratique is automatic.

RADIO: VHF Port Operations and Information Service. Call sign: Fleetwood Harbour Radio Channel 16 (156.80 mc/s): Calling and Safety. Channel 12 (156.60 mc/s): Port Operations.

All movements of vessels arriving for and sailing from the Harbour and Docks are controlled by the Harbour Master using the VHF Port Operations and Information Service located in the Harbour Master's Office on the West side of Fleetwood Harbour. (Lat. 53° 55′ 30″ N., Long 3° 00′ 12″ W.). This service is operated for the 24 hour period, and vessels must maintain a listening watch when approaching or leaving the Port. Messages must be restricted to matters appertaining to general navigation, berthing instructions and the safety of ships or persons within the Port Area. Messages of any other nature will not be accepted.

TUGS: Tug service operated by FFVOA Ltd., 190/192 Dock Street, Fleetwood.

BERTHING: Under normal conditions the lock gates operate for 2 hours each side of high water.

There is a Lift-on/Lift-off container berth within the enclosed docks. The General Cargo berths can be used for handling liquid chemicals and bulk cargoes. Grain can be shipped direct into silo at one of these berths. There is a Roll-on/Roll-off berth in the harbour. This is a daily service to Larne and Dublin for wheeled vehicles and trailer loads.

STEVEDORES: Arranged through ship's Agent.

MEDICAL: Ship's Agent will organise medical attention if required.

DENSITY: 1015 at half tide; 1025 at high water.

FRESH WATER: Fresh water available through stand pipes. Charge according to consumption (sliding scale).

FUEL: All grades of fuel available.

FIRE PRECAUTIONS: No specific requirement outside usual "No smoking" precautions.
GANGWAY/DECK WATCHMEN: Ship's watchmen required.
OPENING/CLOSING HATCHES: Normally carried out by crew.
REPAIRS: 2 slipways located in Fish Dock with lifting capacities of 1,050 and 650 tons respectively.
REPATRIATION: Arranged through ship's Agent.
AIRPORT: Squires Gate, Blackpool, 10 miles away.
TIME: GMT in Winter. GMT plus 1 hour in Summer months.
HOLIDAYS: Christmas Day and Boxing Day; New Years Day; Good Friday and Easter Monday; Spring Bank Holiday; Autumn Bank Holiday.

Cargo working can be arranged on any of these days upon request.

POLICE/AMBULANCE/FIRE: British Transport Police available on Docks Estate. Ambulance 999; Fire 999.
TELEPHONES: Can be arranged through Post Office.
SERVICES: Compass adjusting.
SHORE LEAVE: Crew members are allowed ashore.
AUTHORITY: British Transport Docks Board.

FOWEY: 50.20 N. 04.39 W.

PORT LIMITS: The whole of the Fowey river to a line across the entrance to the harbour. A vessel is considered to have arrived on entering the harbour unless she is anchored just outside by the Pilot to await suitable conditions for entering, in which case she is considered to have arrived on being so anchored.
DOCUMENTS:

Crew and Passenger Lists are helpful, but not essential.
Aliens List is essential.
List of Bonded Stores, including beer.
List of Personal Dutiable Articles owned by Crew.
Bill of Health, if available.
De-Ratisation Certificate.
Manifest of all cargo on board.
Copies of Bills of Lading.
Stowage plan, if available.
Normal Ship's Papers.

PILOTAGE: Vessel requiring Pilot gives ETA as far in advance as possible to Agent. Vessel displays normal signals off port. VHF calling Channel 16, working Channel 9. Pilot boats are black. The Pilot boards off entrance. Vessels can anchor South of entrance if necessary.
RESTRICTIONS: Vessels can enter at any time, if their draft is less than 18 ft. Otherwise according to tide.
MAX. SIZE: 460 ft. in length. Loaded draft of 28 ft. Vessels of this draft have to be handled at or near high water.

Vessels up to 486 ft. in length have been handled, but subject to prior consultation with the Harbour Master and owners of the loading berths.

HEALTH: Vessel is boarded on entering port by Port Health Officer, who gives his Pratique.
RADIO: Land's End Radio, Niton, or Portishead.
TUGS: 2 diesel tugs are available and normally join vessels on entering entrance. Ship's lines usually used. Only 1 tug required for vessels under 350 ft. length.
BERTHING: Vessels waiting for berths are normally moored, using their own anchor with their stern to a buoy. On the berth, vessels require long ropes.

A new berth 550 ft. in length is completed and may be operational by June/July 1976.

CARGO FACILITIES: The port is specially equipped to handle china clay and ball clay in bulk and in bags. No other commodity passes through the port either inwards or outwards. There are 3 berths each with a 3-ton crane and a bulk conveyor capable of handling up to about 330 t.p.h. A new berth is also now under construction.
STEVEDORES: Earliest ETA possible is required, especially when a vessel arrives over week-end.
MEDICAL: If Medical Officer is required on arrival, advise Agent earliest opportunity. Hospital facilities are available.
DENSITY: River fully salt at all states of the tide.
FRESH WATER: Available at all jetties, delivered by hose and rate very variable.
FUEL: Gas/Oil only available. As much notice as possible is advisable.
GANGWAY/DECK WATCHMEN: Not normally employed.
OPENING/CLOSING HATCHES: Carried out by crew.
CUSTOMS ALLOWANCE: 200 cigarettes or 0.5 lb. of tobacco, if foreign-going. Wine and/or Spirits. 0.5 pint if foreign-going.

Half this allowance for vessels arriving from home trade ports.

IDENTIFICATION CARDS: Not needed.
CONSULS:

Belgium	J. H. Samuel, Trafalgar Square, Fowey. Tel. 3414
Finland	,, ,, ,, ,,
France	,, ,, ,, ,,
Sweden	,, ,, ,, ,,
Denmark	Ross Carter, Albert Quay, Fowey. Tel. 3274.
Netherland	Ross Carter, Albert Quay, Fowey. Tel. 3274.

REPAIRS: Not possible. Minor repairs only.
REPATRIATION: Facilities exist.
HOLIDAYS: Saturdays, Sundays, and all Public Holidays.
POLICE/AMBULANCE/FIRE: Telephone 999.
TELEPHONES: No arrangements made for connection on board.
SERVICES: Compass adjusting can be arranged.
SHORE LEAVE: Allowed.
DELAYS: There is a possibility of delay in heavy rain.
AUTHORITY: Fowey Harbour Commissioners.
AGENT: Toyne Carter & Co., Fowey, Cornwall. Tel. Fowey (072683) 3274. Telegraphic address: "Toyne Fowey". Telex: 45331 – AB: "Toyne Fowey". After hours tel. Fowey 3428; 2370 or 2525. Ship's Agents and Shipbrokers.

GARSTON: 53.21 N. 02.54 W.

DOCUMENTS: HEALTH: and all general information, refer to "Liverpool".
RESTRICTIONS: Locking into/out of Garston commences 3 hours before HW and ceases 3 hours after for vessels of 250 ft. in length or under. Vessels over this length must enter when the river and dock are level – about 1 hour before HW to half an hour after.
MAX. SIZE: 500 ft. length, 63 ft. beam, draft about 6 ft. less than HW Liverpool.
RADIO: As Liverpool. VHF Channel 20.
BERTHING: *Stalbridge Dock:*

Width of entrance	65 ft.
Depth on sill	26 ft. 8 in.
Lock length	276 ft.
Total water area	14.5 acres
Length of quays	3,200 ft.

Old and North Docks: entered from Stalbridge Dock

Total water area	14 acres
Length of quays	4,610 ft.

DENSITY: 1025.
FRESH WATER: Available Monday to Friday 0800 to 1600 hrs. All watering required outside of these hours is by arrangement and must be paid for at overtime rates. Rate of delivery, 10 t.p.h.
DEVELOPMENTS: Modernization of coaling facilities and further adaptation to containers under consideration.
OPENING/CLOSING HATCHES: Hatches to be opened and closed by the crew except on request.
AIRPORT: Liverpool airport, 1 mile distant.
HOLIDAYS: Normal English Bank Holidays. Vessels can be worked on these days but this involves additional payment.
POLICE/FIRE/AMBULANCE: Dial 999 and ask for service required.
TELEPHONES: No connection can be made to vessels.
GENERAL: Vessels are required to "stem" on entering the dock; that is, to send an Officer to the Pierhead Office to enter the vessel into the Stemming Book giving all details regarding the vessel and cargo and to sign the sheet.
AUTHORITY: British Transport Docks Board.

GLASGOW and Clyde District: 55.51 N. 04.16 W. (See Plan)

DOCUMENTS: For Customs Clearance and to meet Immigration Authorities requirements, following valid documents are required:

Ship's Crew List.
Port Health Declaration.
Register, Load-line Certificate.
Safety Equipment, Safety Construction and Safety Radio Certificates.
Derat Exemption or Fumigation Certificate.
British Tonnage Certificate.
Copy Manifests and Bills of Lading.
Grain Form (No. S/107) if bulk grain.
Completed Customs Form C.142.

PILOTAGE: Compulsory pilotage from and to Kempock Point (Gourock pilot station) tel. Gourock 31331. "Gourock Pilots Radio" Channel 14 — frequency 156.7 Mc/s.

Optional pilotage is available to and from Cumbrae Island.

Vessel to advise Agent 72, 48 and 24 hours before arrival with subsequent advice of any changes to ETA, stating where Pilot required to board, ETA and draft.

Normal ladder, etc., for Pilot boarding.

ANCHORAGES: As defined by Clyde Port Authority and in special circumstances (e.g. draft, condition of ship, hazardous cargo, etc.) under advice of Pilot.

Anchorages are available for vessels of all drafts in the Tail of the Bank area (off Greenock) and lower Firth of Clyde.

RESTRICTIONS: As defined by Clyde Port Authority and under Clyde Pilotage Authority requirements.
MAX. SIZE: As defined by Clyde Port Authority for berths in Glasgow and Greenock and subject to consideration of particular circumstances prevailing in each case.
HEALTH: The Master of a foreign-going vessel proceeding direct from a foreign port to the port of Glasgow must send wireless message to "PORTELTH GLASGOW". This message must be sent off not more than 12 hours and not less than 4 hours before the arrival of the ship and state:

(*a*) The name of ship.
(*b*) The time on the 24-hour clock it is expected to arrive at the Tail of the Bank, Greenock.
(*c*) The port of departure and last port of call.
(*d*) The number of crew, and passengers, if any.
(*e*) The state of health or any circumstances on board which are likely to lead to infection or the spread of infectious disease.

The Master must fill in and sign the Declaration of Health on pages 1 and 2. It should be completed and ready to deliver to the Officer of Her Majesty's Customs or Officer of the Port Health Authority, whichever shall first board the vessel.

If the answer to any of the health questions on page 1 is "Yes" free pratique will not be granted by Her Majesty's Customs until the ship has been visited by the Port Medical Officer.

The Master must therefore: 1. When the ship comes, whether by day or night, within the district, show or give the following signals:

(*a*) the international signal "ZW" flown at the masthead or where it can best be seen from the shore, and

(*b*) between sunset and sunrise, either: (i) the signal "ZW" flashed in the Morse code by lamp, or (ii) a signal consisting of a red light over a white light, the lights being not more than 6 ft. apart, shown at the peak or where the signal can best be seen from the shore.

2. If the answer to all of the health questions on page 1 is "No" the Master must show or give the following signals when the ship comes, whether by day or night, within the district:

(*a*) the international flag signal "Q" flown at the masthead or where it can best be seen from the shore and

(*b*) between sunset and sunrise, either (i) the signal "Q" flashed in the Morse code by lamp, or (ii) a signal consisting of a red light over a white light, the lights being not more than 6 ft. apart, shown at the peak or where the signal can best be seen from the shore.

3. Article 17 of the Public Health (Ship) (Scotland) Regulations 1966 states:

If, within four weeks after the Master of a ship has delivered a Maritime Declaration of Health pursuant to regulation 16 or a corresponding provision in force in England, Wales or Northern Ireland, the ship arrives in a district or calls at another district, as the case may be, the Master shall report to the Customs Officer or authorised officer, whoever first boards the ship, any case or suspected case of infectious disease which has occurred on board since the Declaration was delivered and which has not already been reported.

4. Article 18 of the Public Health (Ships) (Scotland) Regulations 1966 states:

On arrival of a ship from any foreign port or from any infected area which is not a foreign port, no person other than a Pilot, a customs officer, an immigration officer or an authorised officer shall, without the permission of the medical officer, board or leave the ship until it is free from control under these regulations and the Master shall take all steps necessary to secure compliance with this provision.

5. The maximum penalty for breach of the Public Health (Ships) (Scotland) Regulations 1966 is £100, and in the case of a continued offence, a further penalty not exceeding £50 for every day during which the offence continues.

RADIO: Any GPO radio station.

There is a Port Operations VHF/FM system in operation utilising Channels 12, 14 and 16 in the International Maritime Band as under: West of Bowling, Channel 12; East of Bowling, Channel 14; calling up, Channel 16.

RADAR/VHF: Radar service not available. Port Radio service.

TUGS: As required by Master and under advice of the Pilot. Tug's lines only are used.

CONTAINER HANDLING FACILITIES: Container terminal at Greenock for two container ships to berth and work simultaneously. Two straddle carriers and three transporter cranes available. Length of Quay 1,200 ft. Depth 42 ft. LWOST.

GRAIN HANDLING FACILITIES: *Meadowside Granary:* Total capacity, 176,000 tons. Six grain elevators, each with discharge rate of 200 t.p.h.

STEVEDORES: Arranged by Agent in accordance with Master's advice of ETA.

MEDICAL: Full medical and hospital facilities available.

TANKERS: Agents will advise Master by radio to prepare appropriate manifold connections. No slop facilities at Old Kilpatrick, Bowling, Faslane, Finnart. In Glasgow a small vessel is equipped for removal of sludge, tank washing, etc.

Oil installations:

Bowling (ESSO): Private berth. Maximum length of vessels swinging off Bowling Basin is 550 ft. under suitable conditions. Berthing and unberthing is permitted day and night, according to state of tide.

A port regulation prohibits ships which are not gas free and have on board or have carried cargo with a flash-point of below 73 degrees from navigating the river East of Bowling.

Old Kilpatrick: Admiralty oil installation. Canting facilities in the river off Rothesay Dock, maximum length of vessels permitted is 630 ft. during daylight and under suitable weather conditions. Admiralty, Old Kilpatrick, advise maximum length at the berth is 570 ft., draft 30 ft.

Berthing and unberthing is permitted day and night, according to state of tide. Fully loaded vessels are berthed port side to at high water and must be capable of discharging over the tide. Light or partly loaded vessels may swing on arrival, berth starboard side to.

No low flash-point cargo may be discharged and vessels having low flash-point on board are not permitted at this berth.

Vessels which have carried crude oil as previous cargo are not permitted to load at this berth unless all tanks have been cleansed. There are no facilities for receiving dirty ballast.

Finnart: B. P. Installation. Maximum permissible size of vessel 300,000 d.w.t. — maximum draft 90 ft. salt water.

Faslane: Esso Petroleum. Maximum permissible size of vessel 40,000 d.w.t.

DENSITY: Port of Glasgow — Brackish.

FRESH WATER: Available at all berths by shore hose.

FUEL: All major oil companies represented in Glasgow. As much notice as possible required, all grades can be supplied.

FIRE PRECAUTIONS: As per Clyde Port Authority Regulations. Tanker berths — as per B.P., Esso and Admiralty Regulations.

GANGWAY/DECK WATCHMEN: At Master's discretion.

OPENING/CLOSING HATCHES: To be carried out by ship's crew.

CUSTOMS ALLOWANCE: On arrival from a foreign port with foreign cargo an allowance of 100 cigarettes per man for each four days in port, whilst discharging foreign cargo, and an allowance of a 0.25 pint of spirits is allowed for each man per day in port up to four days.

CARGO GEAR: Valid test certificates required for all cargo gear.

IDENTIFICATION CARDS: Not required.

CONSULS:

American
Brazilian
Danish
Equador
German
Italian
Netherlands
Panama
Spanish
Uruguayan
Belgian
Cuban
Dominican
Finnish
Liberian
Norwegian
Portuguese
Swedish

REPAIRS: All types of deck and engine repairs can be effected in the Clyde Area.

DRY DOCKS: Size of largest dock in Clyde area: Scott Lithgow dry dock, Greenock: 1,000 ft. long clear from gate to head of dock; 156 ft. cope to cope; 150 ft. clear width between altars; 145 ft. clear width at entrance; 45 ft. top of keel blocks to cope; 37 ft. draft on sill HWOST; 27 ft. draft on sill LWOST.

In addition, there are eight other dry docks in Glasgow/Greenock area.

REPATRIATION: Facilities for crew changes, and full repatriation services are available.

AIRPORT: Glasgow Airport (12 miles from city centre) and Prestwick Airport (30 miles from city centre) are served by most major domestic and international airlines.

TIME: BST (1 hour ahead of GMT) in operation. GMT in Winter months.

HOLIDAYS: Official dock holidays on which cargo work cannot be arranged. Easter Monday; Whit Monday; Autumn Bank Holiday; 27th December.

POLICE/AMBULANCE/FIRE: These services can be called by telephone by dialling 999 or contacting Clyde Port Harbour by VHF.

TELEPHONES: Telephones can be placed on board at most docks, charges vary according to berth, type of service and whether prepay call-box type or linked to exchange.

SERVICES: Tank cleaning. Facilities are available for service to ship's radio, navigation aids, etc.

SHORE LEAVE: Crew allowed ashore at Master's discretion and subject to compliance with Immigration and any other interested Authorities' requirements.

DEVELOPMENTS: An ore/coal terminal is to be constructed at Hunterston. The berth will be able to receive vessels of 350,000 d.w.t. Completion is expected in 1977.

AUTHORITY: Clyde Port Authority.

GOOLE: 53.42 N. 00.50 W.

PORT LIMITS: Goole is a river port with conservancy jurisdiction to the junction of rivers Humber, Ouse, Trent. However, laytime commences from commencement of next normal working shift after ship is on berth and ship's Agent has issued "Notice of Readiness". This may be 0800 hrs. or 1300 hrs. dependent on time of issue of notice.

Precedence of order of arrival of vessels is determined by arrival time at Ocean Lock Entrance, Goole Docks.

DOCUMENTS:

Bills of Lading/Manifests (prepared by Agents at port of origination).
"Imperfect" Customs Entry.
Request (to work vessel).
*Request for Immigration Officer to be in attendance – if carrying passengers.
*Crew List to Immigration Officer (for foreign personnel).
Ship's Register.

Ships Agent will normally notify Immigration Officer.

PILOTAGE: Compulsory from Spurn to Goole, two stages.

1st stage: Spurn Light Vessel to Hull Roads.

See "Grimsby" Pilotage.

2nd stage: Hull Roads to Goole. Pilot will board vessel in Hull Roads.

ANCHORAGES: Bull Anchorage on chart of Humber Estuary, or in Hull Roads, otherwise only on advice of Pilot.

RESTRICTIONS: State of tide, springs or neaps. Port entered during tidal hours, 3.25 hours before high water to half an hour after high water, according to draft. Pilots will advise.

MAX. SIZE: Vessels should be within following measurements: 300 ft. overall length, 50 ft. beam and 17/18 ft. draft. Vessels exceeding any of these measurements should seek advice before arranging to visit the port.

HEALTH: Pratique issued by H.M. Customs Waterguard (in absence of Port Health Official). Pratique accepted when entering after calling at another port in the U.K.

RADIO: Via Humber Radio, call sign GKZ – call on Channel 16. Give ship's name and call sign and pass message.

TUGS: Tugs available but not normally used. If required, to be arranged through Ship's Agent.

BERTHING: Berthing instructions given to vessel on arrival at entrance locks. No specific requirements.

SPECIALISED CARGO HANDLING FACILITIES: Three appliances for loading of rail-borne bulk cargoes, e.g. coal, coke, pitch, fluorspar, etc.

Two appliances for loading of canal-borne bulk cargoes (coal, coke, pitch, etc.).

Discharging of bulk cargoes by 12×7.5-ton modern quay cranes, equipped with suitable grabs for sand, ores, fertilisers, coal, grain, sulphur, scrap iron, etc.

Road-borne bulk cargoes loaded by same grabs.

Two 32-ton Scotch derrick cranes for container handling.

50-ton and 40-ton electric travelling cranes for heavy lifts.

Roll-on/roll-off traffic (cars, etc.) accommodated at various berths. The docks are maintained at a constant level and specialised link span berths are not necessary.

No bulk liquid berths.

STEVEDORES: Arrangements made by Ship's Agent who should be given ample notice of time of arrival of vessel, Port Authority will advise.

MEDICAL: Ship's Agent will arrange for attendance of doctor on notification. Doctor's, dentists and hospital services available. Ships Agent can arrange service required.

DENSITY: Water in Goole Docks is fresh water and is maintained at constant level. Entry is by locks. Density 1.000.

FRESH WATER: Delivery by water-boat through hose-pipes. Rate 30 t.p.h.

FUEL: All grades available on reasonable notice being given to Ship's Agent.

FIRE PRECAUTIONS: No specific precautions unless there are exceptional circumstances, when special arrangements can be made with local Fire Service.

GANGWAY/DECK WATCHMEN: Necessary. Usually provided from crew. Otherwise by negotiation locally.

OPENING/CLOSING HATCHES: Responsibility of crew.

SHIP CERTIFICATES:

Ship's Register (including load-line).
Radio Safety.
Life-Saving.
Light Dues.
Change of Articles.
Deratisation Certificates.

CARGO GEAR: Normally not required, as ample port facilities available.

IDENTIFICATION CARDS: May be required to be produced to Immigration Officer or H.M. Customs offical, especially in the case of foreign flags.

CONSULS: France, Netherlands and Denmark.

REPAIRS: All types of deck and engine repairs possible by local ship repairers.

DRY DOCKS: No. 2 Dry Dock: 301 ft. length, 50 ft. width at entrance, 15 ft. depth on sill. Two other dry docks. The water in the wet docks at Goole is maintained at a constant level and all dry docks are entered direct from the wet docks.

REPATRIATION: Arranged by Ship's Agent.

AIRPORT: Yeadon (Leeds-Bradford), 45 miles. Regular services.

TIME: GMT in Winter; GMT plus one hour in Summer months.

HOLIDAYS: Good Friday; Easter Monday; Spring Bank Holiday (last Monday in May); late Summer Bank Holiday (last Monday in August); Christmas Day; Boxing Day and New Years Day. No cargo working on these days.

POLICE/AMBULANCE/FIRE: Dial 999 and ask for service required.

TELEPHONES: No arrangements for ship connection.

SHORE LEAVE: No restrictions.

REGULATIONS: Visitors to vessels require permits from Port Authority and Master or Ship's Agent. Smoking not permitted ashore in dock area.

AUTHORITY: British Transport Docks Board.

GRANGEMOUTH: 56.01 N. 03.43 W. (See Plan)

PORT LIMITS: At Grangemouth a vessel is not considered to be an "arrived vessel" until she is tied up at the allocated berth.

DOCUMENTS:

1 Crew List.
1 Passenger List.
1 List of all high duty goods in crew's possession.
1 Cargo Manifest.
All Valid Certificates.

PILOTAGE: Compulsory in river. Pilot boards at Inchkeith. Pilot boat on VHF, see Radio below.

ANCHORAGES: North of Grangemouth West Buoy, 2 fathoms. Charleston Roads 5 fathoms. East of Inchkeith, up to 8 fathoms.

RESTRICTIONS: Vessels are allowed to enter and depart in the period 4 hours before high water to 3 hours after high water. The height of the tide must always be taken into account when dealing with larger vessels. See "Developments."

MAX. SIZE: 575 ft. length. 96 ft. beam. Draft according to state of tide. Vessels other than tankers max. draft 25 ft. 6 in. Tankers, up to 32 ft. 6 in. max. draft.

HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a Port Doctor or an Officer of H.M. Customs depending on where the ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present Declaration. In all cases, when there is sickness on board the Port Health Authority must be informed preferably not more than 12 hours and not less than 4 hours before arrival.

RADIO: Wick – Stonehaven – Cullercoats, coastal stations.

Port VHF (FM) Communications: Station: Lock Control Office, Lock Entrance, Grangemouth. This centre will maintain a continuous watch. Call sign: Grangemouth Docks.

156.8 Mc/s. Channel 16 calling and safety. All vessels should maintain a listening watch on this Channel and use it to establish contact with Grangemouth Docks. Once contact is established the Duty Operator will request vessels to shift to the Port Operations Channel.

156.7 Mc/s. Channel 14, Port Operations. A working Channel restricted to messages relating to the movement and safety of ships, and in emergency, to the safety of persons.

156.6 Mc/s. Channel 10, Inter-ship. A working Channel for tug-to-tug and tug-to-bridge communications.

156.3 Mc/s. Channel 6, Inter-ship. A working Channel for communication with other vessels.

No message of a personal character or messages of any other nature than those pertaining to the general navigation and safety of ships and persons within the Port Area can be accepted.

TUGS: Can join vessel at Hen and Chicken Buoy or Lock Gates. Optional use of towage lines. Cost for tug's line £10 per hawser.

BERTHING: The water in Grangemouth Docks is maintained at the same level by impounding pumps. On passing through the lock entrance berthing is allocated according to the nature of the cargo and draft of vessel.

The depth of water available at the berths varies in each dock, the max. depths being approx.: Grange Dock 26 ft.; Carron Dock 23 ft.; Old Dock 17 ft.

CARGO HANDLING FACILITIES: Bulk cargoes can be handled at most berths within the port. The East Wall berth has four 10-ton grabbing cranes. Other berths have 7.5 and 6 cranes. One 40-ton heavy lift crane. Container berth is 1,000 ft. long and has two 32-ton transporter cranes.

A roll-on/roll-off berth in operation. Liquid chemicals and LPG Carriers are handled at the BP jetties. No. 1 North Jetty, which is a common user jetty handles chemicals.

STEVEDORES: No particular advice necessary to stevedores. Essential, however, advise Agent 24 hours prior arrival, who will advise stevedores.

CUSTOMS ALLOWANCE: At the discretion of Local Customs Inspector. Normal allowances are equivalent of 5 ounces tobacco per man and equivalent of 1 bottle of wine per man. Allowances may be halved for home trade vessels. Vessels in port more than 3 or 4 days may receive extra allowances.

MEDICAL: No advance notice necessary. Hospital facilities available in immediate district.

TANKERS: B.P. Refinery (Grangemouth) Limited. Private jetties in Eastern Channel: Nos. 2 and 3, 32 ft. 6 in.; Nos. 4 and 5, 19 ft. 6 in. draft No. 1 North Side Jetty, pipe-lines connected to Ross Chemical and Storage Co. are 1.5 in. nitrogen line, 6 in. chemical line, 10 in. heavy fuel line, 2 in. fresh water supply, 8 in. motor spirit line, 8 in. gas oil line. Draft at No. 1 North 32 ft. 6 in.

DENSITY: 1019 average.

FRESH WATER: Available in most berths. Watermen supervise delivery on request. Delivery rate varies depending on berth.

FUEL: All grades available from oil installations.

GANGWAY/DECK WATCHMEN: Not necessary but can be done by ship's personnel.

OPENING/CLOSING HATCHES: Custom of port crew open and close hatches but stevedores will do so if required.

CERTIFICATES: For Customs Clearance valid Certificates in respect of radio, load-line, construction, safety equipment, deratisation, necessary.

CONSULS: Norwegian, Danish and Swedish consuls available locally.

REPAIRS: All types of repairs can be carried out afloat.

DRY DOCKS: Carron dry dock length 350 ft., breadth 50 ft., depth 22 ft. Middle dry dock length 335 ft., breadth 50 ft., depth 19 ft.

REPATRIATION: All facilities exist.

AIRPORT: 1 hour from Glasgow and Edinburgh airports where numerous connections for London thence world wide travel.

TIME: British Standard Time (1 hour ahead of GMT). GMT during Winter months.

HOLIDAYS: 1st and 2nd January; 1st Monday May; 3rd Monday July; 2nd Monday September; Christmas Day.

POLICE/AMBULANCE/FIRE: In public telephone dial 999 and ask for appropriate service. With dock circuit telephone dial 34 for Police or dial 51 and ask for Fire/Ambulance.

TELEPHONES: Telephones available at A and B sheds for placing on board.

SERVICES: Compass adjusting, calibrating, etc., can be done in river. No equipment for tank cleaning but can accept tank washings ashore.

SHORE LEAVE: Allowed.

AUTHORITY: Forth Ports Authority.

GRANTON: 55.59 N. 03.13 W. (See Plan)

DOCUMENTS:

Health Declaration.
1 Crew Declaration Form C.142 (Tobacco List).
1 Crew List.
1 Passenger List.
(Also see "Glasgow").

PILOTAGE: Pilot station in Firth of Forth located at Granton. Contact can be made with pilot cutters *Panther* and *Gazelle* on VHF

Channels 16/14/12 and radio-telephone 2182 kHz. Pilot cutters – black hull with white superstructure.

ANCHORAGES: Good holding ground at Inchkeith Island and Leith roadstead 10–17 fathoms. Request should be made to Forth Navigation Service.

RESTRICTIONS: The entrance between the breakwaters is 340 ft. in width. The rise of tide, 17 ft. at Springs and 12 ft. at Neaps, permits the entry or exit of vessels up to 22 ft. draft at high water.

A red flag bearing St. George's Cross exhibited at the Middle Pier Head signifies that vessels should not enter the harbour until the flag is lowered. A green light takes the place of the flag during hours of darkness.

HEALTH: Vessel boarded immediately alongside berth and pratique granted provided no contagious diseases reported on board, otherwise quarantine restrictions imposed.

Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately upon arrival by either a port doctor or an officer of H.M. Customs, depending on where the ship comes from, and whether there is sickness on board.

Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present Declaration. In all cases where there is sickness on board the Port Health Authority must be informed, preferably not more than 12 hours and not less than 4 hours before arrival.

RADIO: Stonehaven and Cullercoats radio stations.

TUGS: Sound signal for vessels requiring tug services is four long blasts. Tugs, if required, join the vessel in the roads. Ship's lines normally used. Tugs towing gear available, not compulsory.

BERTHING: *Middle Pier:* 1,700 ft. in length with depth shelving from the shore to 17 ft. LWOST. In addition, there is a 450 ft. crosspiece at the end of the pier where depth of water is 25 ft. LWOST.

West Pier: 2,000 ft. of quay. Depth of water varies from 15 to 23 ft. LWOST.

TANKERS: Tankers up to 18,000 d.w.t. are accommodated at the end of the West Pier, adjoining port entrance.

MEDICAL: No advance notice of medical attention required. All hospital facilities available.

FRESH WATER: Available alongside at all berths.

FUEL: All grades available subject 24 hours notice in advance.

REPAIRS: Facilities available for all minor repairs.

DRY DOCK: Floating dock, length 160 ft., beam 30 ft., depth 15 ft.

AIRPORT: Edinburgh Airport, served by regular airlines, situated about 10 miles away.

HOLIDAYS: Public holidays observed annually: third Monday in April; first Monday in June; third Monday in September; Christmas Day (25th December); 1st and 2nd January. Cargo work can be arranged on all public holidays except 1st and 2nd January.

AUTHORITY: Forth Ports Authority.

GRIMSBY: 53.34 N. 00.04 W. (See Plan)

DOCUMENTS:

1 Crew List form H.O. IB6.
1 List of Crew's private dutiable stores Form C.142.
1 Health Declaration.

Also see "Hull".

PILOTAGE: Humber Pilotage District–Spurn Pilot Station: A Pilotage Control and Radar Station (telephone no. 096-46-392; telex no. 527393) has been established on the Spurn Peninsula in a position Lat. 53° 34′ 29″ N., Long. 00° 06′ 48″ E.

The station is manned at all times with a Pilot Master in attendance and vessels bound to the Humber requiring the services of Humber Pilots must give advance notice by signal through a GPO Coast Station to the Spurn Pilot Station giving ETA at the seaward limits of the Humber Pilotage District, draft, and destination at least 12 hours in advance. Any adjustment to the time should be given at least 2 hours before arrival.

Vessels wishing to communicate direct with the Spurn Pilot Station by VHF radio telephony may if within VHF range (approximately 20 miles) call "SPURN PILOT" on VHF Channel 16 (156.80 mHz) and after contact transfer to Channel 14 (156.70 mHz) for passing messages.

(Note: Attempts to establish communication on VHF at extreme range can cause unnecessary intereference).

Inward bound vessels for Goole or the River Trent desiring to pick up Goole or Trent Pilots in Hull Roads should give at least 2 hours advance notice of their expected time of arrival in Hull Roads by signal through a GPO Coast Station to the Humber Ports Operation and Information Service (Telegraphic address "HUMBEROPS") or should immediately on arrival at Spurn report their expected time of arrival in Hull Roads by calling the above service ("HULL RADIO") on VHF Channel 16 then transferring to Channel 12 for passing arrival information.

Compliance with this procedure will ensure as far as possible, the shipping of Pilots without delay.

ANCHORAGES: Hawk and Sunk Roads, Hale, Spurn and Bull Anchorages. See "Hull". The Pilots will advise where to proceed to anchor and also provide Pilot.

MAX. SIZE: Maximum breadth 67 ft., maximum length of vessel that can be locked 268 ft. but vessels of greater length can enter docks on high water when all lock gates are open. 3 ft. clearance under the keel is required. Vessels having a draft of 19 ft. can normally enter the docks on any tide when the height of water is sufficient to allow 3 ft. clearance. Vessels with 21 ft. draft can be taken on Spring tides. Vessels can enter usually approx. 3 hours before and 2.5 hours after high water.

HEALTH: A pratique is issued by the Customs Officers on boarding for all vessels arriving from a port outside the U.K. but this is only done at the first U.K. port of call. If disease is suspected, the Master must advise the Customs Officers on boarding and it is advisable that the Agent be informed prior to vessel's arrival.

RADIO: Humber Radio, 2182 kc/s, or VHF Channel 16. Also see "Hull".

TUGS: Normally join in Grimsby roads. Optional whether use ship's or tug's lines. Tugs operate from Immingham so plenty of notice required.

BERTHING: Vessels are restricted from passing through the Union Dock into the Alexandra Dock by a set of lock gates in the Union Dock which are closed when the height of water in the Royal Dock reaches 24 ft. and also a restriction on the beam of 42 ft. 6 in.

There is one roll-on/roll-off berth in operation and another under construction in Alexander Dock.

STEVEDORES: Vessels are allocated labour in order of arrival so it is only necessary to give the Agent the ETA preferably before noon on the previous day. Normal working hours 0800 to 1700 hrs. Overtime can be worked 1700 to 1900 hrs. Monday to Thursday. On Saturdays and Sundays as required.

MEDICAL: Hospitals and all other medical facilities are readily available. If immediate attention is required on arrival please advise Agent by radio or telegram.

FRESH WATER: Available at all quays. Rate approx. 20 t.p.h.

FUEL: Normal gas and diesel oils available by both road and barge with at least 24 hours notice.

GANGWAY/DECK WATCHMEN: Not necessary, but the service is available if Master requires it.

OPENING/CLOSING HATCHES: Responsibility of the crew. The hatch beams can be removed and replaced by the shore cranes but there is an extra charge for this operation.

CUSTOMS ALLOWANCE: 200 cigarettes per 8 days. 1 bottle wine and 1 bottle spirits per 4 days. All seals to be broken.

CARGO GEAR. In accordance with the regulations laid down by H.M. Factories Inspector.

IDENTIFICATION CARDS: Some sort of identification whilst crew are ashore is advisable.

CONSULS:

Belgium, Vice-Consul	Grimsby	59101
Denmark, Vice-Consul	,,	3063
Dominican Republic	,,	59101
Finland, Vice-Consul	Immingham	2387
France Consular Agent	Grimsby	55176
Germany (F.R.) Consul	,,	77830
Greece, Vice-Consul	Immingham	2166
Iceland, Consul	Grimsby	58881
Netherlands, Vice-Consul	,,	3177
Norway, Vice-Consul	,,	3177
Sweden, Vice-Consul	Immingham	2387

REPAIRS: Facilities are available for all deck and engine repairs.

DRY DOCKS: Nearest at Immingham.

REPATRIATION: Can be arranged if required.

AIRPORT: Humberside, daily service to Amsterdam. Easy access to all major airports via rail, etc.

HOLIDAYS: Christmas Day; Boxing Day; Good Friday; Easter Sunday and Monday; Spring Bank Holiday (end May); Late Summer Bank Holiday (end August). All except Christmas Day and Good Friday can be worked on overtime.

POLICE/AMBULANCE/FIRE: Docks Police – Grimsby 59181; Grimsby Police – Grimsby 57571. Emergency – Police/Fire/Ambulance 999.

TELEPHONES: Not available for connection on board.

GENERAL: The Grimsby Dock Master can be contacted on VHF Channel 16 and then change to Channel 18 for speaking.

SERVICES: Compass adjusting, tank cleaning, etc., are available.

SHORE LEAVE: Crew are allowed ashore.

AUTHORITY: British Transport Docks Board, Grimsby.

AGENT: Cory Brothers Shipping Limited, 8 Cleethorpe Road, Grimsby, South Humberside. Tel: 0472-58266/8. Telex: 527113. Cables: "Spurnship Grimsby."

HARWICH (Parkeston Quay): 51.56 N. 01.15 E. (See Plan)

DOCUMENTS:

1 Home Officer Form 1.B.6 may be obtained from HM Customs Boarding Officer.
1 C.142 Crew Declaration List.
1 Maritime Declaration of Health (Q Flag procedure).
2 Ship's report by Master.
1 Stores List.
1 Certificate of Deck Cargo Tonnage (if carried).
1 Grain Certificate (if carried).
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List required by vessels other than packet vessels.
1 Landing Card for each passenger.
1 Ship's Certificate of Registry.
1 Mercantile Marine Office Certificate – for British vessels only.
1 Load Line Certificate.
1 Safety Equipment Certificate.
1 Lloyd's Certificate.
1 Derating Exemption Certificate.
1 Ship's Register.
1 Lights Bill.
1 Radio Safety Certificate.

In addition Manifests and Bills of Lading are usually sent to Agent direct from loading port.

PILOTAGE: Pilotage into the harbour is compulsory for all ships of 50 tons and over, with the exception of vessels of not more than 3,500 tons gross regularly employed in the home and coasting trades and not carrying passengers.

SUNK PILOT STATION

The Sunk Pilot Vessel has a black hull, a buff funnel, the word "Pilots" painted on her sides and flying the pilot flag, and at night exhibiting lights and signals in accordance with Rule No. 8 of the International Rules for the Prevention of Collisions at Sea, cruises in the vicinity of the Sunk Light Vessel to provide Pilots for ships making the port of the London and other ports in London Pilotage District and to disembark Pilots from outward-bound ships; if unable to carry out her duties there through stress of weather, she moves into smoother water. In these circumstances shipping is warned by means of radio navigation warnings broadcast from North Foreland, Humber and Scheveningen radio stations, which give her position.

The attention of Masters is drawn to the necessity of stopping and giving a satisfactory lee for the pilot vessel's boats. These 18 ft. boats have a max. speed of 5 knots and if ships being served maintain excessive headway, unnecessary difficulty is caused to both the pilot vessel and boats, and the operation of shipping a Pilot will be unduly prolonged.

Trinity House considers it necessary to draw special attention to this matter in view of the considerably different procedure to be adopted for obtaining a Pilot from a cruising pilot vessel compared with a shore-based fast launch which requires the ship to maintain headway.

The attention of Masters is also drawn to the need for them to ensure, when shipping and landing Pilots, that the boarding boats of the pilot vessel are clear of their ships before proceeding, so that the lives of the Pilots and boat crew will not be endangered or the boats damaged.

Ships proceeding to either Maldon or Heybridge Basin must exchange their North Channel Pilots for Essex River Pilots at the Knolls, in favourable weather conditions, and in Brightlingsea Roads in adverse weather conditions.

Deep-drafted ships can be provided with Pilots in deeper water by arranging to be met by the Sunk Pilot Vessel in a suitable position about 3 miles East of the Sunk lightvessel.

Ships requiring a Pilot at the Sunk Station should give the pilot vessel 12 hours in advance and through a Post Office Coast Station, their estimated time of arrival, gross tonnage, max. draft and port of destination. Confirmation of ETA should be given at least two hours before arrival.

Vessels wishing to communicate with the pilot vessel at the Sunk by radio-telephony direct may:

(i) *when within MF range at approx. 50 miles*, call on 2,182 kHz. When contact has been established the pilot vessel will transmit on 2,241 and will listen on 2,241 kHz. or any other agreed licensed intership frequency for passing messages;

(ii) *as soon as within VHF range (approximately 20 miles)*, call on Channel 16 and then transfer to Channels 6 or 9 for passing adjustments to the original ETA and for maintaining contact with the pilot vessel.

The pilot vessel may also be contacted by either W/T or R/T through any Post Office Coast Station addressed Sunk Pilot Vessel Northforeland Radio.

CORK PILOT STATION

To facilitate the arrival and departure of ships trading to and from the ports of Felixstowe, Harwich and Ipswich, a pilot station operates in the vicinity of the Cork light buoy in position lat. 51° 56′ 42″ N., long. 01° 27′ 06″ E. This station is additional to, but is not a substitute for, the Sunk Pilot Vessel. It is for the use of ships bound to or leaving the above mentioned ports whose normal course does not take them past the Sunk Pilot Vessel. Full service is also provided at the Sunk Station. The Cork Station is operated by pilot launches, with black hulls and white wheelhouses, flying the pilot flag, and at night exhibiting lights and signals in accordance with Rule No. 8 of the International Rules for the Prevention of Collisions at sea.

Inward Bound Ships. Ships requiring a Pilot at the Cork Station should apply to the Sunk Pilot Vessel in the same manner and giving the same information but state their estimated time of arrival at the Cork.

Outward Bound Ships. Masters of ships about to sail from Harwich and Felixstowe and wishing to use the Cork Pilot Station should state this when ordering their Pilots for departure but may carry their Pilots out to the Sunk Pilot Station should they so desire. Pilots for ships outward bound should be ordered by telephoning Harwich (code 02555) 3129 – see "Harwich Shore Pilot Station" below.

Launches. The Cork pilot launches keep a constant listening watch on Channel 16 VHF (change to Channels 9 or 12 for working). It is recommended that the ship about to ship or land her Pilot should keep in VHF communication with the pilot launch.

HARWICH SHORE PILOT STATION

A shore pilot station operates at Harwich in position lat. 51° 56′ 35″ N., long. 01° 17′ 34″ E. in the Old Low Lighthouse. The building is 37 ft. high and painted in black and white horizontal stripes.

The station is manned by a Duty Pilot and is equipped with VHF, telex, telephone, radar and a daylight signalling lamp.

VHF: A 24-hour listening watch is kept on Channel 16. The working frequencies are Channels 9 and 12. The call sign is "Harwich Pilots Radio." Tel. Harwich (code 02555) 3129. *Telex* 98472, Pilots Harwich.

Ships not fitted with VHF may contact the pilot station through the Sunk Pilot Vessel on MF.

All requests for the services of Pilots for ships bound into or out of the Harwich/Felixstowe/Cork Complex should be made to this station. Incoming ships may also communicate with this station with requests for the services of the Ipswich Pilots and for the Pilots for Rivers Colne, Blackwater, Crouch and Roach. Orders for outwardbound ships should state whether the Pilot will be landed at the Sunk or the Cork. See above.

ANCHORAGES:

Ewarton: Situated to the North and West of Parkeston Quay with an average depth of 2.5 fathoms at low water.

Parkeston: Situated to the North of Parkeston Quay, with an average depth of 3 fathoms at low water.

Shelf: Situated on the Western side of the main Channel between the North and South Shelf Buoys. Average depth of 2.5 fathoms at low water.

Inner: Situated at the Pitching Ground. Average depth 4.5 fathoms at low water.

Cork: Situated to the Westward of the Cork Light buoy. Area approx. 2 miles×1 mile. Average depth 4 fathoms.

RESTRICTIONS: Normal max. draft allowed alongside the berths at Parkeston Quay is 18 ft.; a deeper draft may be allowed by special arrangement.

Normal cargo working at Parkeston Quay ceases at 2200 hrs., but berthing and night work by arrangement at any time.

MAX. SIZE: Normal max. permissible length 500 ft. arrangements for larger vessels can be made. Normal max. permissible breadth for roll-on/roll-off is 75 ft. Normal max. permissible draft – 18 ft. The height of the tide does not restrict a vessel berthing alongside the quay if her draft is within 18 ft.

HEALTH: Maritime Declaration of Health required (Q Flag procedure). Obtain Pratique through HM Customs Boarding Officer if no sickness on board.

If there is sickness on board the Customs Official will notify the Duty Port Medical Officer.

If the vessel is from another port in the U.K. Pratique is automatic.

RADIO: North Foreland Radio (call sign GNF) or Humber Radio (call sign GKZ) are the most convenient stations to pass ETA cables, etc., to Agents or receivers. The Pilot Land Station has a Surveillance Radar.

VHF: British Rail at Parkeston Quay keep a 24-hour listening watch on VHF Channel 16 and work on VHF Channel 18. Also see "Felixstowe" – VHF.

TUGS: 3 tugs are based at Harwich for use in the area – MT *'Sauria'* 1,600 h.p. MT *'Egerton'* 1,200 h.p. MT *'Deben'* 1,610 h.p.

24-hour service, 7 days per week. Constant watch on 2182 kc/s. and Channel 16 VHF. Additional tugs up to 2,250 h.p. can be obtained from London at 24 hours notice.

BERTHING: There are 8 berths at Parkeston Quay, of which 2 are Portal Roll-on/Roll-off berths and 1 is a Pontoon Roll-on/Roll-off berth. Normally max. draft permissible alongside is 18 ft., but special arrangements as in (4) can be made.

Berthing, etc., by arrangement. Applications for berths must be made through the Marine Superintendent, British Rail, Parkeston Quay, giving as much advance notice as possible.

STEVEDORES: All labour at Parkeston Quay are members of National Union of Railwaymen, and arrangements for their use must be made through the Shipping and Port Manager, British Rail, Parkeston Quay.

MEDICAL: Prior notice through British Rail, Parkeston Quay, desirable to arrange attention. All services are available.

TANKERS: A berth is available for tankers for the purpose of discharging and loading to the local oil refinery.

DENSITY: 1025 (sea water).

FRESH WATER: Fresh water can be supplied from quayside hydrants.

FUEL: Can be arranged by either barge or road tanker.

DEVELOPMENTS: Eastern end of Parkeston Quay to be lengthened in due course to provide more container berths.

GANGWAY/DECK WATCHMEN: Watchmen are not provided or required by the port, but ships may use their own watchmen.

OPENING/CLOSING HATCHES: To be carried out by ship's crew.

CARGO GEAR: There are 8 level luffing cranes, safe working load averaging from 3 tons to 10 tons, which can be used for discharging and loading. There are also 2 transporter cranes, 30 tons SWL.

IDENTIFICATION CARDS: Seaman's Identity Cards sufficient.

CONSULS: Dutch, German, Danish, Belgian.

REPAIRS: Minor repairs can be carried out by British Rail workshops at Parkeston Quay. As much advance notice as possible required.

REPATRIATION: All facilities available.

AIRPORT: Nearest is Ipswich, 22 miles; Southend, 70 miles.

HOLIDAYS: All normal Bank Holidays. Only passengers and car travellers are dealt with at Parkeston Quay on these days. Freightliners sail only if loaded before the holiday. Train ferries operate normal services.

POLICE/FIRE/AMBULANCE: Dial 999 and ask for service required.

TELEPHONES: Arrangements can be made, with advance notice given.

AUTHORITY: Shipping and Port Manager, British Rail, Parkeston Quay.

HEYSHAM: 54.02 N. 02.55 W. (See Plan)

DOCUMENTS: As for other British ports plus Walney Light Dues.
PILOTAGE: Trinity House Pilotage Service, Barrow District. Compulsory for all vessels of 50 tons gross tonnage and over with the exception of vessels of not more than 1,500 tons gross regularly employed in the home and coasting trades and not carrying passengers. Also see "Barrow-in-Furness".
RADIO: Portpatrick Radio and Anglesey Radio. Heysham Harbour Radio, VHF Channels 16 and 14.
MAX. SIZE: 400 ft. length, draft 17 ft. At Tanker pontoon, draft 21 ft.
TUGS: None available.
ANCHORAGES: Heysham Lake. 0.5 mile N.W. of No. 1 Buoy. Position: 53° 59'.4 N., 3° 00.0' W. Depth: 40 ft. at low water.
RESTRICTIONS: Entry possible at all states of tide.
BERTHING: Vessels may be berthed at any time. 1 Roll-on/Roll-off ramp. 1 Lift-on/Lift-off berth.
DENSITY: Salt water.
FRESH WATER: Available from the quays.
FUEL: Gas oil by road vehicle.
GANGWAY/DECK WATCHMEN: Ship's watchmen required.
SHORE LEAVE: No restrictions on landing.
AIRPORT: Nearest, Liverpool and Manchester; 60 Miles.
REPAIRS: Small repairs possible, no docking facilities.
POLICE/AMBULANCE/FIRE: Telephone 999 in emergency.
AUTHORITY: Shipping and Port Manager, British Rail.

HOLYHEAD: 53.19 N. 04.41 W. (See Plan)

DOCUMENTS:

1 Crew List and where applicable a Passenger List.
1 Pratique issued by Customs.
1 Crew Declaration (C.142 for H.M. Customs).
1 List of Consumable Stores (tobacco, snuff, alcohol).
1 Declaration of Health.
1 Cargo Manifest.
1 Ship's Report.

PILOTAGE: Pilotage compulsory under Trinity House Authority. Local Pilot available on request.
ANCHORAGES – PROHIBITED ANCHORAGE: The breakwater affords partial shelter to the outer anchorage and complete protection to New Harbour; there are depths of from 19 to 42 ft. in the former and of from 17 to 40 ft. in the latter.

The accommodation for vessels of deep draft in New Harbour is limited. Small vessels should always proceed into New Harbour and anchor in the S.W. part, leaving the outer part and the roadstead for large vessels. The bottom is hard, overlaid with mud but the holding ground is sufficiently good if an adequate amount of cable is veered. During Easterly winds an uncomfortable sea is raised; vessels may then obtain shelter in the Eastern part of outer anchorage. Anchorage is prohibited within 1.5 cables on either side of the track followed by Mail Steamers from the head of the breakwater to the entrance to Old Harbour; the limits of this area are shown on charts.

MAX. SIZE:

Inner Harbour is restricted to vessels of 15 ft. draft and vessels exceeding this draft will only be accepted after consultation with the Shipping and Port Manager.

Outer Harbour: Vessels of approximately 60,000 tons can be accepted alongside the Anglesey Aluminium Jetty where the berth is dredged to 46 ft. at MLWS.

TUGS: Available through Agents. Tugs up to 1,375 h.p.
RADIO: Holyhead Radio, VHF Channel 16, No Port Radar.
BERTHING: By prior arrangement with Shipping and Port Manager.
STEVEDORES: No stevedores. Vessels loaded and discharged by British Railways dock porters. Outside vessels berthing at Public Quay can be discharged and loaded by making prior arrangements with Agent.
MEDICAL: Medical Officer available. Stanley Sailors Hospital situated in close proximity to Harbour.
DENSITY: Salt water (1025).
FRESH WATER: Available at all berths within the Inner Harbour and alongside Anglesey Aluminium Jetty.
FUEL: Fuel oil and diesel oil available provided that adequate warning is given to Agent. Only 1 berth available for bunkering of large vessels of deep draft alongside Anglesey Aluminium Jetty.

Prior arrangements must be made with British Rail in conjunction with Anglesey Aluminium Metals Ltd., telephone Holyhead 3333.

No oiling barge available for bunkering vessels at anchor.

GANGWAY/DECK WATCHMEN: Required at all times when vessels are in port.
REPAIRS: Repairs can be carried out by the British Rail (SISD) workshops, dry dock available:

Dry dock: Length 412 ft., breadth 70 ft. 3 in., depth on sill 20 ft. at Spring tides.

AIRPORT: RAF Station Valley, Anglesey (6 miles away).
HOLIDAYS: Saturdays, Sundays and all Public holidays.
POLICE/AMBULANCE/FIRE: Tel. 999.
TELEPHONES: No telephone connection for outside vessels. Public telephone within port limits.
SERVICES: Compass adjusting can be arranged.
SHORE LEAVE: Allowed.
DEVELOPMENTS: A single-buoy mooring for Shell Oil for the discharge of crude oil, least depth 80 ft., expected to be operational in 1977.
AUTHORITY: British Rail Shipping and International Services Division.

HULL: 53.44 N. 00.14 W. (See Plan)

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ships Report by Master.
1 Home Office Form 1B6.
1 Stores List.
1 Certificate of Deck Cargo Tonnage.
1 Grain Certificate.
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List.
1 Landing card for each passenger.
Ships Certificate of Registry.
Mercantile Marine Office Certificate – for British Ships only.
Load Line Certificate.
Safety Equipment Certificate.
Lloyds Certificate.
Derat Certificate.
Ships Register.
Light Bills.
Safety Radio Certificate.

In addition Manifests and Bills of Lading are usually sent to Agents direct from the loading Port.
PILOTAGE: A Pilotage Control and Radar Station (telephone no. 096-46-392; telex no. 527393) has been established on the Spurn Peninsula in a position Lat. 53° 34' 29" N., Long. 00° 06' 48" E.

The station is manned at all times with a Pilot Master in attendance and vessels bound to the Humber requiring the services of Humber Pilots must give advance notice by signal through a GPO Coast Station to the Spurn Pilot Station giving ETA at the seaward limits of the Humber Pilotage District, draft, and destination at least 12 hours in advance. Any adjustment to the time should be given at least 2 hours before arrival.

Vessels wishing to communicate direct with the Spurn Pilot Station by VHF radio telephony may if within VHF range (approximately 20 miles) call "SPURN PILOT" on VHF Channel 16 (156.80 mHz) and after contact transfer to Channel 14 (156.70 mHz) for passing messages.

(Note: Attempts to establish communication on VHF at extreme range can cause unnecessary interference).

Inward bound vessels for Goole or the River Trent desiring to pick up Goole or Trent Pilots in Hull Roads should give at least 2 hours advance notice of their expected time of arrival in Hull Roads by signal through a GPO Coast Station to the Humber Ports Operation and Information Service (Telegraphic address "HUMBEROPS") or should immediately on arrival at Spurn report their expected time of arrival in Hull Roads by calling the above service ("HULL RADIO") on VHF Channel 16 then transferring to Channel 12 for passing arrival information.

ANCHORAGES: The undermentioned anchorages have been designated for the use of sea-going vessels. Masters are asked to co-operate by using these anchorages and to avoid anchoring in the Fairway or elsewhere.

Spurn anchorage should normally be used by inward-bound vessels and Bull anchorage by outward-bound vessels and vessels awaiting a berth.

Spurn Anchorage. From position "A" 121° distant 3.65 miles from Spurn Lighthouse, in a 125° direction 1.60 miles; thence in a 020° direction 0.60 mile; thence in a 077° direction 1.00 mile; thence in a 347° direction 0.70 mile; and thence in a 257° direction 2.40 miles to position "A".

Haile Anchorage (Explosives): From position A, 224° distant 2.18 miles from Spurn High Lighthouse in a 284° direction 0.77 mile; thence in a 139° direction 0.80 mile; and thence in a 027° direction 0.46 mile to position A.

Bull Anchorage. From Position "A", 193° distance 2.1 miles from Spurn High Lighthouse, in a 090° direction 1.96 miles thence in a 294° direction 1.76 miles, thence in a 274° direction 0.93 miles, thence in a 206° direction 1.0 miles, thence in a 116° direction 0.88 miles, thence in a 026° direction 0.55 miles to Position "A".

AIRPORT: Nearest is Leeds/Bradford, approx. 60 miles from docks.
RESTRICTIONS: Vessels may be accepted through the day and night, the only restrictions being influence of tides, together with the undermentioned physical limitations. Although vessels may occasionally be penned into or out of the docks outside the high water period it is more usual for them to be handled during the period immediately prior to and following high water.
MAX. SIZE: The maximum permissible dimensions for a general cargo/bulk carrier vessel (excluding tankers) requiring a berth in the enclosed docks are as follows: King George & Queen Elizabeth Docks, length 630 ft., beam 80 ft., draft 33 ft. 6 in.
HEALTH: Pratique granted by Customs Authorities after berthing. If vessel from non-infected area pratique given after Master declares all well on board. If from infected area pratique given after Port Health Authorities doctor has examined crew and given health clearance to Customs Officer. In case of suspected illness Master can send radio to Port Health Authority – telegraphic address "Portealth" Hull. Pratique is automatic when entering after calling at another port or ports in the U.K. and being granted pratique there, unless of course, illness has developed whilst on passage from previous U.K. port.
RADIO: Portishead Radio – call sign GKL but when within 200 miles of the Humber can go through Humber Radio – call sign GKZ.

Humber Ports Operation and Information Service operates a VHF (FM) radio telephone service available to all vessels navigating the River Humber, from the Humber Pilot Office Building, Queen Street, Hull.

A continuous watch is maintained on Channels 16 and 12. The call sign is "Hull Radio". The telephone number is Hull 0482-223999. Telegraphic address "Humerops".

The service provides information regarding the arrival, berthing, anchoring and departure of vessels and also information on navigational aids, navigation generally, visibility, and the safety of vessels and persons. Tidal information, including the height of tide at Bull Sand Fort and Immingham in the Lower Humber, is also available on request. A general broadcast giving weather reports, tidal information and navigational warnings is made by the Humber Ports operation and Information Service on Channel 12 every 2 hours commencing at 0103 hours, prior notification being given on Channel 16.

In general, vessels should report to the Humber Ports Operation and Information Service on arrival in the river obtaining their navigation, safety information and berthing instructions. Vessels wishing to communicate with the Station serving their destination should do so on their final approach reporting their departure from Channel 16 to Hull Radio.

Vessels are advised that, when communicating with these Stations, contact with the Humber Ports Operation and Information Service can only be re-established through Channels 16 and 12 and it is particularly advisable to maintain a listening watch on Channel 16 whenever practicable in the event of unforeseen circumstances developing in the River.

VHF:

Saltend Jetties
Callsign, Saltend Radio
Continuous watch maintained
Channel 16, Calling and Safety
Channel 19, Berthing Instructions for Tankers.

King George Dock
Callsign, King George Dock Radio
Continuous watch maintained
Channel 16, Calling and Safety
Channel 20, Docking Instructions.

Alexandra Dock
Callsign, Alexandra Dock Radio
Operating 5 hours before HW Hull until 3 hours after HW Hull
Channel 16, Calling and Safety
Channel 5, Docking Instructions.

TUGS: Head boat normally joins vessel in vicinity of Saltend, about 2 miles from dock, and the other tug or tugs connect with vessel when approaching the dock. Where vessel supplies own ropes for towage these to be good stout hawsers. Wire ropes will not be accepted. There is a charge for use of tug's hawsers.

BERTHING:

	Entrance lock		*Depth of water*			
	Length	*Width*	*at MHWS*		*at MHWN*	
	ft.	*ft.*	*ft.*	*in.*	*ft.*	*in.*
King George Dock	750	85	42	0	37	1
Alexandra Dock and	550	85	33	4	28	5
extension		70	33	4	28	5
Albert and William Wright Docks	320	80	28	1	23	2
St Andrew's Dock and extension	250	50	28	11	24	0
			at MLWS			
Salt End Jetty Number 1	tidal		35	0		
Salt End Jetty Number 3	tidal		35	0		

BULK HANDLING FACILITIES: Container terminal at Queen Elizabeth Dock equipped with 40-ton transporter crane.

Roll-on/roll-off container services operated from King George, Queen Elizabeth and Alexandra Docks. Grain silo of 60,000 tons capacity.

STEVEDORES: Enable Agent order gangs important receive accurate ETA particularly when week-end work involved. Latest time to order gangs: Normal day work 0730 hours same morning. Saturday and Sunday 1100 hours Friday.

MEDICAL: Necessary for Agents to be advised of any urgent cases of illness in order that they can arrange for a doctor or if necessary an ambulance to be available immediately on berthing. Hospital facilities available.

If vessel required to remain in river awaiting berth arrangements can be made for any serious case to be taken from vessel by lifeboat and conveyed to Grimsby for immediate treatment.

TANKERS: The Oil terminal at Salt End handles refined or semi-refined chemical and petroleum products which are transferred from the vessel along the oil jetties through a series of chemical and service pipes which range from 4 in. for chemicals, 8 in. and 12 in. for spirit and 16 in. for fuel oils and molasses. Facilities available for the discharge of Slop residue.

There are 3 tanker berths at Salt End and maximum dimensions of vessels are length 670 ft., draft 34 ft.

DENSITY: 1013/1015.

FRESH WATER: King George and Queen Elizabeth Docks. Available at any time. Ex Quay. Rate of delivery – 15 t.p.h.

All other Docks. Available at any time. Ex Water Boat. Rate of delivery – 100 t.p.h.

If water required urgently after 1700 hours weekdays or on Saturdays or Sundays Agents must be notified in good time to enable them order men out.

FUEL: Fuel oil available, viscosity up to 3,500 secs. Redwood. Gas oil and diesel also available. At least 24 hours notice required.

FIRE PRECAUTIONS: Copy of Handbook "Emergency Arrangements" is handed to Masters of Tankers.

GANGWAY/DECK WATCHMEN: Watchmen available if required by Master.

OPENING/CLOSING HATCHES: Can be carried out by stevedores when ordered. Ship charged with actual cost, but ship's crew may do so if required.

CUSTOMS ALLOWANCE: Foreign trade – max. allowance 0.5 lb. cigarettes or cigars or tobacco. Home Trade – (Elbe/Brest limits) half the above. Wine and/or Spirits. Foreign Trade – 1 pint – opened. Home Trade – (Elbe/Brest limits) half the above allowance.

CARGO GEAR: When working with ship's gear a Register of Machinery, Chains and Wire Ropes, etc., with all Test Certificates and record of inspections to be produced to the stevedores before work commences.

CONSULS:

	Tel.		*Tel.*
Belgium	0482 27464	Liberia	0482 224151
Bolivia	0482 27301	Netherlands	0482 29841
Denmark	0482 26081	Norway	0482 224151
Finland	0482 25781	Peru	0482 25121
France	0482 27464	Portugal	0482 223391
Germany	0482 25781	Spain	0482 23096
Greece	0482 224151	Sweden	0482 26081
Iceland	0482 224715	Thailand	0482 29925
Italy	0482 224151	S.T.D. Code Hull 0482	

REPAIRS: Facilities available for all types of deck and engine repairs.

DRY DOCKS:

Largest Dock – King George No. 2.

Length at cope level.		568 ft. 3 in.
Length on blocks.		520 ft.
Width at cope level.		92 ft.
Width at entrance.		72 ft.
Depth of water on sill HMWS		27 ft. 11 in.
Depth of water on sill MHWN		23 ft.
Depth of water on block at entrance.	MHWS	29 ft. 2 in.
	MHWN	23 ft. 6 in.

One further dock in King George Dock. Two further docks in Alexandra Dock. One further dock in Wm. Wright Dock.

REPATRIATION: Crew changes can be effected and repatriation arranged by sea or air.

TIME: BST (British Standard Time) GMT plus 1 hour, GMT during winter months.

HOLIDAYS: Good Friday (movable Holiday); Easter Monday (movable Holiday); Spring Holiday (last Monday in May); Bank Holiday (last Monday in August); Christmas Day (25th December); Boxing Day (26th December).

Saturdays and Sundays are non-working days but overtime work can be arranged on a voluntary labour basis. Overtime work can be arranged on all the above holidays on a voluntary labour basis.

POLICE/AMBULANCE/FIRE: Emergency Calls – Police – Fire – Ambulance – Coastguard – Dial 999. Ask the operator for the service required.

TELEPHONES: Can be placed on board at the majority of berths in King George and Queen Elizabeth Docks.

SERVICES: Tank cleaning, facilities for discharge of tank washings slop (residue), compass adjusting, etc., available.

SHORE LEAVE: Crew members allowed ashore.

AUTHORITY: British Transport Docks Board.

AGENT: Cory Brothers Shipping Limited, Queens House, Paragon Street, Hull. Tel: 0482-23747. Telex: 52203. Cables: "Coryton Hull", "Coryship Hull".

IMMINGHAM and KILLINGHOLME:

53.37 N. 00.12 W. **(See Plan)**

DOCUMENTS:

1 copy Immigration Crew and Passenger List, H.O. form 1.S.6. Supplied by Agent.
1 copy Health Certificate form supplied by H.M. Customs & Excise.
1 copy Declaration of Goods obtained abroad or during a voyage, Form C.142. Supplied by H.M. Customs.
1 copy Cargo Manifest.
1 copy Dangerous Cargo List.

PILOTAGE: *Humber Pilotage District – Spurn Pilot Station:* A Pilotage control and radar station (telephone no. 096-46-392; telex no. 527393) has been established on the Spurn Peninsula in a position Lat. 53° 34′ 29″ N., Long. 00° 06′ 48″ E.

The station is manned at all times with a Pilot Master in attendance and vessels bound to the Humber requiring the services of Humber Pilots must give advance notice by signal through a GPO Coast Station to the Spurn Pilot Station giving ETA at the seaward limits of the Humber Pilotage District, draft, and destination at least 12 hours in advance. Any adjustment to the time should be given at least 2 hours before arrival.

Vessels wishing to communicate direct with the Spurn Pilot Station by VHF radio telephony may if within VHF range (approximately 20 miles) call "SPURN PILOT" on VHF Channel 16 (156.80 mHz) and after contact transfer to Channel 14 (156.70 mHz) for passing messages.

(Note: Attempts to establish communication on VHF at extreme range can cause unnecessary interference).

Inward bound vessels for Goole or the River Trent desiring to pick up Goole or Trent Pilots in Hull Roads should give at least 2 hours advance notice of their expected time of arrival in Hull Roads by signal through a GPO Coast Station to the Humber Ports Operation and Information Service (Telegraphic address "HUMBEROPS") or should immediately on arrival at Spurn report their expected time of arrival in Hull Roads by calling the above service ("HULL RADIO") on VHF Channel 16 then transferring to Channel 12 for passing arrival information.

Compliance with this procedure will ensure, as far as possible, the shipping of Pilots without delay.

ANCHORAGES: Hawk and Sunk Roads – Spurn and Bull anchorages. The Pilot station will advise where to proceed to anchor and also provide Pilot. See "Hull".

RESTRICTIONS: No restrictions, vessels may enter the harbour day or night. Max. draft for entering harbour 34 ft. H.W. Compulsory Pilots boarding Spurn Light-vessel, decide whether vessel shall proceed up river or anchor and await suitable state of tide.

MAX. SIZE: Tankers over 100,000 d.w.t., see "Tetney Terminal".

Immingham Dock max. length 650 ft., breadth 86 ft., draft 34 ft.

National Coal Terminal, length no restriction, beam no restriction, draft average 30 ft. Also see "Berthing and Tankers".

HEALTH: Pratique obtained by Master from H.M. Customs Waterguard on arrival. Any suspected disease or fever must be reported by radio to Agent and Dock Master who will arrange for Port Health doctor on arrival. Pratique is granted on arrival if no contagious disease on board.

RADIO: Humber Radio – 2182 kc/s. or VHF Channel 16. Dock Master VHF Channel 16. Tankers use Channel 19. Also see "Hull".

TUGS: Will join vessel off dock entrance, optional use of tow lines. If using tug's tow lines, charge for this service, depending on vessel's length.

BERTHING: Unless Master or Agent indicates preference, the Port Authorities will decide which side alongside. River Pilot deciding in conjunction with Dock Master most suitable berthing time for harbour and river installations.

British Steel Corporation Ore Terminal:

Adjoins N.C.B. Terminal. Max. length 1,095 ft., max. draft subject to approach channel, 39–43 ft.

STEVEDORES: Firm ETA to Agent required if possible before noon on previous day before arrival.

MEDICAL: No advance notice necessary for medical treatment as all hospital facilities available.

TANKERS: Also see "Tetney Terminal".

Immingham Oil Terminal. Length up to 1,100 ft., breadth, no restriction, draft depends on height of water in channel, average 43 ft. Three 12 in. lines for crude oil. Two lines 12 in. and 10 in. all other products. One 8 in. line for bunkers.

Eastern Jetty. Max. Length approx. 650 ft. breadth, no restriction, draft depends on low water, average around 33 ft. 10 in., 8 in., 6 in. lines, depends on Receivers. Bunker line available.

Western Jetty. Max. Length approx. 650 ft. breadth, no restriction, draft depends on low water, average around 31 ft.

Killingholme North. Length 580 ft. max., beam, no restriction, draft 30 ft. 6 in. One 8 in. line. One 4 in. bunker line.

Killingholme South. Length 565 ft. max., beam, no restriction, draft 31 ft. One 8 in. line. Bunker line available. No slop tanks available.

DENSITY: In harbour 1010.

FRESH WATER: Available all berths by hose. Rate of delivery 20 t.p.h.

FUEL: 24 hours notice required. All grades available.

FIRE PRECAUTIONS: Copy of these regulations handed to the Master on arrival.

GANGWAY/DECK WATCHMEN: Watchmen not usually employed, but left to the discretion of the Master.

OPENING/CLOSING HATCHES: See "Grimsby".

CERTIFICATES:

Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Safety Construction and any British Light Dues Receipts.
Derat Certificate.

CUSTOMS ALLOWANCE: 8 days – 200 cigarettes per person approx. Wine/spirits, 4 days – 0.25 pt. per day; this depends on the Customs Officer's discretion.

CARGO GEAR: This must comply with the Department of Employment and Productivity regulations. Normally discharge carried out by shore cranes, although overside berths available.

IDENTIFICATION CARDS: Seaman's book or passport sufficient for crew members going ashore.

CONSULS:

Finland	Immingham 72387	Norway	Grimsby 55324
Greece	Immingham 72166	Sweden	Immingham 72387

REPAIRS: All major repairs possible.

DRY DOCKS: 1. Length 740 ft., width at entrance 56 ft.
2. Length 600 ft., width at entrance 90 ft.

REPATRIATION: All facilities exist for dealing with crews and passengers.

AIRPORTS: Leeds/Bradford. Manchester/Ringway. Daily flights to London for international connections. Humberside Airport for Amsterdam.

TIME: GMT. Summertime, GMT plus 1 hour.

HOLIDAYS: Good Friday, Christmas Day, Boxing Day are regarded as closed holidays. All other holidays work will be carried out.

POLICE/AMBULANCE/FIRE: Police; Docks – Immingham 73441, 72068, 72067; County – Immingham 72222. Ambulance; Docks – Immingham 73441; County – Cleethorpes 62912. Fire; 999 ask for Fire.

TELEPHONES: Public telephones available.

AUTHORITY: British Transport Docks Board.

AGENT: Cory Brothers Shipping Limited, Immingham Dock, Grimsby, South Humberside. Tel: (0469)-73222. Telex: 52309. Cables; "Coryton Imminghamdock," "Coryship Imminghamdock."

INVERGORDON: 57.41 N. 04.10 W.

DOCUMENTS: *At Boarding on arrival:*

1 copy Maritime Health Declaration and Deratisation Exemption.
Lists C.142 – Crew's declaration of dutiable and prohibited goods obtained abroad or during the voyage.
Form I.B.6 – List of members of the crew who are aliens or who were engaged outside the United Kingdom.
List 142.A – Parcels list – small packages of merchandise and addressed packages not borne on the ship's report.
List of ship's surplus stores and live animals on board.
Account of cargo in unregistered spaces (deck cargo) if arriving from a port outside Home Trade limits.

At Customs House when making report:

Form XS1.3 (in duplicate) – Master's report inwards. (A third copy is required if the vessel is carrying cargo for another United Kingdom port or for export.)
Surveys 107 – grain-laden ships only.
Surveys 104 – if carrying deck cargo from outside Home Trade limits.
Forms PR.4, PR.8 or PR.10 – passenger returns in duplicate (1 copy for Customs 1 copy for Immigration). Vessels with passengers only.
Certificate of Registry.
Certificate of British Tonnage.
Light Dues Certificate relating to the vessel.
Certificate of Pratique; Form C.101 – these forms are issued by the Customs Officer who first boards the ship.

To the Agent:

Bills of Lading.
Cargo Manifests.

PILOTAGE: Pilotage compulsory except when under 300 tons gross. Cruising station of pilot boat is the Cromarty Lighthouse where Pilot will board. Pilot boat painted black hull, buff upper structure.

Approaching vessels may give their ETA to pilot station via VHF Channel 16, when in the vicinity of 30 miles, but a 24–hour notice will be required. In the event of bad weather, vessels will be guided by Pilot launch to safety where Pilot will board.

ANCHORAGES: In vicinity of Cromarty Bank Buoy and Cromarty Ness Light.

RESTRICTIONS: Vessels may enter between the hours 0600 and 2200 hours when Pilot will be available.

MAX. SIZE: Max. permissible length 800 ft., draft 35 ft. Also see "Berthing".

HEALTH: International quarantine signals to be used. Advise "Portelth Dingwall" in advance if any suspected diseases on board.

RADIO: Vessels approaching from North should pass their ETA cable via Wick Radio GKR 431, and vessels approaching from East via Stonehaven Radio GND 458 to their Agents.

BERTHING: *Admiralty Wharf:* The wharf is the property of M.O.D. (Navy), however the berths are used regularly by commercial vessels.

Berths 1 and 2 (Outer South): Lengths 443 ft. Dredged depth 36 ft. Also see "Tankers".

Berth 3: Length 204 ft. Depth 18 ft. M.L.W.S. Max. berthing length 350 ft. using dolphins.

Berth 6: Length 124 ft. Depth 18 ft. M.L.W.S. Max. berthing length 230 ft. using dolphins.

British Aluminium Pier: Outer Berth: Length 318 ft. Dredged depth 38 ft. M.L.W.S. (1974). Max. berthing length 900 ft. approx. using dolphins. (50,000 d.w.t.)

Inner Berth: Length 200 ft. Depth 20 ft. M.L.W.S. (1974).

CRANES: Mobile cranes up to a maximum 50 tons available from stevedoring firm.

TUGS: Caledonian Towage Co. Ltd. – Tel: Invergordon 852345 – suitable tugs stationed at the port which work in conjunction with Pilots. Tug's lines used.

STEVEDORES: James Jack (Stevedores and crane hirers) – Tel: Invergordon 85279. F. Lyons (Stevedores and crane hirers) – Burghead 360.

MEDICAL: Medical cases can be dealt with at short notice through local Agent. Hospital facilities available.

TANKERS: Vessels up to 800 ft. Max. draft 35 ft. may use Admiralty Wharf, Berths 1 and 2 combined.

DENSITY: 1022.

FRESH WATER: Obtainable alongside quay. Rate of delivery 50 t.p.h., each hydrant.

FUEL: This can be ordered through local Agent, delivery by road tanker, small quantities, notice required.

GANGWAY/DECK WATCHMEN: Gangways supplied free of charge with vessel responsible while on board. Watchmen supplied by ship's personnel.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: The following Certificates are required to be held on board for production when required:

International Load Line Certificate.
Safety Construction Certificate
Safety Equipment Certificate.
Safety Radio Certificate.

CUSTOMS ALLOWANCE: Following quantities are generally left out for use on board by each member of crew:

Ships arriving from foreign ports within Home Trade Limits: Tobacco 125 gms. (4oz. or 100 cigarettes). Spirits 0.185 litre (0.25 bottle), wine 0.375 litre (0.5 bottle).

All other ships from foreign ports: Tobacco 250 gms. (8 oz. or 200 cigarettes). Spirits 0.375 litre (0.5 bottle), wine 0.75 litre (1 bottle).

IDENTIFICATION CARDS: Not required.

REPAIRS: General repairs undertaken by Cromarty Firth

Engineering Co. Ltd. – Tel: Invergordon 852181 or Evanton 291.
REPATRIATION: Can be arranged.
AIRPORT: Dalcross Airport, operated by British airways, distance from Invergordon 45 miles.
TIME: British Summer Time, 1 hour advanced on GMT. GMT in Winter months.
HOLIDAYS: 1st and 2nd January; 2nd Monday April; Last Monday July; 1st Monday October; Christmas Day.
POLICE/AMBULANCE/FIRE: Police, tel. Invergordon 222 or dial 999; Ambulance, arrangements through local doctor, tel. Invergordon 522; Fire Station, dial 999 and ask for their service.
TELEPHONES: H.M. ships only.
SHORE LEAVE: Allowed.
AUTHORITY: Cromarty Firth Port Authority.

INVERNESS: 57.29 N. 04.14 W.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Customs and Excise and Health Documents.
Manifest.
Bills of Lading, etc.
PILOTAGE: Apply direct to Agent or to Pilot, telephone Kessock 217. ETA 24 hours. Pilot equipped with VHF. Pilot cutter blue launch with letter P. Pilot station Munlochy Buoy. Location of anchorage while awaiting Pilot – Munlochy Buoy.
ANCHORAGES: Munlochy Buoy in 5/8 fathoms. Beauly Basin in 15 fathoms. Munlochy Bay in 5 fathoms.
RESTRICTIONS: 24 hours entry at high water.
MAX. SIZE: Ship max. 280 ft. length, 20 ft. draft, high water springs. 17ft. draft, high water neaps
HEALTH: Pratique as per U.K. procedure.
RADIO: Wick Radio.
TUGS: None.
STEVEDORES: Arrange through Agent. 24 hours notice required.
MEDICAL: Doctor available.
DENSITY: 1012.
FRESH WATER: Available on demand, 20 t.p.h., ex hose on quay.
FUEL: Marine diesel and petroleum on request.
GANGWAY/DECK WATCHMEN: Supplied by ship.
OPENING/CLOSING HATCHES: Done by crew.
CUSTOMS ALLOWANCE: Tobacco/Wines/Spirits. Usual amount allowed by Customs and Excise.
IDENTIFICATION CARDS: None.
CONSULS: Netherlands, tel. Inverness 31171.
REPAIRS: Possible.
REPATRIATION: Facilities available.
AIRPORT: Dalcross, 7 miles from Inverness.
HOLIDAYS: 1st and 2nd January; Easter Monday; July Bank holiday; First Monday in October; and Christmas Day. All official holidays, cargo work can be arranged on these days.
POLICE/AMBULANCE/FIRE: Police Inverness 36111; Fire Brigade Inverness 34633; Ambulance Inverness 31511.
TELEPHONES: On Quay.
SHORE LEAVE: Unrestricted.
AUTHORITY: Inverness Harbour Trust, Harbour Master.

IPSWICH: 52.02 N. 01.10 E. (See Plan)

DOCUMENTS: Masters can conclude all documentation in port. Ship's Agent will give the necessary advice.
PILOTAGE: Normal International signals for "I require Pilot", VHF Channel 16 calling, Channels 9 and 12 working. 30 ft. launch painted black, with word "Pilot" in white on side, available at Sunk and Cork Light Vessels or Harwich Harbour. Desirable that Agents are advised of vessel's ETA at least two hours prior to vessel's arrival at Harwich Roads or, at the Master's option, at either the Sunk or Cork Pilot stations.

A new pilot station has been established in the Orwell Navigation Centre at Ipswich Dock head. The station will be manned from 0700 till 1900 hrs. by a duty Pilot, telephone Ipswich 211347, who will receive orders, and requests for information, regarding the pilotage of vessels in the Ipswich pilotage district.

Outside these hours, from 1900 until 0700 hrs. each day, all such orders and requests for information should be passed to the Orwell Navigation Centre. Telephone 55093, for onward transmission to the duty Pilot at home.
ANCHORAGES: No anchorages within port. All vessels will proceed direct to berth, otherwise anchorage provided in Harwich Harbour.
RESTRICTIONS: Vessels up to 1,500 g.r.t. taken up at night, draft not exceeding 16 ft. Max. length of vessel 460 ft. Max. draft 25 ft. 6 in. Large vessels navigate on flood tide only.
Night Navigation:

Vessels of up to 300 ft. length can navigate at any time providing the U.K.C.* is observed.

Vessels between 300 ft. and 360 ft. in length can navigate (providing the U.K.C. is observed) on a flood tide only. The deadline will be HW at Harwich.

Tankers of over 260 ft. in length will also not be allowed to navigate during darkness. Chemical tankers are also restricted to daylight navigation only.

*U.K.C.: Under Keel Clearance.
MAX. SIZE: 460 ft. overall length and 25 ft. 6 in. draft.
HEALTH: International signals. Master to contact ship's Agent when disease or fever is suspected on board. Pratique automatic for vessels calling at another port in the U.K.
RADIO: Masters to contact ship's Agent through North Foreland, Humber, Niton or Portishead depending on position of vessel. All these radio stations hold cable addresses and staff telephone numbers of Agents.

A 24 hour VHF radio facility has been established. Vessels arriving should contact "Ipswich Port Radio" on VHF Channel 16 on entering the River Orwell and report and/or maintain a listening watch as instructed. Channels 14 and 12 will be used for the passing of messages which should be restricted to the safety of navigation or persons.
TUGS: Tugs available in Harwich Roads and it is customary for tugs' lines to be used, for which there is, of course, an additional charge on the towage. It is advisable for vessels to give 4/6 hours' notice of arrival at Harwich Roads.
BERTHING: Vessels bound for berths in the Wet Dock should arrive off the lock two hours before high water.

Cliff Quay: Length: 3,250 ft (990 m.).

Depth of water alongside: 28 ft. (8.5 m.) below LWOST. Subject to silting.

Approach Channel: 19 ft. (5.7 m.) below LWOST.

Cranes: 15 portal jib cranes from 3.00 to 15.25 tonnes lifting capacity and one derrick crane capable of lifting 32.5 tonnes at 90 ft. (27.4 m.) radius, and 40 ft. (12.1 m.) outreach from the face of the quay.

Largest vessel which can be accommodated: 460 ft. (140.2 m.) overall in length, 25 ft 6 in. (7.7 m.) draft inwards, 24 ft. 6 in. (7.4 m.) outwards.

The Quay handles containers and heavy lifts up to 32.5 tonnes and is particularly well equipped to handle cargoes direct to and from both road and rail transport. The South end has been developed as a modern terminal for handling all types of general cargo, including containers, flats and palletised units. Spacious modern transit sheds, together with a container park, are sited conveniently behind this part of the Quay. Vessels up to 25 ft. 6 in. (7.7 m.) draft can be handled at the terminal.

West Bank Terminal: Stage 1 of this terminal provides (1) Container Berth 400 ft. (122 m.) in length dredged to 20 ft. (6.09 m.) alongside. (2) Roll-on/roll-off berth with a ramp 121 ft. (36.9 m.) long and 23 ft. (7 m.) carriageway capable of taking a 45.8 tonnes axle load. Water alongside 20 ft. (6.04 m.) at LWOST.

Two quayside portal cranes, one of 10 tonnes and one of 35 tonnes capacity and a 60 ft. (18.29 m.) 50 tonne weighbridge have been provided on Stage 1.

Stage 2A (under construction) will provide one 300 ft. berth, dredged to 20 ft. LWOST, and backed by 12 acres of land.

The Dock: The dock is situated within the town of Ipswich. It is some 26.25 acres (10.63 hectares) in extent and is approached by an entrance lock 300 ft. (91.4 m.) long by 50 ft. (15.2 m.) wide and ships up to 47 ft. 6 in. (14.4 m.) beam can be brought in.

The following are the depths on the outer sill: At HWOST, 23 ft. 6 in. (7.16 m.). At LWOST, 10 ft. (3.04 m.). At HWONT, 20 ft. 6 in. (6.25 m.). At LWONT, 12 ft. (3.65 m.).

Owing to the shape of the lock-pit modern vessels require the following clearances:

Beam	*Clearance*
40 ft. (12.19 m.)	3 ft. (0.91 m.)
42 ft. (12.80 m.)	4 ft. (1.22 m.)
45 ft. (13.71 m.)	5 ft. (1.52 m.)
48 ft. (14.63 m.)	5 ft. 6 in. (1.67 m.)

Inside, in addition to some 2,700 ft. (823 m.) of private quays owned by merchants having warehouses or mills adjoining, where small vessels can berth, there are the following quays owned by the Authority:

(i) *South West Quay:* This quay is 800 ft. (244 m.) in length with a depth of 19 ft. (5.79 m.) of water alongside at mean dock level. The quay is served by three modern 7.63 tonne portal electric travelling cranes and mobiles as required.

(ii) *Timber, Public Warehouse,* and *End Quays* total 940 ft. (286 m.) in length and have a depth of water alongside varying from 12 ft. (3.65 m.) to 20 ft. (6.09 m.). Public Warehouse Quay has transit shed and warehouse space behind the quay and is served by mobile cranes capable of lifting up to 5 tonnes.

(iii) *Tovell's Wharf* is a 600 ft. (183 m.) reinforced concrete quay with 22 ft. (6.70 m.) of water alongside. It is served by two 4 tonne and one 5 tonne electric travelling luffing cranes.

(iv) *Orwell Quay* is 775 ft. (236 m.) in length, with 18 ft. (5.48 m.) of water alongside and includes a combined container and roll-on/roll-off berth with a derrick capable of lifting 32.5 tonnes at 112 ft. (34.14 m.). Two transit sheds, with a floor area of 96,700 sq. ft. (8,983 sq. m.) are situated immediately behind the Quay apron together with further extensive covered and open areas.
STEVEDORES: Ship's Master normally advises his Agent of his ETA, disposal of cargo on board, and all relevant details. The Agent passes this information to Stevedores.
MEDICAL: All medical facilities available in port. Vessels requiring medical assistance on arrival should advise all details by radio telephone or on their ETA cables.
TANKERS: It is desirable that when Master of a tanker gives an ETA he also indicates the size of pipe-line, size of connection and discharging point in order that necessary arrangements can be made at discharging point of receiving oil terminal. There are no slop facilities at port of Ipswich, and all cleaning and gas-free operations must be carried out outside precincts of the Harwich Harbour Conservancy Board. Only one tanker berth at Ipswich but there are six intake points on quay and it is usual for four coastal

tankers to be accommodated, depending on the overall length and berth availablity. A maximum draft on the berth of 25 ft. 6 in.

DENSITY: Approx. 1020 oz. depending on the amount of fresh water in river due to heavy rain.

FRESH WATER: Available at all quays. Delivery by hose through meter at 10 t.p.h.

FUEL:

Gas oil 35 secs. Redwood.
Light fuel oil 200 secs. Redwood.
Medium fuel oil heated 950 secs. Redwood.
Heavy fuel oil heated 3,500 secs. Redwood.
At least 24 hours' notice required.

GANGWAY/DECK WATCHMEN: No watchmen required by Port Authority, but sufficient men available at all times to move vessels, if necessary.

OPENING/CLOSING HATCHES: Hatches opened by ship's crew.

CERTIFICATES: Following certificates are required by Agents in order to arrange Customs clearance:

Ship's Register.
Radio Certificate.
Load Line Certificate.
Safety Equipment Certificate.
Derat Certificate.
British Tonnage Certificate, if required.

CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes, or equivalent in tobacco, per man. Wine and/or Spirits, One bottle per man.

CARGO GEAR: Cargo working gear is supplied by stevedores. Normally, quayside cranes are used for discharging and loading. In event of cargo gear being used in port, ship's gear certificate, duly certifying that all gear has been examined and is in every way workable and suitable for discharge and/or loading of cargo, is to be produced.

IDENTIFICATION CARDS: Not required as long as each crew member has in his possession a seaman's book and/or passport.

CONSULS: Vice-consul for Sweden and Vice-Consul for Norway. Tel. 59281.

REPAIRS: Only small repairs on board.

REPATRIATION: Facilities exist at port for effecting crew changing and arranging repatriation.

AIRPORT: A non-customed airport.

HOLIDAYS: Normal holidays for English ports.

TIME: GMT in Winter months. Summer time, GMT plus one hour.

POLICE/AMBULANCE/FIRE: In emergency dial 999. Otherwise Police – Ipswich 55811; Ambulance – Ipswich 56407; Fire – Ipswich 75345.

SHORE LEAVE: Allowed.

AUTHORITY: Ipswich Port Authority.

AGENTS: Cory Brothers Ltd., Dock Head, Ipswich, Suffolk. Tel. 59281. Telex 98282.

ISLE OF GRAIN: 51.26 N. 00.43 E. (See Plan)

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ships Report by Master.
1 Home Office Form 1.B.6.
1 Stores List.
1 Port Dues Certificate.
Ship's Certificate of Registry.
Load-line Certificate.
Safety Equipment Certificate.
Lloyds Certificate.
De-rat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.
Safety Construction Certificate.

PILOTAGE: See "Medway".

VLCC vessels enter and leave by North Channel. Special pilotage and entry arrangements apply.

ANCHORAGES: *Estuary Passage and anchorages:* Vessels proceeding to Isle of Grain will initially contact the Thames Navigation Service (Gravesend Radio Channels 16-12) and comply with the 'General Directions for Navigation in the Port of London 1975' until entering the Medway Area. Prior contact should be made with the Medway Ports Operations Centre (Medway Radio, Channels 16-14-9-22). Anchorages are allocated according to size and draft of vessel and if outside the Medway area are nominated by the T.N.S.

RESTRICTIONS: Tidal port. 24 hour movements, subject to tidal conditions and under-keel clearance appropriate to size of vessel. The declared depth in the Medway Approach Channel is 8.5 m. (27.9 ft.) at datum.

MAX. SIZE: Largest size of vessel accepted to date, 280,420 d.w.t. part loaded.

HEALTH: The Isle of Grain is within the jurisdiction of the Corporation of London Port Health Authority and when required that authority's declaration form must be used.

Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a port doctor or an officer of H.M. Customs depending on where the ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present Declaration. In all cases when there is sickness on board the Port Health Authority must be informed by radio message addressed to "PORTELTH LONDON" giving details not more than 12 hours and when practicable not less than 4 hours before the expected time of arrival.

RADIO:

Notice of 72 hours and over – Portishead Radio.
Notice of 12-72 hours – Landsend Radio.
Notice up to 12 hours – from South, Northforeland Radio. from North, Humber Radio.

RADAR/VHF: See "Medway".

TUGS: 5 tugs available. 2 of them equipped for fire-fighting. Tugs join and leave vessels at Garrison Point, Sheerness. Normally use tug lines, cost included in tug hire.

BERTHING: There are 8 main jetties suitable for ocean-going vessels (Nos. 1 to 8 main) and 3 coaster berths viz.; No. 1 coaster, incorporating No. 1 barge and No. 9 jetty. All the main jetties are of "T" headed design. Jetties 1-7 can accommodate vessels of various sizes up to a max. of 70,000 tons s.d.w. Max. safe drafts for the Medway Approach channel and in the berths for particular periods can be advised on request. No. 8 jetty can accommodate part laden VLCCs up to about 1,130 ft. in length and 179,000 tons arrival displacement. Such vessels are programmed to have not less than 1.22m. (4 ft.) under-keel clearance on arrival at the Medway buoy 40 minutes before H.W. Sheerness. They then berth starboard side to on the first of the ebb tide. The jetty is equipped with the IDASAT visual berthing aid.

Ballast water containing Petroleum may normally be discharged into the Company's oily ballast system by arrangement.

DENSITY: Approx. 1020.

FRESH WATER: Available all jetties by pipe-line.

FUEL: Most grades available on all jetties. Advance notice advisable.

MEDICAL: Advance notice of medical attention and inoculations required is advisable. Hospital facilities available in surrounding areas.

FIRE PRECAUTIONS: *Safety Regulations:* A copy of the BP Oil Kent Refinery Jetty Safety Regulations is put on board each vessel on arrival. The booklet additionally contains various tear-out check lists, forms for confirmation of bunker requirements and requests for immobilisation and permitted repairs. These must be completed by ship and shore representatives before operations commence.

GANGWAY/DECK WATCHMEN: *Gangways:* A tower-mounted gangway suitable for VLCCs is provided on No. 8 jetty. Vessels provide their own gangway at other jetties and are responsible for maintaining it as a safe means of access.

REPAIRS: Local marine repair company can undertake repairs of general nature. No drilling or hot-work permitted alongside jetties.

REPATRIATION: All facilities for repatriation by land, sea and air, through London and Dover. Attendance of British Ministry and Foreign Consulate officials arranged through Agent.

POLICE/AMBULANCE/FIRE: The Refinery Fire Service (which also operates an ambulance) can be summoned by dialling 222 on the Refinery telephone system. This procedure should be followed in any emergency – e.g., a major accident or hose failure, etc.

Refinery Security can be contacted by dialling 221. Any request for attendance by the County Police should be made through Refinery Security Dept.

TELEPHONES: There are public telephone kiosks on the foreshore road.

GENERAL: Agents have difficulty in providing most services at week-ends, therefore, requests for Bond, cash, consular officials, etc., should be radioed as soon as possible.

CUSTOMS ALLOWANCES: At the discretion of Local Customs Inspector. Normal allowances are equivalent of 0.5 lb. tobacco per man and equivalent of 1 bottle of wine per man. Allowances may be halved for home trade vessels. Vessels in port more than 3 or 4 days may receive extra allowances.

TIME: British Standard Time is GMT plus 1 hour. GMT in Winter months.

AGENT: William Hurst Limited, Foreshore Marine Offices, B.P. Refinery (Kent) Limited, Isle of Grain, Nr. Rochester, Kent. Tel. 0634-29 235. Telex 96187 Hurst Grain.

KING'S LYNN: 52.53 N. 00.15 E. (See Plan)

DOCUMENTS:

Pilot Note to be filled in and signed by the Master on completion of pilotage services both inwards and outwards.

Cargo tonnage return to be completed by the ship's Agent.

PILOTAGE: Pilotage is compulsory between an East-to-West line through Bar Flat Buoy in the Wash and the Freebridge at King's Lynn.

Vessels may be boarded and unboarded by pilot cutter in the Wash from approx. 2.5 hours before high water between Daseley Sled, the Sunk Buoy and Roaring Middle Light Float. Unless prevented by weather or breakdown a pilot cutter cruises between King's Lynn No. 1 Light Buoy and the Sunk Light Buoy approx. 2.5 hours before high water until such time as it is too late for a vessel to transit the Approach Channel on that tide.

Requests for a Pilot sent at least 24 hours before the service is required (with amendments if necessary up to 12 hours before) to the Pilot Office, Common Staith, King's Lynn (tel. King's Lynn 3411, telegrams "Conservator" King's Lynn) or through local Agent. The Pilot Office is at the Harbour Office and maintains VHF R/T watch on Channels 16 and 12 from 0900 to 1700 hrs. Monday to Friday and from 4 hours before high water until 1 hour after high water on each tide after 1700 and before 0900 hrs. The Pilot Cutter listens on

Channel 16 when on station and is fitted with Channels 14, 12, 11 and 6 as working channels.

No. 3 and 4 Pilot Launches "Brackley" and "Denver" are 40 ft. fibre glass craft with blue hulls, white superstructure and orange tops to the wheelhouses. In the event of bad weather the pilot launch on duty will fore-run vessels into Daseley Sled (52° 53" N. 0° 21" 5' S.) before boarding Pilots.

Requests for pilots for ships in port, should be made to the Pilot Office at least 2 hours before the Pilot is required to attend the ship. The signals to be used or displayed where the services of a pilot are required in accordance with the provisions of the Merchant Shipping (Pilot Signals) Order, 1970. Pilots are boarded and unboarded directly to and from the Pilot Cutter as conditions allow.

ANCHORAGE: In the Wash vessels anchor within an area bounded by the Roaring Middle Light Float and the King's Lynn No. 1 Light Buoy and the Sunk Light Buoy. Anchoring close to No. 1 buoy in sufficient depth of water assists early boarding of Pilots. Depth of water min. of 20 ft.

RESTRICTIONS: King's Lynn Harbour is situated on the River Great Ouse about 2 miles inland from its mouth, at the S.E. corner of the Wash.

The shipping channel in the approaches to King's Lynn and its approaches in the Wash is subject to changes in depth and direction as published on Admiralty Charts.

Harbour Master will advise in advance upon the suitability of vessels and tides. To navigate the approach channel with sufficient under-keel clearance over shoal areas, the vessel's max. draft plus 6 ft. should not exceed the height of the tide above dock sill.

All ship movements are at high water, times in accordance with a position list maintained at the Harbour Office on the basis of information supplied in advance from Masters of vessels and their Agents.

At the Docks entrance lock docking signals are exhibited from a signal mast. Gale warnings are exhibited from a signal mast on Common Staith.

MAX. SIZE: Max. dimension for vessels entering the Harbour: length 260 ft., beam 45 ft., draft 11 ft., on lowest neap tides, and 17 ft. on highest spring tides. Access over high tide only. Harbour Master to be consulted for vessels approaching these limits.

RADIO: The King's Lynn Conservancy Board operates in the River Great Ouse and its approaches in the Wash a VHF (FM) port operations and information radio-telephone service in the International Maritime Band, call signs: "King's Lynn Harbour Radio" (Channels 16, 12 and 11); "King's Lynn Pilots" (Channels 16, 14, 12, 11 and 6).

British Transport Docks Board operates a docks operations and information service, call sign: "King's Lynn Docks Radio (Channels 16, 14 and 11).

TUGS: Controlled by King's Lynn Conservancy Board and in attendance at the discretion of the Board's Harbour Master. Vessels joined in the Wash Approaches and/or lower reach of River Great Ouse (Marsh Cut). Vessels should provide own hawsers. If ordered, tug hawser available at £2 plus cost of damage in excess of normal wear and tear.

Harbour Master may require any vessel to use and employ a tugboat.

BERTHING: *Alexandra Dock:* Size 780 ft. × 440 ft. Approached from the River Great Ouse and King's Lynn Harbour by a lock 50 ft. wide and 200 ft. between gates. The depth of water on sill is 22 ft. to 26 ft. (springs) and 18 ft. (neaps).

Bentinck Dock: Size 1,000 ft. × 400 ft. Connected with the Alexandra Dock by a passage and gates over which pass 2 swing bridges. Double-sided jetty 235 ft. long.

The quays of the 2 docks have a water frontage of approximately 1 mile and provide a total of 18 berths.

STEVEDORES: Gangs usually can be provided at minimum notice. Main commodities and handling rates: timber (60 tons pre-pack, pre-slung, per gang-hour), steel rods (70 tons per gang-hour), tinplate (90 tons per gang-hour), coal (75 tons per gang-hour), also roll-on/roll-off and container handling.

TANKERS: 4 tanker berths in enclosed docks. Discharge from vessels is to 6-in. connecting pipes feeding 8-in. pipes to storage tanks.

MEDICAL: It is advisable to give advance notice of required medical attendance via Agent. In emergency the Harbour Office will pass on requests received over the VHF R/T Port Operations and Information Service. For other medical information, refer to the Port Medical Officer of Health and H.M. Customs.

FUEL: Available at berths alongside King's Lynn Harbour on 24 hours previous notice. Light-grade fuel oil, gas oil, petrol and paraffin only.

FRESH WATER: Available on all berths through 4-in. pipes off hydrants from public supply.

OPENING/CLOSING HATCHES: Done by crew. Cranes available for heavy beams.

GANGWAY/DECK WATCHMEN: Vessels responsible for providing own gangways at King's Lynn Harbour berths, where the Regulations require the Master or other person having the care of any ship or other craft to have a proper number of hands on board to attend moorings and to comply with all the requirements and directions of the Harbour Master or his Deputy or Assistants.

CONSULS: Vice-Consul for the Netherlands and German F.R. Vice-Consul for Sweden and Denmark.

REPAIRS: Limited facilities only available locally for hull and engine repairs.

AIRPORT: Charter flights from Cambridge and Norwich airports about 45 miles from King's Lynn. Regular flights from London (Heathrow) about 100 miles from King's Lynn.

POLICE/AMBULANCE/FIRE: In emergency dial 999 and ask for the service required. Normal service: Police – King's Lynn 61311; Ambulance – King's Lynn 3503 or 3910; Fire Service – King's Lynn 5163.

HOLIDAYS: Cargo work usually available at overtime rates on Saturday and Sundays and on all public holidays.

AUTHORITY: The King's Lynn Conservancy Board.

KINGSNORTH: 51.25 N. 00.36 E.

DOCUMENTS: See "London".

PILOTAGE: See "Medway."

ANCHORAGES: Vessels proceeding to Kingsnorth must contact Medway Ports Operations Centre (VHF Channels 16 and 14) when a designated anchorage will be allocated appropriate to the size of the vessel.

RESTRICTIONS: Tidal port. 24 hour movements, subject to tidal conditions and under keel clearance appropriate to size of vessel. Minimum depth of approach channel 28 ft. LW at present.

MAX. SIZE: Max. lengths: 750 ft. No breadth restriction. Draft: 38 ft. alongside jetty.

RADIO: Notice of 72 hours and over, Portishead Radio. Notice of 12-72 hours. Landsend Radio. Notice of up to 12 hours, from South, Northforeland Radio, and from North, Humber Radio.

RADAR/VHF: See "Medway".

TUGS: 6 tugs available. 3 of them equipped for fire fighting. Tugs join and leave vessels at Garrison Point, Sheerness. Normally use tug lines, cost included in tug hire.

BERTHING: *Oakhamness Jetty:* 1 tanker berth situated at the end of a 1-mile long jetty with T-head cargo handling platform. Vessels moor alongside dolphins abreast of cargo handling platform which is equipped with Chiksan rigid loading/discharge arms each of 12-in. diameter. Depth alongside berth is 44 ft. below chart datum.

MEDICAL: Advance notice of medical attention and inoculations required is advisable. Hospital facilities available in surrounding areas.

TANKERS: Advisable radio Agents connection sizes required. No slop tank available. 1 large tanker berth only.

DENSITY: Approx. 1018.

FRESH WATER: Available by pipe-line on jetty.

FUEL: Bunkers not usually available on jetty, but may be delivered by barge. Advance notice essential.

FIRE PRECAUTIONS: No immobilisation or repairs allowed without prior authorisation. No hot-work allowed alongside jetty.

GANGWAY/DECK WATCHMEN: Services of shore watchmen not necessary. Shore gangway may be used.

REPAIRS: Local marine repair company can undertake repairs of general nature. No drilling or hot-work permitted alongside jetty.

REPATRIATION: All facilities for repatriation by land, sea and air, through London and Dover. Attendance of British Ministry and Foreign Consulate officials arranged through Agent.

POLICE/AMBULANCE/FIRE: Dial 999 from public call box. Medway Ports Operations Centre can be alerted on Channel 16 and 14 to call these services.

TELEPHONES: No facilities exist for placing telephones onboard.

GENERAL: Agents have difficulty in providing most services at week-ends, therefore, requests for bond, cash, consular officials, etc., should be radioed as soon as possible.

AGENT: William Hurst Limited, Foreshore Marine Offices, BP Refinery (Kent) Limited, Isle of Grain, Nr. Rochester, Kent. Telephone No. 0634-29 235. Telex No. 96187 Hurst Grain.

LARNE: 54.51 N. 05.48 W. (See Plan)

DOCUMENTS: See "Belfast".

PILOTAGE: Not compulsory, though private pilots operate who, when required, are engaged by ship's Agent. Pilots board off Fairway Buoy. Port VHF. Channels 16 and 14.

ANCHORAGES: Inner anchorage in Larne depth up to 5 fathoms. Anchorage outside Fairway Buoy exposed in N.E. winds.

MAX. SIZE: Draft dependent on berth but max. 19 ft. at MLWS, and 20 ft. at MLWN. Oil tankers proceed to Ballylumford Power Station which lies across Larne Lough directly opposite Larne Harbour. Approach channel has depth of 30 ft. at MLWS and berth has 35 ft. at MLWS.

HEALTH: See "Belfast".

RADIO: Portpatrick.

TUGS: Not based at Larne, only heavy-duty motor launches, suitable for small vessels. As a rule tugs are not required for vessels using Larne Harbour.

BERTHING: 2 berths are equipped with two 5-ton cranes for grabbing and general cargo work. 2 berths are equipped with cranes of 32 and 35-ton capacity for handling containers. 3 berths are equipped with roll-on/roll-off ramps, capable of taking loads up to 160 tons and ships up to 70 ft. beam.

STEVEDORES: Larne Harbour Ltd. carry out all the stevedoring. 24 hours notice required for arrangements.

MEDICAL: No advance notice required for medical attention, a hospital being situated 0.75 miles from harbour. No special inoculations or certificates required.

TANKERS: 1 tanker berth in Larne Harbour. Depth alongside, 18 ft. below datum. Max. length of vessel 260 ft. Pipe diameter 6 in. Discharging only. For Ballylumford, see "Max. Size".

DENSITY: 1025.

FRESH WATER: Unlimited by shore hose. Rate 7 to 10 t.p.h.

FUEL: Fuelling carried out by road tanker. Arrangements to be made through ship's Agent.
GANGWAY/DECK WATCHMEN: Agents arrange watchmen.
OPENING/CLOSING HATCHES: Performed by crew.
CUSTOMS ALLOWANCE: Agents arrange with Customs.
IDENTIFICATION CARDS: Not required.
CONSULS: Norwegian Vice-Consul (C. S. Brown, F.I.C.S.) – Larne 2227. Other consuls in Belfast can be contacted through ship's Agent.
REPAIRS: Limited repairs by local firms. Major repairs by Belfast firms.
REPATRIATION: Possible.
AIRPORT: 20 miles. Regular flights.
HOLIDAYS: 12th and 13th July, Easter Monday and Tuesday, Christmas Day, Boxing Day and New Year's Day. No cargo worked on these days.
POLICE/FIRE/AMBULANCE: Dial 999 and ask for Emergency service required.
TELEPHONES: Only on Cross Channel vessels.
AUTHORITY: Larne Harbour Ltd.

LEITH: 55.59 N. 03.10 W. (See Plan)

DOCUMENTS:
Health Declaration.
1 Crew Declaration Form C.142 (Tobacco List).
1 Crew List.
1 Passenger List.
(Also see "Glasgow").
PILOTAGE: Pilot station in Firth of Forth located at Inchkeith Island. Contact can be made with pilot cutters "Panther" and "Gazelle" on VHF Channels 16/14/12 and radio-telephone 2182. Pilot cutters – black hull with white superstructure.
ANCHORAGES: Good holding ground at Inchkeith Island and Leith roadstead depths 10–17 fathoms. Request should be made to Forth Navigation Service.
RESTRICTIONS: None. Vessels can enter harbour day or night.
MAX. SIZE: Governed by draft of vessels. Max. permissible draft alongside in Imperial Dock 30 ft. and in Western Harbour 32 ft.
HEALTH: Vessel boarded immediately alongside berth and pratique granted provided no contagious diseases reported on board, otherwise quarantine restrictions imposed.

Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a port doctor or an officer of H.M. Customs, depending on where the ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present Declaration. In all cases when there is sickness on board the Port Health Authority must be informed preferably not more than 12 hours and not less than 4 hours before arrival.
RADIO: Stonehaven and Cullercoats Radio Stations.
RADAR/VHF: Port and Estuary radar service. VHF contact can be made with Leith Harbour Radio on Channels 16 and 12. Forth Navigation Service now in operation.
TUGS: Attend inward-bound vessels in Leith roads. Tug's towline available but not compulsory.
BERTHING: Vessels arriving on max. permissible drafts of 30 and 32 ft. normally docked by Pilots 1.5 hours before high water.
STEVEDORES: ETA advices given by Master to ship's Agent and conveyed by them to stevedores.
MEDICAL: No advance notice of medical attention required. All hospital facilities available.
TANKERS: 1 tanker berth available – max. permissible draft 30–31 ft. Discharge lines 6 in. and 8 in. No slop discharge facilities.
DENSITY: 1015.
FRESH WATER: Available alongside at all berths.
FUEL: All grades available subject to 24 hours notice in advance.
DEVELOPMENTS: None envisaged at present.
GANGWAY/DECK WATCHMEN: Usually supplied by ship but shore watchmen arrangeable by special agreement.
OPENING/CLOSING HATCHES: Custom of the port is that this work is normally carried out by ship's crew.
CERTIFICATES:
Ship's Register.
Load-line.
Safety Radio.
Safety Equipment.
Cargo Construction.
Deratisation Certificates.
Light Dues receipt.
CUSTOMS ALLOWANCE: 200 cigarettes in an opened carton or 0.5 lb. cigars or 0.5 lb. tobacco and 1 pint spirits.
CARGO GEAR: No additional requirements necessary to comply fully with local safety regulations as all gear supplied by stevedores.
IDENTIFICATION CARDS: Not required.
CONSULS:
U.S.A.: 3 Regent Terrace, Edinburgh. Tel. 031-556 2061.
West Germany: 16 Eglinton Crescent, Edinburgh. Tel. 031-337 2323.
Netherlands: 64 Commercial Street, Leith. Tel. 031-554-1621.
Spain: 100 Constitution Street, Leith. Tel. 031-554-5641.
Finland: 29 Bernard Street, Leith. Tel. 031-554-4311.
Greece: 7 Regent Terrace, Edinburgh. Tel. 031-556-1701.
REPAIRS: Facilities available to carry out all types of deck and engine repairs.
DRY DOCKS: Largest dry dock "Imperial", length 550 ft., width of entrance 70 ft., depth over blocks at MHWS 23 ft. 9 in. also 2 smaller dry docks.
REPATRIATION: All facilities available for effecting crew changes and repatriation by sea, air and rail.
AIRPORT: Edinburgh Airport served by regular airlines and located approx. 9 miles from Leith.
TIME: British Standard Time, GMT plus 1 hour. GMT in Winter months.
HOLIDAYS: Public holidays observed annually: 3rd Monday in April; 1st Monday in June; 3rd Monday in September; Christmas Day (25th December); 1st and 2nd January. Cargo work can be arranged on public holidays except 1st and 2nd January.
POLICE/AMBULANCE/FIRE: Tel. 999 and ask for service required.
TELEPHONES: No facilities available for placing telephones on board vessels.
SERVICES: Compass adjusting facilities available.
SHORE LEAVE: No restrictions.
DELAYS: Minimal delays in berthing, loading and discharging.
AUTHORITY: Forth Ports Authority.

LERWICK: 60.09 N. 01.08 W. (See Plan)

PORT LIMITS: All waters contained within the following boundaries including Dales Voe and Aith Voe.

Straight line drawn from the N.E. extremity of Hawks Ness (60° 13′ 27″ N., 1° 10′ 00″ W. approx.) in an E.S.E.'ly direction to the N.E. extremity of Green Holm and thence in a S.E.'ly direction to the N.E. extremity of Score Head in the island of Bressay. Thence in a W.'ly and S.'ly direction along the high Water Mark of all foreshores to Whinna Skerry (60° 07′ 45″ N., 1° 07′ 17″ W. approx.). Thence in a straight line in a W.'ly direction to the S. extremity of Ness of Sound. Thence along high water mark of all foreshores in a generally N.'ly direction to Hawks Ness.
DOCUMENTS: See "London".
PILOTAGE: *Pilot Office:* At foot of Victoria Pier in Harbour Master's office. Lat 60° 09′ N., Long. 1° 08′ W. Limits of Pilotage District similar to Port limits given above. Licenced Pilots always available on 24 hour service subject to following correct procedure given below.

Call Sign: Lerwick Harbour Radio.

Frequencies: Calling: VHF Channel 16. Working: VHF Channel 12. Pilot Cutter: VHF Channels 6, 11, 12 and 16.

Port Control: Fitted with VHF Channels 11, 12 and 16. Continuous watch is maintained 24 hours per day, 7 days per week on Channel 16 except when working vessels on Channel 12.

Procedure: The Pilot Office controls the movement of all vessels arriving or departing by either entrance and all movement within the harbour from public or private quays or supply bases, whether such vessels are under the control of Pilots or not.

(a) Vessels requiring pilotage should arrange with Agent not less than 24 hours before arrival. Vessels without Agent should contact Lerwick Harbour Master through Coast Radio Stations not less than 24 hours before arrival. Vessels leaving ports less than 24 hours steaming away should advise time of sailing, projected speed and ETA at time of leaving last Port. Vessels inward from Continental Shelf should advise time of leaving location, projected speed and ETA at time of leaving last location. Amended ETA's should be advised 2 hours before the time given in the last transmitted ETA. VHF contact should be made with Lerwick Harbour Radio while still 1 hour away when final pilotage and berthing arrangements will be made. Port control cannot guarantee a Pilot on station unless 1 hour's notice is given.

(b) ETA messages should also contain information on which harbour entrance is to be used, draft and length overall. Vessels entering by the South entrance will be boarded West of Kirkabister Lighthouse or near Knab Point if weather conditions are unsuitable. Vessels entering by the North entrance will be boarded abeam of the Green Holm and 0.5 miles N.E. of Beosetter Holm. If boarding conditions in this area are unsuitable the South entrance must be used.

(c) Pilot Cutter m.v. *Bard* is a 60 ft. converted wooden MFV. Black hull with large, white letter "P" on each bow, white upperworks and varnished wheelhouse. International pilotage signals are in use.

(d) Outward vessels should call the Port Control 1 hour before departure when information on traffic movement will be given and arrangements for pilotage will be made. When moving within the harbour all vessels should maintain a continuous listening watch on Channel 16. All vessels moving within the harbour should report to the Port Control immediately prior to leaving the berth or anchorage, whether a Pilot is on board or not.

(e) Pilotage within Lerwick Harbour is compulsory, but all vessels not carrying passengers are exempt.

(f) Telephone number of Lerwick Harbour Master and Pilot station is Lerwick 3462.
ANCHORAGE: Ample anchorages in harbour roads.
MAX. SIZE: Vessels up to 20 ft. draft and 320 ft. long alongside berth as routine. Vessels of greater length and for draft may be accommodated alongside after discussion with Harbour Master. Anchorages available for any size of vessel subject to prior consultation with Harbour Master, if above 10,000 g.r.t. No mooring buoys available.

RADIO: Nearest Coast Radio station 'Shetland Radio'' Frequency and other details as for "Wick Radio" except for VHF working Channel which is Channel 27.

"Lerwick Harbour Radio" see "Pilotage".

TUGS: No tugs available but Pilot cutter will give towage assistance within her capabilities.

BERTHING: Berths are available for the handling of most cargoes including Roll-on/Roll-off and arrangement should be made through Agents well in advance of arrival. No berths available for handling liquid chemicals. Mobile cranes available from Harbour Authority up to 30 tons capacity or through private operation to 110 tons capacity.

STEVEDORES: Arranged through Agent.

MEDICAL: Medical aid can be arranged through Agent or Coastguard at any time day or night.

COASTGUARD: Lookout on top of Knab Point manned 24 hours a day. Fitted with MF and VHF Radio Channels 16, 13, 10 and Zero.

TANKERS: BP Oil have their own discharging berth. Tankers are also able to discharge at various Offshore Oil Industry Supply berths

DENSITY: Density 1025 at all states of tide.

FRESH WATER: Available at most berths, 65 to 100 t.p.h. No water boat.

FUEL: Gas oil available on demand.

FIRE PRECAUTIONS: No-smoking regulations in operation inside all transit sheds. Usual tanker terminal regulations in operation. Handling of explosives covered by local Bye-Law.

GANGWAY/DECK WATCHMEN: Ships usually supply own watchmen. No fixed sum if shore watchman is employed.

OPENING/CLOSING HATCHES: Crew open hatches.

CUSTOMS ALLOWANCE: Tobacco, wine/spirits; at the discretion of the Customs and Excise.

IDENTIFICATION CARDS: Foreign seamen have to supply same if left behind, i.e. hospital, etc.

CONSULS:

Denmark	Vice	3057
Finland	Vice	3057
France	Vice	3057
W. Germany	Full	2556
Iceland	Full	4121
Netherlands	Vice	3057
Norway	Full	3057
Sweden	Full	2556

REPAIRS: Repairs to fishing vessels and other small craft in steel, wood and fibre glass. Also engine and machinery repairs. Comprehensive electronics repair facilities.

DRY DOCKS: No dry dock available, slip available to take small vessels up to 100 d.w.t.

REPATRIATION: Facilities exist.

AIRPORT: 25 miles to airport. 2 services per day in Summer, 1 in Winter, operated by BEA.

HOLIDAYS: Scottish holidays. Working can be arranged on these days if so desired.

POLICE/AMBULANCE/FIRE: Emergency telephone 999 or call Port Control VHF Channel 16. Harbour Master and Port Control 3462 night or day.

TELEPHONE: Ships telephones can be arranged.

SERVICES: No tank-cleaning equipment. Compass adjuster can be procured if necessary.

SHORE LEAVE: No restrictions.

AUTHORITY: Lerwick Harbour Trust.

LIVERPOOL: 53.32 N. 03.19 W. (See Plan)

DOCUMENTS: Required on arrival, Crew List Form I.B.6 to be completed; this list to include all passengers and any British subjects who joined vessel outside of U.K. If any person falling into this category should be on board they must not leave until permission to land is granted by Immigration Officer.

Customs Form C.142, Declaration of goods obtained abroad or during a voyage, must be completed and signed by Master, and each crew member. Health Declaration must be completed. Above forms should be obtained from Pilot.

Manifest and Bills of Lading should be forwarded to vessel's Agent so as to be available before vessels arrival.

Ship's Papers Required:

Ship's Register.
Certificate for British Tonnage (if issued).
Safety Equipment Certificate.
Safety Radio Certificate.
Safety Construction Certificate.
International Load-line Certificate.
Derating Exemption Certificate.

PILOTAGE: At least 48 hours before arrival, inward vessels should give ETA Lynas/Mersey Bar to Agent. Agent will then arrange docking and advise Pilot Office, the Master will receive radio giving final docking instructions.

Pilot Station. Vessels arriving from South should take Pilot on board at Point Lynas, Pilot Station 1, which shall extend between imaginary lines drawn on the true bearing of North and South from Middle Mouse Island and on the true bearing of North from the Great Ormes Head.

Vessels arriving from North should take Pilot at Mersey Bar Pilot Station 2, which shall extend between imaginary lines drawn on the true bearing of North from the Great Ormes Head on the true bearing of North and South from the Bar Light-float, at the entrance to the principal buoyed channel leading to the Mersey.

Description of Pilot Boats. Black top sides with 2 in. yellow ribbon and white boot topping to water line. Yellow funnel with black top. The name "Liverpool Pilot" painted on each side.

In heavy weather if Master of the pilot boat considers it imprudent to send a launch to put a Pilot on board an incoming vessel, he will hoist signals to that effect. At night he will signal, viz. a red pyrotechnic light shown simultaneously with the flare-up light.

Also see "VHF".

ANCHORAGE: In the event of berths not being readily available for vessels, normally they must wait at the Mersey Bar Anchorage which is in the open roadstead. There are river anchorages, but these are only usually for vessels about to enter the dock system.

RESTRICTIONS: No restrictions on night entry, except VLCC's, tidal restrictions depend on vessel's draft and to which berth vessel proceeding, larger vessels usually have to wait for high water.

MAX. SIZE: Tranmere: up to 48 ft. (14.6 m.) draft dependent on tide. Birkenhead: up to 29 ft. (8.8 m.) draft. Liverpool Docks: up to 40 ft. (12.2 m.) draft.

Seaforth Dock: 50 ft. (15.2 m.) of water depth, up to 75,000 d.w.t.

HEALTH: Maritime Declaration of Health Form must be completed and handed to Customs Officer or Port Health Officer, whoever first boards ship. This form is obtainable from Pilot. In event of any suspected disease or fever on board, or if ship has called during last 4 weeks at any port in Brazil, China, Indo-China, India, Pakistan, Burma, Columbia and the port of Dar-es-Salaam, West African ports between Lat. 20° North and 20° South, the Master should, prior to entering port, make radio contact with Liverpool Port Health Authority, via Anglesey Radio or port radar station (Signal "Portelth Liverpool") giving them following information:

1. Name of Ship. 2. Date of departure from and name of last infected port. 3. Number, ages and sex of any cases of infectious diseases or other relevant information. 4. Expected time of arrival at Rock Light. Before reaching the Rock Light if medical clearance has not been obtained the following signal must be displayed: by day – fly the flag signal "Z W". By night – show red light over white light.

When medical clearance is obtained pratique will be issued at discretion of Customs Officer.

If there is no suspected disease on board and vessel has not called at any of the above ports listed, Master can radio for Free Pratique. Unless otherwise instructed, Customs Officer will again issue pratique.

Vessels arriving from another U.K. port do not require pratique or health clearance.

RADIO: Portishead Radio, call sign: GKL; Landsend Radio, call sign: GDL; Wick Radio, call sign: GKR; but on approaching Liverpool, the local radio station is Anglesey Radio, call sign: GLV.

RADAR/VHF: Vessels should establish contact by VHF/RT with the Port Radar Station call sign "MERSEY RADIO" before sailing and inward bound when approaching the N.W. light float if from the westward, or approaching the bar light float if from the northward.

Harbour Radar: The Liverpool Port Radar Station is now situated at the N.W. corner of the Royal Seaforth Dock Lat. 53° 27′ 56″ N. Long. 03° 02′ 22″ W.

The radar coverage extends seaward over Liverpool Bay for a radius of 20 miles from the station and in the River Mersey as far south as the approaches to the Manchester Ship Canal.

Vessels entering or leaving the Port in conditions of low visibility can, on request, be supplied with continuous information of their position whilst navigating in the river or sea channels, providing such vessels can be identified.

A general situation and movement statement, giving all intended movements inwards and outwards for the Port of Liverpool, Eastham, Bromborough, Garston and Cammell Lairds and approximate times at the dock entrance or river berth, together with a list of Local Navigation warnings in force, latest weather reports and area forecast, is broadcast on Channel 12 at 3 hours before each high water. This full statement is repeated with any amendments and the disposition of the River Anchorages North and South at 2 hours before each high water.

Any local navigation warning is broadcast on receipt on Channel 12, a prior call being given on Channel 16.

A full list of navigation warnings is broadcast every 4 hours, commencing at 0000 hrs. No separate broadcast of this list is made during the period from 4 hours before high water to 1 hour before high water as such warnings are included in the General Situation and Movement Statement. An updated taped recording of the above General Situation and Movement Statement is broadcast on request on Channel 4.

Docking Instructions: The VHF/RT Stations at the Dock Entrances and Stages are provided to facilitate docking and berthing operations and to provide direct communication between the Dock Master or Stage Master and a vessel. The Range of these stations is limited to a distance of 6 to 8 miles.

Tug Communications: Channels 8 and 10 are reserved for tug communications and should not be used for any other purpose. Due to the heavy working of these Channels, especially at tide time, and in order to minimise interference, vessels and their tugs when communicating to one another on VHF/RT, should, when possible transmit on reduced power.

Large Vessels Swinging: Vessels of 450 ft. (137.16 m.) or over in length intending to swing in the river should give advance notice of at least 10 minutes to Mersey Radio of their intentions so that Mersey Radio can broadcast on Channel 16 that a swinging warning is to be broadcast on Channels 12 and 4.

Port VHF Radio Telephone Communications System:

Station	*Call Sign*	*Hague Channel Number*	*Remarks*
Liverpool Port Radar Station	Mersey Radio	16	Calling and safety
		12	Port Operations – General.
		9	Port Operations – M.D. & H.C. Craft
		18, 22	Port Operations Radar information and general.
		19	Port Operations Radar information and general, for tanker traffic for Tranmere only.
		4	Navigation Broadcasts. Transmitting Only.
			A continuous watch is kept on Channels 16 & 12 at Port Radar Station
Gladstone Dock Master's Office	Gladstone Dock	5	Port Operations and Docking Instructions.
Langton Dock Master's Office	Langton Dock	21	
Sandon Dock* Master's Office	Sandon Dock	19	
Waterloo Dock Master's Office	Waterloo Dock	20	
Princes Stage Master's Office	Princes Stage	22	
Alfred Dock Master's Office	Alfred Dock	5	
Tranmere Stage Master's Office	Tranmere Stage	19	
British Transport Docks Board			
Garston Dock Master's Office	Garston Dock	20	Port Operations and Docking Instructions.
U.M.L. Ltd.			
Bromborough Dock Master's Office	Bromborough Dock	21	Port Operations and Docking Instructions.
Manchester Ship Canal			
Eastham Locks Office	Eastham Locks	7	Port Operations and Docking Instructions
M.D. & H.C. Pilot Vessels			
Point Lynas Station (up to November 1974 approx.)	Lynas Pilot	16 6	Calling and safety Intership.
Point Lynas Shore Station (after November, 1974 approx).	Lynas Pilot	16 9	Calling and safety Ship to shore.
Mersey Bar Station	Bar Pilot	16 6	Calling and Safety Intership (See also Appendix 8 (ii))

*Only operational when Sandon Lock is re-opened for traffic.
NOTE:– The first frequency of two-frequency Channels is to be used for ship transmission.

Local Priority Messages: A vessel which has an urgent message to transmit to Mersey Radio concerning urgent navigation matters and which message should receive priority over normal Port Operations R/T Communications, should indicate the urgency of the message by prefixing the call sign of the Port Radar Station with the spoken word "PRIORITY" i.e. "PRIORITY MERSEY RADIO" repeated 3 times followed by normal procedure.

In special circumstances such as the launch of a vessel or in an emergency such as a wreck, it may be necessary temporarily to establish a patrol for the control of traffic. Vessels will be warned of the existence of any such patrol by "Mersey Radio" and any such patrol vessels or launches will maintain a listening watch on Channel 16 and communicate with other vessels on Channel 6.

R/T Procedure

Channels to be used for calling and for Preparatory Signals: Coast stations and ship stations will call on Channel 16. If Channel 16 is being used for distress, urgency or safety Communications, a ship station requiring Port Operations Services should establish contact on the First Choice Port Operations, Channel 12, or if this Channel is busy Channels 18, 22, 19 or 9.

Sequence of R/T Communication for vessels entering the River Mersey: (i) When entering the Pilotage District they should set watch on Channel 16.

(ii) Vessels wishing to communicate with a Pilot Cutter should call the appropriate Pilot Vessel on Channel 16 and shift to Channel 6 for exchange of traffic. Pilot vessels also maintain watch on M/F R/T on 2182 kHz.

Vessels wishing to communicate with the Point Lynas Shore Station should call "Lynas Pilot" on Channel 16 and shift to Channel 9 when instructed by the Shore Station.

(iii) On approaching the N.W. Lightfloat, if from the Westward, or the Bar Lightfloat, if from the Northward the vessel should establish contact with Mersey Rado on Channel 16 and pass her arrival information on the Channel indicated by Mersey Radio, Channel 12 being normally used for this purpose. Following the receipt of docking orders watch should be resumed on Channel 16, unless she is instructed to remain on a working Channel for Port Operational reasons.

(iv) Vessels requiring radar information or assistance will be requested to shift to Channel 18 or 22, or if a tanker for Tranmere, Channel 19.

(v) On approaching the River, vessels should communicate with Mersey Radio and then shift to the appropriate Channel to communicate with the Dock or Stage to which they are bound for their detailed docking orders, sequence of berthing, etc.

Vessels sailing from the River Mersey: Vessels, on sailing from any Stage or Dock, should establish contact with Mersey Radio on Channel 16 and then maintain watch on that Channel unless instructed to remain on a working Channel for Port Operational reasons. Vessels requiring radar information or assistance will be requested to work on Channel 18 or 22 or if a tanker from Tranmere – Channel 19.

TUGS: Join vessel after passing Rock Light. Normally use tug's lines but optional. Charge for tug's hawsers.

STEVEDORES: Earliest possible ETA to be given to arrange gangs.

MEDICAL: If doctor is required to attend immediately on arrival of vessel, prior notice will be required, but generally doctor is arranged for most convenient time after vessel's arrival. All seamen should be vaccinated against smallpox.

Hospitalisation is available, but seamen will only be admitted if immediate treatment is required. It is preferred for foreign seamen requiring hospital treatment to be repatriated, if able to travel.

Dentist available by appointment only.

BULK HANDLING FACILITIES: Seaforth Grain Terminal designed to accommodate up to 75,000 d.w.t. vessels, length 850 ft. Max. draft 42 ft. Discharge capacity up to 2,000 t.p.h. Two marine towers with storage for 100,000 tons.

The container terminal at Seaforth Dock provides four berths, each 900 ft. in length, max. draft 42 ft. Equipment includes five container cranes and 24 straddle carriers.

Four berths equipped for container handling provided on North side of Seaforth Dock. Each length 900 ft. depth 42 ft.

Bulk handling of sugar at North side, Huskisson Branch Dock No. 3. Two berths each equipped with four grab cranes delivering direct to conveyors.

Iron ore is handled at North Bidston Dock. This berth has a quay frontage of over 1,000 ft. and can accommodate vessels of 28.5 ft. draft. There are three transporters, each with an hourly free digging capacity of 350 tons which discharge either into road or rail vehicles via 175-ton hoppers, or into coasters or barges.

At Cavendish Quay there are two 20-ton cargo level luffing jib cranes with a grabbing capacity of 15 tons. Each crane is designed to handle up to 450 t.p.h. The loading of bulk materials into either road or rail wagons is speeded up by the use of two 100-ton capacity mobile weigh hoppers.

Duke Street Wharf also has specialised facilities for the handling of these commodities. There are four 7.5 ton electric level luffing cranes, each with a lifting speed of 250 ft. per minute. There is good road access to this berth where vessels drawing up to 28.5 ft. can be accommodated.

Packaged forest products are handled at two adjacent berths at Seaforth with a combined quay length of 1,400 ft. with a back-up area of 18 acres which includes approximately 15 acres for timber stacking with a timber-storage barn. An overflow berth is provided at North 3 Canada Dock.

Meat is handled at the following berths: North 2 Alexandra, South West Canada, and South No. 2 Seaforth. Seaforth meat terminal, with an 800 ft. quay, can handle the largest refrigerated ships in commission.

There are six berths in the port with roll-on/roll-off facilities, namely South No. 3 Seaforth, North Carriers Dock, the B and I Terminal, Princes Dock, Nelson Dock and North 3 Canada.

Birkenhead: East Tower grain berth can accommodate vessels up to 630 ft. length, max. draft 29 ft. 6 in.

Buchanans Mill, max. length 475 ft.* draft 28 ft. 6 in.; Ranks Mill, max. length 475 ft.* draft 28 ft. 6 in.; Spillers Mill, max. length 450 ft.* draft 28 ft. 6 in.

*Up to 500 ft. by special arrangement.

TANKERS: Oil tanker cleaning and slops discharging may be carried out at Rock Ferry Tanker Cleaning Jetty.

Tranmere South Stage – Capable of accommodating tankers up to 100,000 d.w.t., max. draft 40-48 ft. (12.20-14.60 m.), depending on height of tide.

Tranmere North Stage – Capable of accommodating tankers up to 200,000 d.w.t. after lightening to 140,000 tons, max. 48 ft. (14.60 m.) at high water.

Queen Elizabeth II Dock, Eastham – 4 berths – can take vessels of 28,000 tonnage dependent on height tide and vessels dimensions. (See "Manchester".)

DENSITY: River Mersey salt water. Docks approx. 1020.

FRESH WATER: Available at all berths, ex quay. No water barges available. Rate of delivery 15-20 t.p.h.

FUEL: Most major oil companies are represented and can supply range of fuels of various viscosities. Notice required depends on the berth at which vessel is lying as bunkers are supplied ex lighter at most berths. Notice required can vary depending on availability of barges, but generally at least three to four days notice is required.

FIRE PRECAUTIONS: Tankers may not carry out repairs whilst at discharging berth unless permission is obtained from Harbour Authorities. Fire precautions notice is placed on board by Harbour Authorities.

GANGWAY/DECK WATCHMEN: Watchmen not necessary but available if required.

OPENING/CLOSING HATCHES: Carried out by ship's crew for bulk cargoes and by stevedores for general cargoes.

CERTIFICATES:

Register/Certificate of Measurement.
Certificate of British Tonnage (if issued).
Safety Radio Certificate.
Safety Construction Certificate.
Safety Equipment Certificate.
Load-line Certificate.
Derating Certificate.
Cargo Gear Test Certificates.

CUSTOMS ALLOWANCE: Crew members who remain on vessel during vessel's stay in port may be allowed, under certain conditions, to keep for their own use on board small quantities of any tobacco, spirits and other goods declared on Customs Form C.142. The amount allowed depends on the number of days the vessel is in port.

CARGO GEAR: Cargo Gear Certificates must be produced with the necessary up-to-date endorsement.

IDENTIFICATION CARDS: Not required.

CONSULS: The following countries have representatives in Liverpool:

Argentina
Belgium
Bolivia
Brazil
Chile
Colombia
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Greece
Haiti
Iceland
Italy
Japan
Liberia
Netherlands
Norway
Panama
Paraguay
Peru
Philippines
Portugal
Spain
Sweden
Thailand
Uruguay
U.S.A.
Venezuela

REPAIRS: All types of deck and engine repairs can be carried out.

DRY DOCKS: Largest – length 950 ft.×140 ft. Also 15 smaller dry docks.

REPATRIATION: Can be effected, but must be arranged through Agent, so that Immigration Clearance can be arranged.

AIRPORT: City Centre to Airport approximately 7 miles, regular service to London for international connections.

TIME: British Standard Time, which is one hour in advance of Greenwich Mean Time, reverting to GMT in Winter months.

HOLIDAYS: Good Friday; Easter Monday (alterable); last Monday in May; last Monday in August or first Monday in September, whichever may be closest to August 31st. December 25th-26th and New Years Day. Weekly holidays Saturday, Sunday. Cargo can be worked on official holidays, other than 25th-26th December, also arrangements can be made for cargo to be worked on Sundays.

POLICE/AMBULANCE/FIRE: Telephone 999, ask for service required.

TELEPHONES: A temporary telephone can be placed on board a vessel, at most berths, whilst in port.

SERVICES: Tanker cleaning and slops services at Rock Ferry Tanker Cleaning Berth. Compass adjusting, D.F. Calibration can be arranged.

SHORE LEAVE: All bona fide crew members may be granted temporary shore leave during the vessel's stay in port, on condition that they leave in the same ship. This permission does not apply to any alien member of the crew who is refused leave to land by an Immigration Officer, or to whom an Immigration Officer has given notice prohibiting him from landing without leave.

AUTHORITY: Mersey Docks and Harbour Company.

AGENT: Lambert Brothers (Ship Agencies) Ltd., Peel House, 5 Harrington Street, Liverpool, L2, 9UG. Tel. 051-236 7206. Telex: 62510. Cables "Lambert Liverpool".

LONDON and Thames District: 51.30 N. 0.05 W. (See Plan)

PORT LIMITS: The seaward limit means lines drawn from 51° 37′ 00″ N. 00° 57′ 19″ E. (Foulness Point in the county of Essex) to 51° 46′ 05″ N. 01° 20′ 32″ E. (Gunfleet old Lighthouse) and thence to 51° 26′ 36″ N. 01° 25′ 30″ E. and thence to 51° 24′ 55″ N. 00° 54′ 21″ E. (Warden Point in the county of Kent).

An arrived ship is considered (subject to Charter Party terms) to have arrived when vessel is instructed to anchor at a designated anchorage, as ordered by the Port Authority, if berth where vessel's operations are to be carried out is not available. Otherwise when vessel is alongside. Usual anchorage for larger vessels is below Southend, which is allocated to vessels by the Port Authority.

DOCUMENTS:

1 copy of HM Customs and Excise form C.142 to be completed showing each crew members declaration as to the amount of cigarettes, tobacco, spirits, wine, radios, lighters, etc., belonging to them on board the ship to enable Customs to ascertain if in conformity or excess of requirements.

1 copy of HM Immigration Office (pink form) showing Master's declaration of crew members on board.

1 copy of List of Passengers on board, showing names, place of joining vessel, passport details.

Ship's Register to be available for inspection on arrival.

List of space occupied by cargo in unregistered space.

Chief Engineer's declaration as to the quantity of fuel carried in double bottom tanks.

Details of any livestock on board.

Ship's Stores declaration arrival Form C14 to be completed.

Details of previous ports of call.

PILOTAGE: Pilotage by licensed Pilots in London pilotage district is compulsory unless previous exemption is granted.

Vessels approaching from South enter the pilotage area off Folkestone Harbour position (Lat. 51° 04′ 37″ N. Long. 01° 11′ 21″ E.).

Vessels approaching from the North collect the Pilot at Sunk Pilot Cutter which operates in the vicinity of the Sunk Light Vessel off Harwich. Also see "Harwich".

Radio Communication – General: The maximum range for radio messages is about 20 miles for VHF. The shore Pilot stations and shore based fast launches operate on VHF only.

Attempts to establish communication at extreme ranges cause much unnecessary interference. The first estimated time of arrival should be sent through a Post Office Coast Station giving at least 1 hours' notice of the ETA. Anything less than 1 hour's notice *must* involve ships in delay. The maximum range for MF radio messages is about 50 miles.

Ships should if possible remain in direct contact with the pilot launch or pilot vessel on their approach, as this facilitates shipping the Pilot.

FOLKESTONE PILOT STATION

Pilot launches, with black hulls and white wheelhouses and flying the pilot flag, operate from a shore station at Folkestone to provide Pilots for ships making the port of London and other ports in the London Pilotage District and to disembark Pilots from outwardbound ships. The conspicuous building is 77 ft. high and flies a pilot flag by day; by night it displays an illuminated sign with the word "Pilots". The launches normally ship and land Pilots in a position 225° distant 1 mile from Folkestone Pier Light in fine weather but farther off in bad weather.

A shore VHF station is maintained at Folkestone (Lat. 51° 04′ 37″ N. Long. 01° 11′ 26″ E.), and all requests to ship and land Pilots off Folkestone should be made to it.

Ships requiring a Pilot at the Folkestone Station should give the shore station, 12 hours in advance and through a Post Office Coast Station, their estimated time of arrival, gross tonnage, maximum draft and port of destination. Any adjustment to this time should be given at least 2 hours before arrival. The message should be addressed to "Pilots Folkestone".

The following Channels are in use by Folkestone Shore VHF station (call sign "Folkestone Pilots Radio"):

Channel 16 (Calling): A 24 hour listening watch is kept on this Channel, and ships should make contact on it.

Channel 9 (Working): After initial contact has been made on Channel 16, a transfer should be made to Channel 9 for the exchange of operational messages. It is stressed that the shore station has no other working frequency and that ships wishing to communicate with it must have Channel 9 fitted.

Masters of ships approaching Folkestone are advised to maintain a listening watch on Channel 16 so that they can receive any messages for their ships from the Pilot station.

Masters are warned that it is difficult to receive VHF signals from Folkestone when their ships are to the Westward of Dungeness owing to the presence of very large buildings.

The station is manned by a duty Pilot and is equipped with telex, telephone, radar and a daylight signalling lamp. The communications details are:

Tel. Folkestone (code 0303) 56766.
Telex 96381, Pilots Folkestn.
Telegraphic address "Pilots Folkestone".

Ships without VHF should send any amendment of their ETA in sufficient time to allow its delivery through the Post Office telex network. Ships without VHF should also establish their identity by visual means during their final approach.

If requested Folkestone Station Pilots may also be embarked off Brixham 1.5 miles N.E. of Berry Head in position 50° 24′ N., 3° 27′ W., or off Cherbourg at buoy CH I in position 49° 43′ N. 1° 40′ W. 24 hours notice is required by Folkestone Pilot Station for picking up at Brixham, and 36 hours for Cherbourg.

Should a deep drafted vessel not wish to approach too closely to the Folkestone pilot station, then the pilot cutter will meet this vessel 1 mile to the South-east of the East Road port red can lighted buoy, Gp fl. 4 red every 15 seconds, which is moored about 4.75 miles North-eastwards of Dungeness in position 50° 58′ 18″ N., 01° 03′ 48″ E.

N.E. SPIT.

Ships bound to or from ports between Amsterdam and Dieppe inclusive may land or ship their Pilots by means of a pilot launch which operates as required, but does not cruise, in the vicinity of the N.E. Spit Buoy, but it is emphasised that ships from beyond these 2 ports or bound to ports beyond them are required to ship or land their Pilots at the Sunk or Folkestone Pilot stations.

A shore VHF station operates from North Foreland Lighthouse (51° 22′ 27″ N., 01° 26′ 49″ E.) which is linked by land-line to the Pilot station at Folkestone. The call sign is "Margate Pilots Radio" and the only Channel available is Channel 9. A 24-hour listening watch is kept on this Channel.

Advance notification of ships requiring services of a Pilot at the N.E. Spit should now be given 6 hours beforehand through a Post Office Coast Station, addressed "Pilots Folkestone", or by telephone to Folkestone (code 0303) 56766 or telex 96381.

"Margate Pilots Radio" should then be contacted when within VHF range.

There is a Reserve radio station, call sign "Margate Roads Pilots Radio" situated at Margate Pier Head (Lat. 51° 23′ 40″ N., Long. 01° 22′ 54″ E.) with Channel 9 which should be used if ships are unable to contact the main transmitter at North Foreland Lighthouse.

Communication with Margate pilot launch may be made on Channel 9 VHF. A ship about to ship or land her Pilot should keep in radio contact with the pilot launch.

Ships without VHF should send their ETA or any subsequent amendment in sufficient time to allow its delivery through the Post Office telex network.

It is emphasised that in bad weather the pilot launches operating from Margate have difficulty in working and therefore in providing a fast and prompt service.

RIVER MEDWAY

Messages for the Medway Pilots may be passed through the launches of the Medway Ports Authority, call sign "Medway Patrol". They keep a continuous watch on 2,182 kHz.

Ships bound for the River Medway are requested to call on 2,182 kHz., when 20 to 30 miles from Sheerness, stating their estimated time of arrival, requirements and draft. When contact has been made on 2,182 kHz ships should transfer to 2,241, 2,246 or 2,301 kHz or other licensed intership frequency for passing messages. Ships may also call the Medway Port Operations Service, call sign Medway Radio, when within 20 miles of Sheerness, on VHF Channel 16, transferring to Channel 14 for passing messages.

Sea Pilot leaves vessel at Gravesend when River Pilot boards for final river passage.

PROCEDURE FOR OBTAINING THE SERVICES OF A LICENSED TRINITY HOUSE CHANNEL PILOT.

Ships outward bound from above Gravesend: Masters are requested to give advance notice of estimated time of arrival at Gravesend. Masters of ships fitted with VHF may pass this information direct to Gravesend Radio on the appropriate Port Operations Channel.

Channel Pilots for outward-bound ships are obtainable only from the Royal Terrace Pier, Gravesend, from where they board ships by means of black-painted pilot vessels flying the pilot flag, in response to the statutory signals or a VHF message to Gravesend Radio. In thick or foggy weather 1 prolonged blast followed by 4 short blasts should be sounded by means of a whistle or fog horn or a VHF message should be sent to Gravesend Radio.

In addition to the above, the following signals should be displayed:

Ship's gross registered tonnage	*By day International Code pendant*	*by night White lights*
Not exceeding 2,000	—	1 over the starboard bow
Exceeding 2,000 but not exceeding 6,000	3	1 over the bridge
Exceeding 6,000 but not exceeding 12,000	2	1 over the starboard bow and 1 over the bridge
Exceeding 12,000	1	1 over the starboard bow

Ships outward bound from below Gravesend or shifting between the Nore or Sheerness and Gravesend: When the services of a Channel Pilot are required for shifting a ship inwards between the Nore and Sheerness and Gravesend, or for conducting a ship outwards from below Gravesend, a telephone message should be sent to the Channel Pilots, tel. Gravesend (0474) 3619, stating Name of ship. Time and place at which Pilot is required to join ship. Where bound, Ship's gross tonnage. Ship's draft.

It is particularly stressed that the Pilot must be given adequate time to travel from Gravesend to the ship for her time of sailing, and that allowance must be made for the slowness of night travel and the inaccessibility of some wharves and moorings.

PROCEDURE FOR OBTAINING THE SERVICES OF A LICENSED TRINITY HOUSE RIVER THAMES PILOT.

Duty Pilot: A Trinity House River Thames Duty Pilot is available in the Information Room at the Gravesend pilot station. He can be contacted by telex (Pilot Gravesend 96444) or by telephone Gravesend (0474) 67716/7. Among his duties is the provision of information to Shipowners and Agents, and the Duty Pilot will be pleased to give advice and guidance on the pilotage of ships in the River. The Duty Pilot is in continuous touch with the Duty Officer of the Thames Navigation Service.

Ships outward bound or shifting: When the services of a Trinity House River Thames Pilot are required for piloting a ship down river to Gravesend, or for shifting a ship in the river above Gravesend, a telex message should be sent to Pilot Gravesend 96444. If the message cannot be passed by telex the same information should be given by telephoning Gravesend (0474) 67716/7.

The telex message must start with the word "Pilot" to show that it is an order for a Pilot, and to be consistent with other information now received at the Pilot station by telex, should be in the following form:

1. *Order for Pilot.* The word "Pilot" should be used to show that it is an order for a Trinity House Pilot rather than general information on expected movement. This should be on a separate line from the other information.
2. *Time Pilot required.* This should be expressed as a time on the 24-hour clock followed by a date, e.g. 1035/15 or 2215/16.
3. *Ship's Name.*
4. *Draft.* This should be given in feet.
5. *Berth where lying.* If a shift is required the shift should be shown as "FM Smiths WHF to Jones WHF". If one location is given this is the place where the ship is lying and where the Pilot is required. The abbreviation FM (From) should precede the place where the ship is lying in all messages.
6. *Route or where is bound.* This should state N., S., or E. to show where ship is bound, i.e. N. for ships outward bound to the North, S. for ships outward bound to the South, and E. for ships outward bound to near continental ports between Amsterdam and Dieppe. If an outward Channel pilot is required the letter P should be added so that it reads NP, SP or EP.
7. *Name of Owner or Agent.*

The message should start with the heading of "Pilot" and should continue as follows:

Time	*Ship*	*Draft*	*Berth*	*Route*	*Agent*
2030/15	*Tasman*	13	FM Robinsons WHF	S	E. Wright
0010/16	*British Isles*	18.5	FM Hightown Tier	NP	Despatch Co.
0830/17	*Nicola*	14	FM Black Bys to Spring WHF		Noel S.S. Co.

It is particularly stressed that the Pilot must be given adequate time to travel from Gravesend to the ship for her time of sailing, and that allowance must be made for the slowness of night travel and the inaccessibility of some wharves and moorings. Normally a minimum of 3 hours is required.

Inwardbound ships: It is most important that all inward bound ships notify their estimated time of arrival at Gravesend and keep this information up to date. An estimated time of arrival should be given by using the Post Office public correspondence service through North Foreland Radio at least 3 hours before arrival at Gravesend and preferably immediately after the embarkation of the Sea Pilot. When in VHF range this information may be passed direct to Gravesend Radio on the appropriate port operations channel. In addition the following supplementary information should be communicated: draft, and, if known, berth and name of Agents.

Trinity House River Thames Pilots for inward-bound ships are obtainable only from the Royal Terrace Pier, Gravesend, from where they board ships, by means of black-painted pilot vessels flying the pilot flag, in response to the statutory signals or a VHF message to Gravesend Radio. In thick or foggy weather the letter "G" in Morse code should be sounded by means of a whistle or fog horn or a VHF message should be sent to Gravesend Radio.

Table of Abbreviations: Abbreviations used in this notice are: FM=From. WHF=Wharf. N=The route of an outward ship is to the North. S=The route of an outward ship is to the South. E=The route of an outward ship is to near continental port between Amsterdam and Dieppe. NP=The route of an outward ship is to the North and she requires a Channel Pilot. SP=The route of an outward ship is to the South and she requires a Channel Pilot. EP=The route of an outward ship is to the East and she requires a Channel Pilot. Bys=Buoys.

Pilot Ladders: Instances of the use of unsatisfactory and unsafe pilot ladders continue to be reported by Trinity House Pilots.

Faulty ladders endanger the lives of Pilots.

Instructions have been issued to all Trinity House Pilots to report immediately any pilot ladders which do not comply strictly with the provisions of the Merchant Shipping (Pilot Ladders) Rules 1965, the Merchant Shipping (Pilot Ladders) (Amendment) Rules 1971 and the Merchant Shipping (Pilot Ladders) (Amendment) Rules 1972.

Masters of ships are reminded of their obligation to comply with the statutory rules and are requested also to comply with the following Trinity House recommendations, ensuring that:

1. The Officer responsible for the embarkation and disembarkation of the Pilot is a Watch-keeping Deck Officer.
2. The ladder is in one length and does not consist of two or more lengths shackled or lashed together.
3. The ladder is secure.
4. The ladder is used solely for embarking and disembarking Pilots.
5. A light is provided so that the pilot ladder overside and also the position where the Pilot boards the ship is adequately lit.
6. The ladder is clean and free from oil and grease.
7. Means are provided to enable the Pilot to pass safely and conveniently from the head of the ladder into the ship or on to the ship's deck. Where portable stanchions and accompanying bulwark step ladders are used for this purpose, the portable stanchions *must* be rigidly secured to the ship's structure against being unshipped and supported at not less than 2 points to prevent lateral movement, and the bulwark step ladder should also be independently attached and firmly secured. The stanchions should be of reasonable height and adequately capped to allow firm grip. *Under no circumstances should a stanchion or handrail be attached to the bulwark step ladder.*
8. The ladder is in good condition and its treads remain horizontal. The treads are to have a rough upper surface.
9. The length of the ladder does not exceed 30 ft. Whenever the distance from sea level to a point of access to the ship is more than 30 ft., access from the pilot ladder to the ship must be by means of an accommodation ladder or other equally safe and convenient means.
10. The ladder is rigged so that each step rests firmly against the ship's side.
11. Spreaders are provided not more than 10 ft. apart to prevent the ladder twisting.
12. 2 manropes and a safety line are provided; and a lifebuoy with self-igniting light is available.
13. The ladder is rigged well clear of discharges and water outlets, and at a place where most lee can be given to the Pilot Vessel.
14. Where a pilot hoist is used a ladder must be at hand ready for use in case the hoist fails.

The Masters of small, "all-aft" ships, in which the main deck is frequently awash when a Pilot is being shipped or landed, or of any type of ship in which the bulwark rails are below the deck of the pilot vessel coming alongside, are asked to provide a boarding platform on each side of the forward end of the raised quarter deck and on the same level as that deck.

The platform should be easily accessible from the quarter deck and should have adequate handrails, those on the outboard side being portable. Fittings should also be provided for the rigging of a pilot ladder. When a pilot ladder is rigged from a boarding platform the top rung of the ladder should be not less than 12 in. nor more than 15 in. below the level of the platform. The top of the ladder should be secured at least 3 ft. 6 in. above the platform in such a way as to make a safe handhold for the Pilot entering or leaving the platform.

If a pilot ladder is unsafe a Pilot may refuse to board, thus delaying the ship. If the ladder is unsatisfactory for boarding the Master of that ship renders himself liable to a fine of double the amount of the pilotage dues involved, for failure to comply with the pilotage act 1913; and if the ladder does not meet the statutory requirements, the Master renders himself liable to a fine not exceeding £50 in accordance with the Merchant Shipping Act 1894.

RESTRICTIONS: Certain restrictions are placed on the navigation of vessels carrying petroleum, chemicals, explosives and other hazardous commodities.

Vessels which are carrying any of the above mentioned cargoes should call Gravesend for details of these restrictions and ascertain whether it is permitted for them to navigate.

Notwithstanding any of the aforementioned restrictions, all vessels should comply with the "General Directions for Navigation in the Port of London 1975". (Copies obtained from the Director of Marine Services, Port of London Authority, Thames House, Gallions Entrance, London, E.16.).

The tides at London have a rise and fall of about 5.5 to 6.10 m. above LAT (datum) depending on the tidal conditions.

The sea approach to Shellhaven is dredged to allow the passage of vessels to 13.7 m. at mean neap tides. The depth to Gravesend Reach is about 7.9 to 8.5 m. below LAT, varying on tides.

THAMES NAVIGATION SERVICE:

Traffic Co-ordination Centre, Gravesend: This centre programmes all movements within the port, including the docks. All information required by the Authority regarding ETA, ETD, etc., should be passed through this centre. Also deals with all matters concerning provision of tugs in docks, floating derricks, dummy pontoons, or other services for vessels in dock, moorings in the river and any enquiry reference bye-laws, regulations, etc.

Gravesend Radio: VHF R/T Channel 16, Working Channels 12 and 20 – Port Health and Duty Pilot, Channel 18.

Radar coverage – Erith to Edinburgh Channel. Information supplied on request.

All vessels to report to this station on entering the port or before leaving the berth and whilst manoeuvring in the River. Also report position at stated intervals at points laid down in Notice to Mariners.

Tidal heights – Tilbury to Estuary given on request. Navigation broadcast given every 30 minutes on the hour and half-hour.

Warden Point Radar: VHF and radar coverage for Thames Estuary from Southend to outer limits. Channels 12, 16 and 18 on direction from Gravesend.

Gallions Radio: VHF Channel 16; Working Channels 14 and 22; coverage of Gallions Reach. All vessels entering the area above Crayfordness leaving the berth, manoeuvring and whilst on passage, report to this station.

Navigation broadcast given every 30 minutes at 15 and 45 minutes past the hour.

Receives advance warning of intention to pass through Thames Flood Barrier Diversionary Channel (see below).

Tidal heights at Royals given on request.

Barrier Control: VHF Channel 22. Radar coverage Woolwich Reach; Blackwall Reach to Fords (proposed). This station is situated adjacent to the Thames Barrier on the south side of Woolwich Reach. It exercises traffic control over ALL vessels and craft wishing to proceed through the Barrier Control Zone which extends from Margaretness to Blackwall Point. These vessels and craft must give an ETA at the Barrier when passing CRAYFORDNESS when inward bound or CUKOLDS POINT when outward bound. Vessels leaving berths between these points and wishing to proceed through the barrier should pass their ETA as soon as possible after leaving. Vessels wishing to leave from a berth within the Barrier Control Zone should first obtain permission to proceed.

Patrol Service: 24-hour patrol by launches fitted VHF Channels 16, 14, 12, 6 and radar. Can be contacted through Gravesend or Gallions Radio.

Liaison is maintained through the Thames Navigation Service with Owners, Agents, Pilots, Watermen and all emergency services.

For help, advice, assistance or any matter affecting ships and shipping, contact: Thames Navigation Service:

Traffic Co-ordinator	Gravesend 60311
Duty Officer	Gravesend 68111
Duty Officer, Gallions	01-476-7801

ANCHORAGES: Great Nore and Little Nore anchorages allocated by Medway Port Operations, all other anchorages allocated by the Thames Navigation Service dependent upon the size and draft of vessel, the length of stay required at the anchorage and the specific details of the vessel, i.e. explosives, petroleum, etc.

MAX. SIZE: Maximum, oil carriers.

Berth	*Depth at low water*	*Size-length*
Coryton	46 ft. maximum	1,100 ft.
Shellhaven	48 ft. maximum	1,200 ft.
Holehaven	37 ft. maximum	720 ft.
Purfleet	28-37 ft. maximum	700 ft.
Grays	37 ft. maximum	620-750 ft.

Other river and tanker berths restrictions apply according to tides and berth.

Deep-draft tankers for berthing at Shellhaven is sometimes over a period of 2 tides. Passage on the 1st tide to deep water anchorage, vessel to leave anchorage on make of 2nd tide and arrive off the installation half an hour before high water of this tide.

HEALTH: No automatic pratique, or radio pratique given. The London Maritime Declaration of Health Form which is normally handed to the ship by the Pilot boarding vessel is to be completed and strictly complied to. Any doubts can be clarified by VHF to Thames Navigation, Gravesend, who will connect to the Port Doctor, or to "Northforeland Radio". Pratique is issued by the Customs at the berth after health requirements adhered to, and must be retained on board or if doctor boards at Gravesend.

RADIO: Outside UK waters from the South call long range station "Portishead Radio"; approaching London, "Niton Radio" or Northforeland Radio giving Agents draft and ETA.

TUGS: Tugs usually pick up vessels for Shellhaven and Holehaven in reaches approaching berth, or Gravesend for berths/docks up river. Tug lines can be hired to ships.

CARGO BERTHS: *Containers:*

Tilbury Dock:

No. 39 Berth	OCL depth	37 ft.
No. 40 ,,	Common User depth	42 ft. 6 in.
No. 41 ,,	,, ,,	38 ft.
No. 42 ,,	,, ,,	38 ft.
No. 43 ,,	,, ,,	38 ft.
No. 45 ,,	,, ,,	38 ft.

Victoria Deep-water Terminal depth 20 ft.

Roll-on/roll-off Traffic: Tilbury Dock

No. 34 Berth	– Timber (common)
No. 42 ,,	– Canadian Transport, 37 ft.
No. 44 ,,	– SCA Transport, 37 ft.
No. 46 ,,	– Seaboard Terminals 37 ft.

Grain

Tilbury Grain terminal. Capable of handling vessels up to 77,000 d.w.t.

Iron Ore		
Fords Jetty, Dagenham	depth	15 ft.
Latex		
Tilbury Cargo Jetty	,,	27 ft.
Cement		
Wouldhams No. 3 Jetty	,,	15 ft.
Bevans Northfleet	,,	25 ft.
Whites Wharf, Swanscombe	,,	20 ft.
Alpha Jetty, Cliffe	,,	27 ft.
Tunnel Cement, Purfleet	,,	30 ft.
APCM Greenhithe	,,	18 ft.
Sugar		
Thames Refinery, Silvertown	,,	27 ft.
Paper and Liner Board		
Imperial Papers Mills	,,	28 ft.
Empire Paper Mills	,,	20 ft.
Erith Deepwater Jetty	,,	11 ft.
S. Williams No. 4 berth	,,	32 ft.
Convoys Deptford	,,	14 ft.
New Northfleet Wharf	,,	25 ft.
Bowaters Northfleet	,,	25 ft.
LPG (Methane)		
North Thames Gas Board, Canvey	,,	35 ft.
Fertilisers		
BOCM, Erith	,,	25 ft.

The depths quoted are to be taken as approximate only. For detailed information contact the wharf operator or Thames Navigation Service.

TANKERS: There are about 40 berths for tankers in the Thames District, main terminals of which are listed below. Recommended that Masters cable terminal with discharge manifold size, enabling wharf have correct pipes ready. Slop tanks are available at most wharves.

Regent		
Upper	depth alongside	40 ft.
Lower	,, ,,	28 ft.
L.C.O.W.	,, ,,	35 ft.
Coryton		
No. 1	,, ,,	30 ft.
No. 2	,, ,,	13 ft.
No. 3	,, ,,	41 ft.
No. 4	,, ,,	45 ft.
Shellhaven		
Berth A	,, ,,	41 ft.
,, B	,, ,,	48 ft.
,, C	,, ,,	34 ft.
,, D	,, ,,	14 ft.
,, E	,, ,,	29 ft.
,, F	,, ,,	11 ft.
,, G	,, ,,	27 ft.
,, H	,, ,,	32 ft.
,, J	,, ,,	34 ft.
,, K	,, ,,	11 ft.
,, L	,, ,,	31 ft.
,, M	,, ,,	31 ft.
Wouldhams		
No. 1	,, ,,	36 ft.
No. 2	,, ,,	36 ft.
West Thurrock Oil Terminal		
No. 1	,, ,,	24 ft.
No. 2	,, ,,	24 ft.

Purfleet

Shell Mex. No. 1	,,	28 ft.
Esso No. 1	,,	28 ft.
No. 2	,,	28 ft.
Cory's	,,	35 ft.
Harrisons	,,	20 ft.
S. Williams No. 5	,,	26 ft.

Cliffe

Jet Jetty	,, ,,	44 ft.

BRIDGES: No bridges below Tower Bridge which opens for shipping on request.

STEVEDORES: Ordered by the Agents; no ETA to stevedores from vessel necessary; labour to be ordered by 1200 hrs. day before required.

MEDICAL: Not necessary to contact Agents once port health requirements satisfied unless urgent medical treatment required on board on arrival. All medical treatment, vaccinations available.

DENSITY: Varies according to position and tides.

FRESH WATER: Available at all berths either from shore or barge.

FUEL: All types, grades available by barge, or from terminals.

FIRE PRECAUTIONS: Tankers – no smoking on open decks, only cabins. Deck fire hoses to be connected. Explosive workings at Chapman anchorage, same precautions. Red flag to be flown by these vessels. Fire tug to be in attendance when explosives being worked. Smoking not permitted in the docks or berths.

GANGWAY/DECK WATCHMEN: Available but not compulsory, Master's discretion.

OPENING/CLOSING HATCHES: Liner vessels by crew, with stevedore assistance. Tramp vessels according to charter party.

CERTIFICATES: These certificates to be on board.

Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Safety Construction.
Derat. Exemption.
Previous U.K. Light Due Bills.
Cargo Gear and Chain Register complying to U.K. Factory Acts.
British Tonnage Certificate if available.

CUSTOMS ALLOWANCE: Customs usually permit 200 cigarettes or 0.25 lb. tobacco per person on board for 4 days. They can refuse to issue duty free or amount allowed at their discretion. Usually permit 1.3 pints or 1 bottle spirits per person for 4 days. They can issue less or refuse to allow as duty free at their discretion.

CARGO GEAR: To comply with U.K. Factory Acts, valid chain and Cargo Gear Register to be on board. Stevedores usually supply cargo slings, etc.

IDENTIFICATION CARDS: Seamen's identity book required to be retained on board in port.

CONSULS: All British Commonwealth countries are represented in London by a High Commissioner's Office.

All foreign countries maintain embassies or a consular representative in London.

REPAIRS: All repairs, gas freeing possible; pre-advice recommended.

DRY DOCKS: Largest dry docks at Tilbury, 752 ft. length, 133 ft. breadth; King George Docks, 750 ft. length 128 ft. breadth. There are smaller dry docks available.

REPATRIATIONS: All facilities exist for changing crews, repatriations.

AIRPORTS: All flights serve London Airport, about 18 miles from centre of London. Gatwick and Southend Airports serve local and Continental services also.

TIME: British Standard Time which is 1 hour in advance of GMT. GMT during Winter months.

HOLIDAYS: No work is available on official holidays usually. Official Days: 1st January; Good Friday; Easter Monday; Whit. Monday; August Monday; Christmas Day; Boxing Day. Some weekend work is possible at certain berths only, at overtime rates.

POLICE/AMBULANCE/FIRE: Contact by telephone; dial 999 and ask for service needed.

TELEPHONES: Ship to shore connections available at most berths.

SERVICES: All types of service for navigational aids, radar, compass adjusting, nautical instruments repaired, slop discharge barges available. Tank-cleaning, gas-freeing services available.

SHORE LEAVE: Crew members allowed ashore but must rejoin on sailing.

REGULATIONS: No livestock allowed ashore without permission Customs and Port Health Authorities.

AUTHORITY: Port of London Authority.

AGENT: Lambert Brothers Ship Agencies Limited, 193-207 High Road, Ilford, Essex. Telegrams: "Lambert Ilford" and "Lambert London EC3". Telex: 897147 and 897435. Tel.: 01 553-3311.

LONDONDERRY (incl. Moville): 55.00 N. 07.20 W. (See Plan)

The main port of Londonderry is situated about 21 miles from the sea on the River Foyle.

PORT LIMITS: Extend from Lifford Bridge to a line drawn from Greencastle Fort in the County of Donegal to the Tower on Magilligan Point in the City and County of Londonderry.

DOCUMENTS: For Londonderry see "Belfast". For Moville see "Dublin".

Since the Port of Londonderry falls within the Republic of Ireland and the United Kingdom, both Governments are concerned in regard to Customs documents. Moville, which is situated down river from Londonderry, is located in the Republic of Ireland and is the anchorage where deep-sea vessels lie prior to proceeding to Londonderry. Should vessels discharge cargo or load cargo at this anchorage, Irish documents are required. The port is under the control of the Londonderry Port and Harbour Commissioners who are recognised by both Governments.

PILOTAGE: The Londonderry Port and Harbour Commissioners are the Pilotage Authority for the Londonderry Pilotage District. For information regarding pilotage application should be made to The Secretary, Harbour Office, Londonderry, Northern Ireland.

Pilotage is compulsory, vessels taking the Pilot at the Foyle Buoy or Fairway Buoy, about 2.5 miles N.E. from Dunagree Point, Innisshowen Head.

The Pilot station is located at Carrickarory Pier, Moville, 55° 10′ 57″ N.; 07° 03′ 27″ W.

Deep-sea vessels usually take Pilot 2 hours before High water time Londonderry, so as to arrive at Londonderry on the top of High Water.

Pilotage service may be obtained in response to following signals:

Inward-bound vessels: By day. 1. The International Code Signal G; 2. The International Code Signal P.T.; 3. The Pilot Jack hoisted at the fore; 4. By daylight signalling lamp to the pilot station. If required after hours telephone Pilot Station direct. Tel. Moville 92.

By night. 1. The pyrotechnic light, commonly known as a blue light; 2. A bright white light flashed or shown at short or frequent intervals just above the bulwarks for about a minute at a time; 3. The International Code Signal P.T. by flashing; 4. By signalling lamp to the Pilot Station.

By day or night. 1. By VHF (FM) radiotelephony to the pilot station at Carrickarory Pier. 2. By VHF (FM) radiotelephony to the pilot launch "Foyle Leader." 3. By I.F. radiotelephony to the pilot launch "Foyle Leader."

In poor visibility. By sounding the letter G in Morse Code on the steam whistle or siren.

As visibility to seaward from Carrickarory Pier is restricted it is important that Owners, Masters or Agents notify the Harbour Master (tel. Londonderry 3680) or outside Office hours the Pilot station (tel. Moville 92) of the name of vessel; estimated time of arrival at the Fairway Buoy; draft of water of the vessel. It is also important that VHF (FM) communication be established with pilot station or pilot launch "Foyle Leader" or IF R/T communication with the pilot launch "Foyle Leader" as early as possible before arrival in Lough Foyle. Call signs, frequencies and procedure are as follows:

VHF (FM) and R/T Communications:

1. Pilot Station at Carrickarory Pier, Moville: Call sign "Foyle Pilots". Equipment VHF (FM) R/T single frequency working. A continuous listening watch is kept on Channel 16 (156.80 mc/s.) except when pilot launch is operating, when watch is transferred to the launch. When communication has been established on Channel 16 (calling and safety channel) operators should switch to Channel 12 (156.60 mc/s.)

2. Pilot launch: Name of vessel "Foyle leader". Call sign MIBC Equipment VHF (FM) R/T single frequency working and IF R/T. When launch is operating a listening watch is kept on Channel 16 (158.80 mc/s.). When communication has been established on Channel 16 (calling and safety channel) operators should switch to Channel 6 (156.30 mc/s.).

When arrival of vessels not yet fitted with VHF (FM) R/T is expected a listening watch on IF R/T will be kept on the Pilot launch on frequency 2182 kc/s. per second (calling and distress frequency). When communication has been established on this frequency operators should switch to 2246 or 2301 kc/s. per second.

3. Harbour Office, Londonderry: Call sign "Harbour Office" Equipment VHF (FM) R/T single frequency working. All vessels fitted with VHF (FM) R/T while navigating in the river or at anchor in Moville Bay should keep a listening watch on Channel 16 (156.80 mc/s.). When communication has been established on Channel 16 (calling and safety channel) Operators should switch to Channel 12 (156.60 mc/s.).

Messages must be restricted to those related to the movement of vessels and safety of vessels and persons. Messages of any other nature and messages of a personal character cannot be accepted.

Outward-bound vessels and vessels shifting:

When the services of a Pilot are required for an outward-bound vessel or for shifting a vessel, notification should be given to Harbour Master (tel. Londonderry 3680) during office hours, of name of vessel; time of departure; draft of water of vessel; where bound. Early notification should be given to enable Pilot to board vessel in good time.

ANCHORAGES: The only anchorage at Londonderry is located at Moville.

MAX. SIZE: For vessels using main port of Londonderry, overall length 500 ft., draft (salt water) 23 ft. 6 in., beam 60 ft.

For vessels using E.B.N.I. Oil Jetty, Coolkeeragh, Londonderry, overall length 600 ft., draft (salt water) 23 ft. 6in.

Maximum draft of ships is increased to 24 ft. on Spring tides at Coolkeeragh and Londonderry.

HEALTH: Pratique is automatic except in the case where the Master suspects one of the dangerous diseases on board when he should notify the Agent.

RADIO: Malin Head Radio Station, Republic of Ireland, covers W/T transmissions and Portpatrick Radio Station, Scotland, covers R/T transmissions.
TUGS: One tug is available which is under the control of the Londonderry Port and Harbour Commissioners.
BERTHING: Vessels of deep draft or large dimensions can only berth at Londonderry to arrive on top of high water. Decisions in this matter are taken by the Pilots in conjunction with the Harbour Master.

The reconstruction in ferro-concrete of 300 ft. of existing wharf at Coal Cranes Berth, Queen's Quay, made a total length of ferro-concrete wharves of approximately 2,000 ft. All berths have been dredged to give depth of 25 ft. at LWOST.

The Commissioners have also completed reconstruction in ferro-concrete of 15 Berth which is used by Anglo-Irish Transport Limited for a container service between Londonderry and Preston.

The port is especially adapted for shipment of live stock on large scale. The pens for reception of cattle, sheep and pigs for inspection by Government veterinary officers before shipment are situated close to shipping berths, and are completely roofed over for protection of animals.
STEVEDORES: ETA advices should be given before 1600 hours on week-days to arrange work for the next morning and before 1100 hours on Saturday to arrange work for Monday morning. Bagged cargoes at Londonderry are discharged by the ship's winches/derricks.
MEDICAL: Doctors and hospital facilities available. Agents should be advised in advance of any medical attention required.
TANKERS: No slop facilities available. Deep-sea tankers discharge heavy fuel oil for electricity power station at E.B.N.I. Jetty, Coolkeeragh, diameter of pipes 8 in. Crew are required to connect and disconnect hoses under port conditions.
DENSITY: Water at Londonderry is brackish and average density 1015 to 1018.
FRESH WATER: Available at all berths direct from shore lines.
FUEL: Gas-oil and light marine diesel available by road tankers. Shell Mex and B.P. can supply light, medium and heavy fuel oil by road tanker.
GANGWAY/DECK WATCHMEN: Can be covered by crew; shore watchmen available if required.
OPENING/CLOSING HATCHES: This is required to be carried out by ship's crew under local port labour conditions.
CARGO GEAR: Ship's winches and derricks should be in good working order and have BOT Certificates or equivalent. Winches are also required to plough grain on grain vessels. Cluster lighting is required for night work.
IDENTIFICATION CARDS: Not obligatory but should be carried.
CONSULS:
Portugal Vice-consul – A. Mackenzie, Esq., 13 Foyle Street, Londonderry. Tel. 2033.
Norway Vice-consul – A. Mackenzie, Esq., 13 Foyle Street, Londonderry. Tel. 2033.
Norway – Under the Nordic Treaty, Norway also acts for Denmark, Finland, Iceland and Sweden.
REPAIRS: Deck and engine repairs are carried out by a local engineering works. No major repairs available.
DRY DOCKS: A small dry dock owned by the Harbour is available when harbour equipment is not being serviced. Size: 345 ft. long on floor, 50 ft. wide at entrance, depth of water on sill HWOST., 14 ft. 6 in.
REPATRIATION: Can be arranged by ship's Agent on request.
AIRPORT: The nearest airport to Londonderry is Aldergrove (Belfast) Airport, which is 80 miles from Londonderry.
HOLIDAYS: Port Holidays at Londonderry are: St. Patricks Day (17th March); Easter Monday; 1st Monday and Tuesday in August; Christmas Day and Boxing Day.
POLICE/AMBULANCE/FIRE: Dial 999 and ask for service required, or Police 2244; Ambulance 5171; Fire 2222.
TELEPHONES: No telephones available for connecting on board.
SERVICES: No tank cleaning available or facilities for discharging of tank-washings. Compass adjusters available from Glasgow.
REGULATIONS: Copies of Port Bye-Laws may be obtained through Agent.
AUTHORITY: The Londonderry Port and Harbour Commissioners.

LOWESTOFT: 52.29 N. 01.45 E.

DOCUMENTS:
Crew List (at least 2 copies).
Passenger List (at least 2 copies).
Manifest (at least 3 copies).
Customs & Health Documents (normal U.K. regulations).
Ship's Papers (to be presented to Customs or Port Authorities).
PILOTAGE: Pilots on standby at all times. Pilot launch fitted with VHF and maintains listening watch on Channel 16. Pilots can also be ordered by RT via Humber and Northforeland Radio, hence by phone.

Pilot's private telephone no. Lowestoft 4970 or Lowestoft 61976, or at the Lowestoft Harbour Masters Office, tel. Lowestoft 2286 (this number manned 24 hours). Pilot boat, black hull, white upper work with "Pilot" painted on each side. Light and sound signals as laid down in the International Code of Signals.

Pilot boards vessel at West Holm buoy or East Newcome buoy. Vessel should not approach harbour closer than these limits when awaiting Pilot.
ANCHORAGES: Pilotage anchorage North of a line joining West Holm buoy and Lowestoft Lighthouse.
RESTRICTIONS: No specific restrictions provided the height of tide is sufficient for draft of vessel. Large vessels normally enter on high water slack tide due to cross currents at entrance.

There are regulations governing the passage of vessels through the harbour entrance. Masters of vessels shall observe the Harbour Control Light which is a white flashing light situated below the fixed red light on the South Pier Lighthouse. This light is visible except between 232 degrees to 286 degrees true from the light. When this light is flashing vessels may proceed to sea, but no vessel shall enter the harbour. At all other times vessels may enter the harbour, but no vessel shall proceed to sea.

A green light is shown on the North Pier head and a red light on the South Pier Head, from sunset to sunrise. A green light is shown from sunset to sunrise on each of the Inner Pier Heads. These lights will become visible to the person in charge upon his vessel entering the harbour. A reed signal is fixed on the South Pier Head for use in foggy weather, four blasts of 2 seconds each will be given every minute.
MAX. SIZE: Maximum length approx. 300 ft. Draft 16.5 ft. MHS.
HEALTH: U.K. Regulations.
TUGS: 2 tugs are available; tug's lines normally used.
BERTHING: *Outer Harbour* (comprising Hamilton and Waveney Docks and Trawl and Yacht Basins). Used largely for fish traffic:

Width at entrance	150 ft.
Depth at entrance	22 ft. MHWS
Water area	40 acres
Length of quays	4,500 ft.
Depth of water at quays	18 ft. MHWS 12 ft. MLWS

Inner Harbour. Used for general cargo and grain traffic.

Water area	70 acres
Length of quay	6,500 ft.
Depth of water at quays	20 ft. MHWS 14 ft. MLWS

STEVEDORES: Shipping Agent should be advised of ETA, etc., to enable gangs to be available.
MEDICAL: Advance notice desirable of medical attention required on arrival. Hospital facilities available in Lowestoft.
FRESH WATER: Can be supplied at various points on quays from hydrants with waterman in attendance. Normal hours 0800 to 1700 hrs. Monday to Friday, outside those hours overtime rates payable. Approx. flow 15 t.p.h.
FUEL: Marine diesel available from road tankers or fuelling points within the docks. 24 hours notice is normally required for supplying gas oil or boiler fuel; this comes from road tankers.
FIRE PRECAUTIONS: Local fire services available in an emergency. Special arrangements can be made for taking fire-fighting equipment to sea. Normal harbour fire-prevention regulations apply to all berths.
OPENING/CLOSING HATCHES: Carried out by crew.

CONSULS:		
	Belgium	tel. Lowestoft 2301
	Denmark	,, ,, ,,
	France	,, ,, ,,
	Netherlands	,, ,, ,,
	Norway	,, ,, ,,

REPAIRS: All types of deck and engine repairs are possible in the port.
DRY DOCKS: One dry dock. Length 248 ft. Width at entrance 48 ft. Depth of water on sill 13.5 ft. MHWS.
AIRPORTS: Nearest international airport served by regular airlines is London (Heathrow). Smaller airport at Norwich (27 miles) not served by regular airlines.
POLICE/AMBULANCE/FIRE: In an emergency dial 999 and ask for service required. For normal enquiries: Police Lowestoft 2121; Ambulance Lowestoft 2572; Fire Lowestoft 2227.
GENERAL: Helipad on Dock Estate, also Heliport at Beccles (8 miles away).
Air/Sea Rescue Services at R.A.F. Cottishall (35 miles).
Royal National Lifeboat Institution, lifeboat berthed at Lowestoft.
200-ton crane available for heavy lifts.
Modern transit sheds, cattle lairage facilities.
SERVICES: Compass adjusting. VHF, Radar, radio repairs. All ships' provisions are available by arrangements with the shipping Agencies.
SHORE LEAVE: Leave is permitted.
AUTHORITY: British Transport Docks Board.

MANCHESTER: 53.29 N. 02.14 W. (See Plan)

GENERAL: The port of Manchester includes the whole of the Manchester Ship Canal and Queen Elizabeth II Dock. The Canal is approximately 36 miles long from its entrance at Eastham on River Mersey to the Manchester Docks.

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew Effects List.
2 Ship's Report by Master.
1 Home Office Form 1B6.
1 Stores List.
1 Certificate of Deck Cargo Tonnage.
1 Grain Certificate.
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List.
1 Landing Card for each Passenger.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate – for British ships only.
Load-Line Certificate.
Safety Equipment Certificate.
Lloyds Certificate.
Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.

In addition, Manifests and Bill of Lading are usually sent to Agent direct from loading port.

PILOTAGE: Non-compulsory. Orders for Pilots may be lodged with the Pilotage Office at Eastham (Tel. 051-327 1233) or at Dock Office at Manchester (Tel. 061-872 2411, ext. 2174). As much notice as possible should be given, particularly in the case of inward-bound vessels due to arrive at Eastham. Helmsmen can be obtained in same manner.

RESTRICTIONS: Eastham Locks. The main entrance to the Canal is at Eastham where there are two locks side by side, one 600 ft. by 80 ft., and the other 350 ft. by 50 ft. The outer or lower sill of each lock is 13 ft. below Liverpool Bay Datum. The levels of upper sills of the 80 ft. and 50 ft. locks are 32 ft. and 29 ft. respectively below statutory water level in Canal.

Both locks are operated for incoming and outgoing vessels of suitable draft during a period of 8 hours on each tide, i.e. from 4 hours before high water to 4 hours after high water.

The Canal is constructed to give an available depth of water of 30 ft. from Eastham to Ince Oil Berth (5.375 miles) and of 28 ft. from Ince to Manchester Docks.

The size of vessel which can navigate the Canal is governed by the dimensions of locks, the height of fixed bridges and limitations for the draft of vessel.

Maximum length: The greatest length measured between perpendiculars drawn at the foreside of the foremost extremity and at the afterside of the aftermost extremity of the hull or any attachments to the hull shall not exceed 560 ft.

The length measured between perpendiculars drawn at the foreside of the stern and at the afterside of the rudder post, or through centre of the rudder stock if there is no rudder post, on the Summer load water-line shall not exceed 535 ft.

The length measured between perpendiculars drawn at the afterside of the rudder plate and at the foreside of the foremost extremity of any part of the hull which is below a horizontal line drawn through the top of the rudder plate shall not exceed 544 ft.

Maximum beam: Vessels not proceeding beyond Ince Oil Berth: 72 ft. overall. Vessels proceeding beyond Ince Oil Berth: 63 ft. 6 in. overall.

Provided the height of masts and/or funnels or other structures is not more than 70 ft. 9 in. from water-line, vessels can pass under all fixed bridges under normal conditions. As, however, the headroom is less during periods of high-water levels, a vessel, in order to avoid possible detention, should reduce masts and funnels or other structures to 70 ft. above the water-line. The restriction as regards height does not apply to vessels proceeding only as far as Runcorn Bridge.

Facilities are available at Eastham for removing and replacing tops of masts and funnels.

MAX. SIZE: When vessels are Loading inwards for the canal Masters should take these facts into their calculations and have regard to the following limitations, all of which are expressed as maximum draft in fresh water:

Vessels inward bound to a berth	*Arrival draft at Eastham not to be such as would exceed:*	
Between Eastham Locks and Ince Oil Berth	28 ft. 10 in.	in fresh water
Between Ince Oil Berth and Manchester Docks (other than Pomona Docks)	26 ft. 06 in.	
To or from Pomona Docks (for coastwise shipping)	16 ft. 00 in.	

Vessels loading outwards at any point between Eastham Locks and Ince Oil Berth should not have a draft exceeding 28 ft. 6 in. upon completion of their loading in this section.

Vessels loading outwards at any point between Ince Oil Berth and Manchester Docks (other than Pomona Docks) should not have a draft exceeding 26 ft. 6 in. upon completion of their loading in this section.

Large vessels can swing in the basins at Stanlow and Manchester Docks. Small vessels can swing at certain other points on the Canal.

HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a port doctor or an officer of H.M. Customs depending on where ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present Declaration in all cases; when there is sickness on board the Port Health Authority must be informed preferably not more than 12 hours and not less than 3 hours before arrival.

RADIO: FM VHF R/T equipment is installed at Eastham, Stanlow, Latchford and Manchester Docks as an aid to navigation on the Canal.

Ships which are equipped with the appropriate R/T channels are requested to establish contact with the nearest shore station before leaving a berth or lock within the harbour and thereafter to maintain a continuous listening watch on Channel 14.

Station	*Call sign*	*Channel*	
Eastham Locks	Eastham Locks	7	Docking instructions when approaching Eastham Locks from seaward.
Eastham Locks	Eastham	14	Port operations
Stanlow Oil Docks	Stanlow	14 20	Vessels moving within the harbour should maintain a listening watch on channel 14. After contact has been established the shore station will request the ship to switch to the appropriate speech channel.
Latchford Locks	Latchford	14 20	
Manchester Dock Office	Dock Office	14 18	
Ship/tug Communications	Name of ship/tug	8 10	Inward bound Outward bound

TUGS: The Canal Company maintains a fleet of high-powered tugs which may be hired to assist vessels, 12 hours notice required.

BERTHING:

Locality	*Miles above Eastham*	*Bank N–North S–South*	*Total Length in feet*
Queen Elizabeth II Dock	—	S	3,155
Eastham Laybyes	—	N	645
Eastham Laybyes	—	S	1,560
30-ton Crane Berth	0.50	S	600
Bowater's Wharf	2.00	S	1,100
Ellesmere Port	2.875	S	2,250
Associated Octel Wharf	4.00	S	600
Stanlow Oil Docks Nos. 1 & 2	4.50	N	2,070
Stanlow Laybye	4.625	S	600
Shell Company of the United Kingdom Ltd., Ince Coaster Berth	5.25	S	352
Shell Company of the United Kingdom Ltd., Ince Oil Berth	5.375	S	600
I.C.I. Salt Berth	11.25	S	500
Runcorn Docks	12.25	S	7,500
National Coal Board, Acton Grange Wharf	17.50	N	300
Warrington Wharf	19.00	N	350
Partington	27.375	N	1,885
Partington	27.375	S	1,236
Lancashire Steel Manufacturing Co. Ltd., Iriam Wharf	27.75	N	600
Barton Oil Berth	31.875	S	508
Irwell Park Wharf	32.25	N	1,100
Eccles Oil Wharf	32.50	N	600
Brown & Polson Wharf	32.75	S	700
Weaste Oil Wharf	33.25	N	557
Southern Oil Wharf	33.625	N	500
Esso Petroleum Co. Ltd. Wharf, Mode Wheel	33.75	S	934
Manchester Docks (including Pomona Docks)	34.50	N & S	29,875

CARGO HANDLING FACILITIES: Heavy duty floating cranes with capacity up to 120 tonnes. Roll-on/Roll-off berth with strengthening to take loads of 300 tonnes.

Two floating grain elevators, capacity 250 t.p.h. each and additional elevators at private wharves. Transporter cranes for containers with capacity of 35 tonnes and 25 tonnes.

STEVEDORES: The stevedores require to sight a certificate covering inspection and S.W.L. of slings used in pre-slung cargoes.

TANKERS: *Queen Elizabeth II Dock.* This dock is adjacent to the locks at Eastham which give access to the Canal, and is approached from River Mersey through its own entrance lock. This lock is 807 ft. long by 100 ft. wide. The level of outer sill is 20 ft. below Liverpool Bay Datum. The dock covers an area of 19 acres in the form of a square and has four berths designed to accommodate large tankers, the dimensions of berths being as follows:

Berth No. 1 800 ft. Berth No. 3 900 ft.
Berth No. 2 725 ft. Berth No. 4 730 ft.

The dock is directly connected to oil installations by pipe-lines.

Stanlow Oil Docks. No. 1 & 2 (5 berths) 4.5 miles above Eastham Lock. Length 560 ft., draft 28 ft., beam 72 ft.

Ince Oil Berth. 5.5 miles above Eastham Lock. Length 560 ft., draft 28 ft., beam 72 ft.

Barton. 32 miles above Eastham Lock. Length 560 ft., draft 26 ft., beam 63 ft. 6 in. Daylight movements only. Max. height above water-line 70 ft.

DENSITY: The water in lower section of the Canal between Eastham Locks and Latchford Locks is brackish. In all sections above Latchford Locks the water is fresh.

MEDICAL: Doctors and hospital facilities available. Agent should be advised in advance of any medical attention required.

FUEL: At Partington, coal tips are available for the loading of cargo coal, etc., and bunkers to vessels. Oil bunkers may be taken by arrangement with oil companies either from craft alongside or at various oil berths along the Canal.

DRY DOCKS: The Manchester Marine Limited operates three graving docks at Manchester Docks:

No. 1 Dock – length 535 ft., width 65 ft., depth of water on blocks 20 ft. 3 in.

No. 2 Dock – length 500 ft., width 65 ft., depth of water on blocks 18 ft.

No. 3 Dock – length 450 ft., width 65 ft., depth of water on blocks 19 ft.

There is also a pontoon dock 260 ft. long and 45 ft. wide with a lifting capacity of 2,000 tons.

CUSTOMS ALLOWANCE: At discretion of local Customs Inspector. Normal allowances are equivalent to 0.5 lb. tobacco per man and equivalent to 1 bottle of wine per man. Allowances may be halved for home trade vessels. Vessels in port for more than three or four days may receive extra allowances.

CONSULS:

Austria
Bangladesh
Belgium
Bolivia
Denmark
Dominican Republic
Finland
France
Germany
Greece
Iceland
Italy
Jamaica
Latvia
Lebanon
Liberia
Monaco
Netherlands
Norway
Portugal
Spain
Sweden
Switzerland
U.S.A.
Venezuela

TIME: British Standard Time is GMT plus 1 hour. Reverting to GMT during Winter months.

HOLIDAYS: Good Friday (variable date); Easter Monday (variable date); Spring Bank Holiday (variable date); August Bank Holiday (variable date); Christmas Day (25th December); Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Dial 999 from any telephone and ask for service required.

AUTHORITY: The Manchester Ship Canal Company.

AGENT: Cory Brothers Shipping Ltd., Royal London House, 196 Deansgate, Manchester M3 3WF. Cables "Cory Manchester". Telex: 667207. Tel. 061-834 1167/8.

MEDWAY (See Plan)

PILOTAGE: *Folkestone.* Vessels for River Medway that are approaching from the South obtain Inward Sea Pilot at Folkestone Pilot Station. Telex: 96381. Tel. Folkestone 56766. Telegraphic Address: "Pilots, Folkestone". Notice required: preferably 24 hours notice ETA, then confirmation 12 hours prior arrival with ETA, draft, gross tonnage and destination.

Pilot boards from launch 1 mile South of Folkestone Pier. Contact Pilots by VHF Channel 16, then 9, two hours before arrival (call sign "Folkestone Pilots Radio").

Sunk Light Vessel: Vessels for River Medway that are approaching from the North, obtain Inward Sea Pilot at Sunk Pilot Station. Telegraphic address: "Pilots Harwich". Telex: 98472. Tel. Harwich 3129. Notice required: 12 hours prior to arrival. Cutter cruises in vicinity of Sunk Light Vessel, but in bad weather usually moves to Barrow Deep. Contact cutter on VHF Channel 16, then 9 or R/T 2182 kHz (call sign "Sunk Pilot").

Deep drafted vessels can be provided with Pilots in deeper water by arranging to be met by the Sunk Pilot Vessel in a suitable position about 3 miles East of the Sunk Light Vessel.

Margate: Vessels approaching within the range Dieppe/Amsterdam obtain inward ISP at N.E. Spit Buoy. Telegraphic address: "Pilots, Folkestone". Telex: 96381. Tel. Folkestone 56766. Advance notice essential as Pilots not always on station. Notice required: preferably 6 hours giving ETA, draft, gross tonnage and destination, confirming 2 hours prior to arrival. Contact Pilots on VHF Channel 16, changing to Channel 9 for working (call sign "Margate Roads Pilot Radio"). Light or sound signals as per international code. Pilot boat works from Margate Pier-head and boards in the vicinity of N.E. Spit buoy, but often has difficulty working in bad weather. Contact Pilots on Channel 16, changing to Channel 9 for working or 2182 Mz.

Medway: Medway Pilots join ships at Little Nore Sheerness for all Medway ports, i.e. Isle of Grain, Sheerness, Beeness, Oakham Ness. Otterham, Rochester, Queenborough and Ridham. Telegraphic Address: "Pilot Sheerness". Tel. Sheerness 2276. Notice required, minimum 2 hours. Pilots may be contacted through Medway Radio on VHF Channel 14 or Pilot launch keeps watch on Channel 14 when in service. Lights and sound signals as per international code.

VHF/RADAR: Medway Port Operations and Information Service (Medway Ports Authority) is situated at Garrison Point, Sheerness. Tel. Sheerness 3025. Telex: 96435 (call sign "Medway Radio"). Fitted with VHF, Channels 16, 14, 9 and 22. The station has radar service surveillance of Inner Estuary, Sea Reach, Medway Approach Channel and Lower Reaches of River Medway. Patrol launch maintains watch on VHF Channel 11 (call sign "Medway Patrol") and is also fitted with radar.

REGULATIONS: All vessels required to proceed in accordance with instructions of Port Authority. Vessels are requested to advise Medway Ports Authority – Medway Port Operations Service (call sign "Medway Radio") VHF Channels 16, 14, 9 and 22 of ETA, shifting of sailing movements.

MILFORD HAVEN: 51.42 N. 04.56 W. (See Plan)

DOCUMENTS:

Port Health Form. Immigration Form.
Customs Forms (Crew Declaration, List of Stores.)
3 Crew Lists.

PILOTAGE: Pilots normally board incoming ships from a green-hulled pilot vessel, in a position S.W. of Mid-Channel Rock Light-tower, as close thereto, as weather, size of ship and circumstances permit. When the Western Channel is being used by very large ships other ships may be requested by the signal station, or by the pilot vessel to use the Eastern channel, if draft, and length of ship permit, in which case the Pilot will board close to Sheep Buoy. Deep-draft ships should not approach too close whilst awaiting the pilot vessel. They should remain at least two miles S.W. of Mid-Channel Rock Light-tower. It is important, when manoeuvring at slow speeds to embark a Pilot to make proper allowance for the set of the tidal stream, which sets across the entrance.

Accurate times of arrival are requested so that the pilot vessel may be on station at the correct time. ETAs should be given at least 12 hours before arrival and amendments should be made 2 hours before the latest ETA.

ETAs and subsequent amendments should be passed by radio telegram or radio telephone through any United Kingdom Coast Station (preferably Ilfracombe Radio) to Milford Haven Signal Station (Milford Haven 2343) or to the local Agent of the ship. Alternatively when within 20 to 30 miles of St. Ann's Head ETAs may be passed direct to Milford Haven Conservancy Board signal station calling on VHF Channel 16 then transferring to Channel 12 (the Port working frequency). In addition ships may call the pilot vessel on MF radio calling on 2,182 kHz and transfer to the working frequencies 2,241, 2,246 or 2,301 kHz.

VHF: It is important to maintain continuous radio telephone contact with Signal Station when within one hour's steaming of St. Ann's Head, and at all times when in Haven and not safely moored to and alongside berth, including times spent at anchor or at buoys.

All vessels equipped with F/M, VHF, R/T should adopt following procedures:

Entering the Harbour: Contact Signal Station on Channel 16 (156.8 mc/s) when within one hour's steaming of St. Ann's Head. After making contact ship will be requested to maintain watch on Channel 12 (156.6 mc/s) until vessel safely moored alongside or at anchor.

Going to anchor or to a buoy mooring: report to Signal Station when secured and then maintain a continuous listening watch on Channel 16.

Berthing alongside: report to Signal Station when safely moored and may then shut down.

Leaving the Haven: Maintain continuous listening watch on Channel 12 (156.6 mc/s) until Pilot has disembarked, when Signal Station should be informed and vessel should maintain a continuous watch on Channel 16 (156.8 mc/s) until one hour after passing St. Ann's Head.

Navigating within the Haven: Maintaining a continuous watch on Channel 12. When radio telephone is used between vessel and tugs during berthing operation Channel 6 or 8 will be used and Signal Station will be informed before vessel comes off Channel 12.

Signal Station will answer calls on Channel 16 for any ship in the port which has been instructed to move off international calling frequency.

ANCHORAGES: Anchorage normally available for vessels up to 40 ft. draft in Dale Roads. Anchorage for smaller vessels normally available in Dale Shelf. Signal Station will advise mariners on the availability of these anchorages.

RESTRICTIONS: The "West Channel" with min. depth of 55 ft. at the entrance and 54 ft. inside is the channel used by the largest tankers. The "East Channel" with min. depth of 32 ft. is available to all vessels of suitable size and vessels able to do so are requested to use it when the largest tankers are entering or leaving in the "West Channel".

MAX. SIZE: Vessels of 65 ft. draft can be handled on virtually all high waters, but draft restriction always dependent on tide, e.g. 63 ft. at worst HW neaps, or up to 67 ft. in favourable conditions. Contact Milford Haven Signal Station on VHF Channel 12 for latest information.

HEALTH: All vessels from endemic areas are boarded by Port Health Officials on arrival. Any suspected disease or fever on board radio Port Health, Milford Haven not more than 18 hours before arrival and not less than 4 hours before arrival.

RADIO: Lands End Radio, Ilfracombe Radio.

TUGS: Tugs normally join vessels to Westward of Esso Jetty, but Master will be advised by Pilot. Tug's lines used, cost of lines inclusive of towage charge.

BERTHING: VLCCs enter at HW and berth heading East . Vessel will be required to swing after unloading and prior to departure.

The Milford Docks includes a wet dock with a water area of 23 acres over 30 ft. deep, 4,000 ft. of quay frontage including a 600 ft. cargo jetty, and berths in the tidal harbour with a depth of 12 ft. of water at all states of the tide. Preparations are being made to deepen the tidal berths.

STEVEDORES: Ordered prior to arrival with at least 3 days notice.

MEDICAL: Advance notice to Agent not necessary. Local hospital facilities available. Smallpox and yellow fever certificates required.

TANKER TERMINALS:

Esso

No. 1 Berth: depth 57 ft. five 12-in. cargo lines
No. 2 Berth: depth 65 ft. four 16-in. and one 10-in. cargo lines
No. 5 Berth: depth 20 ft. for small coastal vessels
Esso swinging ground dredged to 37 ft.

New Esso Berths

No. 3 Berth: Max. size 30,000 d.w.t. depth 38 ft. cargo lines; five 10-in. (one Black oil, four clean oil. Three 12-in. (Black oil).

No. 4 Berth: Max. size 20,000 d.w.t. depth 37 ft.; cargo lines are the same as No. 3 berth.

B.P. Angle Bay

No. 1 Berth: depth 54 ft. five 10-in. cargo lines; one 8-in. fuel line

No. 2 Berth: depth 54 ft. five 10-in. cargo lines; one 8-in. fuel line

No. 3 Berth: depth 66 ft. five 16-in. cargo lines; one 10-in. fuel line

B.P. swinging ground dredged to 32 ft.

Texaco, Pembroke

No. 1 Berth: depth 68 ft. 16-in. crude lines

No. 2 Berth: depth 52 ft. 8-in. crude lines

No. 3 Berth: depth 36 ft. 8-in. product lines

No. 4 Berth: depth 18 ft. 6-in. product lines

No. 5 Berth: depth 21 ft. 6-in. product lines

Texaco swinging ground dredged to 32 ft.

Gulf Oil

No. 1 Berth: depth 42 ft. three 10-in. and two 12-in. cargo lines

No. 2 Berth: depth 55 ft. six 12-in. cargo lines

No. 3 Berth: depth 34 ft. six 8-in. and one 4-in. cargo lines

Gulf swinging ground dredged to 42 ft.

Amoco

No. 1 Berth: depth 68 ft. four 16-in. crude lines; two 12-in. and three 8-in. product lines.

No. 2 Berth: depth 38 ft. one 12-in., two 10-in., three 8-in. and one 6-in. product lines.

No. 3 Berth: depth 22 ft. two 8-in. and three 6-in. product lines.

Amoco swinging ground dredged to 32 ft.

DENSITY: 1025.

FUEL: All terminals, Amoco, Gulf, Texaco, B.P. and Esso supply all grades of bunkers.

FIRE PRECAUTIONS: Fire wires to be rigged fore and aft.

GANGWAY/DECK WATCHMEN: Supplied if necessary – very rarely.

CERTIFICATES:

Register.
Load Line.
Safety Radio.
Safety Equipment.
Light Dues, etc.

CUSTOMS ALLOWANCE: Tobacco, 0.5. oz. per man per day. Wine/Spirit, 0.25 pint per man per day.

IDENTIFICATION CARDS: Not necessary.

CONSULS:

Norway tel. Milford Haven 2313
France ,, Milford Haven 2313
Belgium ,, Milford Haven 2313
Spain ,, Pembroke Dock 2603
Italy ,, Milford Haven 2473

REPAIRS: All types of deck and engine voyage repairs carried out.

DRY DOCKS: One dry dock at Milford, 600 ft. × 63 ft. × 18 ft.

REPATRIATION: Crew changes frequently carried out and repatriation arranged.

AIRPORT: Nearest airport at Rhoose (near Cardiff) distance approximately 100 miles. Flights to London, etc., for onward connections.

TIME: Local Time is BST (GMT plus 1 hour). GMT during Winter months.

HOLIDAYS: Standard U.K. Holidays. Cargo work can be arranged on these days.

POLICE/AMBULANCE/FIRE: Police Milford Haven 2351, Pembroke Dock 2121; Ambulance Haverfordwest 3347; Fire Haverfordwest 2131.

TELEPHONES: No telephones on board. Public call boxes exist on all jetties.

GENERAL: Anti-oil Pollution plan in force with facilities for dealing with any oil pollution.

SERVICES: Compass adjusting. D.F. calibration. A "Scamp" underwater hull cleaning service is available.

N.B. Crew and stores directed by rail to vessels at Angle Bay (B.P.) or Pembroke (Texaco) should be directed to Pembroke Station. For vessels at Esso, Amoco and Gulf Terminals, stores should be directed to Milford Haven.

SHORE LEAVE: Shore leave allowed.

AUTHORITY: Milford Haven Conservancy Board.

AGENT: Cory Brothers Shipping Ltd., 5, Victoria Road, Milford Haven, Pembs. Cables: "Cory Milfordhaven". Telex: 48338. Tel. Milford Haven 2473.

MONTROSE: 56.42 N. 02.17 W. (See Plan)

PORT LIMITS: The port is bounded by a line drawn in a NW'ly direction from Scurdie Ness lighthouse to the Annat Bank and thence by both banks of the river to the road bridge which completes the inner boundary.

DOCUMENTS:

1 Crew List,
1 Passenger List,
1 Store List,
1 Personal Effects List for baggage coming ashore,
1 Manifest or Bill of Lading.

Ships Register, Load Line Certificate, Radio Certificate and LSA and Safety Certificates to be sighted.

PILOTAGE: Pilotage is compulsory. Pilots are available throughout the 24 hours. International Code Flag "G" to be exhibited.

Vessels should approach the port to a position with Scurdie Ness lighthouse bearing 250° distance 0.5 mile where Pilot will normally board.

Pilot cutter *"Celurca"* has a dark blue hull with white upper works and "Pilots" painted in black on each side of the wheelhouse. The normal red and white pilot flag is flown during daylight and regulation lights exhibited at night. VHF Channel 16 for calling with a working frequency on Channel 12.

In bad weather it may be necessary for a ship to proceed inwards at the radioed directions of a Pilot to a position on the outer leading marks and inside the lighthouse where the Pilot may board safely. This will only apply during periods of strong Easterly gales and very heavy seas and may be applicable for only a few times in a year. Similarly the port may be closed under severe weather conditions on average 2.5 days per year.

ETA messages: Masters should cable Agent with 24 hours notice of arrival giving overall length and deepest draft and also call Montrose Harbour Radio within 2 hours of arrival at the pilot station.

ANCHORAGE: In position mentioned above with Scurdie Ness bearing 250° distance 0.5 mile, in about 13 m.

MAX. SIZE: Since the harbour was reconstructed and deepened the maximum sized vessel has not been achieved but vessels of up to 4,500 d.w.t. and 18 ft. draft could well be accommodated on a riverside berth. Proportionately smaller ships are handled in the wet dock, berthing about 2 hours before HW and unberthing on HW.

HEALTH: "Q" flag to be flown when coming from a foreign country until cleared inwards. In event of disease or fever warn Agents by radio. Strict attention paid to quarantine regulations regarding dogs which are not allowed ashore.

RADIO: Messages to Agents may be sent through Stonehaven Radio. Harbour service is on Channel 12. Call Montrose Harbour Radio on Channel 16.

RADAR/VHF: No port radar service. Harbour service and pilot vessel work on VHF Channels 16 and 12.

TUGS: Pilot vessel is equipped with towing hook and pusher bow to assist in berthing and unberthing if necessary. Vessels lines used. Small charge made for such work.

BERTHING: Dockside Quays No. 1 and 2, 127 m., No. 3, 88 m., No. 4 and 5, 137 m., No. 6, 63 m.

Wet dock berths retained at approximately 14 ft. of water.

North River Side Quays No. 7, 50 m., No. 8, 40 m., (Unused at present), No. 9, 75 m., No. 10/11, 140 m.

Depths vary from 10 ft. at No. 7 to 16 ft. at Nos. 10 and 11 at chart datum.

South River Side Quays. Berth Nos. 12, 13, 14, 15, 16, 17 and 18. These are extensively used by oil related vessels and this area of the harbour has been leased to Sea Oil Services Ltd.

Total wharf length available is 1,600 ft. with depth alongside 20 ft. at MLWS.

STEVEDORES: Provided by Agents J. M. Piggins & Co. Ltd., phone Montrose 2827 Telex 76251.

CARGO HANDLING FACILITIES: The stevedores are well equipped with mobile cranes, fork lifts, etc., and only rarely is ship's gear used unless it is of rapid, modern type. Grab discharge is used for bulk cargoes and conveyor belt systems for loading same.

Rates of loading or discharge:— Bagged cargoes 250 tons per gang per day; Bulk 400 tons; Bulk grain loading 700 tons; Unitised pulp 500 tons; Paper 500 ton; Timber 500 tons all per gang per day.

There is always available a large motor transport fleet at the port and the Agents also have their own road haulage company.

TANKERS: There is no oil berth in the harbour except the facilities offered by Sea Oil Services for the receipt into their 3,000 ton storage depot of gas oil.

MEDICAL: Small hospital in Montrose. Several major units within easy reach by road.

DENSITY: At high water average 1024 but can be as low as 1005 at low water during heavy river outflow.

FRESH WATER: Supplied from Quayside hydrants at all berths.

FUEL: Obtainable from road tanker, gas oil and H.S.D. only from more prominent oil companies.

FIRE PRECAUTIONS: Normal rules to be observed.

CONSULS: None in Montrose.

GANGWAY/DECK WATCHMEN: Can be arranged. Owing to range of tide on riverside berths mooring watch strongly recommended.

OPENING/CLOSING HATCHES: Normally done by ship's crew.

CERTIFICATES: On arrival ship's register may be asked for.

CUSTOMS ALLOWANCE: As arranged between Customs Officer and Master.

CARGO GEAR: The port is equipped with mobile cranes which can be used at any berth. These are of various capacities and the maximum lift is 25 tons for which prior notice is required.

IDENTIFICATION CARDS: Not required.

REPAIRS: Minor deck and engine repairs can be carried out.

DRY DOCKS: None.

SURVEYORS: Classification Society Surveyors can be called in at reasonable notice.

REPATRIATION: Facilities available with excellent railway connections. Air connections from Aberdeen.

AIRPORT: Aberdeen 36 miles. Montrose has facilities for light aircraft and helicopter landing.

TIME: GMT with 1 hour advance for British Summer Time, approximately March to October.

HOLIDAYS: *Port Holidays:* Christmas Day; Boxing Day; 1st and 2nd January; One day Spring, Mid-Summer and Autumn Trades Holidays.

POLICE/AMBULANCE/FIRE: Report to Dock Office immediately. Dial 999 and ask for whichever emergency service required.
TELEPHONES: Not possible to place phones aboard. Kiosk on Wharf near Agents office. Comprehensive connections to Continent and Telex services from Agents office.
SERVICES: Laundry, Ship Chandlers and Lloyds Agent immediate.
Compass Adjuster, Radio/Radar Mechanics can be called in from Aberdeen at short notice.
SHORE LEAVE: No restrictions on crew members after inward clearance.
AUTHORITY: Harbour Master, and General Manager, Montrose Harbour Board.
AGENT: J. M. Piggins & Co. Ltd., Meridian Street, Montrose. Tel. Montrose 2827. Telex: Montrose 76251. Cables: Shipping Montrose, Night Service telephone Montrose 3211 and Montrose 3472.

NEWHAVEN: 50.47 N. 00.04 E. (See Plan)

PORT LIMITS: A line drawn from a position 300 ft. South of breakwater in a 075° direction to Seaford Bay.
DOCUMENTS: See "London".
PILOTAGE: Trinity House Pilots, Newhaven District: VHF "Newhaven Radio" Channels 16 and 12. Pilot boats are small fast launches painted red and white. Light and sound signals for a Pilot is "G". Notice of ETA 12 hours before arrival, if possible. Anchorage for a vessel awaiting a Pilot is 0.5 to 1 mile S.W. of the breakwater, depending on weather conditions. Pilots normally board S. to S.W. of the breakwater, but in severe gale conditions they keep station 100 m. from breakwater end, and guide vessels in with VHF or lamp. Notice should also be given to the red and green signal lights at the West Pier end lighthouse, and on no account should vessels pass breakwater end if signal is at red. In normal weather, pilot ladder should be on lee side about 1 m. above water. In Southerly gales Pilots prefer a ladder on each side, if available.
RESTRICTIONS: 3 fathoms through entrance to port LWOST. Inner harbour then dredged depth of 13 ft. in accordance with chart datum 11.40 ft. above OD Newlyn.
MAX. SIZE: 450 ft. length, 21 ft. 6 in. draft taking bottom on soft mud at low water. Vessels greater than 350 ft. LOA length must either be towed into or out of port. Vessels for North Quay must not exceed 250 ft. length, draft 17 ft.
RADIO: Radio Station Newhaven Radio, call sign Newhaven Radio.
RADAR/VHF: No radar service. Ship's may contact West Pier control point on Channel 16, working on Channel 12.
TUGS: Available upon request.
BERTHING: Vessels may be berthed at any time, with prior notice given.
BRIDGES: Vessels requiring to berth at North Quay must arrive within 2 hours either side of high water in order to pass through swing bridge which governs access to this quay.
STEVEDORES: ETA should be given as far in advance as possible and not less than 24 hours before ETA.
DENSITY: Salt water.
FRESH WATER: Available on request. Supplied by shore hosepipe.
FUEL: Available by previous arrangement.
FIRE PRECAUTIONS: Usual no-smoking precautions on quayside in port area.
GANGWAY/DECK WATCHMEN: Not provided by Port Authorities but recommended at discretion of Ship's Master.
CONSULS: Norwegian Vice-Consul and French Consular Agency.
REPAIRS: Repairs of a temporary nature only may be carried out by B.R. workshops.
AIRPORT: Nearest airport Gatwick, distance 30 miles. Served by regular airlines.
POLICE/AMBULANCE/FIRE: Police: Civil, Newhaven 5219; Port, Newhaven 4131 (extension: 229). Ambulance: 0830–1700 hours, Lewes 5400; 1700–0830 hours, Lewes 2819; Fire: 999.
SHORE LEAVE: Allowed.
AUTHORITY: Shipping and Port Manager, British Railway Board.

NEWPORT: 51.35 N. 02.59 W. (See Plan)

DOCUMENTS:
- Crew List.
- List of stores for individual crew members.
- Cargo Manifest.
- Cargo Plan.
- Ship's Register.
- Loading Certificate.
- Safety Equipment Certificate.
- Safety Construction Certificate.
- United Kingdom Light Bills.

PILOTAGE: Telegraphic address – "Newpilots Barry". Advance notice required – 24 hours. VHF Channel – Channel 16 for contact, thence Channel 6 for conversation. Description of pilot boat – diesel launch, black hull, white superstructure, buff funnel and painted in white on bulwarks. Particular light or sound signals to be made by vessels requiring a Pilot – Code Signal 8, i.e. 3 longs 2 shorts. Pilot boat is located in vicinity of Breaksea Lightvessel, or in vicinity of Mercur Buoy, for small vessels. Maintain VHF contact (if possible) with pilot cutter and obey instructions with reference to positioning of vessel to facilitate boarding of Pilots.
ANCHORAGES: Large vessel should anchor in deep water to North of one Fathom banks. Deeper water anchorage (10–14 fathoms) in area between Breaksea Lightvessel and East 1 Fathom Bank Buoys to the South, and shallow water off Barry Roads to the North. Small vessels will find safe anchorage in Barry Roads in varying depth, depending on weather conditions and draft.
RESTRICTIONS: Entrance to Newport Docks is by means of a sea lock 1,000 ft. long, 100 ft. wide.
MAX. SIZE: Max. size of vessels accepted at Newport is 800 ft. long, 96 ft. beam, 33.5 ft. draft.
HEALTH: Port Health Authority board vessel at entrance lock and pratique is automatic.
RADIO: At sea – Land's End radio station, call sign GIL. Within Bristol Channel radio station Portishead, call sign GK– (last letter according to frequency).
VHF: Vessels requiring entry can contact port on VHF radio Channels 16 and 11.
TUGS: Normally join at Newport Deeps. Ship's line used.
BERTHING: South Dock, normal depth of water 35 ft. North Dock, normal depth of water 27 ft. Junction passage connecting South and North Dock restricts vessels to a max. size of 56 ft. 6 in. beam and 25 ft. draft.
BULK HANDLING FACILITIES: Container terminal on site of former East Lock equipped with derrick crane of 32 tons capacity.
One floating crane of 100 tons capacity available.
STEVEDORES: Labour is allocated to vessels on arrival.
MEDICAL: No advance notice of medical attention for crew members is required and hospital facilities are available.
DENSITY: Average density of water in docks is 1016.
FRESH WATER: Available at all berths.
FUEL: All classes of fuel available.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCE: Tobacco, 0.5 lb. per crew member, reduced by 50% on coastal trade. 1 pint of spirit and 1 pint wine per crew member, reduced by 50% on coastal trade.
IDENTIFICATION CARDS: Not required.
REPAIRS: All wet dock and engine repairs possible.
DRY DOCK: 454 ft. × 64 ft.
REPATRIATION: All facilities for the changing of crew and repatriation are available.
AIRPORT: Glamorgan Rhoose Airport terminal 28 miles from Newport. Regular connection planes to London Airport.
TIME: BST, GMT plus 1 hour. GMT in Winter months.
HOLIDAYS: Work not undertaken on Christmas, Easter, Spring and Summer Bank holidays. With the exception of Christmas holiday (25 and 26 December) dates on other holidays vary.
POLICE/AMBULANCE/FIRE: Telephone number 999 stating which service is required.
TELEPHONES: Telephone facilities are available aboard vessels.
SERVICES: Tank cleaning equipment. Facilities for tank washing, compass adjusting are available.
SHORE LEAVE: No restrictions to crew members.
AUTHORITY: British Transport Docks Board.
AGENT: Cory Brothers Shipping Ltd., 66 Dock Street, Newport, Gwent. Cables: "Corship Newportmon". Telex: 49429. Tel. Newport 66351.

PLYMOUTH: 50.22 N. 04.90 W. (See Plan)

DOCUMENTS: Importer to supply Agent with Customs documentation, e.g. original B/L with cheque to cover various details; plus copies of Invoice and Forms C.105 with packing lists. Derating or Exemption Certificate required.
PILOTAGE: Compulsory for merchant vessels. Call sign FSG, or 4 short blasts on whistle. Vessels not subject to compulsory pilotage may obtain docking Pilot in Plymouth Sound otherwise pilot station off Penlee Point.
Pilot boat is motor boat with white upperworks, black hull. "Pilot" in black on wheelhouse.
ANCHORAGES: In Plymouth Sound.
MAX. SIZE: Maximum depth of water 9.0 m. Vessel drawing 8.0 m. would leave anchorage 2 hours before High Water. Also see "Berthing".
HEALTH: Pratique. Apply to Customs Waterguard. Pratique issued when requirements satisfied.
RADIO: *Pilots:* The calling and listening frequency is 2,182 kHz and the working frequencies are 2,246 or 2,301 kHz. A listening watch is kept on 2,182 kHz at every even hour to 15 minutes past, local time and for longer periods when a ship is expected. The pilot vessel is also equipped with VHF and should be called on Channel 16; the working Channels 6, 8 or 12 should be used for passing messages. Alternatively the shore-based Trinity House pilot station, Plymouth, call sign "Cattewater Harbour Radio", maintains a continuous watch on Channel 16 (calling Channel) and is fitted with Channel 12 (first choice Port Operations Channel).
TUGS: Available in Sound.

BERTHING: The Outer Basin is tidal and enters directly from Plymouth Sound. West wharf, 230 m. length, depth 9.0 m. LWOST.

Trinity Pier, 150 m. length

Mill Bay Pier, 140 m. length.

The Inner Basin, general depth of water 6.0 m., with 8.0 m. depth alongside a 185 m. length of wharf quay.

CARGO HANDLING FACILITIES: Silo for grain imports owned by Spillers Ltd. Calor Gas plant on North Quay for imports of butane and propane gas. Bulk coal imports and processing for the Plymouth Co-operative Society is situated on South Quay.

A roll-on/roll-off terminal is in operation.

Victoria Bulk Wharves: Pier No. 1. Length 475 ft. Depth 20 ft. LWOST. Pier No. 2. Length 350 ft. Depth 20 ft. LWOST. Max. beam 38 ft. (Larger with prior notice.) Max. d.w.t. 3,000 tons. Bulk products loaded by conveyor ex-railway trucks and lorry.

Cattedown Wharves: Length 712 ft. Depth 24 ft.–26 ft. LWOST. Max. LOA 560 ft. Max. draft 26 ft. Max. size 12,000 GRT. 1×5-ton and 2×3-ton cranes.

Cattedown Wharves Radio on Channel 12, 16 and 18.

STEVEDORES: British Transport Docks Board: Commodities regularly handled include fresh fruit and vegetables, timber, coal, scrap metal and general cargoes.

MEDICAL: No advance notice required; hospital facilities in Plymouth.

TANKERS: Vessels of the Shell "H" class can be handled at Cattedown Wharves. Max. draft 26 ft. Five hose connections, diameter 10 in. Two for black oil and three for white oil.

FRESH WATER: Available from shore at all berths.

FUEL: All normal grades available at short notice.

OPENING/CLOSING HATCHES: Performed by ship's crew or by stevedores at request of ship.

CERTIFICATES: Tonnage registration.

CONSULS:

Norwegian	65154	Greece	60604
Swedish	65154	Italy	63445
Spanish	65154	Netherlands	64846
French	65154	German	66444
Belgian	65154	Dominican Rep.	63175

REPAIRS: Ship repairing facilities available.

HOLIDAYS: Cargo work can often be arranged on Public Holidays subject to prior notice.

POLICE/AMBULANCE/FIRE: Telephone 999.

TELEPHONES: By special arrangement with the GPO, can be placed on board.

AUTHORITY: British Transport Docks Board.

POOLE: 50.43 N. 01.59 W. (See Plan)

DOCUMENTS: As for other British ports.

PILOTAGE: Pilots board 0.5 mile South of Poole Bar Buoy from cutter. Prefer ladder 0.50 m. from water and a good lee. VHF watch kept on Channel 16 working Channel 9. As much notice as possible. Address: Pilots, Poole.

ANCHORAGE: Vessels can anchor anywhere in Poole Bay and Studland Bay. Good holding ground and protected in all but Easterly gale.

RESTRICTIONS: Vessels drawing up to 4.0 m. can enter at any state of tide. Drafts of 5.0 m. must wait to within 2 hours of high water.

MAX. SIZE: Max. length 350 ft., beam – no limit, draft 5.0 m.

RADIO: Vessels using the Port may call the Harbour Master direct on VHF Channel 16 – working frequency Channel 14 call-sign "Poole Harbour Radio".

TUGS: Join at Stakes Buoy, by special application arrangements can be made to join at North Haven Point. Ship's lines. No difference in charges.

BERTHING: Berthing time depends on draft at some private quays. No restriction at New Quay, Ro/Ro berths in operation.

New Quay: 25 ton heavy lift crane, Transit Warehouse facilities.

Town Quay: Pneumatic Bulk Grain discharging equipment in operation – capacity 550 tonnes per 8 hour working (loading facility and bulk fertiliser handling discontinued).

Yard Quay: Suitable for vessels up to 160 ft. Max. 14 ft. draft. Transit Warehouse facilities available.

BRIDGES: Poole Bridge at West end of Poole Quay. Will open at any time on request by commercial vessel.

STEVEDORES: Normal notice for gangs. No Sunday work.

MEDICAL: Advance notice required for ambulance services. Normal medical and hospital services available.

TANKERS: 3 oil berths. Diameter of load/discharge lines 6 in.

DENSITY: 1021.

FRESH WATER: Delivery 25 t.p.h. by 2 in. hose.

FUEL: Gas oil only.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Work carried out by crew.

IDENTITY CARDS: Not required.

CONSULS: None.

REPAIRS: All types deck and engine repairs can be carried out. Slipways (2) available for vessels up to 220 ft. LOA by 40 ft. beam and 120 ft. LOA by 30 ft. beam.

AIRPORT: Charter flights for crew changes can be carried out from Poole/Bournemouth Airport 7 miles away from port.

POLICE/AMBULANCE/FIRE: Call 999 and ask for service required.

AUTHORITY: Poole Harbour Commissioners.

AGENT: John Carter (Poole) Ltd., The Quay, Poole. Tel. Poole 4102. Telex 41176. Cables: Maritime Poole.

PORTSMOUTH: 50.48 N. 01.07 W. (See Plan)

DOCUMENTS: (Those marked* to be produced to H.M. Customs Boarding Officer.)

*1 Maritime Declaration of Health.
*1 Crew's Effects List C142
2 Ship's Reports by Master.
*1 Home Office Form 1B6.
*1 Stores List.
*1 Certificate of Deck Cargo Tonnage.
*1 Grain Certificate.
1 Light Dues Certificate.
1 Port Dues Certificate.
*1 Passenger List.
*1 Landing Card for each non-British passenger.
*Ship's Certificate of Registry.
Mercantile Marine Office Certificate (British ships only).
*Load Line Certificate.
*Safety Equipment Certificate.
Lloyds Certificate.
*Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.
*List C143 for packages not cargo or crew/passenger effects.
*Danish Tollpass for ships arriving from Denmark.
Form of Authority for Agent to make Report and clear vessel outwards for Master.

Note: Where cargo is to remain on board for unloading at another port after Portsmouth, 3 copies of Ship's Report are required by the Customs House.

PILOTAGE: Portsmouth is within the Southampton and Isle of Wight Trinity House Pilotage District (see Southampton entry for limits of District) and a vessel liable to compulsory pilotage must employ a Pilot from and to the limits of the District. Non-compulsory vessels may obtain a Pilot in the vicinity of the 'Outer Spit' buoy. (Note: All vessels carrying explosives or petroleum products are compulsory from the 'Outer Spit' buoy and within the Harbour area, but Order in Council. This also applies to regular Home Trade vessels.) Ministry of Defence Pilots must be employed in addition for vessels using Admiralty berths or being assisted by Admiralty-owned tugs.

In addition to 48 hours notice to local Agent, advise Nab, Needles or Portsmouth Pilot, as appropriate, ETA 48 hours and again 2 to 3 hours immediately prior to arrival. The Nab, Needles and Portsmouth pilot stations are maintained by fast launches under the control of the Duty Pilot at the Pilot Station, 37 Berth, Southampton Docks. The Duty Pilot keeps a continuous watch on VHF Channel 16; call sign 'Nabpilot', 'Needlespilot' or 'Portsmouthpilot' as appropriate. Working frequency, Channel 9 only, but can listen on Channels 14, 12 and 6. No medium frequency: M/F and R/T messages via NITONRADIO. Duty Pilot's GPO telephone numbers: Southampton 32345 and 32346.

The launches only put to sea when required. Failure to send an accurate ETA 2 to 3 hours before arrival could cause delay to the offending vessel.

Strict compliance with the requirements of the Merchant Shipping (Pilot Ladders) Safety Rules is requested by the Pilots, who may refuse to board vessels with unsatisfactory and dangerous ladders. Manropes are not required. Ladders should reach to about 3 ft. from the water, each rung resting firmly against the ship's side; a good lee should be provided whilst making approximately 3 to 7 knots headway.

In most cases, vessels bound to and from the Westward will find it more convenient to use the Nab or Eastern approach to Portsmouth. For details of entrances and pilot launches, see Southampton entry.

ANCHORAGES: Small vessels may anchor close Westward of the 'Outer Spit' buoy, unless prohibition signal flying – see "Restrictions". Larger vessels will be allocated a numbered anchor berth in the Spithead Man-of-War anchorage.

Historic Wreck: The wreck of the Tudor warship "Mary Rose" lies in Spithead, in the position of Anchor Berth 3. it is marked by a light-buoy, and anchorage within the area designated on the chart is prohibited.

If anchorage is prohibited in Spithead, St. Helen's Roads, Ryde Roads or Cowes Roads are the nearest safe anchorages. Mooring buoys 1, 2 and 3 off North Corner in the Harbour are sometimes used. Pilots will be fully informed before the vessel's arrival.

MAX. SIZE: Commercial berths: Camber – length 270 ft., draft 16 ft. Flathouse – length 310 ft., draft 18 ft. Albert Johnson Quay – length 350 ft. depth at MLWS, 12.5 ft. Continental Ferry Port Ro/Ro Link span, length of quay 240 ft. Depth 17 ft. LWS max. LOA, 330 ft.

Vessels at the Camber, Flathouse and Rudmore wharves must expect to take the bottom in soft mud at low water Springs.

RESTRICTIONS: The following traffic signals are exhibited and must be complied with by all vessels. Shown by Central Signal Station (C), Blockhouse (B), Gilkicker (G), Dolphin Pier (D) and H.M. ships concerned (S).

Day	*Night*	*Meaning*	*Shown by*
Red flag with white diagonal.	Red Green Green	No vessel to enter or leave harbour or enter approach channel North of Outer Spit Buoy.	C B G
Red flag with white diagonal over black ball.		No vessel to enter harbour or approach channel. Outward shipping may proceed.	C B G

Day	*Night*	*Meaning*	*Shown by*
Black ball over red flag with white diagonal.		No vessel to leave harbour. Inward-bound shipping may proceed.	C B G
Black pendant.	White Red Red	No merchant or private vessel to anchor in man-of-war anchorage in Spithead.	G
Answg. Pendant over Pt 0.		All vessels North of Outer Spit keep clear of warship flying this signal	S
Answg. Pendant over Pt. 9.	Green Green Green	All vessels and boats keep Clear of H.M. ships under way.	C B G
Answg. Pendant over flags N E.	Green Red	Proceed with great caution, ships leaving Camber (Not ferries).	B
Answg. Pendant over flag A.	Red Red	Divers down, keep clear.	Diving boat.
Flag E	Orange	Submarine entering or leaving Haslar Lake. At night, light flashes when sub. under way. All vessels keep clear of submarines.	B D

Speed limit of 7 knots in harbour and when within 1,000 yards of shore; 12 knots within 1,000 yards of any H.M. ships and anywhere within the Dockyard Port not covered by the 7 knots limit. Dockyard Port boundaries are shown on Admiralty charts.

Time of entry is restricted by the vessel's draft and state of tide. Enter Camber only at 4 hours before high water or at high water slack. Vessels do not berth at South Railway Jetty from 2 hours before high water until high water.

HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a Port Doctor or an officer of H.M. Customs, depending on where ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area (North European ports) and coastal arrivals need not present Declaration in all cases; when there is sickness on board, Port Health Authority must be informed, preferably not more than 12 nor less than 3 hours before arrival.

RADIO: See "Southampton" entry for pilotage communications. Harbour Control is exercised through "Portsmouth Harbour Radio" for commercial traffic on Channels 16 and 11 VHF. Continuous watch is kept during office hours and from 00 minutes until +15 minutes of every hour when office is closed. Gilkicker Radio on Channels 16 and 14 is also available for commercial vessels, and all vessels entering the area bounded by the "Warner" buoy in the East and the "Sturbridge" buoy in the West should contact Gilkicker, even if only passing through the District. Channel 13 is the working channel for H.M. ships and the Q.H.M.'s office; call sign "Central". H.M. ships are required to keep a listening watch on Channel 16 when in the Portsmouth and Southampton control areas, and will 'shift' to working frequencies selected by mutual agreement. Gilkicker is also equipped for visual signalling. Medium frequency calls to Pilots and Port Authorities only available by link call through Nitonradio.

TUGS: 200 ton tug with bollard pull of 2 tons (must be ordered well in advance of arrival) and several tow-boat launches are available for commercial vessels at commercial berths. Two 1,600 h.p. diesel paddle tugs, five screw tugs and three Voith-Schneider water tractors are available for larger vessels at Admiralty berths.

STEVEDORES: Registered dock workers and cranes must be ordered by 1500 hours on the day previous to commencement of discharge or loading, depending upon receipt of exact ETA from Master.

MEDICAL: All medical facilities available. Agent should be advised in advance. (See "Southampton" entry if arrival is solely to land sick personnel.)

CUSTOMS ALLOWANCE: As for "Southampton".

DENSITY: 1025 salt water.

FRESH WATER: Available.

FUEL AND DIESEL OILS: Available by road tanker or bunker barge from Fawley.

FIRE PRECAUTIONS: Notices will be delivered to Master if berthing at any jetty where special precautions apply.

OPENING/CLOSING HATCHES: By ship's crew.

CRANES: Two mobile cranes of 15 tons, 1 mobile crane of 10 tons and 13 mobile cranes of 2 tons capacity are provided by the Port Authority.

CONSULS:

Belgium
Denmark
Finland
France
Netherlands
Norway
Sweden

REPAIRS: Minor deck and engine repairs can be carried out locally. Larger repairs and dry dock facilities at Southampton.

AIRPORT: Fast train service from Portsmouth to London Airport. Portsmouth and Eastleigh airports are local, but mainly short flights to Channel Islands and feeder services.

SERVICES: All marine, radio and radar services can be obtained from Southampton.

REPATRIATION: All facilities exist.

TELEPHONES: None on board.

DEVELOPMENTS: With the opening of the Portsmouth section of the M27 and M275, there is immediate access to the Flathouse and Albert Johnson quays at the Rudmore Roundabout. At present, Townsend-Thoresen to Cherbourg and Brittany Ferries to St. Malo are the only known users-to-be of the new Ro/Ro terminal. However, it is expected that a considerable amount of Ro/Ro traffic will make use eventually of the new facilities and the easier access routes to Portsmouth.

The commissioning of the new Ro/Ro berth will require the dredging of a new channel to give access to the Rudmore berths.

AUTHORITY: Port Manager and Harbour Master, City of Portsmouth for Commercial berths.

PORT TALBOT: 51.35 N. 03.49 W. (See Plan)

DOCUMENTS:
Ship's Register.
Test Certificate for ship's gear.
Manifest.
Master's Report to be completed on arrival.
Customs and Health documents as required by H.M. Customs and Port Health Authorities, to be completed on arrival.

PILOTAGE: Station – Swansea Bay. Usual International signals. VHF Channels 16 and 12.

ANCHORAGES: Swansea Bay.

RESTRICTIONS: *Ore terminal* in New Harbour, entrance channel 1.5 miles long, 550 ft. wide. Depth 60 ft. MHWS, 53 ft. MHWN.

MAX. SIZE: *Ore terminal* – 100,000 tons d.w.t. ore carriers – draft 49 ft.

TUGS: Off Breakwater.

BERTHING:

New Harbour. British Steel Corporation provide 3 unloading appliances on the jetty and also a conveyor-belt system to carry the iron ore to the stocking ground close to harbour and steel works. Grabs on the unloading appliances weigh 22 tons each, and each have a pay-load of 22 tons. The 2 discharging appliances together have an unloading rate of 5,400 t.p.h. Average rate throughout discharge from start to finish of the 2 discharging appliances together is 2,700 t.p.h.

STEVEDORES: ETA advices sent by vessels to local Agent and then advised to British Steel Corp. as stevedores. Labour ordered by Agent from B.S.C.

DENSITY: Ore Terminal 1025.

FRESH WATER: By gravity 10 t.p.h. Harbour pumping 100 t.p.h.

FUEL: By barge or road tanker. Any grade available.

GANGWAY/DECK WATCHMEN: None, but bye-laws state that vessel must be manned.

OPENING/CLOSING HATCHES: Performed by crew.

CUSTOMS ALLOWANCE: Tobacco, 1 oz. per day per man, max. 8 days. Wine/Spirits, 0.25 pint per day per man, every 4 days.

IDENTIFICATION CARDS: Docks Police would require identification to be available.

CONSULS: None at Port Talbot; contact Swansea.

REPAIRS: Facilities exist.

REPATRIATION: All facilities exist.

AIRPORT: Rhoose Airport 25 miles away. Mainly short trips connecting with main airports.

TIME: GMT plus 1 hour. GMT in Winter months.

HOLIDAYS: It is the custom, at the Tidal Harbour, to work on Bank Holidays.

POLICE/AMBULANCE/FIRE: Dial 999 and ask for service required.

TELEPHONES: Can be connected on board.

AUTHORITY: Docks Manager, British Transport Docks Board.

AGENT: Cory Brothers Shipping Ltd. Commercial Buildings, Station Road, Port Talbot. Cables: "Cory Port Talbot". Telex: 48295. Tel. Port Talbot 2292.

ROCHESTER: 51.23 N. 00.30 E. (including Chatham, Strood, Upnor, Gillingham, Otterham Quay, Snodland, Halling & New Hythe (See Plan)

DOCUMENTS: See "London".

PILOTAGE: See "Medway".

ANCHORAGES: See "Sheerness".

RESTRICTIONS: No entry restrictions only as to state of tide and draft and as directed by Medway Radio (Medway Port Operations and Information Service, Garrison Point). Station keeps watch on Channel 16, 14, 22 and 9. Channel 14 is allocated for port operations generally. For vessels exceeding 350 ft. in length, daylight navigation.

MAX. SIZE: For Rochester ship berths maximum length 400 ft. and 25 ft. draft. River berths available 160/500 ft. in length, with depths of water HWST 14/25 ft. and HWNT 9/20 ft.

HEALTH: Pratique obtained on arrival at Sheerness where Port Medical Officer is available if required.

RADIO: From South: Lands End, Niton, Northforeland. From North: Cullercoats, Humber, Northforeland.

BERTHING:

Rochester: Vessels can remain afloat at all stages of the tide at the following:

Berth	*Max. length (ft.)*	*Berth*	*Max. length (ft).*
Strood	365	No. 6	460
Upper Acorn	220	No. 7	250
Middle Acorn	300	No. 8	150
Lower Acorn	200	No. 9	220
No. 3	390	No. 10	220
No. 4	260	No. 11	180

Current depths can be ascertained from Medway Port Operations Service.

Buoys are provided at other points within the River Medway and The Swale. Arrangements to use these buoys at current charges may be made through the Medway Port Operations Service.

Kethole Reach

Buoys	
21 & 22	Fore and aft mooring – distance apart 660 ft. Maximum displacement 16,000 tons, 2nd class mooring.
22 & 23	Fore and aft mooring – distance apart 330 ft. Maximum displacement 8,000 tons. 3rd class mooring.
23	Swinging buoy – maximum length of vessel 200 ft. Maximum displacement 2,500 tons. 4th class mooring.

Saltpan Reach

Buoy	
1*	3rd class mooring – maximum displacement 8,000 tons.
2	Super 1st class mooring – maximum displacement 70,000 tons.
3*	2nd class mooring – maximum displacement 16,000 tons.
4*	Super 1st class mooring – maximum displacement 70,000 tons.
5	maximum displacement 3,500 tons.
6	maximum displacement 3,500 tons.
7	maximum displacement 3,500 tons.
8	maximum displacement 3,500 tons.
9	maximum displacement 3,500 tons.
10	maximum displacement 3,500 tons.

*By permission of the Ministry of Defence (Navy).

MEDICAL: Port Medical Officer available if necessary on arrival at Sheerness with 24 hours notice to Agents. Doctor and hospital facilities available at Rochester.

DENSITY: 1020 unless excessive land water coming down river.

FRESH WATER: Quantities up to 200 tons available for delivery by water barge.

FUEL: Oil bunkers may be obtained at the main installation at the Isle of Grain Oil Refinery, or by barge or by road tanker. The last 2 methods require minimum 48 hours notice, similarly with supplying lubricating oil which is not available at the Isle of Grain.

OPENING/CLOSING HATCHES: To be carried out by crew.

CARGO GEAR: Discharge by ship's gear at ship berth and by mobile cranes up to 10 tons at all river berths.

CONSULS:

Vice-Consul Netherlands, Tel. Medway 43256.
Consul Sweden, Tel. Medway 44632.
Vice-Consul Finland, Tel Medway 44632.

REPAIRS: All types deck and engine repairs possible.

DRY DOCKS: All repair facilities available on river berths for vessels up to 200 ft. in length; on a grid for up to 250 ft., and a slipway for up to 140 ft.

AIRPORT: London Airport (Heathrow), Southend Airport.

POLICE/AMBULANCE/FIRE: Dial 999 and state service required and where vessel berthed, also contact Medway Radio in cases of emergency.

SERVICES: Compass adjustors available.

REGULATIONS: See "Medway".

AUTHORITY: Medway Ports Authority.

SCALLOWAY: 60.08 N. 01.16 W. (See Plan)

Scalloway is a small port on the Atlantic side of the Mainland of Shetland. It is only 7 miles by road from Lerwick and many of the services are provided by officials and Agents in Lerwick.

PILOTAGE: Application for Pilot through Scalloway Harbour Radio, Channel 16 VHF. 1 hour advance notice. No particular light or sound signals required. Usual station off Fugla Ness lighthouse on the island of Burra. Alternative station at entrance to North Channel. Vessels awaiting Pilot lie or anchor off Figla Ness lighthouse.

ANCHORAGES: Good holding bottom in Scalloway Bay.

RESTRICTIONS: No night time or tidal restrictions. Detailed and up to date charts essential.

MAX. SIZE: Only restriction, draft limit of 23 ft.

RADIO: Wick radio.

VHF: Vessels should switch to Channel 16 VHF when in vicinity of harbour.

CRANES: Mobile cranes available. Ships usually employ their own cranes.

BULK CARGO FACILITIES: Deep water berth 200 ft. long able to accommodate vessels up to 300 ft. long. Minimum depth varies from 30 ft. at point of pier to 19 ft. at inner end.

STEVEDORES: Should be arranged through Agents.

MEDICAL: Doctor based at Scalloway. Hospital at Lerwick.

FRESH WATER: Available from standpipe. 7 t.p.h. 16p. per ton.

FUEL: Marine gas oil by pipe or from road tanker. 1 hour advance notice.

REPAIRS: Most types deck and engine repairs.

SLIPWAYS: Slip accommodation for vessels up to 180 tons.

SURVEYORS: Lloyds represented at Lerwick.

CUSTOMS ALLOWANCE: See "Lerwick".

REPATRIATION: Facilities for effecting crew changes.

AIRPORT: Sumburgh Airport 25 miles. British Airways several times daily. Tingwall Airstrip 3 miles.

HOLIDAYS: Cargo or shipping operations not affected by holidays.

POLICE/AMBULANCE/FIRE: Dial 999.

TELEPHONES: No arrangement for placing telephones on board.

SERVICES: Compass adjusting.

SHORE LEAVE: Crew members allowed ashore.

GENERAL: Local shipping Agent Mr. A. S. Fraser, Blacksness Pier. Tel. Scy 636. Pier Master: Magnus Tulloch. Roselea, New Rd. Scalloway. Tel. Scy 324.

AUTHORITY: Shetland Islands Council, Lerwick.

SCAPA FLOW, Orkney Isles (Flotta Terminal): 58.53 N. 03.05 W. (See Plan)

OPERATOR: Occidental of Britain Inc.

DOCUMENTS:

Maritime Declaration of Health (Form supplied by Pilot or Agent).
Vaccination List.
Immigration Form H.O. Form IS6.
Crew Lists — 2 required.
Ship's Stores List.
Crew Personal Effects Declaration, Customs Form C.142.
Last Port Clearance.
Ship's Register.
Load Line Certificate.
Safety Construction Certificate.
Safety Radio and Safety Equipment Certificates.
Deratisation Certificate.
Previous British Light Dues Receipts.

Customs and Health: Weather permitting, Customs, Immigration, Health and Agent will embark with the Pilot.

Customs House: Customs clearance inward and outward will be the responsibility of ship's Agents.

Light dues will be paid by the vessel.

Bills of Lading: Bills of Lading; Cargo Manifest, Quantity and Quality Report; Tanker Time and Loading Report; Certificate of Origin; Ship's Cargo and Ullage Reports; Master's Receipt for Shipping Documents and Documentation Transmittal Reports will be prepared by Company Representative.

It is hoped that early departure procedure will be applied in many cases in order to minimise time spent awaiting documentation. Under this the vessel will sail with the Manifest and Bills of Lading with the tonnage omitted, and the figures for insertion will be radioed to the vessel as soon as they are available in order that the Master may insert them.

Ship's Agent: All ship's business other than Cargo and Customs documentation and the shipping documents under section above will be conducted by the ship's Agent.

PILOTAGE: Pilot vessels *Scapa Pilot* and *Scapa Patrol* watch VHF Channel 16.

Inside pilot station (58° 46′ N. 03° 07′ W.) located 1.35 miles 162° from Cantick Head Lighthouse.

Pilot may be embarked further to seaward, if desired, and provided notice is given in advance. 2 alternative outside pilot stations are then available. Ships coming from the East embark Pilot in position 5 miles 040° from Muckle Skerry Lighthouse. Ships from the West embark Pilot in position 2.6 miles North of Holborn Head.

Unfamiliar vessels, VLCCs, also any vessel without full information about the unusually strong currents in Pentland Firth is recommended to embark the Pilot at the appropriate outside position (Refer to Tidal Stream Atlas, Admiralty Publication H.O. Number NP 209).

Port restrictions which may cause delays: Weather preventing embarkation of Pilot at either inside or outside positions.

Local wind conditions in Scapa Flow preventing a safe approach to the berth.

Remarks; In Scapa Flow the weather conditions, in particular the wind, can change suddenly and quickly deteriorate, not only in Winter but at any time of the year.

Mooring Masters: A Company Mooring Master will board vessels to the Northward of the Calf of Flotta or at her designated anchorage within Scapa Flow prior to berthing at any Terminal Facility. A Company Mooring Master will be on board during the time that a vessel is moored and he will liaise between the Terminal and ship personnel throughout any deballasting, loading or discharging operation.

The Company Mooring Master may ensure that Masters of vessels are familiar with, and strictly observe, all local regulations concerning the safety of operations and pollution of the sea by oil whilst laid at the Company's facilities.

Vessels using the Company's facilities are required to provide the Mooring Master with accommodation and messing of a standard equivalent to that enjoyed by the vessel's officers.

ANCHORAGE: Inside Scapa Flow several anchorages are available depending upon prevailing winds. Sea anchorage outside, in the approaches to the Pentland Firth, is not possible.

APPROACHES: The approach to the Terminal is through the Pentland Firth from East or West, and then Northward through Hoxa Sound, the main entrance to Scapa Flow. Consult Admiralty Sailing Directions Vol. 1, and Admiralty Tidal Stream Atlas for Orkney and Shetland, Publication No. 209. Principal charts are as follows and Decca coverage is available: Admiralty Chart Nos. 2162, 2581, 35.

MAX. SIZE: See "Berthing".

RADIO: Arrival Notices.

Pilots: By coastal radio station 24 and 12 hours prior to arrival. VHF contact at least 3 hours prior to arrival at the pilot station.

Terminal: By coastal radio station 7 days, 72, 48 and 12 hours prior to arrival at the pilot station.

VHF contact should be established at least 3 hours prior to arrival at the pilot station.

The Terminal must be advised by VHF via the "Harbour Control", when the Pilot has boarded or when 6 miles from Stanger Head at the entrance to Hoxa Sound.

INFORMATION REQUIRED PRIOR TO ARRIVAL:

Radio advice prior to arrival: Terminal operated by Occidental of Britain, Flotta Terminal, telex 75212 (OXYOPS G), via Portishead Radio, of ETA with following details. Also advise Agent of ETA, drafts fore and aft for arrival, and any immediate requirements on arrival.

aaa – Arrival and sailing drafts.
bbb – Gross, net and Summer d.w.t.
ccc – Last port and destination.
ddd – Cargo requirements in metric tonnes.
eee – Maximum loading rate.
fff – Grade of previous cargo.
ggg – Quantity of slops, water content, where stowed, if detergents used during tank cleaning.
hhh – Quantity of clean cargo tank ballast and geographical position uplifted.
jjj – Quantity of permanent ballast and geographical position uplifted.
kkk – Total time for deballasting.
lll – Possibility to load and deballast simultaneously maintaining a 2 valve separation?
mmm – Number and size of cargo manifolds.
nnn – Availability of reducers to adapt manifolds to suit 16 in. (150 ASA) flanges (3 required)?
ooo – If bow mooring device fitted, diameter of pin and width jaw end link of mooring 80 mm. in diameter (2 mooring lines required forward).
ppp – Maximum 10 tons SWL derrick required on portside.
qqq – Accommodation ladder rigged to starboard.

Update ETA 48 hours and 24 hours prior arrival.

VHF: *Harbour Pilots and Harbour Control:*

VHF Listening: 16 Telex: 75412
Working: 12

Mooring Masters/Terminal:

Mooring Masters 161.15
Terminal 161.30 } Private Frequencies Only
Loading Operations 161.15
" " 161.30 } Private Frequencies Only

N.B. Launches are fitted with VHF Listening Channel 16
Working Channel 14, 12, 8, 6

TUGS: 2 tugs (each 2,500 h.p., of 37 tons bollard pull) are available, and compulsory, for berthing. They are both fire fighting tugs and equipped with Warren Springs pollution dispersent equipment.

Whenever a tanker is on a berth, 1 stand-by tug is anchored in the close vicinity for safety and pollution purposes. Fire wires must be rigged off-side forward and aft.

READINESS: *Notice of Readiness to load/discharge:*

Notice of Readiness will be accepted subject to the following conditions;—

a. The Terminal is open (this decision shall be communicated to the Master of the vessel by the Company).

b. i) The vessel has been boarded by the Company Mooring Master prior to her proceeding towards the berth *or*
ii) The vessel has anchored within the anchorage area awaiting a berth.

N.B. Although vessels will be loaded in order of Acceptance of Notice of Readiness, it should be borne in mind that Acceptance of Notice of Readiness is contingent upon complete compliance with all the requirements of Port Conditions.

c. Acceptance of Notice of Readiness may be withdrawn by the Company upon the occurrence of any of the following events:—

The decision by the Mooring Master that the vessel's drafts, equipment and/or appurtenances are not suitable for berthing at the Terminal. If this decision has not been taken, for reasons within the Mooring Master's control, within 24 hours from Acceptance of Notice of Readiness, the Company shall be deemed to have waived its right to withdraw acceptance under this sub-paragraph.

Any supervening decision of the Harbour Authority which prevents the vessel from berthing.

N.B. A derrick or crane with a safe working load of not less than 7.5 tons is required for handling hoses at the SPM berths.

BERTHING:

Position:

SPM 1: Lat. 58° 52′ 11.86″ N. Long. 3° 07′ 20.68″ W.
SPM 2: Lat. 58° 52′ 17.72″ N. Long. 3° 05′ 47.79″ W.

Main Control Building (Radio Mast): Lat. 58° 50′ 31.05″ N. Long. 3° 07′ 08.01″ W.

SPM Particulars:

Pillar Type Single Buoy Mooring – 2.
Tanker Size – 35,000 – 200,000 d.w.t.
Minimum Water Depth – 75 ft.
Max. Draft – 72 ft.
Mooring System Chain: 2.625 in.×200 ft. with floatation.
Crude Manifolds – 2×16 in.
Ballast Manifolds – 1×16 in.
Maximum Loading Rate – 80,000 b.p.h.
Hose Weight – Minimum 7.5 tons

Ballast connection is positioned aft of the 2 crude connections.

A load monitoring system is fitted to each SPM giving constant strain readings to the Terminal Control Room and the Mooring Master on board the tanker. In adverse weather conditions strain gauge readings will indicate when vessel should prepare to vacate the berth.

LPG/Crude Oil Jetty:

Finger type jetty with breasting dolphins.
Tanker Size – 4,000 – 150,000 d.w.t.
Minimum Water Depth – 63 ft.
Maximum Draft – 62 ft.
LPG Manifolds – 1×10 in. loading plus 1×10 in. vapour return.
LPG Loading Rate – 10,000 bbls.p.h.
Crude Manifolds – 4×16 in.
Crude Loading Rate – 80,000 b.p.h. maximum.
Ballast Manifold – 1×16 in. (crude gantry only).
Maximum Deballasting Rate – 40,000 b.p.h.

Terminal Capacity:

1. Crude Oil:

There are 5 tanks, each of 500,000 bbl. nominal capacity for storage of stabilized crude oil, plus a further 2 of 1,000,000 bbls. each, available late 1977.

2. Liquid Petroleum Gas:

There are 2 tanks, each of 100,000 bbl. nominal capacity for storage of propane.

Remarks: In certain current and wind conditions on the SPMs, it may be desirable to keep the propeller turning very slowly astern to prevent overriding, or, possibly some revolutions ahead in an attempt to reduce the tension in the mooring chain during strong winds.

When ship's piping does not permit the pumping of permanent ballast through the manifold, the possibility to load some cargo prior to deballasting the cargo tanks' clean ballast may be granted by prior arrangement with the terminal. In all cases where ships intend to deballast and load simultaneously there must be at least a 2 valve separation.

DENSITY: 1025.

MOORING AND HOSE HANDLING:

On SPMs: Ship's derrick and manifold connections will require to be prepared on the port side. An accommodation ladder will be rigged to starboard with a pilot ladder ready to port.

Securing equipment for single chain mooring forward and hose connecting gear will be hoisted on board from Company work launch by ship's derrick. A good mooring line will be required from forecastle head as a messenger for the buoy mooring.

Tanker Loading Pier: The loading pier is equipped with rigid articulated pipe arms mounted on gantries for loading liquid petroleum gas and also for loading crude oil. The crude oil gantry is also fitted with a ballast discharge arm.

There is an access roadway between the Pier head and the shore. Mooring lines are run to dolphins by terminal mooring boats. Vessels with tension winches when moored at the pier must have winches on 'Manual brake'.

Arrival Draft: Vessels must arrive at the Company's facility in an adequate ballast condition compatible with safe manoeuvring during handling. Excessive trim or insufficient ballast could incur delay until such time as an acceptable condition is reached.

BALLAST: All berths are equipped with water ballast discharge lines. There is a water ballast tank of 500,000 bbls. capacity and a ballast treating facility capable of handling 40,000 bbls.p.h. It is prohibited to discharge water ballast into Scapa Flow.

Bilge Ballast Discharge: Vessels should arrive in Scapa Flow with clean ballast only.

The discharge of bilges and/or ballast by vessels into Scapa Flow is strictly prohibited.

N.B. All ballast water including permanent ballast must be discharged through the Terminal ballast reception and cleaning facility.

Discharge of ballast and simultaneously lifting of cargo is not permitted unless approval has been given by the Mooring Master.

The salvage in ballast shall become the property of the Company, in consideration of the Company's operation of the Terminal ballast reception and cleaning facility.

MEDICAL: Medical and dental services are available by arrangement. Hospital facilities are available at Balfour Hospital, Kirkwall.

FRESH WATER: Only available from 1 water barge of 200 tons capacity, rate 30 to 40 t.p.h. Cabled advice or requirements helpful.

FUEL: Bunkers not available at present, but lubricants in small quantity available. Ships should cable requirements to Agent as soon as possible.

REPAIRS: There are no dry-docking facilities available, but local engineering firms undertake minor repairs to machinery and equipment.

Immobilisation of engines: Not allowed on any of the berths, and not recommended when at anchor. When at the anchorage, however, in special circumstances, and provided the Harbour Master's permission is first obtained, it may be possible.

TRAVEL: There are daily air services, during the week, to Aberdeen, Inverness, Glasgow and Edinburgh from Kirkwall Airport. There is no service on Sunday, There is a daily ferry service from Stromness to Scrabster to connect with British Rail. During the Winter months there is no service on Sunday.

CONSULS: Denmark, Netherlands, Norway and West Germany.

LAUNCH SERVICES: Launch services from Flotta and SPM berths are available by arrangement with local Agents to Kirkwall/Stromness.

SHORE LEAVE: There are no restrictions on shore leave for ships' personnel. For vessels moored at SPMs arrangements can be made with the Agent for a launch service to be operated to the shore. For safety reasons, the boat selected for this service must have good stability, to prevent accidents in cases of hazardous boarding due to weather conditions.

Personnel on vessels berthed at the pier will be conducted to the Terminal Boundary Fence gate by a Company Representative.

SAFETY: Should communications fail, the Mooring Master will authorise continuous soundings of the Ship's whistle or siren as a signal to stop loading (ships in the vicinity capable of so doing should inform the Terminal Control by VHF that this signal is being sounded in case it is inaudible ashore). Ships hearing the signal and unable to contact the Terminal should inform "Harbour Control".

SERVICES: Stores are of good quality, and the laundry facilities are good, but limited. Tank cleaning and dirty ballast facilities are not available.

GENERAL:

Accidental Spills and Leakage: All oil spills and leakages must be immediately reported to the Mooring Master, who will inform the Harbour Authority forthwith. All deballasting/loading/discharging operations will be immediately suspended until the cause of the spill/leakage has been determined, and rectified to the satisfaction of the Mooring Master, and the Harbour Authority.

Galley and Other Refuse: Dumping of all refuse into Scapa Flow and approaches is prohibited. Refuse must be retained on board in sealed containers. (Vessels in port over a long period may make arrangements with their local Agent for collection).

Lighting: Sufficient lighting must be provided in the way of all overboard discharge points to facilitate detection of leaks or spillage. Adequate lighting must also be provided at the loading manifold.

Lifting of Stores; When tankships are at SPM's, loading or off-loading of stores, provisions, drums or any other goods or articles on, to or from the main tank deck is prohibited while cargo is being lifted.

Under certain circumstances and with the approval of the Company's Mooring Master, stores may be worked on the poop during the cargo lifting.

When tankships are moored at the pier, vessels and boats are prohibited from coming alongside during cargo lifting, unless all cargo operations are shut down, all tank openings are closed and secured, and permission from the Mooring Master has been obtained.

Working of stores over the pier will not normally be allowed.

During Loading/Deballasting Operations at SPM's: Mooring Masters will carry Company communication equipment. Ship's VHF must also be available to the Mooring Master at all times. Ship's whistle must be available throughout the time a Mooring Master is on board.

Emergency signals in the event of complete communication failure will be as follows:—

By day: Continuous blasting of ship's whistle accompanied by the hoisting of 2 black balls in a position conspicuous to the Terminal Control Room.

By night: Continuous blasting of ship's whistle accompanied by continuous flashing on an Aldis type signal lamp aimed towards the Terminal Control Room.

In the event of such a communication failure all loading operations shall cease until an effective means of communications has been established.

AUTHORITY: Orkney Islands Council, Kirkwall, Orkney.

AGENT: John Jolly, 21 Bridge Street, Kirkwall, Orkney Isles. Telegraphic Address: "Jolly Kirkwall Telex", Telex 75253. Tel. Kirkwall 2268 (24 hrs. answering service) and 3462. VHF call sign (Private frequency 161.25 mHz): Jolly.

SHEERNESS: 51.27 N. 00.44 E. (See Plan)

Situated on Isle of Sheppey at junctions of Thames and Medway Rivers.

DOCUMENTS: See "London".

PILOTAGE: See "Medway".

ANCHORAGES: For vessels entering River Medway up to 350 ft. length, Little Nore Anchorage, Sheerness. Over 350 ft. length – as directed by Medway Port Authority (Medway Radio) or Thames Navigation to Great Nore, Sea Reach or Warps.

RESTRICTIONS: Entry restrictions only to state of tide and draft and as directed by Medway Radio (Medway Port Control Authority). Station keeps watch on Channel 14. Occasional restriction for entering approaching channel when Navy claim priority.

MAX. SIZE: Sheerness. Max. length of vessel 700 ft., draft 38 ft. deep water berth. 4 berths in docks for vessels up to 250 ft. in length and 16–18 ft. draft dependent on tides.

Queenborough: Max. length of vessel 335 ft., draft of 22 ft.

Ridham Dock: Max. length of vessel 335 ft.; beam 50 ft., draft of 22 ft.

RADIO: Portishead. Local Stations: From South – Lands End, Niton, Northforeland. From North, Cullercoats, Humber, Northforeland.

VHF/RADAR: See "Medway".

TUGS: River Medway – For Sheerness, Ridham Dock, Isle of Grain, Bee Ness, Oakham Ness – Tugs usually meet vessels at Garrison Point Sheerness – 7 tugs available with BHP range from 900 to 3,000 BHP. Tug's lines used, no extra charge.

BERTHING: Sheerness, deep water berths and Ferry Terminal – no restriction. Dock berths – limited to 2 hours before and 1 hour after high water.

Berths equipped mainly for handling fresh fruit and vegetables, general cargo, wines in cask and bulk.

Storage facilities available for bulk wine.

No facilities exist for handling bulk cargoes at present.

Containers can be handled in Inner Docks where a 30-ton crane is available.

Sheerness Deep Water Berths – No. 1 – suitable for vessels up to 650 ft. length and 28 ft. draft.

No. 2 Suitable for vessels up to 650 ft. length and 38 ft. draft.

No. 3. Suitable for vessels up to 700 ft. length and 38 ft. draft.

Roll-on/roll-off ferry berth. Suitable for either bow or stern door vessels of up to 450 ft. length and 18 ft. draft. Present service twice daily Sheerness/Flushing and vice versa.

Inner Docks: 4 berths suitable for vessels up to 260 ft. length and 16 to 18 ft. draft, dependent on tides. Berths in Inner docks are n.a.a.b.s.a. berths, there being about 8 ft. of water on berths at LW.

Oakham Ness Jetty. Max. size 750 ft. 38 ft. draft, 55,000 d.w.t.

Private docks: Queenborough and Ridham Dock are privately operated.

Queenborough berthing restricted to daylight only.

Ridham Dock: Berthing restricted to daylight hours at present time. Max. size of vessel length 335 ft., beam 55 ft., draft 22 ft. 4 berths equipped mainly for pulp, logs and general cargo. Vessels pass through lifting bridge (Kings Ferry), fitted with VHF Channel 10. Lifts can be arranged direct on this Channel or via Medway Radio.

Agents: Independent Sea Terminals Ltd., tel. 079–5–70881. Telex 96409.

Queenborough: 4 buoys are available at Queenborough with the following limitation on size and numbers of vessels:

Between Nos. 1 & 2 Buoys – not more than 2 vessels of 260 ft.
Between Nos. 2 & 3 Buoys – not more than 2 vessels of 160 ft.
Between Nos. 3 & 4 Buoys – not more than 2 vessels of 160 ft.

STEVEDORES: ETA's of vessels passed to the Authority in daily consultation with Agents – minimum notice of arrival required being 24 hours for arranging gangs. (Main commodity handled at Sheerness is canned or fresh fruit, perishables, wine and general cargo with average discharge rate of 18 tons per gang hour.)

MEDICAL: 24 hours notice to Agents so that Port Medical Officer can be advised. Normal boarding point – Garrison Point Sheerness – smallpox vaccination certificate required for sighting. All usual hospital facilities available within 15 mile range of Sheerness.

DENSITY: Average density 1021/22.

FRESH WATER: Available alongside all berths at Sheerness. Otherwise available anywhere in River by barge.

FUEL: All grades available at BP Refinery Isle of Grain – or available by barge or lorry given 48 hours notice.

GANGWAY/DECK WATCHMEN: Gangway watchmen – services recommended as all berths at Sheerness are tidal with average rise and fall of 16 ft.

OPENING/CLOSING HATCHES: Within Sheerness Docks rigging gangs are employed by the Authority for this purpose.

REPAIRS: All types of deck and engine repairs can be carried out either in berth, in dry dock or at river buoys.

DRY DOCKS: Sheerness: 4 dry docks available. Largest for vessels up to 280 ft., otherwise only small slipways available.

REPATRIATION: Usual facilities available for crew changes – repatriation can be arranged by various air/sea routes.

TELEPHONES: Police: Sheerness 2261; Fire: Sheerness 2382 or dial 999 and ask for Fire Service; Ambulance: Sheerness 2028. At Sheerness coin boxes are available for placing on board.

GENERAL: All shipping movements co-ordinated by Medway Port Control Authority, tel. Sheerness 3025, all arrangements being made after notification of arrival or departure by vessel's Agent.

REGULATIONS: See "Medway".

AUTHORITY: Medway Ports Authority.

AGENT: Wm. Hurst Ltd., 19 West Street, Sheerness. Tel. 0795–6–2356. Telex 96116. Cables "Hurst Sheerness".

SHOREHAM: 50.50 N. 00.15 W. (See Plan)

DOCUMENTS and all general information, refer to "London". Distance from London, 50 miles.

PILOTAGE: Trinity House Pilotage Service. Pilot Cutter equipped with VHF.

ANCHORAGE: Off Harbour. Depths as per English Channel Charts.

RESTRICTIONS: No night restrictions. Port normally accessible 4 hours before and 2 hours 40 minutes after high water. According to size and draft these times can be extended.

Main entrance channel, 400 ft. wide, leads into a 300 ft. channel to the Eastern arm, and a 135 ft. channel for the Western arm.

Dimensions of Prince Philip Lock: 374 ft. length, 57 ft. width.

MAX. SIZE: Length 350 ft. Draft 21 ft. subject tide.

RADIO: Niton Radio/Northforeland Radio.

Port operation and information service manned continuously, contact by VHF calling Channel 16, working Channel 14. Station is situated on the middle pier.

TUGS: One tug available if required. Tug lines used for which no extra charge.

BERTHING: Vessels passing lock gates have locking period of 4.5 hours before high water to 2 hours 40 minutes after – both according draft. Heavy lift crane, 32 tons capacity for container handling.

A bulk wine terminal capable of handling 800,000 gallons of wine is available.

STEVEDORES: Reasonable ETA is sufficient for gangs to be called.

MEDICAL: All facilities available.

DENSITY: Approx. 1025.

FRESH WATER: Available at Lock Gates and most berths.

CONSULS: Danish – P. D. Wharfage & Transport Ltd.

DEVELOPMENTS: The gasworks of 32 acres have been purchased and will, when levelled, piled and dredged give additional berthing accommodation.

AUTHORITY: Shoreham Port Authority.

AGENT: P. D. Wharfage & Transport Ltd., 31 High Street, Shoreham-by-Sea, Sussex BN4 5EG. Tel. Shoreham-by-Sea 2345. Telex: 87187. Cables: "Shipbroker Shoreham-by-Sea".

SOUTHAMPTON 50.54 N. 01.24 W. (See Plan)

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ship's Report by Master.
1 Home Office Form 1B6.
1 Stores List.
1 Certificate of Deck Cargo Tonnage.
1 Grain Certificate.
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List.
1 Landing Card for each Passenger.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate – for British ships only.
Load-line Certificate.
Safety Equipment and Safety Construction Certificate.
Lloyds Certificate.
Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.

In addition, Manifests and Bills of Lading are usually sent to Agent direct from loading port.

PILOTAGE: Compulsory, with usual regular Home Trade and other small exemptions. In addition to 48 hours notice to local Agent, advise Nab or Needles Pilot as appropriate, ETA 48 hours and again 2 to 3 hours immediately prior to arrival. The Nab and Needles stations are maintained by fast launches under the control of the Duty Pilot at The Pilot Station, 37 berth, Southampton Docks. Duty Pilot keeps a continuous watch on VHF Channel 16; call sign NABPILOT or NEEDLESPILOT as appropriate. Working frequency; Channel 9 only, but can listen on Channels 6, 12 and 14. No medium frequency: M/F and R/T messages via NITONRADIO. Duty Pilot's GPO telephone numbers: Southampton 32345 and 32346.

The launches only put to sea when required. *Failure to send an accurate ETA 2 to 3 hours before arrival could cause delay to the offending vessel.*

The Nab and Needles stations also provide Pilots for vessels bound for Portsmouth, Cowes or other small ports within the Trinity House Southampton and Isle of Wight Pilotage District. The limits of the District are defined by a line drawn from a point 180° – 1 mile from Selsey Bill to a position in 50° 40′ N., 0° 57′ W. (Nab Tower), thence to a point 180° – 1 mile from Culver Cliff, thence to a position 180° – 1 mile from St. Catherine's Lighthouse and thence direct to Peveril Point, but excluding the Poole Pilotage District (q.v.).

Strict compliance with the requirements of the Merchant Shipping (Pilot Ladders) Safety Rules is requested by the Pilots, who may refuse to board vessels with unsatisfactory and dangerous ladders. Manropes are not required. Ladders should reach to approximately 3 ft. from the water, each rung resting firmly against the ship's side; and a good lee provided whilst making approximately 5 to 7 knots headway.

Eastern Approaches or Nab Tower. The station is maintained by 40-ft. fast launches, black hulls, white wheelhouses, showing international signals. VHF Channels 6, 9, 12 and 16. Vessels under 40 ft. draft are normally boarded between the "New Grounds" and "Dean Tail" light buoys, approximately 2 miles NNW of Nab Tower, although in bad weather, boarding at the "Warner" buoy or St. Helen's Roads might be advised by the Duty Pilot. Launches operate from Ryde pier or from Portsmouth Harbour.

Vessels over 35 ft. draft are restricted by tide for time of entry, and will be advised by the Duty Pilot. Vessels of 40 ft. draft and over use the Nab Channel and a message advising Tanker Master of transit times will be sent by Essoship Fawley and confirmed prior to arrival by Duty Pilot by VHF.

The Nab Channel has a limiting depth of 39.7 ft. (although 43 ft can be carried to West of centre line (1976)) below Chart Datum (April 1976). Pilot will board all vessels of 40 ft. draft and over in a position 2 to 3 miles South of the Nab Tower. Masters of such vessels are strongly recommended not to approach closer than 2 miles to the Nab Tower without a Pilot, owing to strong tidal streams. It is advisable for a deep-drafted ship to anchor 3 miles South of the Nab Tower if waiting for the tide. Advice will always be given on request to the Duty Pilot by VHF.

Pilot *will not* board vessels under 40 ft. draft outside the defined pilotage district unless specifically requested by the Master to do so. The additional "Out of District" charge for boarding beyond the normal limits will be debited to Owners.

Western Approach – Needles: Vessels drawing more than 31 ft. are advised to enter via the Nab. Masters are strongly urged not to proceed beyond the Fairway Buoy without a Pilot, especially on the flood tide. Safe anchorage in vicinity of "Fairway" Buoy.

Station maintained by 40 ft. fast launch, black hull and white wheelhouse, showing international signals. Launch operates from Yarmouth Harbour or Lymington. Needles pilot launch is fitted with VHF Channel 6, 9, 12 and 16. No medium frequency.

When it is considered that the weather is deteriorating to the extent that the boarding and landing of Pilots could in the near future become dangerous, a message will be sent to all ships through Nitonradio, as follows:

> "Needles Pilot operating bad weather routine. Vessels should ascertain at least 3 hours before their ETA Needles whether a Pilot will be available. This information can be obtained either through Niton Radio or direct from Needles Pilot on VHF."

If it is not safe to ship or land the Pilot at the Needles, Masters will be advised to proceed to the Nab.

In poor visibility a vessel requiring Pilot at either Nab or Needles uses a distinguishing signal of "G" to which the pilot launch will reply with "H".

General: Particular attention should be paid by Masters to the designated "Reporting Points" marked on the Admiralty Charts. Reports should be made on VHF to Southampton Port Radio, to enable all echoes on the port radar to be properly identified for the benefit of all mariners navigating within the District. This applies equally to naval and to non-compulsory vessels.

Vessels *(a)* drawing more than 35 ft. *(b)* more than 1,000 ft. in length or *(c)* of more than 100,000 d.w.t. exhibit a large black cylinder by day and 3 vertical red lights by night. Vessels showing these signals are not to be passed or overtaken within channel limits between the "West Bramble" and "Hook" light buoys and may not be able to comply with the Collision Regulations at other times. Will indicate inability by 5 short blasts on the whistle. "Clear channel" control is exercised by the Operations Officer at Port Radar Station, 37 berth, Southampton Docks.

Information on the movement of other vessels can be obtained on VHF from this station (and from Gilkicker Signal Station for movements in the Portsmouth area). A patrol launch (Harbour Master flag by day, all-round blue light by night) is controlled by the Southampton Operations Officer for pollution detection and keeping channels clear of pleasure craft for the passage of large vessels. The Thorn Channel has a limiting depth of 41 ft. (April 1976) at low water datum.

Up to 7 vessels of under 300 ft. in length are permitted to anchor out of the channel to the East of the "Hook" Buoy in the designated Small Ship Anchorage, the limits of which must be strictly observed. Three numbered anchor berths are available in the Fawley Reach Controlled Anchorage, where vessels must moor to 2 anchors. Permission to use the Small Ship and Controlled Anchorages must be obtained from the Operations Officer, Southampton Port Radio.

MAX. SIZE: The largest passenger and container vessels call regularly at Southampton. Tankers: Fawley can accept partly loaded VLCC's up to 49 ft. draft.

HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a port doctor or an officer of H.M. Customs depending on where ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present Declaration in all cases: when there is sickness on board the Port Health Authority must be informed preferably not more than 12 hours and not less than 3 hours before arrival.

VHF: A Duty Port Operations Officer, responsible to the Southampton Dock and Harbour Master, maintains a continuous watch at 37 Berth Port Communications and Radar Station: call sign "Southampton Port Radio". He is to be informed prior to any movement to, from or within the port area. The following VHF Channels are operated within the port:

Southampton Port Radio: Channels 16, 14, 12, 18, 20 and 22.

BTDB Patrol Launch (Call sign Southampton Patrol) Channels 16, 14, 12, 10, 8 and 6.

Nab and Needles Pilot Launches: Channels 16, 14, 12, 9, 6 and 0.

Nab and Needles Pilot Stations: Channels 16 and 9. (Duty Pilot).

Southampton Pilot Launch (call sign Southampton Pilot) Channels 16, 14, 12, 9, 6 and 19.

Southampton Pilot Station (call sign Southampton Pilot) Channels 16 and 9 (Duty Pilot).

Tugs: Channels 16, 14, 12, 6 and 19. When working: Channels 8 or 10.

Esso Petroleum Terminal, Fawley: Channels 16, 14 and 19. Private frequencies: 163.0/158.5 mc/s AM and FM.

B.P. Oil Ltd., Hamble. Channels 16 and 14.

TUGS: 2 tugs are permanently stationed at Fawley; if more than 2 tugs are required it should be noted that week-end requirements have to be advised to the tug operators not later than 1800 hrs. on Friday of each week.

If a vessel required more than 2 tugs and is due to arrive at Fawley between 0001 hrs. Saturday and 0900 hrs. Monday, ETAs must be submitted well in advance of 1600 hrs. on the Friday prior to arrival. It is usual to use the wires provided by the tugs for towing.

BERTHING: The Pilot boarding the ship at the Sea Station or anchorage will also berth the ship. Non-compulsory vessels can obtain or disembark a Pilot in the vicinity of the "N.W. Netley" or "Hook" buoys by contacting "Southampton Pilot" on VHF.

Dock or Quay	*Berth Nos.*	*Nominal dredged depth* below chart datum†* feet	*Length of quays* feet
Container Berths	204–5	42.0	2,100
P.O. Cable	203	30.0	900
Container Berth	202	40.0	900
Container Link	201	36.0	900
Western Docks	101–109	38.5	7,741
	110	33.5	273
Ocean Dock	42–47	38.5	3,807
Link	49	23.0	400
Dock Head	37	25.5	470
Empress Dock	20–21	24.5	848
	22–23	22.5	770
	24–27	23.5	1,647
Itchen Quays (Link under construction at No. 31 Berth).	29	18.5	350
	30–33	31.5	1,406
	34–36	32.5	1,590
Princess Alexandra Dock (Links at No. 2S, 3 and 7).	2S–3–4	20.5	903
	1–2N–6–7	16.5	1,760
	8–9	(Obstruction)	
Town Quay	61–62	8.5	500
	63–65	17.5	705
	66	21.5	340
	67	18.0	340
	68–69	18.0	700

Other berths are available. Lesser draft berths not shown. The depths of water are maintained as far as practicable, but are subject to variation and are not guaranteed.

* To find the depth of water in the berths add the tidal rise to the depths shown in the above table.

† Chart datum is approximately the lowest low water level.

TANKERS: Esso Marine Terminal, Fawley. There are 9 berths at Fawley, all running parallel to the main channel. The 5 berths on the outside of the jetty facing the main channel are for ocean-going vessels, No. 1 berth being the most Northerly. The 4 berths on inside of jetty are for small coastal craft. No. 6 berth being the most Northerly.

The following LWD depths are dredged and subject to alteration:

	Alongside	*Approaches*	*Distance between Centres*
Berth No. 1	33.5 ft.	33.5 ft.	800 ft.
,, No. 2	37.5 ft.	35.5 ft.	800 ft.
,, No. 3	41.5 ft.	45.0 ft.	800 ft.
,, No. 4	49.0 ft.	45.0 ft.	800 ft.
,, No. 5	49.0 ft.	45.0 ft.	1,000 ft.
,, Nos. 6-9	18.5 ft.	18.5 ft.	400 ft.

Emergency quick-release swivel mooring hooks are used on the outside berths, where vessels moor with 2 head-and-stern-ropes, 3 breast-ropes at each end and 2 springs at each end.

Dredged channel for Berths No. 6-9 is 375 ft. wide.

Shore gangways are available on Berths 4 and 5 for vessels of 47,000 d.w.t. and over.

Dirty Ballast Facilities: Dirty ballast facilities on all berths with maximum storage of 14,000 tons.

Crew members are not allowed to walk through the Refinery. Transport is provided to Fawley Village and to Southampton at intervals during the day. There are no shopping facilities at the Terminal, although cigarettes are available from slot machines at the Marine Terminal Building. GPO call boxes (coin telephones) are placed on the jetty.

B.P. Terminal, Hamble. Situated immediately opposite Fawley; has two main berths on the outside faces and a small coastal berth (No. 3) on the inner face of No. 2 berth. Berth No. 1 is the Northerly berth, and is used for larger vessels, having a depth of 31 ft. 6 in. below PLWD alongside and in the approaches. The berth face is 250 ft. long, so head or stern moorings are taken to 2 mooring buoys at the N.W. end of No. 1 berth. They are hook buoys; no lashings or mooring shackles are needed. No. 2 berth is similar in dimensions to No. 1 berth, the distance between centres being 530 ft. No. 3 berth is 250 ft. long, with 16 ft. 6 in. alongside at PLWD and 13 ft. in the approaches.

Facilities and services as for Fawley with the exception of transport no transport being available within the depot. Ship's personnel are allowed to walk through the installation to Hamble Village where public transport to Southampton is frequent.

All grades of fuel and diesel bunkers and fresh water available on all berths.

BUNKERS AND WATER: All grades of fuel oil and diesel oil are available and water is piped on all berths. Bunkers and stores can also be obtained by barge in Cowes Roads anchorage, but water is not readily obtainable there.

REPAIRS: All ship repairs can be effected. Largest dry-dock is 1,200 ft. long overall, 135 ft. wide and has 34 ft. over the blocks. Three smaller dry docks are maintained within the Port.

OIL POLLUTION: Southampton Water is an international yachting centre and has many holiday beaches on its shores. Consequently, oil pollution is treated very severely and heavy fines are imposed on offenders.

The Esso Refinery operates a clean-up service, the full economic cost of which is billed to the offending ship.

MEDICAL: Doctors and hospital facilities available. Agent should be advised in advance of any medical attention required.

An organisation exists for hospitalisation of sick seamen from vessels off Cowes, Isle of Wight. Arrange through Nitronradio, Nab, Needles or Southampton pilot or through vessel's Agent. Minimum delay to vessel.

CUSTOMS ALLOWANCE: By statute, crews of vessels in port are allowed 25 cigarettes per day per man. 0.3 litres (0.5 pint) of spirits and 1 bottle of table wine per day per man.

DEVELOPMENTS: A new container berth, 206 berth, is under construction and an additional link-span for Ro/Ro traffic is almost completed at berth 30/1. Transit sheds on the Itchen Quays are being demolished to provide parking spaces for this traffic. A new high-level road bridge is well advanced; it will replace the old Itchen chain ferry.

RADAR GUIDANCE: A channel centre line, designated by Deccaspots, is installed on the radar covering the Eastern part of the area, from off Portsmouth to the 'N.W. Netley' buoy. There is no radar coverage of the Western Solent beyond the 'East Lepe' buoy. Radar information passed to ships does not originate from the Pilot Service, and no responsibility is accepted by the Dock Authority.

TIME: British Standard Time is GMT plus 1 hour, reverting to GMT in Winter months.

HOLIDAYS: Good Friday (variable date); Easter Monday (variable date); Spring Bank Holiday (variable date); Autumn Bank Holiday (variable date); Christmas Day (25th December); Boxing Day (26th December); New Year's Day (1st January).

POLICE/AMBULANCE/FIRE: Dial 999 from any telephone and ask for service required.

AUTHORITY: British Transport Docks Board.

AGENT: P. D. Wharfage & Transport Ltd., Dibles Wharf, Belvidere Road, Southampton, SO1 1QY. Cables: "Shipbroker Southampton". Telex: 47373. Tel. Southampton 24682.

STORNOWAY: 58.12 N. 06.22 W. (See Plan)

PORT LIMITS: An imaginary line from Holm Head to Arnish Point. Any vessel anchored inside the line would be normally considered an arrived vessel.

PILOTAGE: Pilotage not compulsory. Vessels requesting Pilot request same with ETA. Boarding off Arnish Point lighthouse.

ANCHORAGES: Anchorage in harbour between Goat Island and mouth of Creed River, 8 fathoms.

RESTRICTIONS: Entry night or day and at any state of tide. No bar on entrance.

MAX. SIZE: 400 ft. by 60 ft. by 22 ft. draft to berth alongside, 600 ft. length by 35 ft. draft for anchorage in bay.

HEALTH: The customary flying of "Q" flag.

RADIO: Wick Radio or alternatively Oban Radio.

RADAR/VHF: R/T-VHF established in harbour, Channels 16 and 12. Emergency messages may be passed through Stornoway Coastguard on 81.8 m.

TUGS: No tugs available at port. Fishing vessels have been used, when necessary, for this purpose.

BERTHING: Vessels can be berthed at any time, provided berth is free.

Roll-on/roll-off ferry terminal for Stornoway/Ullapool service in operation.

Depth of water at low water spring tides: West side No. 1 pier: 24.5 ft. shallowing to 12 ft. at junction of North Beach Quay. East side No.1 pier: 24.5 ft. shallowing to zero at inward end. West side No. 2 pier: 17.5 shallowing to zero at inward end. East side No. 2 pier: 16.5 ft. shallowing to zero at inward end. Inner Harbour decreases from 12 ft. at junction of Esplanade Quay to 8 ft. at upper end of Cromwell Street Quay.

STEVEDORES: Arranged by Agents on receipt of ETA.

MEDICAL: Advance notice desirable, Hospital facilities available in the town.

TANKERS: Normal safety requirements. One tanker berth only 15 ft. mean draft, max. length 220 ft.

DENSITY: Pratically always dead salt; 1025 density.

FRESH WATER: Fresh water available by hose at 15 t.p.h.

FUEL: 24 hours notice required.

GANGWAY/DECK WATCHMEN: Service of watchmen not necessary. Watchmen from shore may be employed if required.

OPENING/CLOSING HATCHES: Normally crew.

IDENTIFICATION CARDS: Not required.

CONSULS: French, Swedish, Norwegian; tel. Stornoway 2012, 2054, 3173 respectively.

REPAIRS: Minor deck and engine repairs can be carried out locally.

DRY DOCKS: No dry dock but one slipway of 750 tons displacement.

REPATRIATION: Facilities exist for this service.

AIRPORT: 3 miles from port, served regularly by BEA from Glasgow, Aberdeen and Inverness.

HOLIDAYS: New Year's Day, Christmas Day and all other local Bank Holidays. Cargo work can be arranged except New Year's Day. (No Sunday work.)

POLICE/AMBULANCE/FIRE: Police, Stornoway 2222 (can deal with all three).

TELEPHONES: Can be arranged by prior application through Aberdeen office.

GENERAL: ETA to be sent 24 hours beforehand so that necessary arrangements can be made.

AUTHORITY: Stornoway Pier and Harbour Commission.

STRANRAER: 54.55 N. 05.02 W.

DOCUMENTS: As for other British ports.
PILOTAGE: Not compulsory – no Pilot available.
MAX. SIZE: Largest vessel handled 375 ft. long. Working draft 12 ft. 6 in.
BERTHING: 3 berths dredged to 14 ft. One with vehicular ramp. Deep water anchorage at Lady Bay.
CARGO GEAR: Portable crane of 10 tons capacity.
TUGS: Not available.
RADIO: VHF watch kept on Channel 16 at Ferry Terminal.
MEDICAL: Hospital in town.
FRESH WATER: Available at Railway Pier.
FUEL OIL: Limited quantities of fuel can be supplied from road tankers.
REPAIRS: Small repairs can be carried out by local engineering firm.
GENERAL: Inshore lifeboat at Stranraer.
AUTHORITY: Stranraer East Pier is controlled by the British Rail Shipping and Port Manager.

Stranraer West Pier is controlled by the Regional Council Harbour Master.

SUNDERLAND: 54.55 N. 01.21 W. (See Plan)

DOCUMENTS:

Crew List. 1 form I.B.6A to be delivered to an Immigration Officer within 24 hours of arrival.

Passenger Lists. Form P.R.4. in duplicate and Form P.R.10 in duplicate.

Customs Documents. Crew Declaration Form C.142 in duplicate.

Cargo Manifests, triplicate.

Ship's Papers:

Register.
Load Line certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
De-ratisation Certificate.
Customs Light Bills.

PILOTAGE: Call Sunderland Harbour Radio, Channel 16, working Channel for port is 14. Pilotage not compulsory, but advisable for all but small vessels. Pilots maintaining continuous watch on VHF Sound signals for vessel requiring Pilot is Morse Code No. 6. Pilot boards 0.5 to 0.75 mile off piers. In bad weather pilot cutter leads vessel into inner harbour, and Pilot boards there.
ANCHORAGES: 0.5 to 0.75 miles N.E. of Roker Pier Lighthouse.
RESTRICTIONS: Vessels enter 2 hours before high-water for entry into South Dock. For Corporation Quay only restriction is on draft.
MAX. SIZE: South Dock – length 142 m. beam 18.28 m., draft 8.08 m. with Spring tides, 7.16 m. with neap tides.

River – length 183 m., beam – no restriction, draft 8.38 m. subject to siltage.

HEALTH: Pratique procedure: pratique granted by Port Health Authority on arrival.

Suspected disease or fever: all ships from suspected areas must radio Port Health Authority 24 hours in advance of arrival, stating general condition of crew members. Pratique is automatic when ships arrive from other U.K. ports.

RADIO: Cullercoats.
TUGS: Join vessel at or outside harbour entrance. Ship's ropes normally used.
BERTHING: In South Dock vessel must arrive from 2 hours before up to a 0.5 hr. after high water. At Corporation Quay small vessels berth at any time. Large vessels usually berth at same time as mentioned for South Dock.
BRIDGES: In South Dock bridges operated at tide time 2 hours before to a 0.5 hr. after high water. Railway Bridge clearance, 25.1 m. MHWS.
STEVEDORES: The Port of Sunderland Authority carry out all stevedoring. Agents should advise as early as possible in order to arrange berthing and gangs, 5 to 6 days notice if possible. ETA from ship 2-3 days in advance. Working rates of principal commodities are;

Bagged cargoes	15	t.p.h.	
Sisal	20/25	,,	
Scrap – heavy	25	,,	
Chrome and heavy ores	40	,,	
Wood Pulp	30	,,	(loose bale)
Wood Pulp	80/90	,,	(unitised)
Limestone	325	,,	

MEDICAL: Well served with General practitioners and hospital facilities, and attention can be arranged at very short notice. However, unless urgent, 24 hours notice desirable.
TANKERS: 4 installations (lines either 0.16 or 0.2 m.) 3 installations in South Dock and 2 berths, the S.E oil berth 98 m., the S.W. oil berth 89 m. 1 vessel of maximum length 142 m. can use this berth, draft 8.08 m. Spring tides; 7.16 m. Neap tides. At Corporation Quay vessel 183 m. long, draft 8.58 m.
DENSITY: Salt water density 1025.
FRESH WATER: Available. Arrangements can be made to supply water at any time.
FUEL: Bunkers supplied at Corporation Quay pipe-line from Petrofina Ltd. All grades available – Corporation Quay and Hendon Dock. Viscosities range from 32 secs. to 3,500 secs., and can be blended to any requirement in this range. 12 hours notice necessary. Rate 250 t.p.h.
GANGWAY/DECK WATCHMEN: Services of watchmen recommended.
OPENING/CLOSING/HATCHES: This work is normally carried out by ship's crew, otherwise shore riggers.
CERTIFICATES:

Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Deratisation Certificate.

CUSTOMS ALLOWANCE: As per HM Customs and Excise Regulations.
IDENTIFICATION CARDS: Not required. Must possess vaild Seaman's Book and/or Passport.
CONSULS:

Denmark	Tel.	Sunderland	70811
Iceland	,,	,,	70811
Finland	,,	,,	72846
France	,,	,,	73694
Norway	,,	,,	70101

REPAIRS: All repairs possible.
DRY DOCKS: 3 dry docks, the largest of length 675 ft. (205.7 m.) and breadth 87 ft. 06 in. (26.67 m.).
REPATRIATION: Facilities available for effecting repatriations, with good rail, road and air communications.
AIRPORT: Approximately 20 miles. Airport served by regular airlines, all the year round, to all parts of the world. Also chartered flights by Britannia.
HOLIDAYS: Official Holidays for General Cargo ships: New Year's Day (no work except by special agreement); Good Friday; Easter Monday; Summer Bank Holiday; Christmas Day (no work except by special agreement); Boxing Day (no work except by special agreement).
POLICE/AMBULANCE/FIRE: Police Station Tel. Sunderland 76155; Ambulance Control Tel. Sunderland 72875; Fire Station Tel. Sunderland 56456. Or call 999 from any telephone and ask for service required.
TELEPHONES: Permanent arrangements do not exist, but a temporary arrangement can be made at any time.
AUTHORITY: Port of Sunderland Authority.

SWANSEA: 51.37 N. 03.56 W. (See Plan)

DOCUMENTS:

Light Bill receipt.
Crew List.
Manifests.
Bill of Lading copies.
Customs and Health.

PILOTAGE: Request for Swansea Pilots by International Signal Code for Sea Pilots, by telephone call for Dock Pilots. Telegraphic address for Swansea Pilots is "Pilority, Swansea".

Advance notice of ETA required at least 12 hours. VHF Channels 16 and 6. Pilot boat has bright yellow hull with red boot-topping; superstructure painted white. Pilot cutter's sound signal is SM, three shorts and two long blasts. The area of boarding is usually one mile S.E. of Mumbles Lighthouse in all weathers. Usual requirements for ladders are in force, and Pilots require ladder to be about four to five feet above water.

ANCHORAGE: About 1 mile S.E. of the Mumbles Lighthouse.
RESTRICTIONS: Berthing is in accordance with tide. King's Dock Lock operates for a min. of 8 hours each tide. River-side berths and Swansea Ferryport Terminal operate over a greater period.

No night-time restriction of entry.

MAX. SIZE: Max. size for entry is 655 ft. long, 86 ft. beam, 32 ft. 6 in. draft.

These vessels are docked over high water period. Any vessel whose dimensions are approaching max. for port should advise Docks Manager well in advance.

HEALTH: Usual international health regulations are to be observed. Any vessel which is suspect should inform Port Medical Officer of Health.
RADIO: All communications for ship movements through "Swansea Dock Radio" Channels 16 and 14 VHF. Agents, receivers, etc., can be called through usual coastal radio stations – this includes Ilfracombe Radio.
TUGS: Towage undertaken by private operators. The Alexandra Towing Co. Ltd., at present use a modern fleet of tugs at Swansea and Port Talbot. It is optional whose lines are used, but if tugs line is taken, an extra charge will be made.
BRIDGES: Two In dock bridges are under direction of duty Assistant Dock Master. A vessel which has to pass them will be informed by the Assistant Dock Master as to their availablity.
BERTHING: Normal depths of water:

Queen's Dock 35 ft.
King's Dock 33 ft.
Prince of Wales' dock 24 ft. 6 in.

BULK HANDLING FACILITIES: *Petro Chemicals.* One jetty in Queen's Dock operated by BP Chemicals International Ltd.

Coal. Four coal hoists in the King's Dock, operated by the British Transport Docks Board.

Bulk Cargoes. (Sulphur, ores, etc.). Two berths in King's Dock equipped with five 7.5 ton and five 10-ton grabbing cranes. Operated by British Transport Docks Board.

Ferryport: On East bank of River Tawe, used by the B & I Line for its fast service between Swansea and Cork for passengers, cars and wheeled freight.

CRANES: Two 25 ton and nine 11.5 ton electric cranes. Five 7.5 ton, seventeen 6 ton and seventeen 3 ton.

One 100 ton floating crane may be available – arrangements for its use to be made well in advance with the Dock Manager.

STEVEDORES: Stevedoring services are provided wholly by British Transport Docks Board. Advice of labour requirements must be received by the following times:

General Cargo: By 0700 hrs. to start work at 0700 hrs. By 1030 hrs. to start work at 1130, 1400 or 2200 hrs. same day.

Coal Shipping: By 1530 hrs. for work at 0600 hrs. next day. By 1030 hrs. for work at 1400 hrs. same day.

MEDICAL: Port Medical Officer of Health has an office on King's Dock Lock. Medical attention can be obtained at short notice. In emergencies, the duty Assistant Dock Master can be communicated with, to obtain medical help. Hospital facilities available, and there is a first-class medical centre on the Prince of Wales Dock. Vaccination and fever certificates will be examined when receiving pratique.

TANKERS: All tankers arriving, working cargo, and departing are required to observe port's Petroleum By-laws and Oil in Navigable Waters Act. British Petroleum Company has further private directives for oil tankers. Five main tanker berths, one petrochemical berth, two coastal tanker berths and two layby berths in Queen's Dock. One tanker/general cargo berth in King's Dock. Deepest draft permitted is 32 ft. 6 in. A special fire-float to deal with tanker casualties is maintained in the Queen's Dock by the B.P. Company Ltd.

DENSITY: King's Dock Lock density is 1025.

FRESH WATER: Fresh water supplied from hydrants on quays by watermen. Rate of delivery is 2,000 g.p.h., approx., depending on the demand.

FUEL: Various grades of gas oil and diesel can be supplied by barge or road vehicles, or it can be delivered ex-pipeline at Queen's Dock.

FIRE PRECAUTIONS: All matches and lighters must be declared at entrance to oil installation. There are arrangements at the Queen's Dock depot for shore cooking and eating. There is an oil boom between the King's Dock and Queen's Dock to serve as an oil fire break between two docks. A 24 hours observation is kept at Scherzer Bridge for oil pollution and fires.

GANGWAY/DECK WATCHMEN: Under Port Regulations, there shall always be on board sufficient men to move or take care of the vessel. Some vessels employ watchmen. Cost is a tariff charge.

OPENING/CLOSING HATCHES: Normally done by the ship's crew, but if riggers are employed by vessel for general duties they open up hatches.

CERTIFICATES:

Certificate of Freeboard.
Certificate of Registry.
Certificate of Pratique.
Light Bill.
Manifest.
Bill of Health.
Bills of Lading.
AA (1) Certificate.

CUSTOMS ALLOWANCE: At discretion of local H.M. Customs inspectors.

IDENTIFICATION CARDS: Not compulsory, but they are helpful if a crew member has to identify himself to Authorities.

CONSULS:

France	tel. Swansea 55274	Norway	tel. Swansea 50564
Vice-Consuls:			
Belgium	tel. Swansea 50021	Netherlands	tel. Swansea 53921
Finland	,, ,, 53921	Portugal	,, ,, 57757
Greece	,, ,, 50957	Spain	,, ,, 25121
Italy	,, ,, 55146	Sweden	,, ,, 55146

REPAIRS: All types of deck and engine-room repairs are possible.

DRY DOCK: Two dry docks in port are entered from King's Dock. Dry docks: "Duke of Edinburgh" 670 ft. × 92 ft.; "Palmers" 560 ft. × 75 ft.

REPATRIATION: Mercantile Marine Office in Swansea where ship's crews are paid-off before Superintendent of Shipping. Necessary arrangements can be made for repatriation through the Consular Channels.

AIRPORT: Nearest airport at Swansea, 8 miles from Docks. Next are Rhoose (Cardiff) and Bristol airports where regular scheduled flights are handled.

TIME: Local time is British Standard Time which is plus 1 hour to Greenwich Time. Reverting to GMT during Winter months.

HOLIDAYS: Christmas (25th December); Boxing Day (26th December); New Year's Day; Easter, Good Friday and Monday (movable dates); Spring Holiday, Summer Bank Holiday (both movable dates). No cargo is worked on these days.

POLICE/AMBULANCE/FIRE: Call 999 from any telephone, and ask for service required.

TELEPHONES: Arrangements at most berths for placing telephones on board ships in port.

GENERAL: Entrance lock is 875 ft. in length, 90 ft. across at cope level. The inner sill is 7 ft. higher than the outer sill. The outer sill is 11.4 ft. below Admiralty Chart datum.

Tugs are available at the port for in-dock as well as sea towage.

A diver can usually be obtained by enquiry to the British Transport Docks Engineer, Swansea.

Docks Manager: Tel. 50855/200. Dock Engineer: Tel. 50855/275. Dock Master and Fire Officer: Tel. 50855/260.

AUTHORITY: The British Transport Docks Board.

AGENT: Cory Brothers Shipping Ltd., Powell Duffryn House, Adelaide Street, Swansea. Cables: "Cory, Swansea". Telex: 48186. Tel. Swansea 55146.

TEES and HARTLEPOOL: 54.42 N. 01.11 W.

DOCUMENTS: Ship's official papers including Register, Load-line Certificate, Derat, Safety Certificates.

Immigration Crew List (one copy).
Manifest (normally sent in advance from last port).
Bill of Lading (if any).

On arrival Master signs X.S4 giving Agent right to sign all documents on his behalf. Pratique, Surplus Stores Lists X.51, Z.5, 25 and 35 and other documents are completed by HM Customs on arrival.

PILOTAGE: Official Address: The Tees Pilotage Authority, 13-14 Bridge Street East, Middlesbrough, Teeside. Tel. Middlesbrough 2924/5 ffice hours; Middlesbrough 85255 after hours.

Radio telegraphic address: "Tees Pilots Middlesbrough".

Pilot station is situated at South Gare and Pilot cutter on duty is moored there. Pilot cutter is of MFV type painted black with cream structure, flies pilot flag by day and lights as per International Regulations at night.

The Cutter is equipped with R/T, VHF MHF. VHF call sign "Tees Pilots" on Channel 16. MHF call sign "Tees Pilots" last 10 minutes of every hour on 2182 kc/s. Cutter is also equipped with radar.

As much advance notice of a vessel's arrival as possible should be given to Pilots; this is normally passed from Agent about 24 hours before a ship arrives; minimum requirement for vessels arriving is 1 hour, and 1 hour 15 minutes for sailing.

Pilots will board in vicinity of Tees Fairway Buoy, smaller vessels are occasionally boarded at the South Gare. During severe gales Pilot cutter moves to Tees Dock and will board ship when possible at South Gare at No. 11 Light Buoy.

Pilotage is not compulsory.

ANCHORAGES: Vessels prohibited from anchoring inside dredged channel and within 0.5 mile radius of Tees Fairway Buoy and within area bounded by lines projected through 3 and 1, and 4 and 2 light buoys towards the Fairway Buoy.

Small vessels can anchor close N.E. of No. 4 light buoy; larger vessels are advised to anchor in an area about 1 mile N.E. of the Tees Fairway Buoy and in all cases outside the 10 fathoms line. Vessels awaiting Pilots anchor in these areas.

RESTRICTIONS: Vessels over 650 ft. length can only arrive and sail during periods of Traffic Control operated by the Harbour Master. During this period only vessels having Harbour Master's permission may move. Control of traffic on the River Tees for periods of up to approximately 1 hour may be necessary at any time, at short notice during the passage of large vessels.

Vessels entering the River Tees. Masters should, before entering contact Harbour Master's Office by VHF R/T on Channels 16, 14 or 12, call sign "Tees Harbour Radio".

Vessels moving within or sailing from the River Tees. Masters should first obtain permission to do so from the Master's Office by any available means, e.g. telephone Eston Grange 2541 (3 lines); VHF R/T on Channels 16, 14 and 12.

Harbour Master will endeavour to give at least 6 hours notice of traffic control to all those who are likely to be involved during the period.

Vessels bound for Middlesbrough Dock can only enter dock during a period of 2.5 hours before to 1.5 hours after high water.

Dock Sill, 16 ft. LWOST. Draft formula for entry 14 ft. plus height of tide.

Vessels bound for Tees Dock. Norminal dredged depth in dock, 25 ft. Nominal dredged depth in berths, 32 ft. These depths subject to siltation.

MAX. SIZE: Max. length accepted is 1,000 ft., with a max. draft of 57 ft. Vessels in excess of this max. draft may enter after consultation with Harbour Master.

Middlesbrough Dock. Max. size 580 ft. by 76 ft.

Note: The channel has been deepened to 47 ft. 6 in. at LWOST in order to accommodate on all tides vessels of 125,000 d.w.t. drawing up to 54 ft.

HEALTH: Pratique procedure is handled on arrival by HM Customs Boarding Officer. No other notice is required except in case of sickness when Agent can advise Port Health and information can also be passed to Tees Harbour Radio via VHF R/T when within 2 hours of the port.

RADIO: Ships approaching from the North use Cullercoats Radio. Ships approaching from South use Humber Radio.

VHF: Frequencies and channels in use in the Tees and Hartlepool are as follows:

Channel	*Frequency*	*Use*
16	156.80 mc/s	Calling and Safety
14	156.70 mc/s	Port Operations
12	156.60 mc/s	Port Operations
11	156.55 mc/s	Port Operations (Domestic)
10	156.50 mc/s	Intership (3rd choice)
8	156.40 mc/s	Intership (2nd choice)
6	156.30 mc/s	Intership (1st choice)

Station	Call Sign	Channels
Harbour Master's Office (Tees)	"Tees Harbour Radio"	16, 14, 12, 11, 8
Harbour Master's Launch	"Tees Harbour launch"	16, 14, 12, 11, 8, 6
Harbour Master's Office (Hartlepool)	"Hartlepool Radio"	16, 12, 11, 8
Hartlepool Tugs	"Name"	16, 12, 11, 8, 6
Tees Tugs	"Name"	16, 14, 12, 8, 6
Middlesbrough Dock	"Middlesbrough Dock Radio"	16, 14, 12, 11, 8
Tees Pilot Cutters	"Tees Pilots"	16, 14, 12, 11, 10, 6
Hartlepool Pilot Cutter	"Name"	16, 14, 12, 6
Tees & Hartlepool Port Authority, Maintenance Craft.	"Name"	16, 11, 6

Whenever practicable ship/tug operations within the port should be conducted on Channel 8.

TUGS: Official Address: Tees Towing & Co. Ltd., Cleveland Buildings, Queen's Square, Middlesbrough. Tel. Middlesbrough 47277 day and night.

Fleet of 8 tugs between 1,035 and 3,650 horsepower. Tugs join vessel in Redcar Reach between No. 9 and No. 17 buoys depending on size, draft and destination. Tug's lines may be used at Master's discretion. Tugs are on duty daily and only available on 4 hours notice for sailing and arriving after normal office hours.

BERTHING: Small vessels can usually berth at any state of the tide. Middlesbrough Dock is tidal, 2.5 hours before to 1.5 hours after high water. Deep-drafted vessels enter in accordance to tide.

STEVEDORES: In order to prepare for loading/discharging, i.e. ordering of gangs, transport, etc., it is necessary to give ETA through their Agents not less than 24 hours before arrival.

In Tees berths the port works 2 shifts daily, i.e. 0600–1400 hr. and 1400–2200 hr. Mondays to Fridays, with voluntary overtime at weekends.

BULK HANDLING FACILITIES: *Iron Ore Terminal:* On the site of Redcar Wharf, a terminal which handles all iron ore imports for British Steel Corporation plants in the region, berth dredged to 17.63 m. (57 ft. 10 in.) and able to accommodate ships of up to 120,000 d.w.t. and 150,000 d.w.t. on suitable sites. 2 ore dischargers each able to handle 2,000 t.p.h.

Potash Terminal: A terminal for the export of potash mined near Boulby in the North Yorks National Park is being built on the East side of Tees Dock. Ships of up to 30,000 d.w.t. will be accommodated at the 365.8 m. (1,200 ft.) quay. 2 ship loaders will each be able to handle 1,000 t.p.h. The terminal will have a storage silo for 56,898.6 tons capacity. Throughput is expected to exceed 1,000,000 tons.

Roll-on/Roll-off: Berth at Tees Dock can accommodate vessels up to 525 ft. length and 78 ft. beam. Berth dredged to 25 ft. LWOST:

TANKERS:

Name	Vessel's Length	Depth at Low Water	Remarks
Teesport No. 1 Jetty (Queen Elizabeth II)	650 ft.	37 ft.	Port Authority berth used by ICI & Shell/BP
Teesport No. 2 (West Bying)	650 ft.	34 ft.	
North Tees No. 1	300 ft.	21 ft.	Owned by ICI/ Phillips
North Tees No. 2	700 ft.	37 ft.	Owned by ICI/ Phillips
North Tees No. 4	890 ft.	43 ft.	Used by Phillips for import of crude oil
Shell Crude Oil Jetty	875 ft.	45 ft.	Used exclusively by Shell for import of crude oil
Billingham Oil Wharf	265 ft.	16 ft.	Used by ICI
Middlesbrough South Wharf	270 ft.	14 ft.	Movements subject to tide
Middlesbrough No. 2 Quay	600 ft.	(Max. draft up to 28 ft. depending upon state of tide)	
Middlesbrough No. 11 Quay	300 ft.	25 ft.	
South Bank No. 6	750 ft.	38 ft.	British Steel Corporation
Tees Storage No. 1	250 ft.	25 ft.	Tees Storage
Tees Storage No. 2	600 ft.	35 ft.	Company
Seal Sands No. 1	250 ft.	25 ft.	Seal Sands
Storage No. 2	600 ft.	33 ft.	Storage Co.
Monsanto No. 1	500 ft.	18 ft.	Monsanto Ltd.

Slop/oily residue facilities available at most berths.

DENSITY: At Teesport 1015 at LW to 1025 at HW.

FRESH WATER: Plentiful from wharf and small quantities available from tug in emergency approx. 20 t.p.h.

FUEL: All grades available, 48 hours maximum if by barge.

DEVELOPMENTS: North Tees No. 3 jetty being built by I.C.I. for tankers around 40,000 d.w.t. drawing up to 38 ft.

Phillips Ekofisk berth being constructed to handle 4 oil tankers up to 150,000 d.w.t. and 4 gas tankers ranging between 2,800 cu.m. and 60,000 cu.m.

CRANE: A floating crane, lifting capacity 400 tons, is stationed on the Tees.

MEDICAL: Notice of medical attention required in advance, as much notice as possible if emergency expected. All medical facilities available.

GANGWAY/DECK WATCHMEN: Recommended (tidal berth and Spring range 17 ft.). Travel allowance usually charged.

OPENING/CLOSING HATCHES: Always by crew. Riggers available.

CUSTOMS ALLOWANCE: 0.5 lb. tobacco or 200 cigarettes. (0.25 lb. tobacco for coasters). 1 spirit and 1 wine bottle (0.5 bottle spirit and 0.5 bottle wine for coasters).

IDENTIFICATION CARDS: Not used in Tees.

CONSULS:

Swedish	Tel. Middlesbrough	43662
Norwegian, Danish, Netherlands	„ „	43231
Portuguese	„ „	44402
Belgium, W. Germany	„ „	45141
French Consular agency	„ „	47273
At Hartlepool		
Belgium	Tel. Hartlepool	3820
Sweden	„ „	3142
Finland	„ „	3820
Denmark, France, Netherlands & Norway	Tel. Hartlepool	67011

REPAIRS: All types of repairs deck and engine available.

DRY DOCKS: Largest dock 575 ft.×73 ft. sill 26 ft. 4 other dry docks of smaller dimensions.

AIRPORT: Teeside Airport 12 miles from port. Regular flights to London etc.

REPATRIATION: All facilities exist.

TIME: BST is GMT plus 1 hour. GMT in Winter months.

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Whit Monday; Autumn Bank Holiday (Monday); Christmas Day. Work can be arranged if suitable notice is given and at overtime rates.

POLICE/AMBULANCE/FIRE: Telephone 999 in emergency will result in quick action or VHF call to Control Room, Harbour Office (24 hour manning).

TELEPHONES: Most berths can be connected to telephone system (coin boxes); small connection charge is made.

AUTHORITY: Tees and Hartlepool Port Authority.

TETNEY MARINE TERMINAL: 53.32 N. 00.07 E.

DOCUMENTS: The following documents should be completed for arrival:

Crew Manifest, C142.
Health Declaration, PS1.
Crew List, IB6.
Stores on Board List.

These documents will be handed to the Master of the Conoco work boat who will take them to Immingham for perusal by HM Customs and Immigration. On the return trip of the work boat the Agent and Customs will board to clear the vessel and attend to ships business. Pratique is granted by HM Customs when they visit the vessel.

Stores can be taken at the berth provided the Agents are given the order at least 72 hours before arrival.

LOCATION: *Tetney Marine Terminal* is the deep water crude oil terminal of Crude Oil Terminals (Humber) Limited, operated by Conoco Limited.

The position of the mono-buoy is Lat. 53° 32′ 18″ N., Long. 00° 06′ 48″ E., lying in approx. 60 ft. of water at low water and about 2.5 miles offshore.

Tetney is an open roadstead in the entrance of the River Humber on the East coast of England. The tidal rates in the vicinity of the mono-buoy reach 3.5 knots during Spring tides and the direction of the ebb and flood tides is generally East and West respectively. The tidal range varies between 7 ft. and 22.5 ft.

PILOTAGE: Vessels are requested to send ETA and draft to Spurn Pilot 12 hours before arrival and any adjustment to that time at least 2 hours before arrival. Spurn Pilots listen continuously on VHF Channel 16 and use Channel 14 as a working frequency.

Additionally, Agents should be advised of ETA 72 hours before arrival and the following information should be included in the cable, arrival draft, size of forecastle centre mooring fairlead, bow to manifold distance and cargo manifold size.

Pilotage is by Humber Pilots who board in the vicinity of the Humber Light Vessel from a fast launch. Additional berthing information can be obtained from Tetney Base.

The Berthing Controller and his Assistant will board as the vessel approaches the mono-buoy and will assist the Pilot in the mooring operation. He will advise the ships Officers during the mooring operation, hose connection and disconnection, and will act as Company representative throughout the vessel's stay in the berth.

Vessels must provide a pilot ladder with spreaders and grab lines for the Pilot and Berthing Controllers to board and whilst in the berth a suitable gangway with a pilot ladder near the end in order to board from a small boat.

VHF: There is a VHF station at Tetney which is manned 24 hours a day and has the call sign, 'Tetney Base'. A continuous watch is kept on VHF Channels 16, 19 (161.55/156.95), and 48 (163.00/158.40). Channel allocation is as follows, 16 calling, 19 ship to shore, and 48 port operations. UHF (467.725 mc/s.) is allocated for use by the

Conoco Berthing Controller, Tetney Terminal and the Conoco owned work boats.

The Pilot and Berthing Controllers carry portable VHF hand sets for use during berthing for inter-ship and ship to tug communications, Channel 9 (156.45 mc/s.).

Portable radios can be provided for vessels not having a VHF set and the Agents should be so informed in order to allow time to dispatch a set to the ship on arrival. A vessel arriving without suitable means of communication and not having informed the Agent of the fact could incur delays.

BERTHING: The following equipment is required to moor and is placed aboard the vessel when the Berthing Controller boards from the Conoco service craft, Spurn Haven:—

2 each 50 ton S.W.L. alloy steel shackles.

2 each 44 mm. diameter wire securing strops with a 2 metre soft eye at each end, overall length 37 m.

In addition to this mooring gear hose hang-off chains and securing equipment is placed aboard at the same time.

The vessel approaches the mono-buoy on a Westerly heading. A messenger (min. 40 mm. diameter) should be lowered to the water and this will be picked up by the Conoco mooring launch "Monogirl" when approx. 150 m. from the mono-buoy. this messenger will be made fast to a 80 mm. × 92 m. polypropylene pick up rope which should be heaved up as the vessel makes the final approach to the buoy. When the chafing chain is in the fairlead the open links are shackled to the wire strops which are turned up on a suitably sited set of bitts.

HOSES: Hoses are taken on the port side and the port derrick (min. S.W.L. 10 tons) should be rigged and ready for use on arrival.

Two 16 in. hoses are taken aboard, manifolds should be 16 in. 150 A.S.A. and 10 in. and 12 in. 150 A.S.A. can be accommodated by the provision of reducers. Should a vessel have any other size of manifold or be unable to provide adaptors to suit one of the sizes, Tetney Terminal will need to be notified at least 72 hours before arrival.

Hose connection and disconnection is carried out by the ships crew under the supervision of the Berthing Controller. Upon completion of discharge the hoses will be filled with sea water by the ship after which disconnection can commence. When the hoses are blanked off they will be hung off until just before sailing when they will be lowered to the Spurn Haven for towing clear.

POLLUTION: It is the Master's responsiblity to see that no oil of any kind is pumped or spilled overboard from his vessel. This includes oil water from the bilges, crude residues from previous voyages or any other matter that may result in the pollution of the sea. Owners and Masters should comply with any international regulations and recommendations concerning the prevention of pollution of the sea, especially in regard to the river Humber.

SHORE LEAVE: None of the officers or crew shall be allowed shore leave and no boats of any kind, except in an emergency, shall be lowered during the vessel's stay in the berth.

TYNE DISTRICT: 55.01 N. 01.24 W. (See Plan)

(Including Newcastle, North and South Shields, Jarrow, Tynemouth and Gateshead).

DOCUMENTS:

1 Crew List for H.M. Immigration Office.
1 Form C.142 (Tobacco List) supplied by H.M. Customs.
1 Health Declaration form supplied by H.M. Customs.
1 List of Private Addressed Packages not manifested (C.143) supplied by H.M. Customs.

Details of Oil in DBT, also measurement in cu. ft. of cargo in non-registered spaces.

PILOTAGE: Pilots normally stationed outside Harbour entrance within 1 mile radius. In bad weather Pilots will advise concerning entering. 12 hours advance notice via Agent requested. Frequency medium wave 2182 kHz. Call "Tyne Pilots". VHF – Call on Channel 16, working Channel 6. Cutter – 55 ft. in length painted black with white lettering "Pilots" – displaying pilot's flag. Efficient pilot ladder required as per Board of Trade regulations.

ANCHORAGE: Off entrance River Tyne, recommended 1.5 mile N.E. of North Pier. Minimum 12 fathoms.

RESTRICTIONS: Depths below Chart Datum (L.A.T.).

From sea to Jarrow Oil Jetty (West end) 8.61 m.

From Jarrow Oil Jetty (West end) to Newcastle Bridges (except in main channels of Swing Bridge and High Level Bridge, Newcastle) 6.0 m.

From Newcastle Bridges to West end of Dunston Staith 5.61 m.

MAX. SIZE: Harbour entrance, length and breadth: no limit. Draft 9.14 m. any state of tide: up to 10.97 m. at high water.

Riverside Quay, draft up to 10.97 m.
Esso Oil Terminal, draft up to 9.75 m.
Newcastle Quay, 25–26 berths – 9.14 m.
Ranks Mill, 8.2 m.

HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a port doctor or an officer of H.M. Customs depending on where the ship comes from and whether there is sickness on board. Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present declaration. In all cases, when there is sickness on board, the Port Health Authority must be informed preferably not more than 12 hours and not less than 4 hours before arrival.

RADIO: Cullercoats Radio W/T "GCC." Cullercoats Radio On R/T.

VHF: Call sign "Tyne Harbour Radio" on Channel 16, frequency 156.80 mHz and on Channel 12, frequency 156.60 mHz. A VHF Radio Port Operations and Information Service on 24-hour coverage is provided for use by vessels approaching the port, for movement of vessels in the port and for giving information to Shipowners and Agents.

TUGS: Normally join inside piers, tow ropes optional except manufactured of man-made fibres. Towing hawsers £6.60 per rope. Orders for week-end arrivals must be given before 1030 hrs. Saturday.

BERTHING: Albert Edward Dock – Warehouse Quay: 356 m. long, depth of water 7.9 m.

East Dock Wall: 162 m. long, depth of water 7.9 m.
2 roll-on/roll-off berths: depth of water 7.9 m. One of the berths can accommodate loads up to 500 tons.
Tyne Commission Quay: 335 m. long, depth of water 7.11 m.
Tyne Commission Quay Extension: 118 m. long, depth of water 6.21 m.
Car Ferry Terminal: 7.11 m. depth.
Tyne Dock – North-west Quay: 242 m. long, depth of water 8.2 m.
Factory Quay: 196 m. long, depth of water 7.0 m.
Sutherland Quay: 137 m. long, depth of water 6.51 m.
Riverside Quay: 264 m. long, depth of water 10.51 m.
Newcastle Quay: 930 m. long, depth of water to 8.61 m.
Spillers' French Tyne Mill, Newcastle: Berth 173 m. long, depth of water 8.01 m. discharge rate 200 t.p.h.
Baltic Flour Mill, Gateshead: Berth 198 m. long, depth of water 8.2 m. discharge rate 200 t.p.h.
Jarrow Staith – 2 berths, rate of shipment 1,000 t.p.h., East berth, 500 t.p.h. West berth, depth of water 7.11 m.
Harton Staith – 1 berth, depth of water 5.91 m.
Dunston Staith – 3 berths, depth of water 5.5 m.

TANKERS: Jarrow – (Shell U.K. Ltd.) Jarrow Oil Jetty, 189 m. in length with a depth of 8.61 m. below Chart Datum.

Tynemouth – (Esso Petroleum Co. Ltd.) 1 tanker berth 274 m. in length with a depth of 9.51 m. below Chart Datum and 1 Coaster Berth 167 m. in length with a depth of 6.21 m. below Chart Datum.

Tynemouth – Tanker-cleaning river berth, 248 m. length with a depth of 7.11 m. below Chart Datum.

The Lawe, South Shields – Velva Liquids Ltd. Berth 170 m. length with a depth of water 7.71 m. below Chart Datum.

BRIDGES: At Newcastle 10 miles from entrance for proceeding to Dunston Staiths, Swing Bridge negotiated against tide; other bridges, max. mast height 24.7 m. above MHWS.

STEVEDORES: All arrangements through Agent. Stowage plan required prior to arrival.

MEDICAL: Hospitals available, Advise Agent in advance if medical attention required on arrival.

DENSITY: Entrance/Tyne Dock – 1025; Tyne Dock/Jarrow 1020; Newcastle Quay 1005/1010.

FRESH WATER: Available ex Water Boat, rate of delivery up to 150 t.p.h.

FUEL: All grades ex installation, or by barge, 24 hours notice required.

GANGWAY/DECK WATCHMEN: Available if required.

OPENING/CLOSING HATCHES: Crew allowed open and close.

CERTIFICATES:

Register.
Load-line.
Safety Construction.
Safety Equipment.
Safety Radio.
Trinity Light Bills.

CUSTOMS ALLOWANCE: At the discretion of Local Customs Inspector. Normal allowances are equivalent of 0.5 lb. tobacco per man and equivalent to 1 bottle wine per man. Allowances may be halved for home trade vessels. Vessels in port more than 3 or 4 days may receive extra allowances.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	tel.	Newcastle	24225
Brazil	,,	,,	22491
Denmark	,,	North Shields	78115
Finland	,,	Newcastle	28767
France	,,	Whitley Bay	25320
Germany (Fed. Rep.)	,,	Newcastle	25060
Norway	,,	,,	26171
Portugal	,,	,,	25256
Greece	,,	,,	25414
Iceland	,,	,,	841112
Italy	,,	,,	28971
Liberia	,,	,,	610536
Luxemburg	,,	,,	24225
Netherlands	,,	,,	27314
Sweden	,,	,,	850621
Latvia	,,	,,	25060
Spain	,,	,,	661620

REPAIRS: All types of repairs possible at many building/repair yards.

DRY DOCKS:

Name of Owner or Occupier	Dock	Length on Bottom (m.)	Breadth at Entrance (m.)	Depth on Sill at M.H.W.S (m.)
NORTH SIDE OF RIVER				
Swan Hunter Shiprepairers Tyne Ltd., North Shields				
Wallsend	No. 1	170.7	23.2	7.9
	No. 2	149.4	21.3	8.1
	No. 3	173.7	24.4	8.45
	No. 4	217.9	32.0	9.4
North Shields	No. 5	152.4	20.7	7.4
	No. 6	167.6	22.1	6.9
	No. 7	90.5	15.9	5.4
	No. 8	216.1	29.6	8.5
	No. 9	149.4	20.7	7.1
	Shields, Eng:	55.5	12.2	5.5
	Bairds Dept:	48.8	13.7	6.7
Swan, Hunter Ship Repairers Tyne Ltd., Wallsend Slipway	No. 1	164.6	20.1	7.6
SOUTH SIDE OF RIVER				
Brigham & Cowan Ltd., South Shields	No. 1	217.9	28.9	7.6
	No. 2	138.7	16.6	7.3
	No. 3	62.2	11.9	5.0
Tyne Dock Engineering Co. Ltd., South Shields	No. 1	96.0	13.7	5.0
	No. 2	85.3	14.0	5.6
Middle Docks & Engineering Co. Ltd. South Shields	No. 1	103.6	14.6	5.5
	No. 2	145.4	17.7	6.4
	No. 3	152.4	19.5	7.2
	No. 4	197.1	24.4	7.9
Swan, Hunter Shipbuilders Ltd. South Shields	No. 1	100.9	14.6	7.2
	No. 2	146.3	19.8	7.2
Mercantile Dry Dock Co. Ltd. Jarrow	No. 1	129.5	18.3	5.5
	No. 2	110.3	15.2	5.5
	No. 3	137.2	18.3	6.4
	No. 4	182.9	25.9	7.3

Slipways:

Name of Owner or Occupier	No. of Slipways	Length of Cradle
NORTH SIDE OF RIVER		
Clelands Shipbuilding Co. Ltd., Wallsend (Swan Hunter Group)	2	76 m. 94.5 m.
SOUTH SIDE OF RIVER		
R.B. Harrison & Son Ltd., Bill Quay	2	61 m. 27.4 m.

REPATRIATION: All facilities available.

AIRPORT: Newcastle Airport, served by regular airlines.

TIME: British Standard Time, GMT plus 1 hour. GMT in Winter months.

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Whit Monday; Autumn Holiday Monday; Christmas Day.

POLICE/AMBULANCE/FIRE: Dial 999, and ask for service required.

TELEPHONES: Can be arranged on board at certain berths.

SERVICES: The tanker-cleaning berth at North Shields provides accommodation for vessels about 248 m. length, depth alongside 7.11 m. below Chart Datum. The shore installation, which is owned and operated by the Tyne Tanker Cleaning Co. Ltd., includes large reception capacity for tank washing and oily sludge, separators of the latest type which can deal with oily water at the rate of 1,000 t.p.h. and various treatment and storage tanks; together with boilers and steam and pumping plant. Expert staff and modern equipment for carrying out tank washing, cleaning and gas-freeing of vessels at the berth, and for other essential duties are also available, making it possible for tanker crews to be paid off immediately on arrival. The whole installation is protected by a most complete system of fire precautions and fire-fighting equipment. Also available is compass adjusting, etc.

SHORE LEAVE: Allowed.

AUTHORITY: Port of Tyne Authority.

AGENT: Lambert Brothers Ship Agencies Ltd., 'B' Floor, Milburn House, Dean Street, Newcastle-upon-Tyne, NE1.1LY. Tel. Newcastle (0632) 27314. Telex: 53405. Cable address: "Lambros."

WARRENPOINT: 54.06 N. 06.16 W. (See Plan)

PORT LIMITS: Seaward to a line from Ryland River (South Coast) to Ross Memorial (North Coast) approximately 3,000 m. from Warrenpoint.

DOCUMENTS:
- 2 Crew Lists.
- 2 Passenger Lists.
- 1 Store List.
- Vessel's Papers and Certificates.
- 1 Manifest or Bill of Lading.

PILOTAGE: Not compulsory. Pilot station at Greencastle Pier at entrance (North side) to Carlingford Lough. VHF (Warrenpoint Pilot) radio, Channels 16 and 12. Notice to Agents of ETA at 48 hours and 24 hours.

ANCHORAGES: Safe anchorage at Fairmont Roads S.E. Greenore and also inside Carlingford Lough N.W. of No. 13 Buoy.

RESTRICTIONS: None except draft of vessel. Advise Agents.

HEALTH: No certificate necessary. In event of disease or fever contact Agent in advance. Hospitals available.

RADIO: All messages to Agents through Portpatrick Radio or Anglesea Radio.

VHF: Pilot station (Warrenpoint Pilot) and Port Radio (Warrenpoint Harbour) on Channels 16 and 12.

TUGS: None.

BERTHING: All berths except Town Dock have 15 ft. at LWOST.

STEVEDORES: Warrenpoint Harbour Authority. Telephone: Warrenpoint 3381. Telex: 74660

CARGO HANDLING FACILITIES:
- 2 35 tonne Liebherr Transporter Container Cranes;
- 1 Poclain HC300 Hydraulic Crane;
- 1 Jones 971 HLB Dockside Crane;
- 2 Babcock Wilcox Luffing Grabbing Cranes;
- 2 Ransome Rapier Cranes.

BULK CARGO FACILITIES: Coal – 2 Luffing Grabbing Cranes at 150 t.p.h.

Grain discharged at up to 250 t.p.h. to Grain Silo of 8 bins, total capacity about 4,800 tonnes.

SPECIALISED CARGO HANDLING FACILITIES: Roll-on/Roll-off berth with 15 ft. at LWOST. Bridge has HA loading. Ramp 6 m. wide Marshalling area about 8 acres.

FUEL: Available by road tankers. 48 hours notice usually required.

FRESH WATER: Available from pipes on quay.

CONSULS: None.

REPAIRS: Small repairs can be undertaken.

DRY DOCKS: None.

SURVEYORS: Lloyds – Jos. Fisher & Sons, Ltd. Warrenpoint 3500.

GANGWAY/DECK WATCHMEN: Neither compulsory nor necessary.

HATCHES: Opening and closing by crew.

CUSTOMS ALLOWANCE: As permitted by UK Customs and Excise.

CARGO GEAR: Ship's gear only used if shore cranes not available.

REPATRIATION: Airports (Belfast and Dublin) 2 hours away. Transport available. By sea – Belfast 1 hour.

AIRPORTS: Belfast (Aldergrove) 60 miles. Dublin 75 miles. Schedule flights daily to London.

TIME: GMT.

HOLIDAYS: New Year's Day; St. Patrick's Day (17th March); Easter Monday and Easter Tuesday; 12th July; Christmas Day and Boxing Day.

POLICE/AMBULANCE/FIRE: Dial 999 and ask for service required.

TELEPHONES: Not possible to place telephones on board.

SERVICES: Check with Agents. Most services can be supplied given 24 hours notice.

SHORE LEAVE: After clearance inwards, crew members allowed ashore without restriction. No passes issued.

DELAYS: Delays in loading or discharging are minimal and infrequent.

AUTHORITY: Warrenpoint Harbour Authority.

WATCHET: 51.11 N. 03.20 W. (See Plan)

DOCUMENTS: Crew List, Store List, Ships Register, Manifest or Bills of Lading.

PILOTAGE: Trinity House Outport District, Compulsory, ETA 24 hrs. before arrival to Harbour Masters Office, Watchet 264.

ANCHORAGE: Safe anchorage Blue Anchor Road.

RESTRICTIONS: Accordance with state of tide and draft. Vessels enter 2 hours before H.W.

MAX. SIZE: Max. permissible length 97 m., breadth 16m., draft restrictions according the height of tides, max. draft Neap tides 12 ft. and Spring tides 14–16 ft.

HEALTH: Necessary to obtain pratique.

RADIO: It is best for vessels to give ETA by RT to Lands End or Ilfracombe Radio.

VHF: Watchet Radio Channels 16, 12 and 14.

TUGS: None.

BERTHING: 2 quays one of 150 m., one of 120 m.

CRANES: 3 cranes, two of 5 tons, one of 10 tons.

BULK CARGO: Cranes with grabs.

STEVEDORES: Watchet Marine Ltd.

MEDICAL: Port Doctor in Watchet.

DENSITY: Salt 90%.

FRESH WATER: Available on the quay.

FUEL: All grades, advance notice required.

FIRE PRECAUTIONS: Normal port precautions.

CONSULS: Bristol.

REPAIRS: Normal repairs to ships possible notice required.

SURVEYORS: Available from nearby ports.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Carried out by crew.

CUSTOMS ALLOWANCE: Decided by the Customs officer in charge.

CARGO GEAR: Shore gear, cranes and forklifts.

REPATRIATION: Facilities exist for crew changes.

AIRPORT: Nearest airport at Bristol.

TIME: GMT and British Summertime.

HOLIDAYS: Cargo work can be arranged.

POLICE/AMBULANCE/FIRE: Phone 999 for all three services.

TELEPHONES: None on quay.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: None required.

DEVELOPMENTS: New warehouse.

AUTHORITY: West Somerset District Council.

WHITEHAVEN: 54.33 N. 03.36 W. (See Plan)

DOCUMENTS: Usual required for clearing a vessel from foreign port, i.e. Crew list, Passenger list, Customs Documents, Ships Register, Manifest and Bills of Lading.
PILOTAGE: Request for Pilot is made by International Code signal G, sound and visual. ETA should be sent 12 hours in advance either to ship's Agent or Harbour Master or both. Area for taking Pilot on board 4 to 5 cables West of Harbour. Pilot boat is a 36 ft. varnished boat, name "J. T. Pears". VHF is installed.
ANCHORAGE: Same area as for boarding Pilot according to draft.
RESTRICTIONS: Vessels may dock from 1.5 hours before high water till 1 hour after high water according to draft.
MAX. SIZE: 270 ft. length, 40 ft. beam and 17 ft. draft (deepest) on spring tides, 14 ft. draft (deepest) on neap tides.
HEALTH: Usual pratique procedure.
RADIO: Port Patrick and Anglesey Radio Stations.
TUGS: No tugs
MEDICAL: Agent should receive notice in advance of any medical treatment required. Hospital services are readily available.
DENSITY: Any state of tide density is 1025.
FRESH WATER: Fresh water is available on all berths, any quantity on request to ship's Agent.
FUEL: Most grades and types available.
FIRE PRECAUTIONS: Usual precautions are taken when inflammable cargo is being loaded or discharged.
GANGWAY/DECK WATCHMEN: Advisable to have a watchman but not absolutely necessary.
OPENING/CLOSING HATCHES: Always opened and closed by crew members.
CERTIFICATES: Derat certificate, Load Line certificate, Radio R/T certificate, etc.
CUSTOMS ALLOWANCE: 200 cigarettes, 1 bottle spirits.
IDENTIFICATION CARDS: None required.
CONSULS: Norway, Sweden, Denmark and the Netherlands.
REPAIRS: All types of deck and engine repairs carried out.
REPATRIATION: Facilities exist for effecting crew changes and arranging any necessary repatriations.
AIRPORTS: Nearest airports are at Manchester, Newcastle and Prestwick, all approx. 130 miles away.
HOLIDAYS: Cargo may be worked on following days: New Year's Day, Good Friday, Easter Monday, Whit Monday, August Monday, Christmas Day and Boxing Day.
POLICE/AMBULANCE/FIRE: Telephone numbers of these services in order are: Whitehaven 2616, 3181 and 2151.
TELEPHONES: No special arrangements exist for placing telephones on board vessels.
SHORE LEAVE: Crew members may come and go at all times.
DELAYS: There are very seldom any delays in berthing and none in loading, discharging or bunkering.
AUTHORITY: The Whitehaven Harbour Commissioners.

NOTES

Please also advise Shipping Guides (Services) Ltd.

United States of America

GENERAL

AGRICULTURE: All ports

Arrival Notification: The vessels' Master or port agent should notify the U.S. Department of Agriculture (USDA) inspector at each port of arrival of expected time and location of arrival.

Documents: The cargo, stores, and crews' effects lists or manifests must be available for review by the boarding USDA inspector.

Inspection: The USDA inspector will examine the galleys, storerooms, lockers, mess areas, and crew quarters in some instances for prohibited plant materials (fruits, vegetables, and plants) and meat products. Some categories of food materials may require being placed under seal. Also, inspections may be made of onboard cargo and cargo holds.

Garbage: all food wastes aboard vessels arriving from foreign or offshore areas (except Canada) must be handled in accordance with USDA regulations. Garbage may be held aboard vessels in leakproof, covered containers for disposal at sea or, it may be removed with permission of a USDA inspector for disposition in approved facilities.

Treatments: If quarantine-significant pests are found aboard a vessel, an Emergency Action Order may be issued to the Master. It will prescribe what treatments are required to the affected articles or area of the vessel and when this treatment must be accomplished.

Animals/birds: All live animals or birds aboard vessels must be reported to the USDA inspector.

For additional information: Write to "Quarantines," U.S. Department of Agriculture, Federal Building, Hyattsville, MD 20782.

HEALTH: All ports.

The U.S. Public Health Service does not maintain Quarantine Stations at each port of entry. The smaller ports are under the jurisdiction of Quarantine Stations located at strategic ports of entry. Matters of public health significance occurring on vessels destined to ports not manned by Public Health Service personnel should be reported to the Quarantine Station having jurisdiction over that port.

U.S. PORTS

PORT	QUARANTINE STATION
Albany	New York
Alexandria	Baltimore
Anacortes	Seattle
Anchorage	Anchorage
Ashtabula	Chicago
Astoria	Seattle
Atreco	Houston
Baltimore	Baltimore
Bangor	Boston
Baton Rouge	New Orleans
Baytown	Houston
Beaumont	Houston
Bellingham	Seattle
Benicia	San Francisco
Boston	Boston
Brownsville	Brownsville
Brunswick	Miami
Buffalo	New York
Burnside	New Orleans
Cape Cod Canal	Boston
Castle Island	Anchorage
Charleston	Fort Monroe
Chicago	Chicago
Cleveland	Chicago
Coos Bay	Seattle
Cordova	Anchorage
Corpus Christi	Brownsville
Deer Park	Houston
Destrehan	New Orleans
Detroit	Chicago
Duluth-Superior	Chicago
Erie	Chicago
Eureka	San Francisco
Everett	Seattle
Fall River	Boston
Ferndale	Seattle
Freeport	Houston
Galena Park	Houston
Galveston	Houston
Geismar	New Orleans
Good Hope	New Orleans
Gramercy	New Orleans
Grays Harbor	Seattle
Green Bay	Chicago
Gulfport	New Orleans
Haines	Anchorage
Hampton Roads	Fort Monroe
Hilo	Honolulu
Homer	Anchorage
Honolulu	Honolulu
Houston	Houston
Hueneme	Los Angeles
Huron	Chicago
Jacksonville	Miami
Juneau	Anchorage
Kahului	Honolulu
Ketchikan	Anchorage
Kings Bay	Miami
Kodiak	Anchorage
Lake Charles	New Orleans
Long Beach	Los Angeles
Longview	Seattle
Los Angeles	Los Angeles
Magpetco	Houston
Metlakatla	Anchorage
Miami	Miami
Milwaukee	Chicago
Mobile	New Orleans
Morehead City	Fort Monroe
Myrtle Grove	New Orleans
Nawiliwili	Honolulu
New Bedford	Boston
New Haven	Boston
New London	Boston
New Orleans	New Orleans
New York	New York
Nikiski	Anchorage
Oakland	San Francisco
Ogdensburg	New York
Olympia	Seattle
Orange	Houston
Ostrica	New Orleans
Palm Beach	Miami
Panama City	New Orleans
Pasadena	Houston
Pascagoula	New Orleans
Pensacola	New Orleans
Petersburg	Anchorage
Philadelphia	Philadelphia
Pitney Point	Baltimore
Port Adams	Houston
Port Angeles	Seattle
Port Arthur	Houston
Port Canaveral	Miami
Port Everglades	Miami
Port Huron	Chicago
Portland, Maine	Boston
Portland, Oregon	Seattle
Port Lavaca/ Point Comfort	Houston
Port Neches	Houston
Port St. Joe	Miami
Port San Luis	Los Angeles
Port Sulphur	New Orleans
Redwood City	San Francisco
Richmond, California	San Francisco
Richmond, Virginia	Fort Monroe
Riverhead	New York
Rochester	New York
Sacramento	San Francisco
San Diego	San Diego
San Francisco	San Francisco
Savannah	Miami
Searsport	Boston
Seattle	Seattle
Seward	Anchorage
Sitka	Anchorage
Skagaway	Anchorage
Smiths Bluff	Houston
Stockton	San Francisco
Tacoma	Seattle
Tampa	Miami
Texas City	Houston
Toledo	Chicago
Valdez	Anchorage
Vancouver	Seattle
Wilmington, Delaware	Baltimore
Wilmington, North Carolina	Ft. Monroe
Wrangell	Anchorage

Masters of Vessels arriving at United States ports

Effective July 1, 1973, radio pratique as a method of quarantine clearance will be discontinued at all ports under control of the United States. Changes in regulations, policies, and procedures concerning maritime public health clearance have been promulgated.

Vessels subject to routine inspection

Only vessels in the following categories will be subject to onboard public health inspection upon arrival at ports under control of the United States:

A. Crew or passengers having:
   1. Temperature of 100° F (38° C) or greater (a) which persisted for 2 days or more; or (b) which was accompanied or followed by any one or all of the following: rash, jaundice, glandular swelling; or
   2. Diarrhoea severe enough to interfere with work or normal activity; or
   3. On board occurrence of death, regardless of the signs and symptoms above.

B. Vessels which have been in a smallpox infected country during the 15 days prior to arrival in the United States.

C. Vessels which have been in a plague infected country in the 60 days prior to arrival in the United States.

Procedures. Vessels in any of the categories, A, B, or C above will be granted provisional pratique and boarded upon arrival for inspection. In addition, vessels boarded for quality control may be boarded upon or subsequent to arrival. In accordance with regulations you must inform the quarantine station, through your vessel Agent, at or nearest the intended port of your vessel's first arrival in the United States of the occurrence of illness as specified in A above. Based on information you provide your Agent, or information your Agent already possesses regarding your vessel's itinerary, your Agent will notify the quarantine station if your itinerary included a smallpox or plague infected country. Arriving vessels no longer need to complete a maritime public health declaration unless boarded for inspections as described above. The boarding inspector will provide the declaration.

These changes reflect our confidence that you will continue to report, in advance of arrival in the United States, the on-board occurrence of illness compatible with the signs and symptoms specified above.

SHIP'S OFFICER'S REPORT: The information given for the port of New Orleans (U.S.A.) applies to all the ports in the U.S.A. in the event of the vessel arriving from abroad or from a previous U.S. port. All the documents such as Crew List, Passenger List (Form I-418), Deck, Engine, Stewards & Bonded Stores Lists (Form 1303), Crew's Effects Declaration (Form 1304), are required in duplicate at each port for entry inward.

ALBANY, New York: 42.40 N. 73.45 W.

DOCUMENTS: If first port of call in U.S., 2 complete Custom's Manifests describing all cargo on board and ports of discharge. Also 1 Cargo List for Albany cargo; 3 Crew Lists; 3 Store Lists, 3 Curio Lists, the Ship's Register, Load Line Certificate and Tonnage Tax Certificate.
PILOTAGE: Hudson River Pilot boards vessel off Yonkers, N.Y. Cable address: "Hudpilots, Yonkers, N.Y."
ANCHORAGES: Several anchorage areas in Hudson River en route to Albany if required due to weather. Vessels cannot anchor at Port of Albany.
RESTRICTION: Hudson River Channel to Albany has controlling depth of 32 ft. MLW. Vessels with draft in excess of 28 ft. will be required to transit river on favourable tide as directed by Pilot.
MAX. SIZE: Max. permissible length 750 ft.; breadth 110 ft., draft 30 ft. Turning basin at Albany 1,100 ft. in width.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: One 2,500-h.p. tug stationed at port at all times; additional tugs available upon advance request. Normally 1 tug is sufficient for turning and docking. Tug's lines are used.
BERTHING: 4,000 linear ft. of marginal wharf available at APDC terminal for general cargo, grain, lumber, etc., 32 ft. alongside wharf. Various privately operated deep-water petroleum terminals in port area.

Facilities: 13.5 million bushel grain elevator. 17 million gallon molasses storage – 3 terminals. Scrap Iron Terminal, Banana Terminal.
BRIDGES: Minimum vertical clearance of bridges on Hudson River en route to Albany is 135 ft.
STEVEDORES: Rates and information can be obtained from John W. McGrath Corporation; 7 gangs available.
FRESH WATER: Supplied during regular working hours daily except Saturdays, Sundays, and holidays at $1.00 per 100 cubic ft. plus $10.00 service charge per daily delivery on straight time. Additional charge if supplied during other periods.
GANGWAY/DECK WATCHMEN: Available via ship chandler not required but recommended.
CONSULS: Italian Vice-Consulate located at Albany, other consulates available at New York City.
REPAIRS: Minor deck and engine repairs can be handled.
AIRPORT: 7 miles distant from port: served by Allegheny, America, Altair and Executive Airlines.
TIME: Eastern Standard and Eastern Daylight Saving, 5 hours minus GMT.
HOLIDAYS: Standard U.S. holidays; cargo work can be arranged on all holidays at overtime rates, except July 4th, Labour Day and Christmas Day.
SHORE LEAVE: Crew members allowed ashore unless restricted by Customs or Immigration requirements.
AUTHORITY: Albany Port District Commission.

ALEXANDRIA, Virginia: 38.48 N. 77.03 W.

(See Plan)

DOCUMENTS/PILOTAGE: Refer to "Hampton Roads".
RESTRICTIONS: Anchoring necessary between 2200 to 0600 hrs. Berthing daylight only.
MAX. SIZE: Governed by draft only – max. 22 ft. 6 in. all times.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Baltimore Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: WMH Baltimore, Md.
TUGS: None required.
BERTHING: Berthing 0600 to 2200 hrs.
BRIDGES: 1 bridge, closed Monday through Friday 1600–1830 hrs. and 0630–0900 hrs.
STEVEDORES: Informally arranged through Receivers or Shipper's Agents.
MEDICAL: Hospital available.
FRESH WATER: Available at berth – 10 t.p.h.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Shore watchman provided.
OPENING/CLOSING HATCHES: Stevedores. Vessel – depending on understanding.
IDENTIFICATION CARDS: Required by Immigration.
REPAIRS: Minimal facilities.
REPATRIATION: Facilities exist.
AIRPORT: 3 miles. Washington National – multiple flights.
TIME: GMT minus 6 hours.
POLICE/AMBULANCE/FIRE: Agents arrange. Watchmen on duty.
SHORE LEAVE: Allowed.
DELAYS: No unusual delays.
AUTHORITY: Virginia Port Authority, Norfolk, Va.

ANACORTES, Washington: 48.31 N. 122.36 W.

DOCUMENTS, PILOTAGE, etc: Refer to "Tacoma".
ANCHORAGES: East End Guemes Channel, 54 ft. min. depth.
MAX. SIZE: Length, open. Draft, 54 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Join vessel in Guemes Channel at Anacortes – lines optional.
BERTHING: Pier no. 1, depth 31 ft.; Pier no. 2, depth 38 ft.
STEVEDORES: Request 24 hours notice.
FRESH WATER: Available from city water system.
FUEL: Available from Shell and Texaco.
GANGWAY/DECK WATCHMEN: Not required by port.
OPENING/CLOSING HATCHES: Stevedores.
CUSTOMS ALLOWANCE: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.
CARGO GEAR: ILWU requirements.
IDENTIFICATION CARDS: Required.
REPAIRS: Minor repairs only.
AIRPORT: 75 miles, Seattle International.
TIME: GMT minus 8 hours. From end April to end October, Pacific Daylight Saving Time, GMT minus 7 hours.
HOLIDAYS: See "Tacoma".
POLICE/AMBULANCE/FIRE: Police 293–3157; Ambulance 293–3183; Fire 293–3155.
TELEPHONES: Available at Pier 2 and at Pier 1 by Phone Co.
SHORE LEAVE: Allowed.
AUTHORITY: Port of Anacortes.

ANCHORAGE, Alaska: 61.12 N. 150.00 W.

(See Plan)

DOCUMENTS:

3 copies Cargo Manifest (Forms 7527.A or 7527.B), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I.418).
2 copies Crew List (Form I.418).

Customs boarding Officer will also examine Ship's Register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:

Master's Oath (Customs Form 3255).
All foreign clearances.
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certified Crew List.

PILOTAGE: The pilot station for Anchorage is at Homer, Alaska. Vessels may contact Pilot by radio telephone. Telegraphic address "Almarrpilot", ETA notice requested 24 hours. Guards VHF Channel 10. Pilot boat green and white. Pilot flag by day, pilot light at night. Pilot boat 1 mile South of Homer Spit (Coal Point) Homer Alaska. In bad weather, wait inside Homer Spit and advise via radio-telephone.

Also see "Homer".
ANCHORAGES: The best anchorage for deep-draft vessels is West of Anchorage in depth of 10 to 12 fathoms, silt bottom. Holding ground is good.
TIDE AND CURRENTS: The diurnal range of tide is 29.6 ft., currents from 1.7 to 6 knots or more in mid-channel.
RESTRICTIONS: Flow and pan ice is encountered in the Cook Inlet from approximately the end of November until the end of February. This ice does not freeze solid due to the tidal action. The port is in year-round use and expert information on Winter conditions may be obtained from any of the highly qualified licensed ship pilots available in the area.
MAX. SIZE: All berths 35 ft. MLLW.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Port of Anchorage "KBT-42" on HF-AM and SSB. "WHJ-82" on VHF-FM.

TUGS: Join vessel 1.5 miles S.W. of docks.
BERTHING: 600 ft. general cargo Terminal No. 1, apron width 47 ft., live road limit 600 lb. per sq. ft. General cargo Terminals No. 2 and 3, 610 ft. and 714 ft. respectively, apron width 69 ft. Depth alongside face at MLLW 35 ft.

Shore Cranes: Level luffing gantry and Paceco container cranes. Capacity: Level luffing gantry 7.5 tons and 40 tons (5 ton high-speed whip lines). Container cranes 27.5 tons.

Outreach from fender face is 70 ft. for the gantries and 81 ft. on the Paceco. Clear height above MLLW is 132 ft.
TANKERS: The Petroleum Terminal at the port of Anchorage is contiguous to the general cargo docks. The POL Dock is 612 ft., long and contains multiple petroleum manifolds in addition to those on Terminal No. 1. Depth 35 ft. alongside.
STEVEDORES: Working Hours: Stevedores do not work on January 1, September 6, November 25 and December 25. The first 6 hours of any shift between 8.00 a.m. and 3.00 p.m. is at the straight time rate. Work performed on Saturdays, Sundays, holidays and between 5.00 p.m. and midnight is at overtime rate. Meal breaks are 11.45 a.m. to 1.00 p.m. and 4.45 p.m. to 6.00 p.m. Stevedores do not normally work between midnight and 7.00 a.m.
SPECIALISED CARGO HANDLING FACILITIES: Two 27.5 ton Paceco container cranes servicing general cargo Terminal 2 and 3; private bulk cement pipe-lines to shore silos. Ro/Ro service available.
DENSITY: From 1.0098 to 1.0102.
MEDICAL: All facilities available. 3 local hospitals.
FUEL: All grades available.
FRESH WATER: Public Health Service certified water station.
GANGWAY/DECK WATCHMEN: Required shipside.
OPENING/CLOSING HATCHES: By stevedores.
AIRPORT: 5 miles; served by regular foreign and domestic airlines.
CUSTOMS ALLOWANCES: At the discretion of customs officer. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.
IDENTIFICATION CARDS: Standard U.S. Immigration Forms I.–95 to be made up for each crew member on arrival. Not necessary for crew men already holding Form I.–95, issued for the same vessel.
HOLIDAYS: New Year's Day (January 1st); Lincoln's Birthday Washington's Birthday; Seward's Day (March 30th); Memorial Day; Independence Day (July 4th); Labour Day; Columbus Day; Alaska Day (October 19th); Veterans' Day; Thanksgiving Day; Christmas Day (December 25th).
POLICE/FIRE/AMBULANCE: Police 272–1414; Ambulance/Fire 272–1515.
TELEPHONES: Telephones available shipside.
DEVELOPMENTS: Present expansion plans call for a 179 ft. extension to Terminal No. 3 to more efficiently accommodate overlength Ro/Ro trailerships and a second petroleum terminal and additional tidelands development.
AUTHORITY: Port Director, Port of Anchorage.

ASHTABULA, Ohio: 41.53 N. 80.48 W. (See Plan)

Refer to "St. Lawrence Seaway" for important general information.
PILOTAGE: Nearest pilot station is the Welland Canal, Canada.
ANCHORAGES: No anchorage inside boundaries. Good anchorage outside to East of the entrance, depth approx. 20 fathoms.
MAX. SIZE: The Pinney Dock and Transport Company stevedoring dock handling overseas cargoes located just East of entrance to the port. Channel depth of 28 ft. 4 berths, 27 ft. alongside; length of facilities up to 700 ft. by 75 ft. beam. No facilities for oil carriers.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Contact Lorain, Ohio ship-to-shore station for local connections.
TUGS: Tugs normally join vessels just inside harbour entrance. Use ship's or tug's lines optional; tug lines used at additional charge of 10% of the tons will be added. For tug service call ship-to-shore tug Idaho, FM Channel 51.
STEVEDORES: Work gangs for loading and unloading provided by the Pinney Dock and Transport Company.
MEDICAL: Vessels requiring medical attention call U.S. Coast Guard station located in the main river by calling AM Channel 20. Ambulance and hospital service available. No inoculation, vaccinations, or fever certificates required.
DENSITY: Fresh water.
FRESH WATER: Available at stevedoring dock.
FUEL: Available on 24-hour notice.
FIRE PRECAUTIONS: City fire department. Also water line on face of the dock available.
GANGWAY/DECK WATCHMEN: Overseas stevedoring dock enclosed wire fence, watchmen on dock at all times, guard at main gate.
OPENING/CLOSING HATCHES: Optional by crew or stevedores.
CUSTOMS ALLOWANCES: Only allotments per person consumed aboard allowed.
IDENTIFICATION CARDS: Required.
CONSULS: Nearest at Cleveland.
REPAIRS: All types of deck and engine repairs available; also topside shell repairs.
REPATRIATION: Can be arranged.
AIRPORT: Nearest airport approx. 10 miles South with commuter services to Cleveland Hopkins Airport. Cleveland Hopkins Airport approx. 70 miles West.
TIME: Local Eastern Standard Time except from May to October – Daylight Saving Time.
HOLIDAYS: Stevedoring docks double time on holidays and time plus one-half on Saturdays and Sundays.
POLICE/AMBULANCE/FIRE: Police, 993-8281; Ambulance, 964-3121; Fire, 964-7123.
TELEPHONES: No provisions for placing telephones aboard vessels.
SHORE LEAVE: Crew allowed ashore.
DEVELOPMENTS: Pinney Dock and Transport Co. are dredging a second slip (length 2,000 ft.) and constructing a third pier (length 2,000 ft., depth 28 ft.).
AUTHORITY: Ashtabula Port Authority.

ASTORIA, Oregon: 46.11 N. 123.50 W.

PILOTAGE: Columbia River Bar Pilots, PO Box 81, Astoria, Oregon, 97103. TWX. 910-466-8014. Tel 503-325-2641.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
BERTHING: The port of Astoria has 3 finger piers with 9 berths.

Pier 1: 2 berths – 167,000 sq. ft. covered shed, gallery for elevator – rail trackage.

Grain loading facilities: At Pier No. 1 Max. draft 37 ft. Loading rate 750 t.p.h.

Pier 2: 5 berths – 600,000 sq. ft. open area, bunkering facilities at berths 3-5-6, rail trackage.

Pier 3: 2 berths – 248,000 sq. ft. covered shed, barge ramp, rail trackage.

Water Depth: 35 ft. at inside berths, 40 ft. at outside berths.
STEVEDORES: Brady-Hamilton, Jones-Oregon and Portland Stevedoring Company.
FRESH WATER: Available delivery to vessel through portable hose.
AUTHORITY: Port of Astoria.

ATRECO, Texas: 29.59 N. 93.53 W.

DOCUMENTS, PILOTAGE, RADIO, etc.: Refer to "Port Arthur".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

BALTIMORE, Maryland: 39.17 N. 76.35 W. (See Plan)

DOCUMENTS:

3 Copies Cargo Manifest (Forms 7527-A or 7527-B), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores Lists.
2 copies Passenger List (Form 1.–418).
2 copies Crew List (Form 1.–418).

Customs boarding officer will also examine Ship's Register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port.
Health Pratique.
Master's Oath (Customs Form 3255).
All foreign clearances.
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certificate Crew List.

PILOTAGE: Each vessel entering the Chesapeake Capes under foreign flag or carrying foreign cargo is required to employ a Pilot of the Association of Maryland Pilots. The Association maintains a pilot boat which is anchored at the entrance of the Chesapeake Capes. Pilots will be furnished with a small transistorised portable radio unit, which provide ships bridge to bridge communication system to ensure navigational safety while traversing the waters of Chesapeake Bay. It is a positive means of communication to ensure ship's position reporting, the safety and movement of vessels, as well as messages related to the operational needs of vessels proceeding to the port, and provide the Pilots communications instructions expediting operations of vessels when they are aboard.

The pilot boat has a black hull and is located 2 miles North of Cape Henry Lighthouse.

The pilot ladder should be 2 ft. above the water – manropes not required.

Send ETA pilot station via WMH 24 hours before arrival. Also advise if change in ETA is over 2 hours.

The ETA message should state whether arriving via Chesapeake and Delaware Ship Canal or Cape Henry, and deepest draft and speed of vessel.

Cable address of Pilot: "Marpilot, Baltimore", pilot vessel on VHF Channel 16, 13A and 18A.
ANCHORAGE: Numerous anchorages located within harbour limits for ocean-going vessels. 7 such areas are available for vessels of light and heavy draft. 4 of these anchorages are located on the East side of the main ship channel between the entrance channel to the Central Soya Company Grain Elevator and Fort Carroll. 2 are on the West side of the main ship channel, and 1 on the North side of Curtis Bay channel.

At Sandy Point, approximately 22 miles South of Baltimore, there is an emergency anchorage in natural deep water with depth of 50 ft. or more.

RESTRICTIONS: There are two different approaches and exits to the sea lanes. The principal route is by way of the Southerly course through the Chesapeake Bay and Cape Henry to the ocean. The distance by this route is approximately 150 nautical miles. There is a main ship channel 20 miles long from Baltimore to the Chesapeake Bay; this channel is 800 ft. wide and 42 ft. deep.

The other route to the sea lanes is via the Chesapeake and Delaware Ship Canal. This offers a short protected route between Baltimore and other leading North Atlantic ports by way of Delaware Bay and allows ships serving North Atlantic European ports to save about 115 miles sailing distance.

Entrance to the Chesapeake and Delaware Ship Canal is located about 50 miles North of Baltimore. The width of the channel is 450 ft. Max. draft 26 ft. 06 ins. The canal itself is 15 miles in length, and from the Delaware Bay side the distance to sea lanes is about 60 miles. Navigation lights are maintained so the canal is open to navigation day and night.

MAX. SIZE: Length 1,250 ft., draft 42 ft. at Canton Ore pier.

HEALTH: See "Health; All Ports" before first U.S.A. port (Albany). Illness reports made to Baltimore Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: The port has an efficient fleet of tug-boats in operation. The tugs usually take vessel in tow at Quarantine Station.

BERTHING:

There are approximately 45 important piers and terminals, some of which are listed below:

Marine Terminals

Name	*Berths*	*Max. draft*	*Cranes*	*Special features*
Canton	10 General 3 Bulk	42 ft.		
Clinton St.	4 General	32 ft.	1 at 15 t 1 at 18 t	
Dundalk	12	34 ft.	1 at 70 t 7 at 40 t 2 at 50 t 2 at 60 t	Berths 7–12 for containers 1 Ro-Ro berth
Hawkins Point	2	36 ft.		Length 720 ft.
Locust Point	13 General 3 Bulk	34 ft.	2 at 75 t	Whirley, Gantry mounted at Pier 4
Port Colvington	10 General 7 Bulk	38 ft.	4 at 10 t 1 at 45 t	
Rukert Term Corp	6 General	35 ft.	6 at 15 t	
Sealand	1	32 ft.	1 at 27.5 t	Length 800 ft.
Terminal Corp	1	28 ft.		Length 419 ft.

Public Bulk Cargo Piers

Name	*Berths*	*Length*	*Breadth*	*Draft*	*Loading Cap./ Storage Cap.*
(Coal)					
Curtis Bay	2	900 ft.	117 ft.	42 ft. (Ship)	6,000 t.p.h.
Coal Pier				30 ft. (Barge)	4,000 t.p.h.
Penn Central RR Coal Pier	4	1,100 ft.	223 ft.	35 ft.	900 t.p.h.
Port Covington Coal Pier	2*	888 ft.	78 ft.	30 ft. to 25 ft. (ES) 40 ft. (WS)	3,500 t.p.h.
(Grain)					
Canton Pier 3	2	1,418 ft. (ES) 690 ft. (WS)	88 ft.	32 ft.	3,957,000 bushels 75,000 b.h.p.
Locust Point Pier 7	3	1,000 ft.	67 ft.	35 ft. (2) 30 ft. (1)	3,880,000 bushels 40,000 b.p.h.
Port Covington Pier 2	2	1,340 ft. (ES) 245 ft. (WS)	57 ft.	37 ft.	5,000,000 bushels 20,000 b.p.h.
(Ore)					
Canton	2	1,250 ft. (WS)	88 ft.	42 ft.	3,000 t.p.n.
Pier 2	1	800 ft. (ES)		25 ft.	
Curtis Bay Ore Pier	1	650 ft.	81 ft.	39 ft.	2,000 t.p.h.
Penn Cent RR Bulk Commodity Pier	2	1,200 ft.	64 ft.	30 ft.	800 t.p.h.
Port Covington Pier 6	3	1,524 ft.	66 ft.	30 ft. to 25 ft. (NS) 38 ft. (SS)	2,000 t.p.h.

Locust Point South is scheduled for completion early 1978. At this facility there will be 2 cargo berths, 2,050 ft. of bulkhead. Erected will be one Stiffleg crane of 350 tons, 1 Whirley crane of 75 tons and 2 container cranes each 40 tons, capacity.

BRIDGES: The Chesapeake Bay Bridge-Tunnel is located across the entrance to the Bay, between Cape Henry and Cape Charles. This vehicular crossing consists of fixed causeways and bridges, and 2 tunnels – one under the Chesapeake Channel and one under the Thimble Shoal Channel.

No bridges cross the main ship channel in Baltimore Harbour. Vessels en route to the harbour from the ocean via the Chesapeake Bay pass under the Chesapeake Bay Bridge, about 151 statute miles above the ocean entrance to the bay. This bridge is 3.7 miles long from shore to shore; its western end is 0.5 miles S.W. of Sandy Point and its Eastern end is on Kent Island, 4 miles S.W. of Love Point. The Curtis Creek and Middle Branch sections of harbour are each crossed by highway and railraod bridge.

The Francis Scott Key Bridge is being constructed at the entrance to Baltimore Harbour between Sollers Point and Hawkins Point. Completion is scheduled for January, 1977. The bridge will be 8,640 ft. long, the main channel horizontal clearance will be 800 ft. and vertical clearance 180 ft.

DENSITY: The salinity of Baltimore harbour waters requires full fresh water draft allowance.

TANKERS:

Pier	*Operator*	*Berth*	*Length*	*Draft*
American Oil Co.	Amoco Oil Co.	1		30 ft.
		1		32 ft.
		1		32 ft.
Ashland Oil	Deep-water Terminals Inc.	1	426 ft.	33 ft.
B.P.–Texas Co.	B.P.–Texaco	1	520 ft.	33 ft.
Continental Oil Co.	Continental Oil Co.	1	700 ft.	34 ft.
Crown Central Pet. Corp.	Petroleum Marketing Inc.	1	800 ft.	32 ft.
Exxon Pier 1	Exxon	3	810 ft.	30–42 ft.
Exxon Pier 3	Exxon	2	405 ft.	27–30 ft.
Gulf Oil Co.	Hoffberger	2	544 ft.	35 ft.
Hess Oil Co.	Amerada Hess	1	315 ft.	36 ft.
		1	250 ft.	23 ft.
Shell Oil Co.	Shell Oil Co.	1	800 ft.	23 ft. (WS) 35 ft. (ES)

Slop disposal facilities at Humble Oil Terminal.

MEDICAL: All facilities available.

FRESH WATER: Can be supplied at all berths. Water barges available.

FUEL: All grades supplied by numerous oil companies by barge or ex-wharf at the oil berths.

REPAIRS: *Bethlehem Steel Corporation.* At the Sparrows Point Shipyard vessels up to 300,000 d.w.t. are constructed, and the facilities include all the necessary equipment for the construction of large and small vessels.

2 other marine yards, 1 of which is located at Key Highway, while the second is located on the Eastern end of Locust Point adjacent to Fort McHenry. The facilities of these plants include 3 dry docks, 2 graving docks and 9 outfitting piers. These facilities handle all types of dry docking and ship repairs.

Maryland Shipbuilding and Dry-dock Company. This large marine shipyard is located on the water front at Fairfield. Plant facilities include 4 dry docks, 5 outfitting piers and 1 side launch way. All types of ship repairs are handled in this yard.

In addition to the above mentioned facilities there are numerous companies specialising in minor ship's repairs.

CUSTOMS ALLOWANCES: At the discretion of customs officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms 1.–95 to be made up for each Crew member on arrival. Not necessary for crew man already holding Form I.–95, issued for the same vessel.

CONSULS:

Argentina
Belgium
Bolivia
Columbia
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Great Britain
Guatemala
Honduras
Italy
Netherlands
Norway
Panama
Sweden
Uruguay
Venezuela

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight saving time, GMT minus 4 hours from April to October.

AUTHORITY: Maryland Port Administration.

BANGOR, Maine: 44.49 N. 68.47 W.

DOCUMENTS:

1 copy of Crew List.
1 copy of Passenger List.
2 copies of Stores Lists.
2 copies of Foreign Purchase Lists.
2 copies of Inward Foreign Manifest.
1 form 3251 (Master's Oath on entry of vessel).
2 forms 1374 outward foreign Manifest.

PILOTAGE: Cable PENBAY via Chatham Radio. Ship's Agent usually notifies Pilot 48 hours and 24 hours before arrival at the Pilot station. Pilot boat usually stands by on their radio 1 hour before ETA on RT 2182 and the VHF Channel 16 (156.8). Pilot boards at Monhegan Is., Lat. 43° 45' N., Long. 69° 22' 5" W. Pilot uses a white boat 36 ft. long and displays "H" by day and the Pilot signals at night. Vessels awaiting Pilot in bad weather must heave-to outside.

ANCHORAGES: No restrictions on anchoring at Searsport and the Fort Point area.

RESTRICTIONS: Large ships are restricted to daylight navigation and high water. Small coastal ships of 14-15 ft. draft run day and night. South Brewer has a controlling depth of 16 ft. at low water. Lower Bangor has controlling depth of 15 ft. and upper harbour has depth of 11 ft. Average rise of tide is 13 ft.

MAX. SIZE: At present ships of 560 ft. are taken up the river 2 hours before high water during daylight. Size and draft of ship depend on the berth.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Vessels arriving Bangor use radio station at Chatham Mass., or call on the R/T through station WOU at Boston, Mass.
TUGS: Usually meet ship at Bucksport, and use ship's lines.
BRIDGES: 1 suspension bridge with a height of 135 ft. at high water. Horizontal clearance is 750 ft.
MEDICAL: No advance notice required. There are 3 large hospitals. Seamen required to have certificate for smallpox vaccination during past 3 years.
TANKERS: 1 berth for ocean-going vessels. 1 × 8 in. hose with a 10 in. line. 22 ft. at low water.
DENSITY: Nearly fresh water.
FRESH WATER: Supplied at ocean-going berth at the rate of 50 t.p.h.
FUEL: Only available at oil berth.
CERTIFICATES:
Load-line.
Foreign Clearance.
Safety Certificate.
Radio Operator's Licence.
CUSTOMS ALLOWANCES: 200 cigarettes per man, 1 bottle wine/spirits per man.
IDENTIFICATION CARDS: Form 1.–95 must be filled out upon arriving unless seaman has made one out before on a previous trip.
CONSULS: None.
REPAIRS: Only machinery repairs.
REPATRIATION: Arrangements must be made ahead of time by telegram.
TIME: GMT minus 5 hours in the Winter and minus 4 hours in the Summer.
AIRPORT: Bangor International is 2 miles from the city.
POLICE/AMBULANCE/FIRE: Police 9427377; Ambulance 9893311; Fire 9422293.
TELEPHONES: None put aboard. 1 pay phone on ocean-going berth.
SHORE LEAVE: Allowed subject to Immigration approval.
AUTHORITY: City of Bangor, Dept. of Harbour and Wharves, Harbour Master.

BATON ROUGE, Louisiana: 30.28 N. 91.12 W.

DOCUMENTS:
Original and 3 Crew Lists.
Original and 3 Passenger Lists.
Clearance from last foreign port.
Original and 3 copies Inward Manifest.
Certified Derat Certificate.
Load-line Certificate.
Safety Certificate.
Ship's Register.
3 copies Curio List.
PILOTAGE: Advise Agents ETA sea-buoy 48 hours in advance. Agent then makes arrangements for Pilots. Seven 46 ft. Pilot boats – red hulls white cabins, flying white and blue Pilot flags. Suggest Pilot ladder 6 ft. above water level, no life-line. Call Channel 2738 or VHF Channel 9, 30 to 40 miles out. Safe anchorage within 2 miles Southpass or S.W. pass entrance.
ANCHORAGES: General anchorage Baton Rouge as directed by Pilots.
RESTRICTIONS: No night-time restriction for entry or clearance, docking or undocking.
MAX. SIZE: Humble Oil Docks can accommodate 1,000 ft. vessels – unlimited breadth; draft governed by S.W. pass – project depth 40 ft. usually restricted from 37 ft. to 30 ft. draft May through August, due to low water and silting.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: ETA cables can be routed through Tropical Radio WNU New Orleans.
TUGS: Available at Baton Rouge for docking and undocking. Ship's lines used.
BERTHING: No time restrictions on berthing. 2 general cargo docks with total 280,000 sq. ft. transit shed and 2,265 ft. long, 40 ft. wide apron with double marginal tracks; grain elevator and bulk terminal at Burnside, for handling ores, concentrates, etc.; container marshalling yard adjacent cargo docks; also 20-acre paved staging area for import automobiles. Dock equipped for roll-on/roll-off. 1 dock equipped handle liquid chemicals.
BULK HANDLING FACILITIES:
Grain: Cargill Grain Elevator: Max. draft 38 ft. Loading rate 1,000 t.p.h. Silo storage 160,000 tons.
Aluminium: Conalco-Burnside Terminal: 2 unloading gantries for bauxite. Rate 2,000 t.p.h. Max. draft 39 ft. Kaiser-Burnside Terminal: Same specifications as Conalco.
BRIDGES: Sufficient clearance for all stages of river at all times; 2 bridges cross at New Orleans, 1 at Baton Rouge and 1 at Donaldsonville.
STEVEDORES: May be obtained by Agent with 4 hours notice.
MEDICAL: Agents should receive 24 hours notice when medical attention is required. 2 excellent hospitals at Baton Rouge, U.S. Public Health Hospital at New Orleans.
TANKERS: Oil tankers load various petroleum and chemical products at Humble Oil Docks with sufficient hose, reducers, etc., available. Oil residue slop facilities available.
DENSITY: No tide – fresh water at all times.
FRESH WATER: At public docks, At Humble Oil Terminal simultaneous with loading or discharging at no cost. Ship's crew to make water connections.
FUEL: All grades subject inquiry. Barging essential.
FIRE PRECAUTIONS: Usual fire lines and sprinkler systems.
GANGWAY/DECK WATCHMEN: Only if Master requires.
OPENING/CLOSING HATCHES: Depending on terms of charter, usually by ship's crew.
CUSTOMS ALLOWANCES: Tobacco, each crew member allowed 300 cigarettes. Master allowed reasonable quantity. Wine and/or Spirit, each crew member allowed 1 bottle each of wine and spirits. Master allowed reasonable quantity.
CARGO GEAR: Safety certificate required for ship's gear in handling. Pkg. cargo, etc.
IDENTIFICATION CARDS: Usual passports.
CONSULS: Norwegian only, all other consuls at New Orleans – 80 miles distant.
REPAIRS: All types of deck and engine repairs may be carried out.
REPATRIATION: Crew repatriation and crew changes may be made.
AIRPORT: 6 miles to Ryan Airport, served by regular airlines.
TIME: Local time is Central Standard Time – 6 hours later than GMT; from April through October local time is CS daylight saving time, 5 hours later than GMT.
POLICE/AMBULANCE/FIRE: Tel. Nos. Public Dock: Police 343–5525; Ambulance 344–0566; Fire 343–4140.
TELEPHONES: No arrangements for placing telephones aboard.
GENERAL: Tankers in ballast advised of drift wood conditions in river and ballast their vessels accordingly so as to avoid propeller damage.
SERVICES: Because of restricted river inadvisable adjust compasses. This is usually accomplished below New Orleans where river of sufficient width to permit large vessels to swing. 2 firms engaged in tank cleaning, namely, Two Twenty Eight Terminals Inc. and Port Allen Marine Cleaning Plant. Slop facilities available at the Humble Oil & Refining Co. dock.
SHORE LEAVE: Shore leave permitted except when detained aboard by U.S. immigration.
DELAYS: Normally no delays at Humble Oil docks in berthing except when vessel's tanks unsuitable for loading. Normal delay at city wharf is 1 day awaiting berth.
AUTHORITY: Greater Baton Rouge Port Commission.

BAYTOWN: Texas: 29.44 N. 95.01 W. (See Plan)

DOCUMENTS, PILOTAGE, etc.: Refer to "Houston".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Available if required.
BERTHING: Humble Oil & Refinery Co. Terminal, depth alongside 35 ft.
MEDICAL: All medical assistance available.
DENSITY: Brackish.
FRESH WATER: Available ex wharf.
FUEL: All grades available ex wharf.
GANGWAY/DECK WATCHMEN: Required only if crew detained by Immigration.
CUSTOMS ALLOWANCES: Each man 300 cigarettes or 100 cigars of 1 lb. tobacco; 1 quart wine/spirits.
AUTHORITY: Port of Houston Authority.

BEAUMONT, Texas: 30.05 N. 94.05 W.

DOCUMENTS, PILOTAGE, RADIO, etc., Refer to "Port Arthur".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Meet vessel in Neches River before arriving at berth. Normally 2 tugs used for docking, 1 for undocking.
BERTHING: Beaumont Elevator, distance from sea 50 m., loading rate 1,500 t.p.h. depth alongside 38 ft. Texas Gulf Sulphur Co., distance from sea 47 m., depth alongside 34 ft.
CARGO HANDLING FACILITIES: 6 general cargo berths, with total of 520,000 sq. ft. transit shed space. 3 open berths with double marginal tracks; 700 ft. of gantry tracks with 60 ton travelling gantry crane. There is also a heavy duty 220 ton mobile crane.
STEVEDORES: Normal working hours 0800/1200 and 1300/1700. Monday to Friday.
TANKERS: Mobil Oil Co., distance from sea 49 m., depth alongside 36 ft. Pan American Pet. Co., distance from sea 45 m., depth alongside 38 ft.
Sun Oil Terminal:
Report received August 1975.
Operators: Sun Oil Co., Nederland, Texas.
Type of Terminal: Refinery. Handling Crude Oil & Lubs.
Density: Fresh water.
Distance from sea: 37.4 miles.
Controlling Depth: From channel to berth – 39–40 ft. Actual depth alongside – 40 ft.
Vertical clearance at High Water: 136 ft.
Max. length of berth facility: 150 ft.

Max. length of vessel to be moored safely: 900 ft. but that is absolute max. and normally prefer not more than 850 ft.

Hoses: 4 × 12 in. (Crude). 6 × 6 in. (Lubs).

Usual Loading Pumping Capacity: 60,000 bbls per hour (Crude). 2,000 bbls per hour (Lubs).

Usual Discharge Pumping Capacity: To vessel's capacity.

Fresh Water: Available on 24 hour basis.

Fuel: None.

Tugs: Per Pilot's requirements.

Anchorage: Max. draft 29 ft. (i.e. no anchorage facility for loaded ships).

MEDICAL: All facilities available.

DENSITY: Fresh water.

FRESH WATER: Available at berths, or by barge.

FUEL: Available ex-wharf at Mobil terminal. All grades available by barge to other locations.

GANGWAY/DECK WATCHMEN: Not required unless crewmen detained by Immigration.

CUSTOMS ALLOWANCES: 300 cigarettes and 1 quart wine/spirits for each man.

IDENTIFICATION CARDS: Foreign crew require only Immigration landing permit.

CONSULS: Nearest at Houston.

REPAIRS, DRY DOCKS: Beaumont's Bethlehem Shipyard offers all types ship repair or reconditioning – plus vessel conversion and jumboizing 2 side-launching ways over 800 ft. each. Floating dry dock with extreme length of 648 ft.; length on bottom 576 ft.; breadth at entrance, 87 ft.; and lifting capacity, 17,500 tons. Active in design and construction of mobile drilling platforms and oil and gas production and storage facilities for service off shore.

HOLIDAYS: Longshore holidays are: New Years Day: Martin Luther King's Birthday (January 15); Lincoln's Birthday (February 12); Washington's Birthday; Texas Independence Day (March 2); Good Friday; Memorial Day (last Monday in May); Emancipation Day (June 19); Fourth of July; Labour Day; Columbus Day; Veteran's Day (November 11); Thanksgiving Day; Christmas Day.

DEVELOPMENTS: 2 new 600 ft. berths; 1 shedded with 120,000 ft. transit warehouse space, 1 open with 17 acres back from shipside area now complete and in operation. The ports new 220 ton mobile crane will complement the new facilities.

AUTHORITY: Port Director, Port of Beaumont.

BELLINGHAM, Washington: 48.45 N. 122.31 W.

(See Plan)

DOCUMENTS, PILOTAGE, etc.: Refer to "Tacoma".

HEALTH: See "Health; All Ports" before first U.S.A. Port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available, join vessel in Bellingham Bay.

ANCHORAGE: Deep water available, but not good holding ground.

BERTHING: North Terminal, Berths Nos. 1 & 2 length 1,500 ft., depth alongside 32 ft. MLLW. Berth No. 3 length 400 ft., depth alongside 30 ft. MLLW. Georgia Pacific Dock, Berthing length 600 ft., depth alongside 28 ft. MLLW.

CRANES: 2 × 50-ton capacity rail-mounted gantry cranes and 1 barge mounted 60-ton crane.

STEVEDORES: 8 local gangs. Additional gangs imported if required.

HOLIDAYS: See "Tacoma".

MEDICAL: All medical facilities available. Local hospital.

DENSITY: Salt water.

FRESH WATER: Available at all wharves.

FUEL: Available. Barge delivery only.

GANGWAY/DECK WATCHMEN: Required only if detainees aboard.

CUSTOMS ALLOWANCES: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.

AIRPORT: 3 miles from the city.

AUTHORITY: Port Manager, Port of Bellingham.

BENICIA, California: 38.03 N. 122.10 W. (See Plan)

DOCUMENTS: Health and all General Information: refer to "San Francisco".

PILOTAGE: Port located about 25 miles above Golden Gate Bridge. River Pilot joins at San Francisco, using VHF for traffic information. Passage includes passing under 2 bridges, Carquinez Strait Bridge having the least clearance, with 146 ft. (HW) and 151 ft. (LW) (using North Channel). River passage is timed to arrive at Benicia at the first of ebb tide; this is approximately 2.5 hours after HW at Fort Point (Golden Gate).

ANCHORAGE: At San Francisco.

RESTRICTIONS: Tankers must lighten to 36 ft. fresh-water draft. This is done at No. 7 anchorage, 1.5 miles East of Alcatraz Island. This cargo will later be pumped back to the tanker as barges cannot overcome shore back pressure. Turning basin off the berths, radius 1,800 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: 1 small tug assists berthing. Only 1 normally required for unberthing.

BERTHING: Continuous wharf 2,404 ft. long with berth for 3 vessels. Depth alongside 38 ft. The North berth used for crude oil discharge and the South berth for petroleum products. The centre berth is equipped for handling general and bulk cargoes.

MOORINGS: Berths equipped with quick-release hooks and bollards. 2 head wires, 4 breasts and 2 springs forward. This is necessary because of current off the bank during ebb tide. 2 stern lines, 2 breast lines and 2 springs aft.

BULK HANDLING FACILITIES: Waterside silos capacity 26,000 tons. With loading conveyor belt capacity 1,000 t.p.h.

TANKERS: Crude oil discharge through 2 × 12-in. Chiksan arms and 36-in. shoreline, 2.5 miles long. Shore tanks are situated 164 ft. above sea level, initial back pressure 65/70 p.s.i.

FRESH WATER: Available from shore lines.

FUEL: Can only be delivered by barge. Averate rate 300 t.p.h.

DEVELOPMENTS: Current plans call for: (1) enlargement to 9 berths; (2) deepening of water alongside, including channels to 45 ft.; (3) installation of bulk handling equipment for wood chips; (4) for bulk iron ore and (5) development of a complete container terminal.

AUTHORITY: Benicia Port Terminal Company.

BOSTON, Massachusetts: 42.21 N. 21.05 W.

(See Plan)

DOCUMENTS:

3 copies Cargo Manifest (Forms 7527–A or 7527–B), 2 copies showing all cargo on board, and 1 copy showing only cargo for this port.

3 copies Crew Manifest (Form 1304).

3 copies Stores List (Form 1303).

3 copies Passenger List (Form I.–418).

3 copies Crew List (Form I.–418).

Customs boarding officer will also examine Ship's Register, Safety Equipment Certificate and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States Port:

General Declaration (Form 1301).

Health Pratique.

Master's Oath (Customs Form 1300).

All foreign clearances.

Certificate of Financial Responsibility (Oil Pollution).

U.S. Certificates of payment of tonnage tax (Customs Form 1002).

Certified Crew List.

PILOTAGE: Is compulsory. Pilots cruise in boats which are designated by numbers painted in black figures 4 ft. high on deckhouse. The outer boat cruises outside the Graves.

ANCHORAGES: ANCHORAGE No. 1.

Upper Harbour Anchorage: Steam and motor vessels permitted to anchor in this basin anchor within the following area: S.E. of a line bearing 205° true from N.E. corner of Boston and Albany Pier No. 5, East Boston; N.E. of a line bearing 122° true from S.E. corner of Lewis Wharf, North Pier; S.W. of a line bearing 292° true from N.E. corner of Southernmost Airport Approach Pier; N.W. of a line bearing 025° true from Buoy No. 12, F1.R.6 sec.

ANCHORAGE No. 2. *President Roads Anchorage* (40 ft. anchorage): All vessels anchoring in this basin anchor within an area beginning at a point bearing 237°, 522 yards from Deer Island Light; thence to a point bearing 254°, 2,280 yards from Deer Island Light; thence to a point bearing 261°, 2,290 yards from Deer Island Light; thence to a point bearing 279°, 2,438 yards from Deer Island Light; thence to a point bearing 319°, 933 yards from Deer Island Light; thence to a point bearing 319°, 666 yards from Deer Island Light; and thence to point of beginning.

President Roads Anchorage: (35 ft. anchorage): All vessels anchoring in this basin anchor within an area beginning at a point bearing 256°, 2,603 yards from Deer Island Light; thence to a point bearing 258°, 3,315 yards from Deer Island Light; thence to a point bearing 264°, 3,967 yards from Deer Island Light; thence to a point bearing 261°, 2,290 yards from Deer Island Light; and thence to point of beginning.

ANCHORAGE No. 3. *Nantasket Roads Anchorage:* Vessels anchoring in this anchorage basin anchor within following area: Westerly of a line bearing 143° from wharf at Gallups Island to Bell Buoy No. 2, S.W. of Georges Island; Northerly of a line bearing 260° from Bell Buoy No. 2, Georges Island, to the Northerly end of Rainsford Island; Northerly of a line bearing 273° from the Northerly end of Rainsford Island to Bass Point, Long Island; Southerly of a line bearing 270° from the wharf at Gallups Island to Long Island.

ANCHORAGE No. 5. *Peddocks Island and Explosive Anchorage:* Vessels anchoring in this anchorage basin anchor within following area; S.W. of a line bearing 122° true from the Easterly end of Rainsford Island to the N.E. end of Rainsford Island to the N.E. end of Peddocks Island, N.E. of a line bearing 165° true from the Westerly end of Rainsford Island to the S.E. end of Peddocks Island.

RESTRICTIONS: There are 3 main channels of entrance from sea to President Roads.

Broad Sound North Channel from Broad Sound to President Roads from N.E. Dredged 35 ft. deep and 1,500 ft. wide and is deepened to 40 ft. in a width of 900 to 1,100 ft. This channel well marked by lighted buoys.

Broad Sound South Channel from Broad Sound S.W. and Westerly to President Roads. Dredged 30 ft. deep and 1,200 ft. wide. This channel is well marked by buoys and ranges but most aids to navigation are not lighted.

The Narrows is channel leading into Boston Harbour from S.E. between Boston Lighthouse and Lovells Island on the N.E. and Point Allerton, Georges Island and Gallups Island on S.W. Depth is 27 ft. Width is generally 1,000 ft. except in a section between

Narrows Light and Georges Island where shoaling on N.E side limits it to 700 ft. Channel is well marked.

The Main Ship Channel of Boston Harbour extends from President Roads to the mouths of the Chelsea and Mystic Rivers and to Charlestown Bridge on the Charles River. Channel has been dredged 35 ft. deep and 1,200 ft. wide to the inner end where widths decrease near the river mouths. It has been deepened to 40 ft. for 600 ft. width from President Roads to the mouth of the Mystic River, with a widening to 1,200 ft. at the bend just Northerly of Commonwealth Pier No. 5, South Boston.

Charles River is the approach by water to Cambridge and Watertown. About 0.5 mile above the lower bridge there is a dam with a lock 45 ft. by 350 ft. with depth of 17 ft. over the lower sill. Depths above dam decrease gradually to 9 ft., basin level, at head of navigation. *Mystic River* is approach by water to Everett, Malden and Medford. Controlling depths are 35 ft., from Mystic River bridge to approximately 1 mile above, thence 20 ft. from the 35 ft. channel to 800 ft. above the Malden Bridge to a point abreast Monsanto Chemical Company plant. *Chelsea River* is approach to city of Revere. Channel from entrance to a point opposite the Tenneco Oil Co. terminal has a controlling depth of 35 ft. *Weymouth Fore River* is approach by water to Quincy and Weymouth. Controlling depth is 30 ft. to Fore River Bridge. Controlling depth for a distance of 2,800 ft. above Fore River Bridge is 30 ft. *Town River* extends N.W. from Weymouth Fore River at Quincy Point. River has a controlling depth of 27 ft. from deep water in Weymouth Fore River to a point opposite the Quincy Oil Co. terminal. Opposite Quincy Oil Co. terminal there is a turning basin 18 ft. deep, 400 ft. wide and 1,000 ft. long.

MAX. SIZE: The primary entrance to Boston Harbour is via the North Channel and President Roads. Controlling depth is 35 ft. MLW. Average rise of the tide in Boston is 9.5. ft.

Generally speaking, vessels drawing 40 ft. are taken at the top of the tide to White Fuel and Exxon only. Vessels going to berths in the Mystic River above the Mystic River Bridge are limited by the bridge's vertical clearance of 135 ft. MHW.

Vessels consigned to berths in the Chelsea Creek are limited to a length of 669 ft., beam of 90 ft. and draft of 36 ft. high water docking. Furthermore, vessels which exceed 630 ft. going above the Chelsea Street bridge are restricted to daylight docking. Daylight sailing is required from the berths above the McArdle Bridge if the vessel is over 585 ft. long.

As a rule, vessels are docked bow in at the Chelsea Creek berths. If docked between the bridges, departure is stern first through the McArdle Bridge. If docked above the Chelsea Street bridge, then on sailing, the vessel is turned in the basin West of the Gibbs and Union terminals.

The controlling depth in the channel leading to Weymouth Fore River is 28 ft. MLW. Vessels with a max. draft of 33 ft. 6 in. will be taken at high water, but it should be noted that docking and undocking in Fore River are daylight operations – between sunrise and sunset – and no vessel longer than 628 ft. will be handled.

Ships going to the liquid gas facility in Dorchester are restricted to daylight docking and sailing. The controlling depth in the entrance channel in 18 ft. MLW.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.

RADIO: *Advance Notice of Arrival:* 24 hours advance notice of arrival be given. This notice is made to the office of the Captain of the Port – 223-6979.

The information to be provided consists of: Vessel's Agent's name; Vessel's name, type, flag, and call sign; the ETA; Berth; Last port and next port; Dangerous cargo on board. In return the Captain of the Port will assign a consecutive log number to the vessel.

In event the vessel's ETA is changed by more than 24 hours from first notice, the Captain of the Port should be so notified, identifying the vessel by its assigned log number.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Steamers can proceed from the sea to Boston Upper Harbour under own power. They are usually met by tow-boats, for docking while in the stream. Barges usually left by the outside tow-boats at the anchorage grounds, to be docked later by harbour tugs.

BERTHING: There are 259 piers or wharves in the port of Boston providing 158,646 lineal ft. or 30 miles of berthing space measured along the sides and ends of piers and along bulkheads or shore wharves. Many of them have railroad connections. The depths of water available alongside these terminals range up to a maximum of 40 ft. at mean low water. Practically all terminals fronting on main ship channel are in close proximity to storage warehouses, both cold and dry which greatly facilitates transfer of cargo between vessel and warehouse.

Main Terminals:

Hoosac Pier, 3 berths	depth alongside 35 ft.
Mystic Pier, 4 berths	depth alongside 40 ft.
Commonwealth Pier, 5 berths	depth alongside 40 ft.
South Boston, 10 berths	depth alongside 35 ft.
Castle Island, 7 berths	depth alongside 35 ft.
East Boston, 3 berths	depth alongside 32 to 35 ft.
Public Container Terminal, 2 berths	depth alongside 40 ft.

Sea-land Container Terminal, South Boston (Berth 17, Castle Island):

Operator – Sea-Land Service, Inc. Tel. 268-9720.

Type of Pier – Single face, 500 ft. long 1×27.5 ton container crane. 10 acre container storage area.

Depth alongside at MLW – 35 ft.

Normal ship side to dock – Starboard.

Line handling boat – not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – Containers.

Castle Island Terminal, South Boston:

Operator – Massachusetts Port Authority. Tel. 482-2930

Type of Pier – Single face. 6 berths No. 16 (610 ft.) adjacent to and extending N.W. of No. 17 (see above); No. 15 to No. 11 (2,995 ft.) adjacent to and extending Westward of No. 16. 294,000 sq.ft. covered storage, 4 million sq.ft. open storage (including 32 acres fenced in automobile storage and 20 acres lumber storage), 50 ton crane, rail service.

Depth Alongside at MLW – 35 ft.

Normal ship side to dock – Varies.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side. Min. 40 ft. apron.

Products handled – General cargo, containers, lumber, bulk salt and cement, automobiles, petroleum products (at berth No. 11 for White Fuel).

White Fuel Company, South Boston:

Operator – Texaco, Inc. Tel. 269-2111.

Type of Pier – Single face.

Depth alongside at MLW – 40 ft.

Normal ship side to dock – Port (bow in).

Line handling boat – required.

Access to vessel (for stores and repairs) – limited, trucks can approach only to within 150 ft. of gangway or ship's side.

Products handled – Avjet, Heating Oil, No. 6 Oil, Molasses.

Size and number of pipe-lines – Numerous – 24 in., 20 in., 16 in., 12 in.

Bbls per hour discharge capacity –12,000 to 18,000.

Average distance to storage tanks – 1,000 ft.

Pollution control equipment – 1,600 ft. boom, 16 ft. boat, 300 absorbent pillows, 2,000 gal. pumpout truck.

Eastern Minerals, South Boston:

Operator – Eastern Minerals, Inc. Tel. 269-5857

Type of Pier – Single face.

Depth alongside at MLW – 40 ft.

Normal ship side to dock – Starboard (bow out).

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – bulk salt, pumice. Discharge rate 5,000 tons per day with fixed grab requiring vessel to be shifted in berth.

Boston Army Base, South Boston:

Operator – Port Terminals, Inc. Tel. 542-7100.

Type of Pier – Single face, three sides: South 3,705 ft., East 351 ft. North 964 ft., 950,000 sq.ft. covered storage, rail service, 2×27.5 ton rail mounted cranes.

Depth Alongside at MLW – 35 ft.

Normal ship side to dock – Varies.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side. 50 ft. apron incorporates rail lines.

Products handled – General cargo, containers.

Commonwealth Pier, South Boston:

Operator – Massachusetts Port Authority. Tel. 482-2930.

Type of Pier – Single face, three sides: North and South 1,200 ft. East 400 ft. 500,000 sq.ft. covered storage, 1 million cu.ft. freezer, rail service, passenger lounge, upper level exhibition hall.

Depth Alongside at MLW – 40 ft.

Normal ship side to dock – Varies.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side. 20 ft. apron incorporates rail lines.

Products handled – Passengers, general cargo, refrigerated cargo, bulk tallow.

Pier 1, East Boston:

Operator – Massachusetts Port Authority Tel. 482-2930.

Type of Pier – Single face, three sides: East and West 605 ft. South 390 ft. 196,000 sq.ft. covered storage.

Depth Alongside at MLW – 35 ft.

Normal ship side to dock – Varies.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – General cargo, containers.

Metropolitan Petroleum Company, Chelsea:

Operator – Metropolitan Petroleum Company. Tel. 288-1111

Type of Pier – Timber pile, offshore.

Depth Alongside at MLW – 35 ft.

Normal ship side to dock – Starboard (bow in).

Line handling boat not required.

Access to vessel (for stores and repairs) – by hand cart only.

Products handled – Heating Oil, No. 6 Oil.

Size and number of pipe-lines – 2 × 8 in.

Bbls per hour discharge capacity – 6,000 to 8,000.

Storage tanks adjacent to berth.

Pollution control equipment – 1,000 ft. boom, 18 ft. boat, 50 absorbent pillows, 150 gals. Aqua-clene.

Note:– Bow to manifold 370 ft. No wire ropes used to moor vessel.

Exxon Company U.S.A., Everett:
Operator – Exxon Company U.S.A. Tel. Marine Department 387-1733, Marketing Terminal 389-7400.
Type of Pier – Timber pile wharf with caissons.
Depth alongside at MLW – 40 ft.
Normal ship side to dock – Starboard.
Line handling boat not required.
Access to vessel (for stores and repairs) – by rail-mounted hand cart.
Products handled – Asphalt, Chemicals, Diesel Oil, Jet Fuel, L.P.G., Kerosene, Gasoline, No. 2 and No. 6 Oil.
Size and number of pipe-lines – numerous.
Bbls per hour discharge capacity – Up to 35,000.
Average distance to storage tanks – 5,000 ft.
Pollution control equipment – 1,500 ft. boom, skiff.

Prolerized New England, Everett:
Operator – Prolerized New England Company. Tel. 389-8300.
Type of Pier – Straight face.
Depth alongside at MLW – 37 ft.
Normal ship side to dock – Port (bow out).
Access to vessel (for stores and repairs) – trucks to ship's side, but access may be limited due to vessel's position at conveyor.
Products handled – Ferrous scrap (including Prolerized shredded-scrap).
General notes: Pier is equipped with 2×40-ton cranes. Shredded scrap is loaded from fixed conveyor requiring vessel to be shifted as each hatch is served.
This berth is also used by Distrigas Corp. and Union Carbide Corp.

American (Domino) Sugar Refinery, Charlestown:
Operator – Amstar Corporation. Tel. 242-3670.
Type of Pier – Single face.
Depth Alongside at MLW – 33ft.
Normal ship side to dock – Port (bow in).
Line handling boat required.
Access to vessel (for stores and repairs) – trucks to ship's side, but may be limited depending on vessel's position at conveyor.
Products handled – raw sugar. Discharge facility consists of single grab with capacity of 200-250 t.p.h. Vessels limited to approximately 650 ft. overall length.

Revere Sugar Refinery, Charlestown:
Operator – Sucrest Corporation. Tel. 242-2750.
Type of Pier – Straight face.
Depth Alongside at MLW – 33 ft.
Normal ship side to dock – Port (bow in).
Line handling boat not required.
Access to vessel (for stores and repairs) – trucks to ship's side.
Products handled – raw sugar. Discharge facility consists of 23.5 ton grabs with total capacity of 350-400 t.p.h. Vessels limited to approximately 600 ft. overall length.

Mystic Scrap Terminal, Charlestown:
Operator – Schiavone Terminal, Inc. Tel. 242-5210.
Type of Pier – Single face.
Depth Alongside at MLW – 35 ft.
Normal ship side to dock – Owner's preference.
Line handling boat not required.
Access to vessel (for stores and repairs) – trucks to ship's side.
Products handled – Ferrous scrap.
General notes: Pier is equipped with 3×14-ton Clyde gantry cranes. Loading rate 2,500 tons per day. Rail service to pier.

J. F. Moran Container Terminal, Charlestown:
Operator – Massachusetts Port Authority. Tel. 482-2930.
Type of pier – Single face, 1,100 ft. long. 1×45-ton container crane, 1×70-ton container crane, 38,000 sq.ft. container stuffing shed, 23 acre container storage area, rail service.
Depth alongside at MLW – 35 ft.
Normal ship side to dock – Varies.
Line handling boat not required.
Access to vessel (for stores and repairs) – trucks to ship's side.
Products handled – Containers.

U.S. Gypsum, Charlestown:
Operator – U.S. Gypsum Co. Tel. 241-9100.
Type of Pier – Single face.
Depth alongside at MLW – 23 ft.
Normal ship side to dock – Port.
Line handling boat not required.
Access to vessel (for stores and repairs) – No access to berth.
Products handled – Gypsum rock from Nova Scotia, carried in company's own vessels, specially fitted and adapted for discharge at this berth.

Mobil Oil, East Boston:
Operator – Mobil Oil Corporation. Tel. 567-9080.
Type of Pier – Straight face, with centre relieving platform.
Depth Alongside at MLW – 30 ft.
Normal ship side to dock – Starboard.
Line handling boat required.
Access to vessel (for stores and repairs) – trucks to ship's side.
Products handled – Gasoline, Heating Oil.
Size and number of pipe-line – Various.
Bbls per hour discharge capacity – 8,000.
Average distance to storage tanks – tank farm adjacent to berth.
Pollution control equipment – 950 ft. boom.

Gibbs Oil Company, Revere:
Operator – Gibbs Oil Company. Tel. 289-7700.
Type of Pier – Timber pile, wooden deck.
Depth Alongside at MLW – 35 ft.
Normal ship side to dock – Starboard.
Line handling boat not required.
Access to vessel (for stores and repairs) – only by handcart.
Products handled – Heating Oil, Gasoline.
Size and number of pipe-lines – 3×10 in., 2×12 in.
Bbls per hour discharge capacity – 8,000 per line.
Average distance to storage tanks – 2,500 ft.
Pollution control equipment – 1,750 ft. boom, 16ft boat. (shared with Union, Gulf, Northeast.)

Union Oil Company, Revere:
Operator – Union Oil Company. Tel. 284-4490.
Type of Pier – Timber pile, wooden deck.
Depth Alongside at MLW – 33 ft.
Normal ship side to dock – Port.
Line handling boat required.
Access to vessel (for stores and repairs) – only by handcart.
Products handled – Heating Oil, Mogas, No. 5 Oil, No. 6 Oil.
Size and number of pipe-lines – 5×12 in.
Bbls per hour discharge capacity – 8,000 per line.
Average distance to storage tanks – 2,500 ft.
Pollution Control equipment – 1,750 ft. boom, 16 ft. boat. (shared with Gibbs, Gulf, Northeast).

Gulf Oil Company, Chelsea:
Operator – Gulf Oil Company. Tel. 884-5980.
Type of Pier – Single face.
Depth Alongside at MLW – 26 ft.
Normal ship side to dock – Port.
Line handling boat not required.
Access to vessel (for stores and repairs) – Trucks to ship's side.
Products handled – Heating Oil, Gasoline.
Size and number of pipe-lines – 5×12 in.
Bbls per hour discharge capacity – 8,000 per line.
Average distance to storage tanks – 1,000 ft.
Pollution control equipment – 1,750 ft. boom, 16 ft. boat. (Shared with Gibbs, Northeast, Union.)

American Oil, Chelsea:
Operator – Northeast Petroleum Corp. Tel: Office – 884-7570; Terminal – 884-7577.
Type of Pier – Timber pile dolphins, wooden decked parallel to single face abutment.
Depth Alongside at MLW – 35 ft.
Normal ship side to dock – Port (bow upstream).
Line handling boat required.
Access to vessel (for stores and repairs) – Trucks to ship's side.
Products handled – Gasoline, Kerosene, Heating Oil, No. 6 Oil.
Size and number of pipe-lines – 8 in., 10 in., 14 in., depending on product.
Bbls per hour discharge capacity – Up to 13,000 depending on product.
Average distance to storage tanks – 2,500 ft.
Pollution control equipment – 1,750 ft. boom, 16 ft. boat. (Shared with Union, Gibbs, Gulf.)

Texaco, Chelsea:
Operator – Texaco, Inc. Tel. Terminal 884-7000, Offices 269-2111.
Type of Pier – Single face.
Depth Alongside at MLW – For 575 ft. vessels: 31 ft. fwd., 34 ft. aft. For 624 ft. vessels: 21 ft. fwd., 34 ft. aft.
Normal ship side to dock – Port.
Line handling boat not required.
Access to vessel (for stores and repairs) – trucks to ship's side.
Products handled – Avjet, Diesel Oil, Gasoline.
Size and number of pipe-lines – 7×12 in.
Bbls per hour discharge capacity – 5,000 to 10,000.
Average distance to storage tanks – Tank Farm adjacent to berth.
Pollution control equipment – Automatic boom being installed.

Boston Gas, Dorchester:
Operator – Boston Gas. Tel. 288-3820.
Type of Pier – Centre platform and dolphins.
Depth Alongside at MLW – 25 ft.
Normal ship side to dock – Starboard.
Line handling boat not required.
Access to vessel (for stores and repairs) – None.
Products handled – Liquefied Natural Gas.

Quincy Oil, Quincy:
Operator – Quincy Oil Company. Tel. 773-2500.
Type of Pier – Timber pile, timber deck, offshore wharf.
Depth Alongside at MLW – 29ft.
Normal ship side to dock – Port.
Line handling boat not required.
Access to vessel (for stores and repairs) – by hand cart only.
Products handled – Gasoline, Heating Oil.
Size and number of pipe-lines – 2×8 in.
Bbls per hour discharge capacity – 6,000.
Average distance to storage tanks – Tank Farm adjacent to berth.
Pollution control equipment – 800 ft. boom, workboat.

Mobil Oil, Quincy:
Operator – Mobil Oil Corporation. Tel. 773-7080.
Type of Pier – T-head with dolphins.
Depth Alongside at MLW – 30 ft.
Normal ship side to dock – Starboard.
Line handling boat not required.
Access to vessel (for stores and repairs) – trucks to ship's side.
Products handled – Gasoline, Heating Oil.
Size and number of pipe-lines – Various.
Bbls per hour discharge capacity – 8,000.
Average distance to storage tanks – Tank Farm adjacent to berth.
Pollution control equipment – shared with Sprague.

C.H. Sprague & Son Co., North Weymouth:
Operator – C.H. Sprague & Son Co. Tel. Terminal 337-2040, Offices 542-7807.
Type of Pier – Timber pile, concrete deck.
Depth Alongside at MLW – 35 ft. 6 in.
Normal ship side to dock – Starboard.
Line handling boat not required.
Access to vessel (for stores and repairs) – trucks to ship's side.
Products handled – No. 6 Oil.
Size and number of pipe-lines – 2×12 in.
Bbls per hour discharge capacity – 10,000 per line.
Average distance to storage tanks – 2,500 ft.
Pollution control equipment – 500 ft. boom, 16 ft. boat (shared with Mobil).

Cities Service Oil Company, Braintree:
Operator – Cities Service Oil Company. Tel. 848-1100.
Type of Pier – 4 cylindrical caissons.
Depth Alongside at MLW – 34 ft.
Normal ship side to dock – Starboard.
Line handling boat not required.
Access to vessel (for stores and repairs) – trucks to ship's side.
Products handled – Heating Oil, Gasoline.
Size and number of pipe-lines – 1×10 in., 4×12 in.
Bbls per hour discharging capacity – 10,000.
Average distance to storage tanks – 2,500 ft.
Pollution Control Equipment – 1,500 ft. boom, work boat.

Bulk Cement Piers:
There are 2 berths in Boston used exclusively for the discharge of bulk cement from barges. Both are in the Mystic River.

No. 28: Allied Concrete Corp. Telephone. 389-2800. This berth is leased to: Marquette Cement Manufacturing Co. Telephone. 235-8006.

No. 33: Atlantic Cement Company, Inc. Telephone. 241-9090.

Meat Inspection Station: The Massachusetts Port Authority operates a meat inspection station on Mystic Pier (No. 38) adjacent to the Moran Container Terminal.

Random incoming meat samples are cut, defrosted, weighed, inspected, and re-frozen at this new facility, enabling inspectors to use one central location instead of the 5 other waterfront stations previously utilized.

The chief component of the building is the large, well-lighted, well-ventilated, and sanitary inspection room. Walls are ceramic tile, the floor has quarry tile, and the ceiling is of acoustical tile.

Up to 50 containers of meat a day will be inspected at this modern facility.

SPECIALISED CARGO HANDLING FACILITIES: Also see "Berthing".

	Location	Depth at MLW
Bulk Cement		
Atlantic Cement Company	Charlestown	29 ft.
Marquette Cement MFG. Company	Everett	20 ft.
Universal Atlas Cement Company	South Boston	25 ft.
Chemicals and Solvents		
Union Carbide Corp.	Everett	36 ft.
General Cargo Terminals		
East Boston Pier (3 berths)	E. Boston	35 ft.
Mystic Pier (4 berths)	Charlestown	40 ft.
Hoosac Pier (3 berths)	Charlestown	35 ft.
Commonwealth Pier (5 berths)	S. Boston	40 ft.
Boston Army Base Terminal (10 berths)	S. Boston	35 ft.
Castle Island Terminal (7 berths)	S. Boston	35 ft.
Container Terminals		
JF Moran Docks (2 berths)	Charlestown	40 ft.
Sea-Land Services Inc. (1 berth)	S. Boston	35 ft.
Gypsum Rock		
U.S. Gypsum Company	Charlestown	24 ft.
Sulphur		
Freeport Mineral Company	Everett	36 ft.
Iron and Steel Products		
Boston Army Base Terminal (1 berth)	S. Boston	35 ft.
Raw Sugar		
American Sugar Co.	Charlestown	30 ft.
Revere Sugar Refinery	Charlestown	30 ft.
Salt (Sodium Chloride) and Pumice		
Eastern Minerals Inc.	S. Boston	35 ft.
Castle Island Terminal, Berth II	S. Boston	35 ft.
Scrap Metal		
Prolerized N.E. Co.	Everett	36 ft.
Schiavone & Sons Inc.	Charlestown	34 ft.
Vegetable Oils, Liquid Caustic Soda, etc.		
Procter & Gamble MFG Co.	Quincy	30 ft.
Animal Oils Greases and Fats (Tallow)		
Commonwealth Pier 5 (Corenco)	S. Boston	40 ft.
Automobiles		
Castle Island Terminal Berth 16	S. Boston	35 ft.
East Boston Pier I	E. Boston	35 ft.
Commonwealth Pier 5	S. Boston	40 ft.
Lumber		
Castle Island Terminal Berth II	S. Boston	35 ft.
L.N.G. Terminals		
Boston Gas Company	Dorchester	25 ft.
Distrigas	Everett	36 ft.

TANKERS: Also see "Berthing".

Tanker Berths	*Location*	*Depth at MLW*
State Fuel Co. Inc.	E. Boston	29 ft.
Mobil Oil Corp.	Quincy	35 ft.
Mobil Oil Corp.	E. Boston	30 ft.
Gibbs Oil Company	Revere	35 ft.
Atlantic Richfield Company	Revere	35 ft.
Sun Oil Company	Revere	30 ft.
Northeast Petroleum Corp.	Chelsea	32 ft.
Northeast Petroleum Corp.	Revere	30 ft.
Union Oil Company of Boston	Revere	35 ft.
Gulf Oil Corp.	Chelsea	31 ft.
American Oil Company	Chelsea	32 ft.
Cities Service Oil Co.	Braintree	35 ft.
Cities Service Oil Co.	Chelsea	30 ft.
Texaco Oil Inc.	Chelsea	36 ft.
Quincy Oil Co.	Quincy	32 ft.
Metropolitan Petroleum Co.	Chelsea	35 ft.
Exxon	Everett	42 ft.
White Fuel Oil Co.	S. Boston	40 ft.

LNG/LPG: Presently there are 2 facilities in Boston Harbour which handle LNG (Liquid Natural Gas – methane). Boston Gas at Commercial Point, Dorchester, Mass., and Distrigas on the Mystic River, Everett, Mass., have storage capabilities for LNG.

The Exxon Everett facility receives and stores LPG (Liquefied Propane Gas).

The Captain of the Port has issued very specific requirements for vessels transitting the harbour and transferring cryogenic cargoes. The Coast Guard team consisting of Port Safety Station, representing the Captain of the Port, and Marine Inspection Office boarding officers and the men assigned to the escort and monitoring details are charged with the responsibility for insuring compliance with these regulations which are detailed in the 60-page LNG/LPG Contingency Plan issued by the Captain of the Port. Included in the plan are the following General Regulations:

The vessel must:

(1) Hold a current Letter of Compliance for the carriage of methane/propane issued by the Commandant and a Certificate of Financial Responsibility for Oil Pollution.

(2) Enter the harbour only during daylight hours. Additionally, vessels transitting Dorchester may only do so within 2 hours of high water. Weather permitting, the COTP may authorize night departures providing the vessel does not have a full or partial cargo.

(3) Enter the harbour only during periods of good visibility. If the visibility is less than 2 miles the vessel must:

(i) If at sea, not enter the port without the COTP's premission.

(ii) If in port, notify COTP of position and then proceed to berth or anchorage, whichever nearer.

(4) Maintain a radio watch on Channel 13 (156.65 mHz) while underway in the port area. Additionally, a watch should be maintained on Channel 16 (156.8 mHz).

(5) Not commence offloading cargo prior to the satisfactory completion of the arrival safety inspection by Coast Guard Marine Inspectors and the issuance of the Permit to Handle Explosives or Other Dangerous Cargo (CG Form 4260).

Additionally:

(1) The vessel must moor either bow to seaward and be prepared to get underway on short notice, should an emergency so require, or have a tug standing by during all cargo operations. A tug standby will be required on a vessel's first visit to this port.

(2) The vessel will normally be boarded while anchored in President Roads by COTP/OCMI Inspectors unless, prior to the vessel's arrival, the Master sends a message to COTP stating that: "To the best of my knowledge and belief there are no known casualties to this vessel or its machinery which might affect the seaworthiness. I further state that all cryogenic handling and detection equipment is in proper operating condition."

If this message has been received, the inspection will be made at the dock unless it is the vessel's first visit to Boston. On a vessel's first visit to Boston the boarding will always be made in President

Roads. If the vessel does not hold a Letter of Compliance the boarding will be made in Broadsound and the vessel will not be allowed to enter the port until a temporary Letter of Compliance is issued.

(3) Venting gas to the atmosphere is not permitted in port.

(4) All cargo operations must cease if electrical storms are present.

(5) If interpreters are not available, all ship's personnel directly involved in the transfer operation shall readily speak the English language.

(6) If the vessel is at anchorage a live bridge watch shall be maintained. A round of bearings fixing the vessel's position shall be taken hourly followed by a report, every 4 hours, to USCG Group Boston on Channel 16 FM reporting anchor holding and operations normal or any significant change in position or deviation from the norm.

Also, whenever an LNG/LPG vessel is transitting Boston Inner or Outer Harbour (to the seaward entrance of the Boston North Channel) no other vessel will be allowed to be underway in an area 2 nautical miles ahead and 1 nautical mile astern of the LNG/LPG vessel in transit. This concept can be thought of as a "moving restricted area" centred on the LNG/LPG vessel. For vessel movement in an area of the Port other than that described above, express permission from COTP Boston must be obtained.

Furthermore, the maximum allowable speed for any vessel movement during an LNG/LPG vessel transit, will be 6 knots. A Coast Guard escort craft will always be present during an LNG/LPG vessel transit and will vigorously enforce these vessel movement restrictions. The maximum penalty for violation of any of the rules established under the above authority is imprisonment for not more than 10 years and a fine of not more than $10,000.

It should be noted that these rules establishing a restricted envelope around the LNG/LPG vessel and the 6 knot speed limit apply not only to other vessels but to the LNG/LPG vessel itself. Therefore, the LNG/LPG vessel may not approach any closer than 2 nautical miles to another vessel underway, thus eliminating a possible collision should another vessel lose steerage or suffer a casualty. These rules prohibit crossing, meeting or overtaking situations from occuring in Boston Harbour out to the seaward entrance to the North Channel. However, other vessel movements during an LNG/LPG vessel transit may be allowed with permission of the Captain of the Port.

LNG/LPG Vessel Inspections: Before an LNG/LPG vessel is allowed to conduct cargo operations in the Port of Boston, the vessel must undergo a joint COTP/MIO Boston inspection to determine if all cargo handling and detection systems are in proper working order. One of the tests involves the introduction of a properly certificated amount of test gas (span gas) into the vessel's gas detection system. This allows the Inspector to determine if the gas detection system is functioning properly and is able to detect the presence of LNG or LPG should an actual leak occur somewhere on the vessel. Until recently, if a vessel did not have on board a cylinder of the properly certificated span gas, the Coast Guard Inspectors would provide this service. However, due to the increasing costs of the gas (LNG over $40.00 and LPG over $63.00), the vessel will be required to provide the span gas with a valid certificate attesting to its composition before the inspection can begin. Also, for the inspection to continue, shipboard or civilian technicians must be available to rectify any problem that may develop.

STEVEDORES: Available at various rates.

FRESH WATER: Plentiful supply of excellent water in Boston. It is supplied by terminal at prevailing rates.

FUEL: All grades available in various viscosities. Normally supplied by barge subject to advance notices.

CUSTOMS ALLOWANCE: At the discretion of Customs officers. Normal allowance is 200 cigarettes or 2 lb. of tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I.–95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I.–95, issued for the same vessel.

GANGWAY/DECK WATCHMEN: Available at prevailing prices.

OPENING/CLOSING HATCHES: Performed by stevedores.

CONSULS:

Australia
Argentina
Austria
Belgium
Bolivia
Brazil
Canada
Cyprus
Colombia
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland

France
W. Germany
Great Britain
Greece
Guatemala
Haiti
Honduras
Iceland
Ireland
Israel
Italy
Japan
Korea
Lebanon
Mexico

Netherlands
Nicaragua
Norway
Panama
Paraguay
Peru
Portugal
Spain
Sweden
Switzerland
Taiwan
Thailand
Turkey
Venezuela

REPAIRS: Any type of repair undertaken.

DRY DOCKS:

Bethlehem Steel Co., Shipbuilding Division, East Boston, Massachusetts

	Length	*Capacity*
Floating Dry Dock No. 1	622 ft.	18,000 tons
Floating Dry Dock No. 2	479 ft.	20,000 tons
Graving Dry Dock No. 4	256 ft.	

Modern facilities for repair, overhaul, and conversion of vessels of all sizes:

(a) a 10,000 ton capacity floating dry dock serviced by 2×150 ton overhead cranes with a yoked capacity of 350 tons. The 5-section dock is 415 ft. long, 120 ft. wide, and has an inside dimension of 85 ft. 7 in.

(b) 3 building basins (actually a 3-positioned graving dock). 2 are 132 ft. wide, 867 ft. long; 1 is 150 ft. wide, 938 ft. long. Each basin serviced by 2 whirley type cranes of 75 and 50 ton capacity.

(c) 4 outfitting piers capable of handling up to 10 ships simultaneously provide adequate space for dockside work and for mooring personnel or service barges.

(d) 3 conventional "sliding" ways capable of handling ships up to 1,000 ft. in length.

Major Shops: 2-bay fabricating shop served by 17 bridge cranes. Machine shop equipped with large vertical and horizontal mills planers, lathes and a complete small machine complement. Fully equipped sheet metal, joiner, boiler, blacksmith, pattern foundry, galvanizing, pipe and copper, and electrical shops. Complete facilities for inspection of all types including nondestructive testing such as radiography, magnetic particle, liquid penetrant and ultrasonic.

REPATRIATION: Good facilities exist.

HOLIDAYS: New Year's Day (1st January); Washington's Birthday (22nd February); Patriots' Day (19th April); Memorial Day (30th May); Bunker Hill Day (17th June); Independence Day (4th July); Labour Day (first Monday in September); Colombus Day (8th October); Veteran's Day (22nd November); Thanksgiving (fourth Thursday in November); Christmas Day (25th December). *Note:* "Or any day celebrated in lieu thereof".

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight saving time, GMT minus 4 hours from April to October.

AUTHORITY: Massachusetts Port Authority.

BRIDGEPORT, Connecticut: 41.07 N. 73.11 W.

DOCUMENTS: Refer to "New York".

PILOTAGE: Vessel usually notifies Agent 48 hours before arrival, who will arrange pilot boarding. Pilot boards either at Brenton Reef pos. 41.25 W., 71.23 W. or Point Judith pos. 41.17 N., 71.29 W.

ANCHORAGE: 2 miles South of No. 2 entrance buoy.

RESTRICTIONS: Local Pilot usually boards vessel at anchorage at 0600 hrs. and docks vessel about 0700 hrs. Entrance channel 33 ft.

MAX. SIZE: Draft up to 33/36 ft. subject to weather and tides.

HEALTH: Vessel to cable Agent 24 hours prior to arrival of any illness on board, otherwise radio pratique not necessary.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Vessels arriving from North use Chatham Radio. Vessels from South use Amagansett Radio on Long Island.

TUGS: Assistance is available.

BERTHING: Cilco terminal, depth 30 ft. 6in. at MLW. Length of dock 1,100 ft.

TANKERS: Shell dock, depth 38 ft. at MLW. United Illuminating Co., depth 35 ft. at MLW, max. length 800 ft.

FRESH WATER: Available at all berths.

FUEL: No fuel barge service available. In emergency tank truck delivery can be arranged.

MEDICAL: All facilities available.

AIRPORT: Bridgeport Airport about 3 miles away. New York airports about 50 miles distance.

CONSULS: All countries represented in New York.

HOLIDAYS: New Year's Day (1st January); Lincoln's Birthday (12th February); Washington's Birthday (18th February); Good Friday–Memorial Day–Independence Day (4th July); Labour Day–Columbus Day (14th October); Veterans' Day–Election Day (5th November); Thanksgiving Day (28th November); Christmas Day (25th December).

TIME: Daylight Saving Time, GMT minus 4 hours from April to October.

AUTHORITY: Office of the Harbour Master.

AGENT: Cilco Terminal Company Inc., (Main office) 75 Third Street. (Terminal and Operations) 535 Seaview Avenue, Bridgeport, Connecticut 06601. Tel. (203) 336-3841. TWX 7104534028. Cables "Cilco".

BROWNSVILLE, Texas: 25.54 N. 97.28 W.

DOCUMENTS: See "Houston".

PILOTAGE: When a vessel is scheduled to arrive at the port of Brownsville the vessel's Agent notifies the Harbour Master's office of the approximate ETA. Later, when a firm ETA is received, the Harbour Master's office notifies the pilot office that the vessel is expected on the bar at a certain time and also gives the time which she would like to enter.

The telegraphic address of the pilot office is: Brazos-Santiago Pilots, 411 First National Bank Bldg., Brownsville, Texas.

If possible, it is desired that the pilot office be notified 2 hours in advance of the ETA of any vessel.

The VHF Channel to be used when contacting the pilot boat is 16. When contact is made, this will be switched to Channel 13.

The pilot boat is a steel hull length 43 ft. beam 16 ft. and draft 8 ft. 250 h.p. diesel. Gross tonnage 36 tons. Built 1975.

No light or sound signals are necessary from vessels requiring a Pilot, although light signals may sometimes be used at night – ordinarily a vessel is picked up by visual sighting.

The pilot boat is located on the South tip of Padre Island – the Pilot station is adjacent to the entrance to ship channel with a clear view of the approach to the jetties.

The Pilot is taken on board an incoming vessel at the sea buoy which is located 2 miles off shore.

The anchorage for a vessel awaiting Pilot is 1.5 miles North of sea buoy.

ANCHORAGES: Anchorages are marked on charts.

MAX. SIZE: The max. permissible: Length 800 ft., beam 100 ft., draft 35 ft.

RADIO: ETA cables to Agent, etc., should be addressed to the Agent via Mackay Radio at Galveston or RCA in Port Arthur. When within a 60 miles range of the port, calls may be made through the Harbour Master's office on VHF Channel 16 and the calls will then be transferred to land lines to any point.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Brownsville Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

VHF: A vessel approaching the port of Brownsville may contact the Harbour Master's office on VHF Channel 16.

TUGS: Tugs normally join an incoming vessel 1.25 miles before she enters the turning basin. The tug's lines are used for which there is no charge.

STEVEDORES: To arrange for gangs the vessel needs to notify the ship's Agent of ETA; the Agent will in turn notify the stevedores. It is necessary that the Agent be advised of an ETA before 1900 hrs. for an 0800 hrs. start.

Main commodities and average load discharge rates:

Grain	Bulk carrier 1,200 t.p.h.
Grain	between deck 600 t.p.h.
Cotton	100 bales per hour per gang
Lead and zinc pigs	30 tons per hour per gang
Citrus in boxes	18 tons per hour per gang
Onions and carrots in bags	18 tons per hour per gang
General cargo	25 tons per hour per gang

MEDICAL: When medical attention is required, advance notice should be given the Agent by ship's radio.

TANKERS: Ballast facilities are available up to 6,000 barrels per hour. The port loads residual crude only – about 13.2 API. The port has 3 tanker berths, with 34 ft. 7 in. max. draft.

DENSITY: The average density is 32 parts per 1,000.

FRESH WATER: Fresh water is available and can be delivered to a vessel through hose or pipe-line at 150 gallons per minute.

FUEL: No fuel is available locally. It must be barged in from Corpus Christi – advance arrangements are necessary.

FIRE PRECAUTIONS: Tankers are required to berth head out.

DEVELOPMENTS: The Federal Government has made an appropriation to initiate a study on deepening ship channel from 36 ft. to 42 ft. and to widen the channel from 200 ft. to 400 ft., bottom width. Plans are being made to build another grain elevator/bulk materials dock, and another chemicals dock within 2 years.

GANGWAY/DECK WATCHMEN: Such services are necessary only when detainees are held on board.

OPENING/CLOSING HATCHES: This work is done by the stevedores.

IDENTIFICATION CARDS: Immigration requires form No. 1-95 Landing permit.

CONSULS: Mexico: tel. 542-4431; Guatemala, Costa Rica and Honduras, tel. 542-3506; Nicaragua, tel. 546-6861.

REPAIRS: Marathon, located at the port, is equipped to handle all normal temporary ship repairs.

DRY DOCKS: None available.

REPATRIATION: There are facilities for this service.

AIRPORT: The local airport is located 2 miles from the port. Braniff Airways operates 4 flights daily.

TIME: Local Time is 6 hours behind GMT.

HOLIDAYS: The following holidays are observed here: Veterans Day (4th Monday of October); Thanksgiving; Christmas; New Year; Washington's Birthday (Feb. 22); Texas Independence Day (March 2); Emancipation Day (June 19); July 4th; Labour Day (1st Monday in September); Decoration Day (last Monday in May).

No work shall be performed on Labour Day or Christmas Day except in case of fire or where property is in danger. When holidays come on Sunday, the following day will be recognised as the holiday. Also, no work will be performed between 1600 and 1900 hrs. on election days.

POLICE/AMBULANCE/FIRE: Sherriff 546-2451; Brownsville Fire Dept. 542-4375; Ambulance Service 542-2121.

TELEPHONES: Telephones are not available for placing on ships.

SERVICES: Tank cleaning service is available at the port. Ballast facilities are available at oil docks 1, 2 and 3. P.I.B. can take care of compass adjusting, etc.

DELAYS: There are no delays unless an incoming ship has been assigned to a berth now occupied. Bunkers must be barged in; arrangements may be made ahead of time to avoid delay.

AUTHORITY: Port Director.

BRUNSWICK, Georgia: 31.09 N. 81.30 W.

DOCUMENTS:

Crew Lists: 1 certified copy for Immigration; 2 copies uncertified for Customs.
1 copy Pratique.
3 copies Inward Customs Manifests.
3 copies each Stores, Curio & Narcotics List.

PILOTAGE: Compulsory. 24-hour Pilot service arranged by Agent with 48-24 hour prior notice from ship. Pilot station at Buoy "St. S." Pilot reached through UHF Channels 12, 14, 16 on voice radio (R/T). Pilot boat is 25 ft. white hull. Marking is "Pilot" on hull.

ANCHORAGES: 3 miles S.E. of buoy "St. S." sand and mud bottom. In event deep draft (30 ft.) and high winds, anchorage near Ocean Buoy 2B and inform Pilot as in "Pilotage". Vessels in need or for other good reason, may anchor in St. Simon's Sound, depth 10 fathoms.

APPROACHES: The harbour is located about midway between Savannah and Jacksonville. the harbour is reached by a channel from the Atlantic Ocean, running between St. Simons and Jekyll Island. The channel has a minimum width of 500 ft. and a depth of 32 ft. to St. Simons Sound, thence a width of 400 ft. and a depth of 30 ft. to Sidney Lanier Bridge, where the channel divides, 13 miles from sea. The Northern branch leads to Lanier Dock, State Dock and the city, 400 ft. wide and 30 ft. deep. The other branch leads N.W. to the pulp plant dock, chemical docks and electrical generating plant, 300 ft. wide and 30 ft. deep.

RESTRICTIONS: No restrictions unless vessel drawing 30 ft. or more, then must await high tide to cross bar.

MAX. SIZE: Max. permissible length 650 ft. Max. d.w.t. over 33,000 tons.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Prior arrival, use commercial Lantana, Chatham Radio for advices to Agent, 48-24 hours in advance.

TUGS: 3 Tugs, 500 h.p. each. Join vessel in St. Simon's Sound after passing lighthouse. Tug lines used.

BERTHING: 1,600 ft. continuous marginal wharf; steel and concrete construction, 57 ft. wide apron. Vessels normally turned to moor port side alongside unless deck cargo or other vessel obstruction means cargo may not be worked over port side. Gantry crane of 27 tons capacity available.

The Brunswick Port Authority operates a bulk commodity terminal at Lanier Dock. The facility is 500 ft. long and constructed of steel and concrete, with a project depth of 30 ft. MLW, equipped with a grab bucket, conveyors and marginal tracks for handling bulk cargoes at rates up to 600 t.p.h. It operates covered warehouses with a capacity of approx. 32,000 tons. A limited amount of open storage space is available equipped with a conveyor system and reclaim facilities. Lanier Dock lies directly adjacent to the Brunswick State Docks and warehouses. Both wharves have a turning basin of 1,000 ft. in length and 600 ft. wide with a project depth of 30 ft. MLW (mean low water) also Barge Dock facility 250 ft. long.

BRIDGES: 1: Lanier Bridge draw bridge; 250 ft. horizontal clearance, 139 ft. vertical clearance, up position, high water. Vessels under Pilot and tugs when passing through.

STEVEDORES: Wireless to Agent 48-24 hours prior arrival with number of gangs, working hatches and space in hatch, and special factors, e.g., pilferable cargo, autos, heavy-lifts, etc.

MEDICAL: Advance notice to Agent, or notify on arrival.

TANKERS: Liquid bulk cargo is pine oil distillates loading. Petroleum storage 310,000 barrels, Number 6.

DENSITY: Average 1.0166 (high) to 1.0141 (low). Water inside considered brackish.

FRESH WATER: From shore connections at 20 t.p.h.

FUEL: Bunker "C" available at piers. Distillate and blends by barge, if required. 72 hour advance notice to Agent, giving type and quantity.

GANGWAY/DECK WATCHMEN: Not required but available.

OPENING/CLOSING HATCHES: "MacGregor" hatches must be opened by vessel prior working. All others may open at discretion to save turn-around time.

CERTIFICATES: Registry, U.S. tonnage tax.

CUSTOMS ALLOWANCES: Tobacco, 2 cartons. Customs will open bonded stores on request. Spirits, reasonable amount.

IDENTIFICATION CARDS: U.S. Immigration Landing Permits.

CONSULS: None, Consulates at Savannah, Ga., and Jacksonville, Fla., may be used as required by vessel.

REPAIRS: Limited to minor replacement parts to engine, radio, radar of standard makes. Major repairs may be arranged with shipyards of Savannah or Jacksonville.

DRY DOCKS: None.

REPATRIATION: Through Agent.

AIRPORT: 20 minutes drive from quays; 4 flights daily.

TIME: GMT minus 5. Daylight Saving Time, 15 April through last Sunday October. April: advance; October: retard.

HOLIDAYS: 1 Jan., 15 Jan., 12 Feb., 22 Feb., 30 May., 4 July, 1st Monday in September, 12 October, 11 November, 4th Thursday in November, 25 December.

POLICE/FIRE/AMBULANCE: Numbers given in Boarding Brochure.

TELEPHONES: None placed aboard. Public pay (coin) telephones on quay clearly marked.

GENERAL: Brunswick, Georgia, is a small port specialising in export of woodpulp in bales, pine-tree products in drums. Imports bulk salt, salt-cake, fertilizer materials and gypsum, some break-bulk general cargo. Vessel requirements handled by Agent in residence, communication by wireless or R/T essential in advance.

AUTHORITY: The Brunswick Port Authority and Georgia Port Authority.

AGENT: Southern Shipping Company, State Port Bldg. Tel. 912/256/7588. Cables: Soshipco.

BUFFALO, New York: 42.55 N. 78.55 W.

(See Plan)

DOCUMENTS: For vessels arriving from foreign ports:

3 Unfreighted copies of Complete Manifest covering all cargo to be discharged in the Great Lakes.
4 Personal Effects Lists.
4 Crew Lists.
4 Narcotics Lists.
Vessel's Registery and copies of Paid Tonnage Tax Certificates.
Health Pratique.
Clearance from previous port.

PILOTAGE: Not compulsory. Seaway Pilots will assist if required.
MAX. SIZE: Limited by Seaway Locks. 730 ft. length and Seaway draft.
RESTRICTIONS: St. Lawrence Seaway navigation season approximately from 15th April to 10th December. Controlling depth 25 to 27 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Available.
RADIO: WBL – Buffalo.
BERTHING: Outer harbour: Total berth space 2,400 ft.; depth alongside 27 ft. LWD. 2 transit sheds – total of 184,000 ft. dry dock space; sprinkler system equipped, seaway piers for bulk cargoes. South and North Piers 3,506 ft. of berth space, 200 acres open storage area. Depth alongside 27 ft.
SPECIALISED CARGO HANDLING FACILITIES: Niagara Frontier Transportation Authority has a mobile gantry crane capable of handling lift of 50 tons at 40 ft. with a boom. Additional heavy lift equipment available from commercial sources.
DENSITY: Fresh water.
MEDICAL: U.S. Public Health Outpatient Clinic as well as numerous hospital facilities.
FRESH WATER: Available at most berths.
FUEL: All grades available by tank truck delivery or by harbour tank barge.
REPAIRS: Machinery and above-water repairs available.
GENERAL: Refer to "Great Lakes Pilot".
AUTHORITY: Niagara Frontier Transportation Authority.

BURNS HARBOUR: Indiana: 41.38 N. 87.11 W.

(See Plan)

The entrance to Burns Waterway Harbour is at 41° 38′ N. and 87° 11′ W. and is located on the South shore of Lake Michigan at Portage, Indiana, some 30 miles East of Chicago in an area known as the Indiana Dunes.
PILOTAGE: Available.
RESTRICTIONS: Average Navigation Season: Domestic cargo by lake freighters – March 15 to February 1. Ocean going vessels via Seaway – April 1 to December 15. Lake river barges – twelve months.

Approach to Harbour: Controlling depth of water at harbour entrance 30 ft., entry is from deeper water. Length and Beam Limitations – none. Approach open 24 hours per day.

Harbour: Controlling depth of water for outer harbour 28 ft.; East and West harbour arms 27 ft. Turning basin – 1,600 ft. radius with water depth of 28 ft. Accessible 24 hours a day. Length and beam limitations – none.
TUGS: Available if required.
BERTHING: The port provides 30 ft. depth at the entrance channel, 28 ft. at the inner harbour, and 27 ft. at berths. The harbour is protected by an all weather breakwater.

The port has 7 modern berths plus a mooring facilitiy specifically designed for self-unloader ships. Ultimately the Port will have 15 ship berths. Recently completed are 2 modern, heated, sprinkler-equipped transit sheds providing 146,000 sq. ft. of space for general cargo, which are being operated by competent stevedores.
CRANES: 3 × 150 ton crawler cranes; 3 × 75 ton crawler cranes; 3 × 60 ton crawler cranes.
FRESH WATER: Available.
AUTHORITY: Indiana Port Commission, Port of Indiana – Burns Waterway Harbour, Portage, Indiana.

BURNSIDE, (Including St. James), Louisiana: 30.08 N. 90.55 W.

East bank of Mississippi River, about 200 miles from sea.
DOCUMENTS/PILOTAGE: For all general information refer to "New Orleans".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made out to New Orleans Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Not normally required.
BERTHING: Bulk Marine Terminal: berth 800 ft. long, 40 ft. depth; Ormet Corporation berth 825 ft. long, 50 ft. depth.
TANKERS: *St. James:* The facility is located on the West bank of the Mississippi River at Mile 180 above Head of Passes.

The operators are Shell Pipeline Corporation, Donaldsonville, Louisiana.

There are 2 berths, one of which is 800 ft. long and the other 1,100 ft. long. At the newer dock there are two 16 in. arms and the berth is capable of unloading 28,000 barrels per hour.

The depth alongside these berths is 55 to 60 ft. However, the draft of the vessel is limited to that available at Southwest Pass.

It is important to note that due to the design of this terminal it is impractical for vessels to receive stores at this location. Additionally there are no bunkers provided at this terminal nor is there any fresh water available from the terminal and there is no authorized anchorage in the immediate area of this facility. Vessels expecting less than 24 hours delay awaiting berth are generally anchored at New Orleans and then proceed to the terminal (which is a different port of entry for Customs) otherwise vessels would have to anchor at Burnside which is about 10 miles up river from St. James.

Because of an underwater pipe-line near the dock, the terminal management requires all vessels using their facility to have at least 1 tug of 1,800 h.p. to assist in docking and undocking. Note that the tugs emanate from New Orleans which means approximately 7 hours transit to St. James.

As a point of reference it generally takes approximately 15 or 16 hours transit from Southwest Pass to St. James Terminal for most vessels.
FRESH WATER: Available ex-berth.
FUEL: Not available.
DENSITY: Fresh water, 1000.

CAPE COD CANAL, Massachusetts

The Cape Cod Canal is a sea-level canal, extending from a point on Cape Cod Bay about 50 miles S.E. of Boston Harbour, Mass., to the head of Buzzards Bay, Mass. In general direction the canal trends from Cape Cod Bay Westerly to Buzzards Bay.
PILOTAGE: The Corps of Engineers, Department of the Army , does not maintain pilot service but independent Pilots, licensed by the U.S. Coast Guard, are usually available at the canal. Messages will be transmitted to Pilots with the understanding that the Government will assume no responsibility in connection therewith.
RESTRICTIONS:

	Width bottom Feet	Length Miles
Easterly Entrance to Station 430	480*	8.4
Station 430 to Wings Neck (Hog Island Channel)	500	4.3
Wings Neck to Cleveland Ledge (Cleveland Ledge Channel)	700	4.7

*Except narrows to 450 ft. opposite State Pier.

The canal and approach channels have been dredged to the project depth of 32 ft. below mean low water.
RADIO: Direct communication with the Cape Cod Canal sub-office, New England Division, Corps of Engineers, is available at all hours by means of telegraph, telephone, or radio. The telephone number is 759-4431 or 789-4432.

The nearest ship to shore telephone stations are at Scituate call letters (WOU) and Chatham call letters (WCC). Bridge to bridge radio-telephone facilities are available on 156.65 mHz, 156.6 mHz, 156.7 mHz and 156.8 mHz. Vessels equipped for communications with the Cape Cod Canal are requested to keep their radio-telephone tuned to the above frequencies.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Not available.
BERTHING: Mooring basins are located at the East and West ends of the canal. The East Mooring Basin, located on the North side of the canal is 2,500 ft. in length, 350 ft. in width and is maintained at a depth of 25 ft. at mean low water. The West Mooring Basin, located on the S.E. side of the Hog Island Channel is 3,300 ft. in length, 350 ft. in width and is maintained at a depth of 32 ft. at mean low water. Mooring dolphins are provided in both mooring basins.
BRIDGES: 2 fixed span high-level highway bridges and 1 vertical lift railroad bridge cross the canal.

The minimum bridge clearance for the available width of channels are as follows:

	Horizontal Clearance	Vertical Clearance (mean high water)
Highway Bridges	480 ft.	135 ft.
Railroad Bridge (vertical Lift)	466 ft.	135 ft. (open) 7 ft. (closed)

COAST GUARD STATION AND WEATHER SIGNALS: A U.S. Coast Guard Station is located near the Eastern entrance.

TRAFFIC LIGHTS: Red, green and amber electric lights, visible for a distance of about 2 miles in clear weather, day or night, are located at the following points:

(a) Eastern or Cape Cod Bay entrance, on South side of entrance at an elevation of about 55 ft. above high water.

(b) Western or Buzzards Bay entrance, (1) Wings Neck, near Wings Neck Light at an elevation of about 48 ft. above high water.

AUTHORITY: Corps of Engineers, Dept. of the Army, Waltham, Massachusetts.

CASTLE ISLAND, Alaska

Located in Duncan Canal off Kupreanof Island between Wrangell and Petersburg. Open all year.

DOCUMENTS: See "Anchorage, Alaska".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

PILOTAGE: (From sea via Dixon Entrance up Clarence Strait to Guard Island.) Under pilotage from Guard Island.

MAX. SIZE: Harbour depth 45 ft.

TIDES: Diurnal range 16 ft. Also see "Berthing".

ANCHORAGE: Fair weather anchorage only.

CUSTOMS: Quarantine and Immigration available from Guard Island. Customs available from Petersburg or Guard Island.

BERTHING: Alaska Barite facility: dolphins and 2 floats. Present facilities limited to about 22,000-ton ships. Loading equipment consists of 1 loading spout for bulk cargo. Production average of 1,000 t.p.h.

TUGS: From Wrangell 3 available 500 h.p. each.

STEVEDORES: Sufficient to work ore loading facility 24 hours a day when necessary.

REPAIRS/WATER/FUEL: None.

MEDICAL: Facilities available in Petersburg or Wrangell.

AIRPORT: Charter airplane only.

CHARLESTON, South Carolina: 32.47 N. 79.56 W. (See Plan)

DOCUMENTS:

3 Crew Lists.
3 Curio Lists.
3 Stores Lists.
3 Manifests.

At least 1 copy of Bill of Lading, if provided by shipper, and 1 copy of Parting Crew List.

PILOTAGE: Shipmasters to notify Agent 48, 24 and 12 hours prior arrival at C-2 Buoy. Pilot may be contacted by VHF Channels 16 and 18. Pilot boards on lee side from black-painted launch with "PILOT" painted in white letters on the side. Normally vessel is berthed by Docking Master from tug company.

ANCHORAGES: Rarely required.

RESTRICTIONS: Only restriction affecting operation relates to channel depth of 35 ft. at low tide.

MAX. SIZE: Can handle vessels 950 ft. long. Present facilities measure 475 ft. from centre of discharge pipe-line to end of dock.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Fort Monroe Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Normal procedure. No special or unusual procedures required.

TUGS: Tugs usually join tankers between Cooper River Bridge and Coal Pier, approximately 0.5 mile from dock. Tug lines used. No charge made for this service.

BERTHING: *Union Pier:* State Pier No. 2: 3 berths. Break-bulk terminal, length 2,083 ft. Depth 35 ft. One 90 ton track crane and one 75 ton gantry crane.

Colombus Street Terminal: State Pier No. 8. 5 berths. Length 3,875 ft. Depth 35 ft. Terminal handles break-bulk and containers. One 440 ft. fruit berth. One 75 ton container gantry crane, 50 ton and 30 ton gantry cranes serve 1,940 ft. of berthing space along the South end of the pier. One 400 ton capacity sheer-leg and one 90 ton truck crane.

North Charleston Terminal: State Pier 15: Total length 2,500 ft. One general cargo berth length 600 ft., one grain berth, length 675 ft. 2 container berths each 930 ft.length. 2×50 ton container cranes, one grain elevator, capacity 1.5 million bushels. Also one gantry crane of 50 tons capacity.

STEVEDORES: *Working Hours:* Labour may be ordered for work to start at the following times: 0800, 1000, 1200 and 1900 hrs. Labour will usually work as long as necessary; shift system not used in this port.

RADAR/VHF: Services required are handled through Agent.

MEDICAL: Advance notice when possible.

TANKERS: Discharge lines all 8 in. dia. and 1 solvent line 8 in. Adapter to conform to ship's discharge lines supplied. Draft not to exceed 35 ft. low tide. Tanker berths operated by Humble Oil, Shell Oil, Hess Oil, BPT, and Phillips Petroleum, all suitable for 35 ft. draft. Gulf Oil berth, max. draft 30 ft. Texaco berth, max. draft 32 ft.

FRESH WATER: Available via 2.5 in. hose at a rate of 500 bbls.p.h.

FUEL: Bunker "C" at API of 14.4 to 16.6 (approx.) and blended Bonded Intermediate grades from 1 to 30.

FIRE PRECAUTIONS: Normal precautions.

DEVELOPMENTS: No changes planned in present facilities until channel depth is increased.

GANGWAY/DECK WATCHMEN: Supplied by Agent upon request from Shipmaster only.

CERTIFICATES: Normal International certificates.

CUSTOMS ALLOWANCE: Tobacco, Wine and/or Spirits, governed by length of time in port and existing Customs regulations.

CONSULS:

Denmark: Ashmead F. Pringle, Jr., 607 Peoples Building, 18 Broad Street, Charleston, S.C. 29401. Tel.: 722-7016.

France: Jack C. Muller, 6 King Street, Charleston, S.C. 29401. Tel.: 722-8045.

Norway: James D. Lucas, Jr., 10 N. Adgers Wharf, Post Office Box 536, Charleston, S.C. 29401. Tel.: 577-5782.

Switzerland: Dr. Hans Kuhn, 176 West Park Drive, Spartanburg, S.C. 29301. Tel.: 585-3922.

REPAIRS: Available.

DRY DOCKS: 1×10,000-ton floating dock, 1×1,500-ton, and 2×1,000-ton floating docks.

REPATRIATION: Facilities available.

AIRPORT: 10 miles from Terminal, served by regular airlines.

HOLIDAYS: Work continues on holidays.

POLICE/AMBULANCE/FIRE: Contact dockmaster at any time.

TELEPHONES: No arrangements exist for placing phones aboard vessels. Phone facilities are situated within 100 ft. of vessel at dock.

SERVICES: No tank cleaning/washing facilities available at dock. Can be arranged and handled at local shipyard. Practically any other service available at dockside.

SHORE LEAVE: Subject Shipmaster's permission and existing Immigration regulations.

DELAYS: Normally, no delays beyond normal time required to connect/disconnect hoses.

AUTHORITY: South Carolina State Ports Authority.

CHICAGO: Illinois: 41.50 N. 87.45 W. (See Plan)

DOCUMENTS:

For Agent in Montreal:

3 unfreighted copies of Complete Manifest for Seaway Toll purposes covering all cargo to be discharged in the Great Lakes.

In first U.S. port: a "Traveller" is made up by the Customs Inspector with the following documents:

2 complete sets of U.S. Cargo Manifests, plus 6 copies for Agents.
1 set Manifest of Cargo for first U.S. port.
4 Stores Lists.
4 Personal Effects Lists.
4 Firearms and Ammunition Lists.
4 Crew Lists, Form I418.
4 Narcotics Lists.
4 Vessel's Itinerary Lists.
Vessel's Registry and copies of Paid Tonnage Tax Certificates.
Health Pratique.
Clearance from previous port.
2 sets Bills of Lading.
3 copies Stowage Plan.

In subsequent U.S. ports the following are required:

5 sets Manifest of Cargo for that port.
The "Traveller" and Permit to Proceed issued in previous port.
2 Stores Lists.
2 Personal Effects Lists.
2 Firearms and Ammunition Lists.
2 Crew Lists.
2 Narcotics Lists.
2 sets Bills of Lading.
3 copies Stowage Plan.

PILOTAGE: Compulsory unless Master holds exemption "B" license. 24 hours notice of arrival required by Agents who arrange Pilot.

ANCHORAGE: In Chicago Harbour, anchorages A, B and F designated for merchant ships and marked on charts. In Calumet Harbour vessels should not anchor within 1,000 ft. of the breakwaters.

RESTRICTIONS: St. Lawrence Seaway navigation season approximately from April 15th to November 15th. Controlling depth 27 ft.

MAX. SIZE: Limited at Seaway Locks. 730 ft. length, 26 ft. draft. Depth alongside terminals 27 ft.

RADIO: Port can be contacted by Illinois telephone station WAY.

Notice of arrival; Master must give at least 24 hours notice to Commander 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also at least 24 hours notice of ETA at first U.S.A. discharge port is required.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available, not compulsory but recommended.

BERTHING: *Navy Pier Terminal:* The North Pier Terminal Co. terminal has 1,235 ft. of berthing space and more than 250,000 sq. ft. of dock space, with 185,000 sq. ft. under cover. North Pier also features adjacent warehousing available in its downtown distribution centre. Lift truck capacity at North Pier ranges up to 62,000 lb.

Terminal features dockside rail and truck service and mobile cranes for heavy lifts.

Calumut River Terminals: Transoceanic Terminal Corp. has its facilities at the mouth of the Calumut River. Transoceanic handles general cargoes, automobiles, steel products, bulk liquids and containers. The terminal has 3,000 ft. of berthing space, 130,000 sq. ft. of transit shed storage, and 850,000 sq. ft. of open storage. Heavy lift cranes run from 75 to 110 tons in capacity. Transoceanic also has numerous lift trucks, with capacities to 56,000 lb.

Federal Marine Terminals Inc. handles general cargo, steel products and containers. This facility has 730 ft. of berthing space, 34,000 sq. ft. of covered storage space and 11 acres of open storage space. Heavy lift cranes at Federal Marine range from 20 to 150 tons. Lift truck capacities range up to 52,000 lb.

The Rail to Water Transfer Corp. (RTW) on the Calumet River specialises in handling, storing and distributing raw materials or dry bulk commodities. RTW's twin bulk loading facilities offer 2 deep-water berths, each more than 700 ft. long. The facility has railroad yards that accommodate 2,200 rail cars adjacent to the dock. The twin loading towers provide fast handling at up to 2,500 t.p.h.

Western Navigation Co. handles bulk cargo, such as coal, coke, pig iron, ore and scrap. Berthing space is 1,000 ft. Western Navigation has 28 acres of open storage space. Rail facilities feature a complete switcharound that holds 30 cars. Heavy lifts include 3 cranes with capacities from 25 to 100 tons. Handling mostly Great Lakes vessels. Western also loads coke and scrap on ocean vessels.

Lake Calumet Terminals: Bulk Terminals Co. in Lake Calumet transfers liquid bulk cargoes – animal fats, vegetable oils and chemicals. Bulk Terminals has 400 ft. of berthing space, with storage capacity of more than 550,000 barrels and 16,000 sq. ft. of drumming warehouse space. This facility has a transfer capacity of approximately 200 t.p.h. Bulk also has 5 miles of internal railroad trackage and a switch engine.

The International-Great Lakes Shipping Company (INGLA) terminal at Lake Calumet handles steel, ores, pig iron, scrap and containers. The terminal was designed for easy interchange of cargoes to and from deep sea vessels. Mississippi River barges, Great Lakes vessels, railroads and trucks – both local and interstate. Truck and railcar weighing services are available also. INGLA has 1,500 ft. of berthing space; 45,000 sq. ft. of covered storage and 27 acres of open storage. Heavy lift equipment includes 5 cranes ranging from 125 to 150 tons. Lift truck capacities range up to 50,000 lb. per unit.

North Pier Terminal Co. facilities on Lake Calumet have 176,000 sq. ft. of transit shed (60,000 heated); 100,000 sq. ft. of general storage, warehouse and distribution area (50,000 heated), and 50,000 sq. ft. of open storage. Refrigerated space is available in the transit warehouse. Equipment includes lift trucks with capacities up to 62,000 lb. North Pier services barge traffic to and from locations along the entire inland waterway system, and as far South as the Gulf, in addition to serving deep draft vessels.

EmEsCo warehousing and marine terminal facilities on Lake Calumet are designed for efficient handling of steel, machinery, containers, scrap, pig iron, ferro-alloys and other metallic bulk commodities. EmEsCo's 800 ft. of heavy duty bulkhead and 2×75-ton gantry mounted cranes operating over 3,700 ft. of tracks provide more than 1,000,000 sq. ft. of open storage under cranes. EmEsCo has 100,000 sq. ft. of heated warehouse, with plans to expand that to 425,000 sq. ft. Other features are 25 acres of open storage, miscellaneous auxiliary cranes, an electronic truck and rail scale, 25,000 ft. of railroad track, ship to barge transfer, 100 intra-plant flat and gondola cars.

Buffington Harbour: Private harbour owned by Universal Atlas Cement. Located about 9.5 miles S.E. of Calumet Harbour. A concrete dock 1,755 ft. long, enclosed by a breakwater with entrance 880 ft. wide. Exposed to heavy N.E. swell. Depth alongside from 25 to 31 ft.

BULK HANDLING FACILITIES: Garvey Grain Co. Rock Island Elevator. Berthing space 650 ft. Storage capacity 3,800,000 bushels. Shipping capacity 25,000 bushels per hour. The elevator has 1 leg with 3 spouts. Unloading capacity from rail cars is 12,000 bushels per hour. It is also equipped with pellet mills for pelletizing grain products.

Garvey Penn Central Elevator. Berthing space 770 ft. Storage capacity 2,150,000 bushels. Shipping capacity 25,000 bushels per hour. The elevator has 1 marine leg and 2 loading spouts. Unloading capacity is 10,000 bushels per hour.

Continental Grain Company's Elevator "B" on the Calumet River has a storage capacity of 6,800,000 bushels. Elevator "B" has 5 loading spouts with a shipping capacity of 40,000 bushels per hour. Unloading capacity from barges is 15,000 bushels per hour. Receiving capacity from rail cars is 10,000 bushels per hour and from trucks 15,000 bushels per hour. The berthing space at elevator "B" is 1,025 ft.

The Cargill Inc. grain elevator on the Calumet River has a capacity of 23 million bushels. In addition to grain, this facility handles salt, molasses, and grain by-products. Cargill has 3,600 ft. of berthing space – 1,200 of this for elevator use, and 20 acres of open storage. Loading capacity is 60,000 bushels per hour, while unloading is 12,500 bushels per hour. Cargill has 3 marine legs, and 5 loading spouts.

The Gateway Elevator of the Indiana Grain Co-Operative at Lake Calumet offers storage capacity of 6,500,000 bushels for bulk grains. The 8 loading spouts have a capacity of 20,000 bushels each per hour. Unloading speed is 10,000 bushels per hour. Berthing space is 1,000 ft.

Continental Grain's Elevator "C" at Lake Calcumet has a capacity of 6,500,000 bushels of bulk grain and grain products. The 8 loading spouts have a capacity of 20,000 bushels each per hour. Unloading capacity is 10,000 bushels per hour. This facility has 1,000 ft. of berthing space.

DENSITY: Fresh water.

MEDICAL: Doctors, hospital and all facilities available.

FRESH WATER: Available at most berths.

FUEL: All grades available, ex-wharf, or delivered by barge.

CONSULS:

Argentina
Australia
Austria
Barbados
Belgium
Bolivia
Brazil
Canada
Great Britain
Chile
China
Colombia
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Greece
Guatemala
Honduras
Iceland
India
Iran
Ireland
Israel
Monaco
Italy
Jamaica
Japan
Jordan
Korea
Lebanon
Liberia
Lithuania
Luxembourg
Malagasy Republic
Mexico
Netherlands
Nicaragua
Norway
Panama
Paraguay
Peru
Philippines
Poland
Portugal
Senegal
Spain
Sri Lanka
Sweden
Switzerland
Thailand
Turkey
Uruguay
Venezuela
Yugoslavia

REPAIRS: All marine repairs can be effected.

DRY DOCKS: No. 1, 570 ft. length, 71 ft. 8 in. wide, 16 ft. sill depth. No. 2, 727 ft. length, 90 ft. 2 in. wide, 16 ft. 3 in. sill depth.

GENERAL: Refer to "St. Lawrence Seaway" for important general information.

AUTHORITY: Department of Port of Chicago, Navy Pier, Chicago.

CLEVELAND, Ohio: 41.31 N. 81.43 W.

DOCUMENTS:

For Agent in Montreal:

3 unfreighted copies of Complete Manifest for Seaway Toll purposes covering all cargo to be discharged in the Great Lakes.

In first U.S. port: a "Traveller" is made up by the Customs Inspector with the following documents:

2 complete sets of U.S. Cargo Manifests, plus 6 copies for Agents.
1 set Manifest of Cargo for first U.S. port.
4 Stores Lists.
4 Personal Effects Lists.
4 Firearms and Ammunition Lists.
4 Crew Lists, Form I418.
4 Narcotics Lists.
4 Vessel's Itinerary Lists.
Vessel's Registry and copies of Paid Tonnage Tax Certificates.
Health Pratique.
Clearance from previous port.
2 sets Bills of Lading.
3 copies Stowage Plan.

In subsequent U.S. ports the following are required:

5 sets Manifest of Cargo for that port.
The "Traveller" and Permit to Proceed issued in previous port.
2 Stores Lists.
2 Personal Effects Lists.
2 Firearms and Ammunition Lists.
2 Crew Lists.
2 Narcotics Lists.
2 set Bills of Lading.
3 copies Stowage Plan.

It is especially important that vessels try to have their visaed Crew List on board which is required by U.S. Immigration at first U.S. port. Failure to have this visaed Crew List can result in all personnel being detained on board. Visa waivers are applied for and granted fairly regularly but Immigration has the discretion to refuse these at will.

PILOTAGE: Compulsory, unless Master has a "B" Certificate on board. Vessels are not permitted to transit the lakes from Port Colborne to Cleveland without either a "B" Certificate on board or a special Waiver from the U.S. Coastguard.

ANCHORAGE: In the outer harbour, 28 ft. depth, mud and sand bottom.

RESTRICTIONS: St. Lawrence Seaway navigation season approximately from April 15th to December 15th. Controlling depth 25 to 27 ft. Access to berths in the River is limited by height restriction of 97 ft. above waterline.

MAX. SIZE: Limited at Seaway Locks, 730 ft. length, 26 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.

AGRICULTURE: See "Agriculture" first U.S.A. port (Albany).

TUGS: Available and use is compulsory in Cuyahoga River and Old River channel.

RADIO: U.S. Coast Guard can be contacted by R/T on 2182 kc/s.

Notice of arrival: Master must give at least 24 hours notice to Commander 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also at least 24 hours notice of ETA at first U.S. discharge port is required.

BERTHING:

Pier	Owner/ Operator	Berth features	Depth (ft.)	Mechanical Equipment	
Dock 20	Cleveland Stevedore Co.	East 900 ft.	27	Three 40-ton capacity Diesel-Locomotive Cranes One 200-ton capacity Crawler Crane Three 150-ton capacity Crawler Cranes	One 100-ton capacity Truck Crane 55 Fork Lift Trucks up to and including 30-ton capacity 50-ton capacity Truck Scale
Dock 24 West 9th St. Pier	Cleveland Cuyahoga County Port Authority	East 670 ft. North 519 ft. West 640 ft.	27	*Available on Port Authority Piers* Great Lakes International One 200-ton capacity Crawler crane One 150-ton capacity Crawler crane	Cleveland Stevedore Co. Three 40-ton capacity Diesel Locomotive Cranes
Dock 26 West 6th St. Pier	Cleveland Cuyahoga County Port Authority	East 698 ft. North 297 ft. West 681 ft.	27	One 130-ton capacity Crawler crane One 110-ton capacity Crawler crane One 85-ton capacity Crawler crane	One 200-ton capacity Crawler crane Three 150-ton capacity Crawler cranes One 65-ton capacity Crawler crane
Dock 28 West 3rd St. Pier	Cleveland Cuyahoga County Port Authority	West 710 ft.	27	32 Fork Lift trucks up to and including 40-ton capacity. Container top-handling racks, modern gear for Break Bulk and Steel cargoes.	55 Fork Lift Trucks up to and including 31-ton capacity. Automatic container handling gear. Pumps, Clam, Shell Buckets, Electro Magnets, Steel handling and Break Bulk equipment, Special Fork Lift Trucks for newsprint, Stuffing and Stripping facilities.
Dock 30 Stadium Pier	Cleveland Cuyahoga County Port Authority	North 1,606 ft. (28–30–32)	27		
Dock 32 Stadium Pier	Cleveland Cuyahoga County Port Authority	East 712 ft.	27		
				Serving Pier 28 Cleveland Cuyahoga County Port Authority One 150 short (2,000)-ton capacity stiff-leg crane. The "Buckeye Booster". Capacity – 150 tons at 65 ft., 100 tons at 85 ft. Max. arc swing 265°	
Dock 54 Nicholson Pier	Nicholson Cleveland Terminal	West 574 ft.	21	Two 3-ton capacity Fixed Cranes Fork Lift Trucks	
Dock A	Baltimore & Ohio R.R.	East 500 ft.	23	Two 5-ton capacity Bridge Type Cranes	
Dock C	Cleveland	East 425 ft.	23	Three 40-ton capacity Diesel Electric Locomotive Cranes	
Sycamore Dock	Stevedore Co.			Fork Lift Trucks up to and including 26-ton capacity Liquid and Solid Bulk Handling Equipment 50-ton capacity Truck Scale	
Dock 1	Penn Central Railroad	450 ft.			
Ore Dock Erie (Nypano)	Erie Dock Co.	1,600 ft.		Three 17-ton capacity Hullett Unloaders. Unloading speed – 2,400 t.p.h.	
Ore Dock "C & P"	Ohio & Western Penna Dock Co.	1,875 ft.		Four 17-ton capacity Hullett Unloaders. Unloading speed 3,500 t.p.h. Storage capacity 1,000,000 tons	

SPACE AVAILABLE:
Dock 20: 30,000 sq. ft. Transit shed. 2,000 sq.ft. open. Fully paved.
Dock 24: West 9th St. Pier, 285,680 sq. ft. open. Fully paved, 64,320 sq. ft.
Warehouse A: 144,000 sq. ft.
Dock 26: West 6th St. Pier, 85,000 sq. ft. Transit shed. 85,000 sq. ft. open. Fully paved.
Dock 28: West 3rd St. Pier, 260,000 sq. ft. open. Fully paved.
Dock 30: Stadium Pier, 54,000 sq. ft. Transit shed 35,000 sq. ft. open. Fully paved.
Dock 32: Stadium Pier, 64,000 sq. ft. Transit shed. 350,000 sq. ft. open. Fully paved.

BULK HANDLING FACILITIES: *Ore:*

Operator	Berthing space (ft.)	Depths alongside at LWD (ft.)	Unloading equipment Type	Rate (tons/hr.)	Storage capacity (tons)
Ohio and Western Pennsylvania Dock Co.	1,875	30–24	4 Hulletts	800, each	1,036,000
Erie Dock Co.	1,620	26–21	3 Hulletts	2,500, total	– (1)
Jones & Laughlin Steel Corp.	920	23–19	Self-unloading vessels		100,000 (2)
United States Steel Corp.	900	23–21	2 Hulletts	350, each	530,000
Republic Steel Corp.	3,340	23–10	2 Hulletts	1,000, total	750,000
Jones & Laughlin Steel Corp.	1,780	23–19	2 gantry 1 bridge	300, each 500	955,500 (3)
Republic Steel Corp.	1,250	23–20	2 Hulletts	500, each	785,500

(1) No storage available at wharf, iron ore is unloaded directly from vessels to rail cars for shipment.
(2) Reserve storage.
(3) Additional open storage area for 261,000 tons of ore available North of Clark Avenue Viaduct.

Grain: 2 private waterside, grain elevators are located at the port; each has facilities for receiving grain by rail and by water.

The International Multifoods, Inc., owns and operates a 590,000-bushel elevator at the rear of its wharf on the right bank of the Cuyahoga River, approximately 270 ft. above the Centre Street Bridge. This elevator, consisting of 2 wooden, storage bins and 20 concrete silos, is used in connection with the milling operations of the company. The wharf provides 350 ft. of berthing space with 22- to 18-ft. depths of water alongside at low water datum. A marine leg unloads grain from vessels at a rate of 8,000 bushels per hour; grain is unloaded from rail cars by power shovels at a rate of 4 cars per 8 hours. Rail tracks serving the elevator and flour mill connect with tracks of the Penn Central Transportation Co.

DENSITY: Fresh water.

MEDICAL: Doctors, hospital and all facilities available.

FRESH WATER: Available at most berths.

FUEL: Marine gas oil and diesel oil readily available, ex-wharf or delivered by barge.

CONSULS:
Austria
Belgium
Canada
Colombia
Denmark
Dominican Republic
Finland
France
Germany (Federal Republic)
Haiti
Honduras
India
Italy
Japan
Korea
Mexico
Netherlands
Nicaragua
Norway
Panama
Sweden
Switzerland
United Kingdom
Yugoslavia

REPAIRS: All marine repairs can be effected. Dry dock 730 ft. length at Lorain, Ohio.

GENERAL: Refer to "St. Lawrence Seaway" for important general information.

AUTHORITY: Cleveland-Cuyahoga County Port Authority.

COOS BAY, Oregon: 43.22 N. 124.13 W.

DOCUMENTS: Local Port Authority does not require any documents from merchant vessels entering this harbour. This does not preclude United States Customs requirements for documents.
PILOTAGE: No specified amount of advanced notice of ETA required. Radio contact may be made on frequency 8182, also on frequency 2182. Pilot will be taken on board at entrance of Coos Bay channel. No designated anchorages for vessels awaiting a Pilot.
ANCHORAGES: Only anchorage in Coos Bay is South of buoy 23. Limiting draft 30 ft.
RESTRICTIONS: Only entry restriction is vessel's draft which is normally acceptable at 28.5 ft. At maximum flood tide, depths of 30 ft. to 33 ft. have been accommodated.
MAX. SIZE: Max. permissible length is 675 ft. Breadth 100 ft. and draft normally 28.5 ft. with above-mentioned exceptions. A 2 ft. clearance under keel is considered necessary for safe navigation. Vessels entering Coos Bay from sea draw down about 0.166 in. per foot of draft because of difference of density.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Pilots, Agents and stevedores monitor VHF-Channel 16.
TUGS: Pilot vessel acts as Tug. Emergency small harbour tugs available and ship's lines generally used.
BRIDGES: 2 bridges cross the main ship channel. The Southern Pacific railway drawbridge 9 miles from the entrance and the Coast highway bridge 9.6 miles from the entrance. Clearance height of the highway bridge is 149 ft. in the centre of the span at MLW. Clearance width of swinging railway bridge 194 ft.
BERTHING: *Cape Arago Dock:* Length 504 ft. Depth alongside at MLW 22 ft. 6 in. (West end) and 25 ft. (East end). No dock cranes available. Fresh water available. Distance from entrance 5 miles.

Roseburg Lumber Co. Dock: Length, 635 ft. Depth alongside at MLW 35 ft. No fresh water available. Distance from entrance 8 miles.

Ocean Terminals Dock: Length, 400 ft. Depth alongside at MLW 33 ft. No dock cranes available. Fresh water available. Distance from entrance 11 miles.

Weyerhaeuser Dock: Length: (Lumber Dock) 1,433 ft. (Wood Chip Dock) 694 ft. Depth alongside at MLW 30 ft. No dock cranes available. Fresh water available. Distance from entrance 12 miles.

Fibrex and Shipping Co. Dock: Length of floating walkway 700 ft. Depth alongside at MLW 32 ft. Wood chip loaded by pneumatic pipe. Fresh water available. Distance from entrance 12.5 miles.

Bayshore Dock; Length 504 ft. Depth alongside at MLW 30 ft. No dock cranes available. Fresh water available. Distance from entrance 13 miles.

Dolphin Terminals: Vessels moor to dolphins adjacent to apron 60 ft. long and 26 ft. wide which is joined to the shore by a causeway length 190 ft. and width 12 ft. Depth alongside at MLW 30 ft. Fresh water available. Distance from entrance 13 miles.

Central Dock: Length 1,348 ft. Depth alongside at MLW 30 ft. No dock cranes available. Fresh water available. Distance from entrance 13.5 miles.

Portland Dock: Length 576 ft. Depth alongside at MLW 33 ft. No dock cranes available. Fresh water available. Distance from entrance 15 miles.

Coos Bay Dock: Length 1,326 ft. Depth alongside at MLW 30 ft. No dock cranes available. Fresh water available. Distance from entrance 15 miles.
STEVEDORES: Should have minimum of 48 hours to arrange gangs. Also see "Radio".
MEDICAL: Advance notice of required medical attention is desirable, in order to expedite use of ambulance, if necessary.
TANKERS: 2 tanker berths, Standard Oil and Union Oil Co., draft 30 ft. Tankers discharge into tank farms. Union Oil Co. is the bunkering Agent.
FRESH WATER: Available. Cost per ton is negotiable.
FUEL: 24 hours advance notice desirable, both bunker and diesel fuel available.
DEVELOPMENTS: Depth of channel at entrance 40 ft. Inner channel, to head of channel 30 ft. It is expected entrance channel to be dredged to 45 ft., inner channel to depth of 35 ft. An additional anchorage will be installed, directly East of beacon 17.
GANGWAY/DECK WATCHMEN: Service of watchman at discretion of ship's master.
OPENING/CLOSING HATCHES: Normally by stevedores.
IDENTIFICATION CARDS: Not required by local authorities.
CONSULS: None.
REPAIRS: Only minor deck and engine repairs possible.
DRY DOCKS: Largest dry dock handles vessels not exceeding 125 ft.
REPATRIATION: All repatriation handled in Portland, Oregon.
AIRPORT: All docks within 5 miles of airport. Airport served by regular airlines.
TIME: GMT minus 8 hours, clocks advanced 1 hour on 1st May, clocks retarded 1 hour, 1st November.
HOLIDAYS: All legal holidays observed, plus state-wide elections. Cargo work through negotiations with stevedore contractors.
POLICE/AMBULANCE/FIRE: Police: Coos Bay 269-1181, North Bend 756-3161; Ambulance 756-3234; Fire Coos Bay 267-4123, North Bend 756-6111.
SHORE LEAVE: Crew members allowed ashore except when Federal directives may be applied to a specific vessel.
DELAYS: No delays in berthing, loading or discharging, or bunkering can normally be expected.
AUTHORITY: Administrator and Harbour Master, Port of Coos Bay.

CORDOVA, Alaska: 60.33 N. 145.46 W.

Located at S.E. side of Prince William Sound. Open harbour year round.
APPROACHES: Via Prince William Sound.
DOCUMENTS: See "Anchorage, Alaska".
PILOTAGE: Pick-up point is Sheep's Point. Prior arrangements required.
MAX. SIZE: Recommend max. draft 25 ft. Tides: diurnal range 12.4 ft. Tide runs parallel to dock. Also see "Berthing".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
ANCHORAGE: Good holding ground. Mud bottom between Spike Island and Municipal dock.
CUSTOMS: Quarantine, local. Immigration and Customs from Anchorage, Alaska.
BERTHING: Berthing Permit required. Advance notice of 48 hours requested.

Municipal Dock: 18 ft. deep, 400 ft. long, 72 ft. wide. Open storage – 300 ft. × 45 ft. One 140 ton P & H mobile crane.
TUGS: Limited availability. Prior arrangements need to be made.
STEVEDORES: ILWU No. 66, Box 416, Cordova, Alaska, 99574. Telephone 907-424-7224.
REPAIRS: Radio, radar, welding, machining and light engine repairs can be effected.
WATER: Available.
FUEL: No bunker "C" available.
MEDICAL: 22-bed hospital and a medical clinic, with 2 doctors, 1 dentist.
TRANSPORTATION: Regular air service, Charter air Service, Ferry to Valdez.
TIME: Alaska Standard.
POLICE/FIRE/AMBULANCE: Police telephone 907-424-3673; Ambulance/Fire telephone 907-424-3232.
AUTHORITY: Port Director.

CORPUS CHRISTI, Texas: 27.48 N. 97.23 W.

(See Plan)

PORT LIMITS: Corpus Christi's port limits include all of Nueces County, which has been officially designated as Nueces County Navigation District No. 1. The Corpus Christi turning basin, Avery Point turning basin, Chemical turning basin, Tule Lake turning basin and the Viola turning basin are interconnected by the Industrial Canal, the Tule Lake Channel and the Viola Channel and constitute the Corpus Christi Main Harbour. Other Bay points included in the port of Corpus Christi area are: Harbour Island, the North end of Mustang Island, near the inner end of the Aransas Pass entrance, and Port Ingleside and La Quinta along the route of dredged deep-water channels on North side of Corpus Christi Bay.
DOCUMENTS:

3 copies Cargo Manifest (Forms 7527–A or 7527–B), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (Form 1304).
2 copies Stores List (Form 1373).
2 copies Passenger List (Form I.–418).
2 copies Crew List (Form I.–418).

Customs boarding Officer will also examine Ship's Register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:

Health Pratique.
Master's Oath (Customs, 2 copies Form 1300).
General Declaration (2 copies Form 1301).
All Foreign clearances.
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certified Crew List.

PILOTAGE: Pilot boards off Port Aransas.
RESTRICTIONS: No restrictions, 24 hour service. The port of Corpus Christi is situated on the West side of Corpus Christi Bay, in South-western Texas. Port facilities at Corpus Christi lie along a 9.5 miles stretch of dredged channels and basins about 18 miles from Aransas Pass entrance at the Gulf of Mexico, Channel depth 40 ft., width 400 ft.

Turning Basins: 3 turning basins in Main Harbour are each minimum 1,000 ft. wide and more than 1,000 ft. in length.
MAX. SIZE: Cargo vessels: 39 ft. draft. Tankers 39 ft. draft. (A tanker with a draft of 45 ft. 9 in. has docked.)
Maximum size tanker to date:

"Overseas Natalie"	L. 860 ft., B. 104.5 ft. L.D. 45 ft. 9 in. d.w.t. 72,254.
"Scandia Team"	L. 840 ft. B. 128 ft. L.D. 39 ft. 8 in. d.w.t. 108,000.
"Manhattan"	L. 1,005 ft. 6 in. B. 132 ft. 6 in. M.D. 52 ft. 9.75 in. d.w.t. 114,668.
"Intisar"	L. 886 ft. B. 142 ft. L.D. 56 ft. d.w.t. 140,999.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Brownsville Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: KLC ITT-Radio-Arcadia, Texas. KLC RCA-Radio-Galveston, Texas.
VHF: KKQ 769 – Harbour Master – Channel 12 and 16. WR 8879 – Aransas-Corpus-Christi Pilots Channel 12 and 16. KVP 384 – Harbour Tugs – Channel 12. U.S. Coast Guard – Channel 16.
TUGS: Tug assistance available. Tugs join vessels berthing at Harbour Island in jetty channel. Tugs accompany vessels entering Inner Harbour outside Corpus Christi Harbour Bridge.
BERTHING: The Corpus Christi Turning basin is over a mile long and 1,000 ft. wide. There are 4 additional basins in main harbour, which extends Westward from Corpus Christi Harbour Bridge for 9.5 miles. The water in all basins, channels and canals is 40 ft. deep, enabling port to handle largest merchant ships operating in Gulf trade.

Depth alongside docks:

Southside Docks 1–8	32 ft.	Northside Dock 9, 10 & 11	32 ft.
Southside Docks 14 & 15	36 ft.	Bulk Materials Dock	38 ft.

Note: Staging area back of cargo docks 14–15 for storing containers, vehicles, etc.

Inner Harbour – Public Docks; The length limit indicator is not of necessity the max. length for a vessel as larger vessels can berth if adjacent berth is not occupied.

Cargo Docks No.	*Length Limit ft.*	*Max. Draft ft.*
1 – 2	700	28
3 – 6	1,300	29
8	600	28
9	750	30
10 – 11	700	28
12	700	19.5
14 – 15	1,000	29
Bulk Materials Dock	Max. Length 835 ft.	
Public Grain Elevator Dock	Depth 34 ft.	

Inner Harbour – Private Docks:
PPG Industries Inc., Cargo Dock: Length of pier 450 ft. Length of Head 100 ft. Depth, East-side 30 ft. West-side 27 ft. and Head 34 ft. Producers Grain Port Terminal Dock: Depth 41 ft. Lone Star Cement Corp. Dock: Slip dredged to 14 ft.
Outside of Inner Harbour – Private Docks:
Dupont Barge Wharf No. 1: Dredged to 14 ft.
Dupont Barge Wharf No. 2: Dredged to 20 ft.
Reynolds Metals Co. Docks: Bauxite Unloading Pier dredged to 40 ft. Alumina Loading Dock dredged to 38 ft.
TANKERS: Between Corpus Christi Turning Basin and Viola Basin are 12 public and 6 private Oil Docks, some capable of berthing tankers of 150,000 d.w.t. capacity.
Inner Harbour – Public Docks:

Oil Dock No. 1	Length Limit	800 ft.	Max. Draft	33 ft.
No. 2*	Length Limit	350 ft.	Max. Draft	28 ft.
No. 3**	Length Limit	430 ft.	Mid Depth	25 ft.
No. 4†	Length Limit	850 ft.	Mid Depth	37 ft.
No. 5	—	—	Depth (MLT)	27 ft.
No. 6*	—	—	Depth (MLT)	9 ft.
No. 7†	Length Limit	850 ft.	Depth (MLT)	36 ft.
No. 8	Length Limit	1,000 ft.	Max. Draft	37 ft.
No. 9	Contact Harbour Master		Max. Draft	33 ft.
No. 10*	—	—	Max. Draft	12 ft.
No. 11†	Length Limit	850 ft.	Min. Depth	37 ft.
No. 12*	—	—	Min. Depth	9 ft.

*Limited to barge operations. **Exclusively for barges. †Larger vessels may be berthed when adjacent berth not occupied.

Inner Harbour – Private Docks:
Mobil Oil Dock: Limitations not known.
Southwestern Refining Co., Oil Dock No. 3: Depth at MLT 41 ft.
Southwestern Refining Co., Oil Dock No. 2: Depth at MLT 41 ft.
Southwestern Refining Co., Oil Dock No. 1: For barges, depth 10 ft.
Champlin Petroleum Co.: Depth at MLW 40 ft.
CPC International, Inc., Liquid Cargo Dock: Depth at MLT 40 ft.

Outside of Inner Harbour – Private Docks:
American Petrofina: Length Limit 750 ft. Slip depth 53 ft. below MLT (Reported 1974).
Exxon, Oil Dock No. 1: Depth 40 ft at MLT.
Exxon, Oil Dock No. 2: Depth 14 ft. – 22 ft. at MLT.
Sun Pipe Line Co.: Depth 40 ft. at MLT.
CARGO GEAR: *Heavy Lift facilities:* Derrick at Cargo Dock 14 has 100 tons capacity at 53 ft. radius, can handle containers, 40 ft. or larger. Locomotive cranes (5) 30 tons capacity.

Facilities are available for all types of liquid cargo, dry bulk and general cargo, except cannot handle restricted cargo such as ammunition and explosives.
BRIDGES: Corpus Christi Harbour Bridge; vertical clearance at MHW is 138 ft.

Upper Harbour Lift Bridge: Vertical clearance at MHW when raised is 138 ft.
FRESH WATER: Available.
FUEL: 1,500 Redwood, 1,000 Redwood – 24 hour notice.

Bunker C, Marine diesel, Light diesel – Pipe-line or Barge, Truck.
FIRE PRECAUTIONS: No working barges alongside (except bunkering barges) and normal precautions as shut down cargo operations during lightening storm, etc.
SURVEYORS: American Bureau of Shipping and J. E. Orrell, Lloyds Sub-Agency.
GANGWAY/DECK WATCHMEN: Not necessary. If recommended $4.00 per hour.
HATCHES: Hatches may be opened by crew before entering harbour, after the ship has entered harbour it is carried out by stevedores.
CUSTOMS ALLOWANCE: 300 cigarettes per man. 1 quart liquor per man.
POLICE/AMBULANCE/FIRE: Police 882-1911, Ambulance 882-5571, Fire 884-5563 (City); 882-7801 (Refinery Co-op).
TELEPHONES: No arrangements exist.
SERVICES: Coastal iron Works: ship repair, etc. International Marine Services: ship repairs, etc. No facilities for tank washings.
CONSULS: Mexican Consul, Guaranty Bank Plaza, Corpus Christi, Texas. Tel: 882-3375.

Norwegian Vice Consulate, Wilson Building, Corpus Christi, Texas. Tel: 883-0801.
AIRPORT: Approximately 7.75 miles from Port. Serviced by 3 regular airlines.
TIME: Daylight Savings Time from March to October (minus 5 hours GMT). Central time remainder of year (minus 6 hours GMT).
HOLIDAYS: New Year's Day (January 1); Martin Luther King Birthday (January 15); Lincoln's Birthday (February 12); Washington's Birthday (3rd Monday of February); Texas Independence Day (March 2); Good Friday (varies); Memorial Day (last Monday of May); Juneteenth Day (June 19); July 4th; Labor Day (First Monday of September); Columbus Day (2nd Monday of October); Veterans Day (4th Monday of October); Thanksgiving (4th Thursday of November); Christmas Day (December 25).

Possible to work on any holiday except Labor Day or Christmas in case of fire or danger to property. If holiday falls on Saturday or Sunday, will be taken following Monday.
SHORE LEAVE: Possible.
IDENTIFICATION CARDS: Standard Immigration Forms I.–95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I.–95, issued for same vessel.
DEVELOPMENTS: Deepening of all waterways, channels including La Quinta Channel and turning basins to a depth of 45 ft. is now in progress and proceeding on schedule. When completed Corpus Christi will be deepest port on entire Gulf Coast.

Latest port plans include an inshore multi-purpose facility at Harbour Island that will accommodate VLCC's up to 275,000 d.w.t.
GENERAL: Refer to Houston for all general information.
AUTHORITY: The Nueces County Navigation Commission.

DEER PARK, Texas: 29.44 N. 95.08 W.
Refer to "Houston".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

DESTREHAN, Louisiana: 29.56 N. 90.21 W.

East bank of Mississippi River about 135 miles from sea.
DOCUMENTS/PILOTAGE: For all general information refer to "New Orleans."
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: At least 1 tug required for mooring/unmooring.
BERTHING: St. Charles Elevator, berth 800 ft. length, 45 ft. depth. Loading rate, 70,000 bushels per hour; 2 loading belts. Bunge Grain Elevator, berth 600 ft. length, 41 ft. depth. Loading rate, 50,000 bushels per hour; 2 loading belts.
FRESH WATER: Available ex-berth.
FUEL: Not available. Barge not permitted alongside at Bunge Elevator.
DENSITY: Fresh (1000).

DETROIT, Michigan: 42.19 N. 83.05 W. (See Plan)

Refer to "St. Lawrence Seaway" for important general information.
PILOTAGE: Compulsory unless Master holds exemption "B" licence. 24 hours notice of arrival required by Agents who arrange Pilot.
ANCHORAGE: In depths from 29–51 ft. in the Detroit River off the marine terminals and away from main channel.
RESTRICTIONS: St. Lawrence Seaway navigation season approximately from April 15th to November 15th. Controlling depth 27 ft. Minimum depth of 25 ft. in the Detroit River. The Amherstburg Channel has a depth of 27 ft. 6 in. for up bound traffic.
MAX. SIZE: Limited at Seaway Locks. 730 ft. length, 26 ft. draft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Available, not compulsory but recommended for some terminals.
BERTHING: *See Table overleaf.*

Terminal	Length of dock	Depth of water	Equipment
Detroit Harbour Terminals, Inc.	2,325 ft.	27 ft. LWD	One 200-ton diesel mobile crane One 165-ton diesel mobile crane Two 150-ton diesel mobile crane One 45-ton diesel mobile crane One 50-ton diesel electric travelling gantry crane One 35-ton diesel electric travelling gantry crane One 15-ton diesel electric gantry crane Three 10-ton diesel locomotive cranes One 150-ton rail scale Three Straddle carriers with capacity to handle 20-40 ft. containers
Detroit Marine Terminals, Inc.	1,400 ft.	27 ft. LWD	Three 140-ton caterpillar cranes One 50-ton gantry crane Two 40-ton railroad cranes One 25-ton gantry crane One 600 h.p. switch engine One rail scale, 212,000 lb. capacity One truck scale, 212,000 lb. capacity Six magnets Five clam buckets Seventeen yard and warehouse lift trucks up to 56,000 lb. capacity
Federal Marine Terminal	520 ft.	25 ft. 9 in. LWD	One 140-ton crane Two 100-ton crawler cranes Fork lift trucks up to 40-ton capacity
Nicholson Terminal & Dock Company	3,400 ft.	27 ft. LWD	Two cranes; 70-ton capacity at 40 ft. radius and 50-ton capacity at 60 ft. radius Four 12-ton gantry cranes Six 30-ton diesel locomotive cranes One 85-ton mobile crane Two 1,000 h.p. diesel yard engines One 290 h.p. diesel yard engine One 150-ton railroad scale One 72 ft. combination rail and truck scale, 400,000 lb. Two 87-in. magnets Eleven 65-in. magnets Five 55-in. magnets Twelve buckets 1.5 yards to 7 yards capacity One fork lift truck, 40,000 lb. capacity One fork lift truck, 50,000 lb. capacity Twenty-five fork lift trucks, various capacities One 80,000 lb. capacity container handler Two 6.5 yard bucket front end loaders
Consolidated Dock Inc.	1,050 ft.	27 ft. LWD	Four 110-ton mobile cranes.

DENSITY: Fresh water.
MEDICAL: Doctors, hospital and all facilities available.
FRESH WATER: Available at most berths.
FUEL: All grades available, ex-wharf, or delivered by barge.
CONSULS:

Austria
Belgium
Canada
Chile
Colombia
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Great Britain
Guatemala
Haiti
Italy
Ivory Coast
Japan
Jordan
Lebanon
Liberia
Malta
Mexico
Netherlands
Norway
Panama
San Marino
Sweden
Thailand

REPAIRS: All marine repairs can be effected.
AUTHORITY: Detroit-Wayne County Port Commission.

DULUTH-SUPERIOR, Minnesota: 46.49 N. 92.09 W.

Refer to "St. Lawrence Seaway" for important general information.
PILOTAGE: U.S. or Canadian Pilot compulsory except when Master or officer specially qualified to navigate waters concerned. Pilots obtained from Upper Great Lakes Pilots Inc., Clure Marine Terminal, Duluth. Duluth entry – Pilots picked up at point 2 miles due East of pierhead lights. Superior entry – pick up Pilot 2 miles N.N.E. of lighthouse. Advise Agents 24 hours in advance of ETA for scheduling Pilot, Customs, Immigration, and agricultural inspection. Masters should hold to the South of convergence of shipping lanes at the Duluth Entry and to North of this convergence at Superior Entry when approaching to embark a Pilot.
ANCHORAGES: Anchorage areas near Duluth and Superior entries are South and Eastward and North and Eastward respectively of main channel through harbour. Marked by anchorage buoys. Vessels must only anchor clear of channels at all times.
RESTRICTIONS: Because of varying conditions of wind and current, no restriction placed on speed passing through entry piers at either Duluth or Superior entry. Speed throughout harbour limited to 7 knots. Speed through bridges other than the Aerial Bridge at Duluth entry limited under normal conditions to 6 miles per hour. Because of current conditions at inner end of Duluth entry, both inbound and outbound vessels must leave vertical black/white striped mid-channel or traffic buoy on starboard hand. This gives outbound ships maximum straight run.
MAX. SIZE: Draft 26 ft. Duluth Harbour Entry: Duluth ship's canal, min. width 300 ft. Superior Entry: Min. width 500 ft. min. depth at inner end of 27 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Prior to entering harbour vessels must make "Security Call" on Channel 51 (2185 kc/s) from 10 to 20 minutes in advance advising intended movement. All vessels should monitor Channel 51 all times when under way to determine position and intent of other vessels moving in constricted areas within harbour and approaches.
TUGS: Available, not compulsory.
BRIDGES: Aerial bridge spanning Duluth entry vertical clearance of 138 ft. Signal for opening bridge shall be given by vessels approaching from lakes, in all circumstances, when not less than 1 mile from bridge. A flashing amber light on harbour side of Aerial bridge warns outbound vessel of approach of inbound vessel in lake.
BERTHING: *Clure Marine Terminal.* Also see "Developments".

Length of dock: 6,600 lineal ft., 9 ship berths, 5 for unloading/loading, four for fitting, cleaning, standby, etc. Water depth: 30 ft. 2×90-ton Clyde gantry cranes for container handling. 1×35-ton mobile crane.

Duluth Iron & Metal – length of berth 1,586 ft. – water depth 26 ft.
Great Lakes Storage & Contracting – length of berth 1,059 ft. – water depth 22 ft.
Hallet 3 – length of berth 2,080 ft. – water depth 23 ft.
Hallet 5 – length of berth 2,373 ft. – water depth 23 ft.
Hallet 6 – length of berth 2,060 ft. – water depth 23 ft.
Northern Pacific No. 2 – length of berth 2,415 ft. – water depth 22 ft.
Paper Calmenson-Duluth – length of berth 853 ft. – water depth 21 ft.
Paper Calmenson-Superior – length of berth 700 ft. – water depth 20 ft.

MEDICAL: All medical assistance available.
DENSITY: Fresh water.
FRESH WATER: Available at most docks in both ports.
FUEL: Available from dock or by barge.
FIRE PRECAUTIONS: No open fire permitted on deck of any vessel while in harbour. This restriction does not apply to a vessel at a shipyard which will be governed by this shipyard's local rules, nor to vessels in lay-up or fit-out status at ore docks.

Ocean vessels, upon docking, shall put on off-shore side of vessel, wire rope lines fore and aft as tow lines for use in pulling ship off dock face in case of fire. Such tow line shall be securely made fast to bitts with eye about 1 ft. above the water.

CERTIFICATES: Masters are required to present Safety Inspection Certificate of cargo handling equipment and gangways to stevedoring companies and other employers of harbour labour upon request.
IDENTIFICATION CARDS: Required by Immigration.
REPAIRS: All ship repairs can be effected.
DRY DOCKS: At Superior, one 831 ft. by 95 ft. and one 628 ft. by 76 ft.
SHORE LEAVE: Allowed.
DEVELOPMENTS: A grain terminal, meal-handling facility and coal-handling facility under construction.

A container terminal, together with all the back-up facilities located near the S.W. corner of Clure terminal is now available. The container crane will be a Paceco Economy Portainer with a capacity of 30 tons, outreach 84 ft., back reach 22 ft. The Portainer will be equipped to handle 20 ft., 35 ft., and 40 ft. containers.
AUTHORITY: Seaway Port Authority of Duluth, Superior Board of Harbour Commissioners.

ERIE, Pennsylvania: 42.10 N. 80.05 W.

Refer to "St. Lawrence Seaway" for important general information.
PILOTAGE: Not compulsory. Seaway Pilots will assist if required.
RESTRICTIONS: Navigation season from 14th April to 26th December approx. The port is connected to Lake Erie by an entrance channel, depth 28 ft. Vessels size restricted by Seaway locks.
MAX. SIZE: 730 ft. length; 26 ft. draft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Quarantine Station.Quarantine procedure undertaken at Quebec City for incoming vessels from foreign ports.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Master must give at least 24 hours notice to Commander 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also, at least 24 hours notice of ETA at first U.S. discharge port is required.
TUGS: Available. Not compulsory, but sometimes necessary in bad weather.
BERTHING:

City of Erie Grain Elevator: Owned by the City of Erie, leased by the Port Authority, berthing length 980 ft., depth of water alongside 24 ft., 2.5 million bushel capacity.

Erie Marine Inc. (subsidiary of Litton): New ship assembly yard with graving dock (largest on Great Lakes), available for dry dock repairs.

Ore Dock: 1,000 ft. long, 26–27 ft. of water alongside. The ore dock has 2 clam shell buckets, unloaders and 1 ore bridge. 400,000 ton storage pad available for lease.

Port Authority East Bay Industrial Site: 75 acres available for sale or lease.

Erie International Marine Terminal: Leased to Codan Corporation, stevedores for the Port of Erie; 1,400 ft. long, with 28 ft. of water. Terminal used for bulk and general cargo; 23 acres; 50,000 sq. ft. of warehousing and transit sheds with truck and rail loading facilities; 140 and 125 ton mobile cranes equipped with magnets, buckets and gear for heavy lifts, also 300 ton stiff leg crane. Terminal served by ConRail with reciprocal switching for N&W and B&LE railroads. A total of more than 100 acres of waterfront property is available where an industrial complex may be constructed.
DENSITY: Fresh water.
MEDICAL: All facilities available.
FRESH WATER: Obtainable by pipe-line at all docks.
FUEL: All grades available by pipe-line at all docks.
REPAIRS: Local shipbuilding company can handle most repairs. Dry dock available.
AUTHORITY: Erie-Western Pennsylvania Port Authority.

EUREKA, California: 40.48 N. 124.10 W. (See Plan)

DOCUMENTS: In addition to the documents detailed below, Agent will present to Master normal Customs forms to be signed, such as Master's Oath, Permit to Lade, Inward & Outward Manifest, etc. These forms will be filled out by local Agent and Customs Broker and presented to local Customs house when entering and clearing vessel:

Foreign Flag Vessels: I. Entering from another U.S. port:
- 3 Crew Lists.
- 3 Passenger Lists (only if passengers on board).
- 3 Curio Lists.
- 3 Store Lists.
- Permit to Proceed (issued at last U.S. port).
- Travelling Manifest (only if there is foreign cargo on board).
- Ship's Register.

II. Entering from a foreign port:
- 3 Crew Lists.
- 3 Passenger Lists (only if passengers are on board).
- 3 Curio Lists.
- 3 Store Lists.
- Travelling Manifest.
- Permit to Proceed.
- Ship's Register.
- Ship's tonnage tax Certificate.
- Clearance from a foreign port.

PILOTAGE: Telegraphic address of Pilot station "Humbar". 24 hours advance notice of ETA; in case of change in ETA give minimum 4 hour notice. Contact pilot boat on VHF 156.8 (Channel 16) or radio watch on 2182. Radio watch is maintained 2 hours prior to arrival at sea buoy on Channel 16. Working Channels are 6, 13 and 18A.

No Pilot boat on station. Local Pilots use tug "Thor" length 65 ft. 800 h.p. Tug colours: black funnel, red and white superstructure and black hull. As no Pilot boat on station, sound signals not required. Visual international flag and light signals observed. Pilot will board vessel within 1 mile radius North, South and West of sea buoy. Sea-buoy located 1.4 miles from end of North jetty lined up with range lights bearing 105 degrees true.

Specific requirements: *(a)* Pilot ladder with spreaders in accordance with Solas regulations, and 9 ft. above water. *(b)* At night – brilliant light to illuminate ladder. *(c)* Recommended anchorage outside Humboldt Bay located 1 mile South of sea-buoy in 15 fathoms of water.
ANCHORAGES: Inside harbour, weather permitting. Light draft vessel (22 ft. or less) South of Fairhaven Dock (Crown Simpson) and West of Standard Oil Dock. Deep draft vessels (22 ft. to 32 ft.) will anchor North of Union Oil Terminal and South of Samoa Channel entrance buoys.
RESTRICTIONS: Humboldt Bay is a 24 hour port; restrictions if any would depend upon manoeuvrability and horsepower of vessel during peak tide. Range of tide normally 8 ft. extreme cases 10 ft. At present vessels normally limited to a deep draft of 30 ft. at zero tide.
MAX. SIZE: Largest vessel to enter Humboldt Bay to date had LOA 657 ft. and beam 90 ft. Draft limitation 30 ft. at zero tide. Vessels of this size and draft normally enter and depart about 1.5 hours before high water.
HEALTH: See "Health: All ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Send cables through one of the following stations:

ITT World Communications, Inc. – San Francisco Marine Radio Station KFS.

RCA Global Communications – San Francisco Marine Radio Station KPH.
TUGS: 2×800 h.p. tugs available, 1 tug acts as pilot boat, other tug joins vessel when in harbour. Tug lines are normally used, occasionally a ship's line is used. No extra charge assessed for use of tug's line. Depending upon size of vessel and weather conditions, Pilots will use 1 or 2 tugs.
BERTHING: No specific requirements relating to berthing; normal procedures prevail. Vessel normally docks stemming the tide.

Presently available berths at Eureka as follows:
- Crown-Simpson Pulp Co.
- Eureka Forest Products
- Louisiana-Pacific Corporation.
- Humboldt Dock & Shipping Co.
- Kramer Lumber Sales
- Olson Terminal
- Standard Oil of California
- Union Oil of California
- North Coast Exporting Co.

Harbour channels maintained to 30 ft. zero tide. Most of berths at above-mentioned docks also maintained at 30 ft. zero tide; however, some occasionally fill in and recommended check with Agent as to depth available at specific dock which vessel intends moor and load.
STEVEDORES: 10 local gangs available. Groups ordered at 0630 hrs. in the morning for both day and night gangs. Therefore essential that local Agent or stevedore company receives accurate ETA by 0600 hrs. in the morning. Normally, vessel will advise arrival sea-buoy with a 24-hour ETA and correct ETA at a later time if necessary. The basic commodities exported from Eureka are woodpulp, logs and lumber.

Westfall Stevedore Co. Cable Address: Westfall, Eureka. Tel. (707) 443-5688.
MEDICAL: Not necessary for Agent to receive advance notice of required medical attention unless ambulance and doctor are required on arrival. 3 hospitals in immediate area. Inoculation and vaccination certificates should be up-dated.
TANKERS: 2 tanker berths available: Standard Oil of California – deepest draft 25 ft. at zero tide. Union Oil – deepest draft 30 ft. at zero tide. Normally only Company tankers use own facilities. Facilities privately owned and are not available for bunkering other vessels.
DENSITY: Pure salt water. No fresh water allowance on any tide.
FRESH WATER: Available all berths. Delivery by hose. Rate of delivery: 10 t.p.h.
FUEL: If bunkers required, Agent must go through major contractors, who in turn will inform their local supplier of requirements. Generally speaking bunkers are only supplied to vessels on an emergency basis in limited quantities. The bunkers usually diesel grade and delivered by truck on a prearranged schedule.
DEVELOPMENTS: Deepen North bay channel to 35 ft. and widen bends in channel at channel miles 0.74 and 2.6. Deepen Samoa channel and outer reach of the Eureka channel to 35 ft. Provide an anchorage area in North bay, at a suitable location between jettied entrance channel and Gunther Island, 35 ft. deep, 1,200 ft. wide and 1,200 ft. long.
GANGWAY/DECK WATCHMEN: Services of gangway guards available if required by ship.
OPENING/CLOSING HATCHES: Normally stevedores' work.

Vessel's crew may assist in opening and closing hatches, if hatches require special attention.

CERTIFICATES:

Ship's register.
Load-line Certificate.
valid Derat Certificate.
Cargo Gear Certificate.
Tonnage Tax Certificate and all other usual certificates required.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes and 1 lb. of tobacco. Wine and/or Spirit, 1 bottle (approx. 1 quart).

CARGO GEAR: Must be in good order and safe operating condition and all cargo gear certificates must be valid.

IDENTIFICATION CARDS: Alien seamen require Crewman Landing Pass (U.S. Form I-95).

CONSULS: None. Nearest consuls at San Francisco.

REPAIRS: Small welding jobs, and minor machine work only. Major repairs normally carried out in San Francisco.

DRY DOCKS: None.

REPATRIATION: Normally done in conjunction with San Francisco, Portland, Los Angeles or Seattle Agent.

AIRPORT: Airport located approximately 20 miles North of Eureka. Limousine service available. Major airline, Air West. At present 3 flights per day to San Francisco and 1 flight per day to Portland.

TIME: Eureka local time is Pacific Standard Time and is GMT minus 8 hours. However, from the last Sunday in April to the last Sunday in October, Eureka is on Daylight Saving Time.

HOLIDAYS: No work performed on following holidays: New Year's Day (January 1); Labor Day (1st Monday in September); Christmas Day (December 25).

POLICE/AMBULANCE/FIRE: Eureka City Police 442-4545; Eureka City Ambulance 442-4551; Eureka Fire Department 443-5656; Humboldt County Sheriff Department 443-5671; Arcata Fire District 822-2424; Humboldt Fire District No. 1 442-1212.

TELEPHONES: No arrangements for placing telephones on board; however, there are pay phones nearby at each dock as well as phones in nearby offices.

SERVICES: Specific services such as tank cleaning, compass adjusting, tank washing,etc., are not normally performed in the port of Eureka and are usually performed in one of the close major ports such as San Francisco; however, there are facilities available for minor repair.

SHORE LEAVE: Crew members allowed ashore unless restricted for Customs or Immigration reasons.

DELAYS: Berthing delays seldom incurred primarily due to the fact that the prime Agents are always in contact with the local Agent at Eureka informing them of vessel's ETA and prime Agent is always advised with regard to all arrivals and possible berth conflicts at this port.

AUTHORITY: State of California, Board of Harbor Commissioners for Humboldt Bay.

EVERETT, Washington: 47.59 N. 122.13 W.

DOCUMENTS, PILOTAGE, etc.: Refer to "Tacoma".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

PILOT: Boards off Port Angeles pilot station.

ANCHORAGE: Unlimited deep water anchorage in Possession Sound.

TUGS: Available, join vessel off berth. 17 tugs, 150 to 900 h.p.

BERTHING:

Pier No. 1 South: Useable berth length 600 ft.; Approach water depth 90 ft.; Water depth at pier 35 ft. MLLW; Plank and piling; 20 ft. Apron; Transit shed with 57,960 sq. ft. on pier; Access by road, barge and rail.

Pier No. 1 North: Useable berth length 520 ft.; Approach water depth 90 ft.; Water depth at pier 40 ft. MLLW; Multi-purpose 35-ton bridge crane (Containers, bulk ores); Rail spur on dock; Plank and piling; 40 ft. Apron; Transit shed with 57,960 sq. ft. on pier; Access by road, barge and rail.

Pier No. 3 South: Useable berth length 750 ft.; Approach water depth 90 ft.; Water depth at pier 40 ft. MLLW; Cement piling and blacktop surface; 120 ft. Apron; Access by road and barge.

Pier No. 3 North: Useable berth length 450 ft.; Approach water depth 90 ft.(+); Water depth at pier 40 ft.; Plank and piling; 15 ft. Apron; Access by road, rail and barge; Rail spur on dock.

Pier "B": Useable length 450 ft.; Approach water depth 27 ft.(+); Water depth at pier 40 ft.; One 35-ton Whirley crane; Plank and piling; 50 ft. Apron; Access by road and barge.

Pier "D": Useable length 500 ft.; Approach Water depth 27 ft.; Water depth at pier 50 ft.; Two 35-ton Whirley cranes; Plank and piling construction; 45 ft. Apron; Access by road and barge.

Pier "E": Useable length 450 ft.; Approach water depth 27 ft.; Water depth at pier 40 ft.; Plank and piling construction; 45 ft. Apron; Access by road and barge.

STEVEDORES: 11 local gangs, additional gangs may be imported if required.

HOLIDAYS: See "Tacoma".

MEDICAL: Doctors and local hospital available.

DENSITY: Changes daily as port is at the mouth of a fresh water river.

FRESH WATER: Available at wharves.

FUEL: Available by barge from Seattle.

GANGWAY/DECK WATCHMEN: Required only if detainees aboard.

CUSTOMS ALLOWANCE: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.

AIRPORT: Seattle–Tacoma International Airport is 45 miles South of city of Everett on excellent highway. Driving time is approx. 45 minutes.

POLICE/AMBULANCE/FIRE: Port of Everett Security: 259-3164; Everett City Police: 259-8711; Everett City Fire Dept.: 252-1111; Ambulance Service: 252-1234.

TELEPHONES: Will be placed on board vessel on request. Charges are made only for calls made. Arrangements should be made through ships Agent.

SHORE LEAVE: Crew members are able to visit Everett at all times.

AUTHORITY: Port of Everett.

FALL RIVER, Mass.: 71.10 W. 41.42 N.

DOCUMENTS: If first port of call in U.S., 2 complete Custom's Manifests describing all cargo on board and ports of discharge. Also 1 Cargo List for Fall River cargo; 3 Crew's Lists; 3 Stores Lists; 3 Curios Lists; the Ship's Register, Load-line Certificate and Tonnage Tax Certificate.

PILOTAGE: Vessel first contact ship's Agent for Pilot and tug arrangements. R.I. State Pilots Association radio call letters KDF-375 on frequency 156.9 kc/s., Channel 18. Usual Pilot pick-up is at Brenton Reef Light Tower off Newport, R.I.

RADIO: Chatham Radio or Amagansett Radio.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Tugs for N.E. Power Station met at Buoy 6; all other berths North, meet tugs at Buoy 10. Tugs provide own lines at no extra charge.

BERTHING: Vessels berth at State Pier. Depth alongside 35 ft.

BRIDGES: All bridges have 135-ft. clearance with exception of Brightman Steel Bridge at approach to Montaup Electric Co. and Shell Oil docks. This bridge has a draw clearance of 97.5 ft. and passage allowed for vessels with less than 75 ft. beam. No unusual requirements. Practice is to depart on flood tide. (See "Developments".)

TANKERS: Berth at Shell Oil Docks, Depth alongside 32 ft.

FRESH WATER: Available at most berths. State Pier delivery is at 125-pounds pressure.

OPENING/CLOSING HATCHES: Usually performed by stevedores.

CERTIFICATES: All certification of vessel, safety conditions and radio facilities should be available for U.S. Coast Guard.

CARGO GEAR: No additional safety requirements.

TELEPHONES: Available at most berths. Contact Agents.

DEVELOPMENTS: Plans for construction of a new 300-ft. wide draw bridge to replace the existing Brightman Street Bridge. This will mean unobstructed use of the entire port area.

SHORE LEAVE: Permitted, but consult Agents.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I.95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I.95. issued for the same vessel.

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours from April to October.

HOLIDAYS: New Year's Day (January 1): Washington's Birthday (February 22); Patriots' Day (April 19); Memorial Day (May 30); Independence Day (July 4); Labour Day (1st Monday in September); Columbus Day (October 12); Veterans' Day (November 11); Thanksgiving Day (last Thursday in November); Christmas Day (December 25); or any day celebrated in lieu thereof.

AUTHORITY: Fall River Port Authority.

FERNDALE, Washington: 48.49 N. 122.43 W.

Mobil Oil Tanker Terminal

DOCUMENTS/HEALTH/etc.: Refer to "Seattle".

PILOTAGE: Compulsory. Pilot boards at Port Angeles.

TUGS: Tug escort required if vessel is loaded and is larger than 40,000 d.w.t. Tug horsepower must be 5% of d.w.t. Available up to 3,000 h.p. Additional tugs ordered from Seattle if required.

RESTRICTIONS: Vessels enter any hour day or night, 4 ft. keel clearance required. Deep water channel.

MAX. SIZE: 1,250 ft. length, 42 ft. max. draft depending weather and tides.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

BERTHING: Terminal used for crude and product discharging. Vessels berth alongside finger pier, lines to bollards. Inner berth for barges only. Outer berth 700 ft. long, depth alongside 40 ft. Facilities available for crude slop 1,400 long tons, other slops 140 long tons, dirty ballast water 3,000 long tons.

FREEPORT, Texas: 28.57 N. 95.21 W. (See Plan)

DOCUMENTS: Handled at Freeport.
PILOTAGE: VHF Channels 6, 8, 12, 13, 14, 16 – at sea buoy – Pilot Office (tel. 233-1120) – 304 West Park, Freeport, Texas; – Pilot boards 0.25 mile North of sea buoy. Anchor 1 mile from end of sea buoy if awaiting Pilot.
ANCHORAGES: 1 to 2 miles from end of sea buoy.
RESTRICTIONS: Depth 36 ft. at bar.
MAX. SIZE: Length 670 ft., draft 36 ft. for ships from bar to within upper turning basin, 30 ft. from upper turning basin to Public Facilities. Tide governing these dimensions – plus or minus 3 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Galveston Marine Operator.
TUGS: Join vessel at shore line. Tug's lines to be used, and no charge for use.
BERTHING: 1 hour to reach berth. Deep water terminals at Public Facilities consist of 1,250 linear ft. of deep water bulkhead wharf with 2 modern transit sheds each 400 ft. long, 150 ft. wide, and 1 berth of 250 linear ft. of deep water bulkhead wharf with transit shed of 204 ft. long and 180 ft. wide. In addition a back-up warehouse is available consisting of 60,000 sq. ft. The 2 large transit sheds and back-up warehouse have railroad tracks under cover, permitting all-weather work and preventing cargo damage.

The Navigation District owns a total of 1,106 acres of land for future Port and industrial development, 2,400 ft. of this land is situated on the Brazos River.

CRANES: Vessel is required to use own gear, shore-cranes are available in area for hire.
STEVEDORES: Obtained through Agent.
MEDICAL: Obtained through Agent and advance notice required. Doctors, hospital available.
DENSITY: 1020.
FRESH WATER: Available ex wharf at Brazos Harbor.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Special watchman required for certain commodities.
OPENING/CLOSING HATCHES: Stevedore contract.
CUSTOMS ALLOWANCE: Local Customs Agent control.
IDENTIFICATION CARDS: None needed.
CONSULS: None. Nearest at Port Arthur or Houston.
REPAIRS: Available.
DRY DOCKS: None.
REPATRIATION: Possible, through Agent.
AIRPORT: Houston Intercontinental Airport – Houston, Texas (80 road miles to Brazos Harbor; Metro Airlines – Shuttle to Lake Jackson, Texas (8 miles from Brazos Harbor).
TIME: GMT minus 6 hours. Daylight saving time starts last Sunday in April and ends the last Sunday in October – GMT minus 5 hours.
HOLIDAYS: New Year's Day (January 1); Martin Luther King's Birthday (January 15); Lincoln's Birthday (February 12); Washington's Birthday (Third Monday in February); Good Friday; Texas Independence Day (March 2); Decoration Day (Last Monday in May); Emancipation Day (June 19); Independence Day (July 4); Labor Day (First Monday in September); Columbus Day (Second Monday in October); Veteran's Day (Fourth Monday in October); Thanksgiving Day (Fourth Thursday in November); Christmas Day (December 25).

If any of the above holidays fall on Saturday or Sunday the following Monday will be recognized as the holiday.

POLICE/AMBULANCE/FIRE: Police 233-5434; Fire 233-2651; Ambulance Service 233-4700.
TELEPHONES: Arrangements exist for placing telephones on board through Southwestern Bell Telephone Co.
SERVICES: Tank-cleaning facilities available locally. Compass adjusting available from Houston, Texas.
SHORE LEAVE: Crew members allowed ashore.
AUTHORITY: Brazos River Harbor Navigation District.

GALENA PARK, Texas: 29.44 N. 95.14 W.

Refer to "Houston".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

GALVESTON, Texas: 29.17 N. 94.50 W.

DOCUMENTS:
- 1 visaed Crew List.
- 3 Passenger Lists.
- 3 or more copies of complete Manifests of Cargo for discharge at all United States ports.
- 2 or more copies of Manifest of Cargo for each United States port.
- 1 Souvenir List.
- 1 Stores List.
- Ship's Register.
- Tonnage Tax.
- Load Line Certificate.
- Nationality Certificate.
- No health document required.

PILOTAGE: Radio to local Agent who arranges Pilot and specifies boarding time. United States Coast Guard require 24 hours notice of arrival at Galveston Bar. Contact pilot boats and pilot station on VHF Channel 12. Pilot boats marked HP No. 1, 53 ft. long; HP No. 2, 61 ft. long; HP No. 3, 106 ft. long. Pilot boats can be signalled by light in international code. Pilot taken on board at sea buoy No. 1 located 6.7 miles from Galveston.
ANCHORAGE: In Bolivar Roads, 6.7 miles inwards from sea buoy No. 1. Depths 32-34 ft.
RESTRICTIONS: Prolonged North winds can reduce water level as much as 4 ft. in Winter. Channel depth 40 ft.
MAX. SIZE: No length restrictions. Draft according to berth depth.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: International Telephone and Telegraph station Galveston, call sign KLC.
TUGS: Available if required.
BERTHING:

Grain elevators	Bayside Elevator	Depth alongside 40 ft.
	Port Richmond El. Co.	,, 40 ft.
Bulk loading	Pier 14 East	,, 36 ft.
	Duval Sulphur Terminal	,, 40 ft.
	Seebee Berth	,, 40 ft.
	Imperial Sugar Dock	,, 40 ft.

Container terminal, wharf 1,000 ft. length, equipped with container crane handling 40 tons under the spreader or 60 tons with cargo hooks at 100 ft. outreach – depth alongside 40 ft.

STEVEDORES: Order before 1700 for 0700 or 0800 hrs. following day. During day can be ordered at 2 hours notice. Gangs must be ordered before 1900 hrs. on Saturday for Sunday or holiday.
MEDICAL: All medical assistance available.
FRESH WATER: At all wharves.
FUEL: All grades available. Delivery only by barge from Houston.
GANGWAY/DECK WATCHMEN: Required only if crewmen detained by Immigration.
OPENING/CLOSING HATCHES: By stevedores only.
CUSTOMS ALLOWANCE: Each man 300 cigarettes, or 100 cigars or 1 lb. tobacco; 1 quart wine/spirits.
IDENTIFICATION CARDS: Immigration form 1-95 required.
CONSULS:

Chile	Haiti	Netherlands
Dominican Rep.	Iceland	Norway
Finland	Italy	Sweden
Guatemala	Mexico	Venezuela

TIME: Central Standard Time. Daylight Saving Time effective from April to October.
HOLIDAYS: January 1st; February 22nd; March 2nd; May 30th; June 19th; July 4th; First Monday in September; November 11th; December 25th; No work on Labour Day or Christmas Day.
POLICE/AMBULANCE/FIRE: All services provided.
SHORE LEAVE: No restrictions unless detained by Immigration.
AUTHORITY: Galveston Wharves (The Port of Galveston).

GEISMAR, Louisiana: 30.13 N. 91.01 W.

East bank of Mississippi River, about 187 miles from sea.
DOCUMENTS/PILOTAGE: For all general information, refer to "New Orleans".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Available if required; normally not used.
BERTHING: Wyandotte Chemical Co: berth 620 ft. long, 32 ft. depth.
FRESH WATER: Available ex-wharf.
FUEL: Not available.
DENSITY: Fresh water (1000).

GOOD HOPE, Louisiana: 29.59 N. 90.24 W.

East bank of Mississippi River, about 140 miles from sea.
DOCUMENTS: For all general information, refer to "New Orleans".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
ANCHORAGE: South of berth in river for unlimited number of ships.
TUGS: 1 tug used for mooring/unmooring.
BERTHING: General American tank storage terminal; tanker berth, 40 ft. depth alongside. 2 × 8-in. hoses. Loading 17,000 bbls.p.h. No ballast facilities.

Norco: Shell Oil Co. 2 tanker berths 45 ft. alongside. 2 × 8-in. hoses, loading 10,000 bbls.p.h. Ballast line 12-in., max. capacity 20,000 barrels.

FRESH WATER: Available ex-wharf.
FUEL: Bunker "C" available ex-wharf.
DENSITY: Fresh water, 1000.

GRAMERCY, Louisiana: 30.03 N. 90.41 W.

East bank of Mississippi, about 144 miles from sea.

DOCUMENTS/PILOTAGE: For all general information, refer to "New Orleans."

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available if required; normally not used.

BERTHING: Colonial Sugar Refinery: berth 600 ft. long, 40 ft. depth. Kaiser Aluminium and Chemical Corp: berth, 40 ft. depth.

FRESH WATER: Available ex-wharf.

FUEL: Not available.

DENSITY: Fresh water, 1000.

GRAYS HARBOR, Washington: 46.55 N. 124.08 W. (See Plan)

DOCUMENTS, etc.: Refer to "Tacoma".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

PILOTAGE: A vessel approaching requested to give 24 hours advance notice of arrival to Grays and Willapa Pilots through Everett Radio, KLB which runs on a calling frequency of 500 kc/s. and VHF Channels 6, 8, 12 and 16. Pilot boat, "Mercury", 65 ft. long, with an 18 ft. beam, powered by a 330 h.p. GM diesel engine. "Mercury" moored at Westport Fishing Basin, and delivers Pilots to vessels outside Grays Harbor bar.

ARRIVED VESSEL: Vessels must be inside Grays Harbor bar to be considered an "arrived vessel".

ANCHORAGE: No specific areas in Grays Harbor have been designated as anchorage grounds. The best area is Southward of Sand Island Shoal in depths of 35 to 40 ft.; the holding ground is good.

RESTRICTIONS: Bar Channel and Approach Channel, depth 30 ft. MLLW. Mean tidal range, about 10 ft.

BERTHING: 7 wharves in port dock. Depths alongside from 20-35 ft.

BULK CARGO FACILITIES: 1 berth in port dock for petroleum discharge and/or bunkering. No other bulk cargo berths. No liquid chemical or LPG berths. No roll-on/roll-off berths. One berth with container capability.

STEVEDORES: 16 local gangs. Additional gangs imported if required.

HOLIDAYS: See "Tacoma".

MEDICAL: All medical facilities available. Local hospital.

DENSITY: Salt water.

FRESH WATER: Available at all wharves.

GANGWAY/DECK WATCHMEN: Required only if detainees aboard.

CUSTOMS ALLOWANCE: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.

AUTHORITY: Port of Grays Harbor.

GREEN BAY, Wisconsin 44.32 N. 88.02 W.

For important general information refer to St. Lawrence Seaway.

DOCUMENTS: No special documents required. All necessary Customs and St. Lawrence Seaway documentation should be accomplished prior arrival.

PILOTAGE: Pilot not compulsory although some Masters prefer Pilot aboard. Pilot boards prior to arrival.

CHANNEL: From Grassy Island, outside mouth of Fox River, to C&NW Railway bridge, channel is maintained 24 ft. below low-water-datum (576.8 ft. above Father Point, Quebec) and 300 ft. width except through bridges. Above C&NW Railway bridge channel and turning basin is maintained at 20 ft. below low-water-datum. From Grassy Island lakeward channel maintained at 26 ft. below low-water-datum varying in width from 300 to 500 ft. for approximately 8 miles. 24 ft. deep turning basin maintained at confluence of Fox River and East River opposite Leicht's North Dock. Currents will flow up and down river and will influence channel depths at times. Present high-water will add 2-4 ft. to channel depths.

RESTRICTIONS: Entry may be made at any time of day or night subject to Master's descretion.

MAX. SIZE: Subject water depths and width of bridge openings.

HEALTH: See "Health: all Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station. Pratique may be obtained prior to entry of St. Lawrence Seaway. Suspected disease should be reported locally. Rat guards required on all lines.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Ships' Agents located at Milwaukee and Chicago, ETA should be directed accordingly.

TUGS: Join vessel at any designated point. Charges should be obtained from tug operators. Use ship's lines.

BERTHING: General cargo at Leicht's North Dock, 1,500 ft. length, full channel depth. Discharge by ship's gear and shore based equipment. Bulk cargo handled at several docks.

CRANES: Shore based lifting devices to 20 tons. 100 ton stiff-legged derrick available for heavy cargo.

BULK CARGO FACILITIES: Available at several places for coal, salt, fertilizer, chemicals, liquid cargo, stone, pig-iron, etc.

BRIDGES: No bridge opening restrictions for railroad bridges. Highway bridges permit vessels of 300 tons or over to transit at any time. However, heavy land traffic occurs about 0730–0830 hrs., 1145–1315 hrs. and 1630–1730 hrs., and co-operation of Masters is urged during these times so that city bridges may remain closed.

STEVEDORES: Services performed by Leicht Transfer and Storage Co. and arrangements should be handled by ship's Agent or directly with Leicht's.

MEDICAL: Subject to regulations of U.S. Customs and Immigration and St. Lawrence Seaway authorities. 3 excellent hospitals.

TANKERS: Limited only by harbour dimensions.

DENSITY: Fresh water harbour.

FRESH WATER: Available through ship's Agent and water company.

FUEL: Fuel oil available in any quantity. Normal fire precautions.

SURVEYORS: Available through ship's Agent.

GANGWAY/DECK WATCHMEN: Available at ship's option.

OPENING/CLOSING HATCHES: By stevedores.

REPATRIATION: Available through local immigration officials.

CONSULS: No consuls. Nearest are at Milwaukee, Chicago, Minneapolis.

REPAIRS: Topside and engine repairs available. Complete repair service available at Sturgeon Bay, 45 miles North.

DRY DOCKS: No local facilities. Available at Sturgeon Bay, Wisconsin.

AIRPORT: 8 miles from port. Served by regular airlines with over 30 flights daily.

TIME: Central standard time. Central daylight saving time in effect from the last Sunday in April to the last Sunday in October.

HOLIDAYS: January 1 (New Year's Day), May 31 (Memorial Day), July 4 (Independence Day), 1st Monday in September (Labor Day), Last Thursday in November (Thanksgiving Day), December 25 (Christmas).

POLICE/AMBULANCE/FIRE: Police: Green Bay – Administrative calls 437-7144 Emergency 432-9251 Sheriff: 432-6494 Ambulance: Izzy's Ambulance – 435-4423 Fire Dept. Rescue – 435-4401 Fire: 435-4401

TELEPHONES: On board service. Contact Wisconsin Telephone Co.

SERVICES: Tank cleaning, fumigation, waste disposal, chandler.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: Proper identification should be carried.

DELAYS: Expect no delays for berthing or harbour movement.

AUTHORITY: Brown County Board of Harbor Commissioners, Office of the Port Director.

GULFPORT, Mississippi: 30.21 N. 89.05 W. (See Plan)

DOCUMENTS: See "New Orleans".

PILOTAGE: Compulsory from outer sea buoy to docks, provided by Gulfport Pilots Association, arranged through Agent. Pilot boards at Sea buoy.

Pilot boat has red hull, white superstructure with "PILOT" in black lettering. When pilot boat is underway, contact can be made by VHF Channel 16.

RESTRICTIONS: The Gulfport Channel is 12 miles long running between Ship Island and Cat Island. Channel is 225 ft. wide and has a minimum depth throughout of 30 ft. at MLW. Harbour is dredged rectangular basin about a 0.25 mile wide and 0.5 mile long, this area being protected by piers. Depth in harbour and along wharves is 30 ft. with a 2.5 ft. tide variation. No entry restrictions as to time.

MAX. SIZE: Length of vessel is restricted to approximately 900 ft. by turning basin, no breadth restrictions.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Gulfport Radio KKM 650 – VHF Channel 16 (26 safety only). Continuous service.

TUGS: 2 tugs available but not required unless requested to assist in berthing.

CARGO HANDLING: 4 gantry banana terminal capable of unloading 16,000 boxes per hour. 50,000 sq. ft. transit shed refrigerated facility.

STEVEDORES: Must have 12 hours' notice to arrange stevedore gangs. Normal work day 0800–1200 hrs., and then 1300–1700 hrs. Monday through Friday.

MEDICAL: No advance notice required for medical attention, doctor and hospital care readily available.

FRESH WATER: Fresh water is available.

FUEL: Only on advance notice.

DENSITY: Brackish.

GANGWAY/DECK WATCHMEN: Port guards or Dubuisson Detective Agency.

CONSULS: Many countries have consuls within a 100 mile radius of Gulfport.

REPAIRS: Most deck and engine repairs could be arranged within port facilities.

AIRPORT: Gulfport Municipal Airport is approximately 4 miles from the port and served by regularly scheduled airlines.

REPATRIATION: Can be arranged.

TIME: The Port of Gulfport is on Central Standard Time, GMT minus 6 hours; clocks are moved ahead 1 hour during Summer months.

HOLIDAYS: United States national holidays are observed, cargo work can be arranged on these days at a penalty time.

POLICE/FIRE/AMBULANCE: Telephone numbers for emergency services are; Fire 863-1212; Police 863-4211; Ambulance 863-1441.

TELEPHONE: Can be placed aboard only by special arrangement; not normally available.
DEVELOPMENTS: Container crane to be installed.
AUTHORITY: Mississippi State Port Authority at Gulfport.

HAINES, Alaska **(See Plan)**

(Lutak Inlet) Located 5 miles N.W. of Haines. Open all year.
APPROACHES: Lynn Canal to Lutak Inlet.
DOCUMENTS: See "Anchorage, Alaska".
PILOTAGE: Pilot pick-up point located in vicinity of Point Retreat.
MAX. SIZE: Harbour depth 36 ft. at zerotide. Tides: diurnal range 16 ft. Also see "Berthing".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
ANCHORAGE: Lutak Inlet.
CUSTOMS: Quarantine, immigration and Customs, local.
TUGS: 3 available.
BERTHING:

1. Haines dry cargo dock can be secured by request through City of Haines (Telephone: Area code 907 number 766-2231). Berthing length – 750 ft. and a clear surface of over 300 ft. in depth. Depth at face of dock – 36 ft. MLLW. No covered sheds. 6 acre open staging area. Crane may be available. Continuous to 300 ft. Alaska State Ferry facility which is equipped to handle roll on/roll-off cargo.
2. Schnabel Lumber Co. Dock: Berthing length – 520 ft. long and 80 ft. wide. Depth at face of dock – 45 ft. No covered storage. Open storage. 30,000-ton capacity for bulk cargo storage. No crane. Chip loader with 350 t.p.h. capacity. Crane available.

STEVEDORES: 4 gangs.
REPAIRS: None.
WATER: Available in small quantities in temperate seasons only.
FUEL: None.
MEDICAL: Doctor/dentist available.
TRANSPORTATION: Air, ferry. Haines Highway principal route connecting Southeast Alaska with the Alcan Highway leading to the interior of Alaska and Canada.

HAMPTON ROADS DISTRICT, Virginia: **(See Plan)**
NORFOLK, 36.51 N. 76.19 W.
NEWPORT NEWS, 36.59 N. 76.26 W.
PORTSMOUTH, 36.50 N. 76.17 W.

DOCUMENTS:

3 copies Cargo Manifest (Forms 7527–A or 7527–B), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I–418).
2 copies Crew List.

Customs boarding officer will also examine ship's register and load line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours of arrival from a United States port:
Health Pratique.
Master's Oath (Customs Form 3255).
All foreign clearances.
U.S. Certificates of payment of Tonnage Tax (Customs Form 1002).
Certified Crew List.
F.M.C. Certificate of Financial Responsibility.

PILOTAGE: Compulsory; is generally arranged through port Agent. Vessels approaching port may use VHF telephone, Channel No. 16, radio telephone 2738 kHz. Advance notice of 24 hours is required of ETA. Pilot boat is 165 ft. long, black steel hull, with "VA Pilot" painted on hull, white superstructure, and buff funnel. Long and short light or sound signals are used by vessels requiring a Pilot. Location of pilot boat is 1 mile North of Cape Henry Lighthouse. Pilot boat will issue instructions in event of bad weather or when pilot boat is off station and information on anchorage for vessel awaiting a Pilot.
ANCHORAGE: In Hampton Roads, depth 45 ft.
RESTRICTIONS: Channels to Norfolk and Newport News – 45 ft. depth. Elizabeth River Channel – 40 ft. depth to Norfolk and Western Railway Bridge, then 35 ft. to Chesapeake.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Fort Monroe Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Radio-telephone communications in the Hampton Roads area are furnished by the Chesapeake and Potomac Telephone Company of Virginia. A regular ship-to-shore channel transmits to ship on 2538 kHz and the ship returns the call on 2142 kHz. A "daytime" ship-to-shore channel transmits to ship on 2450 kHz and the ship returns the call on 2366 kHz. In the very high frequency band, "XY" ship-to-shore is available which transmits to the ship on 161.9 mHz and the ship returns the call on 157.3 mHz.

BERTHING:
Public General Cargo Facilities:

		Length (ft.)	Depth (ft.)	Cranes
Lambert Point Terminal:				
Pier L	Berth 1	600	32	Nil
	Berth 2	600	32	Nil
	Berth 3	600	32	Nil
	Berth 4	600	32	Nil
Pier N	Berth 1	550	32	Nil
	Berth 2	550	32	Nil
	Berth 3	550	32	2×15 ton gantries
	Berth 4	550	32	
Pier P	Berth 1	598	32	2×25 ton cranes serve all berths
	Berth 2	598	32	
	Berth 3	598	32	
	Berth 4	598	32	
Sewell's Point:				
Pier A	Berth 1	600	35	1×15 ton revolving crane 1×7.5 ton cantilever crane
	Berth 2	600	35	
Pier B	Berth 1	600	35	Nil
	Berth 2	600	35	Nil
Norfolk International Terminals:				
Pier 1	Berth 1	664	35	Nil
	Berth 2	664	35	Nil
	Berth 3	664	35	Nil
	Berth 4	664	35	Nil
Pier 2	Berth 1	664	35	Nil
	Berth 2	664	35	Nil
	Berth 3	664	35	1×7.5 ton gantry crane serves berth 3 and 4
	Berth 4	664	35	
Container Pier	2 berths	1,589	35	3×50 ton, 1×30 ton container gantries
Newport News Terminal:				
C. & O. Pier B	Berth 1	543	35	Nil
	Berth 2	620	40	1×50 ton gantry crane serves berth 2 and 3
	Berth 3	620	40	
C. & O. Pier 2	Berth 1	606	32	2×30 ton gantry cranes serves berth 1 and 2
	Berth 2	606	35	
C. & O. Pier 8	Berth 1	818	35	Nil
	Berth 2	818	35	Nil
C. & O. Pier C	Berth 1	755	35	Same as Pier "B" plus a 40 long ton crane with outreach of 115 ft. and a 40 long ton rubber tyred bridge crane.
	Berth 2	755	40	

Portsmouth Marine Terminal:

			Equipment
	1,700	35	2×20 ton container cranes; 1×110 ton gantry crane; 3×35 ton container carriers

Sealand has private facility at Portsmouth with 1 × 50 ton Paceco crane.

Private Cargo Facilities:

Norfolk: Elizabeth River Terminal, berth 1,000 ft. long, 35 ft. depth; Imperial Tobacco Piers, Nos. 2 and 3, 27 ft. depth; Southgate Warehouse Terminal, 3 general cargo berths, 18–25 ft. depth; N.B. & C. Line Piers, 4 general cargo berths, 20 ft. depth. Coal: Pier No. 5, 1 berth 1,000 ft. long, 36 ft. depth; Pier No. 6, 2 berths, 1,800 ft. long, 45 ft. depth. Grain: Cargill Grain elevator, 1 berth 35 ft. depth, loading rate 30,000 bushels per hour. Continental Grain Elevator, 1 berth 35 ft. depth, loading rate 45,000 bushels per hour.

Newport News: Coal: Pier No. 14, 2 berths, 1,090 ft. long, 38 ft. and 41 ft. depth; Pier No. 15, 2 berths, 1,000 ft. long and 38 ft. depth. Ore: Pier No. 9, 2 berths, 707 ft. long, 35 ft. and 42 ft. depth. Discharge rate 1,500 t.p.h.

Portsmouth: Lumber: One berth, 400 ft. long, 32 ft. depth.

TANKERS: Sewells Point: Exxon Co., 2 berths, 38 ft. depth.

Elizabeth River: *Lower Norfolk:* American Oil Company, 1 berth, 31 ft. depth; Atlantic Energy Inc., 1 berth, 32 ft. depth; Gulf Oil 2 berths, 32 ft. depth; Mobil Oil, 1 berth, 36 ft. depth; Swann Oil Co., 1 berth, 32 ft. depth; Union Oil Company, 1 berth, 15–20 ft. depth; Shell Oil Company, 1 berth, 38 ft. depth; Tenneco/Cities Service, 1 berth, 32 ft. depth; Texaco Inc.,1 berth, 32ft. depth.

Newport News: Exxon Co., 1 berth, 35 ft.; 2 berths 19-27 ft. depth.

Portsmouth River: B.P. Oil Corp., 2 berths, 30 ft. depth.

TUGS: Compulsory, normally join the vessel in Elizabeth River.
BRIDGES: Sufficient clearance at all times.
STEVEDORES: Labour arranged through International Longshoremen's Association.

1. Straight Time – work between the hours of 0800 and 1200 and between the hours of 1300 and 1700 daily except Saturdays, Sundays and holidays.
2. Double Time – hours daily between 0600 to 0700 and 1200 to 1300, 1800 to 1900, 2400 to 0100 hrs. and all Sundays.
3. Time and one-half – shall be all those hours not included above, except holidays.

DENSITY: Average 40% fresh.
FRESH WATER: Available at all berths, Barge service available if required.
FUEL: All grades available at oil company berths. Delivery by barge to all other locations.
GANGWAY/DECK WATCHMEN: Not required unless crew members detained by Immigration.
CERTIFICATES: Cargo Gear Certificate, Derat, Radio, Safety Equipment, and Ship's Register.

CUSTOMS ALLOWANCE: At the discretion of Customs Officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1qt. wine/spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.
IDENTIFICATION CARDS: Identification required by Immigration for shore passes.
CONSULS: The following countries are represented at Norfolk:

Belgium
Brazil
Denmark
Finland
France
Germany
Great Britain
Greece
Iceland
Italy
Mexico
Netherlands
Norway
Panama
Sweden

REPAIRS: Newport News Ship Building and Dry Dock Company in James River; 8 outfitting piers up to 1,050 ft. length. Floating cranes up to 67 tons capacity.

Norfolk Ship Building and Dry Dock Corporation, situated on East Branch of Elizabeth River. Channel depth 25 ft.; 7 piers equipped for ship's repairs. Floating crane 25 tons capacity. Other repair companies in addition.
DRY DOCKS: Norfolk: 1 dry dock 450 ft. long, 57 ft. beam; floating dock 360 ft. long, 64 ft. beam.

Newport News: Dry docks:

	Length inside gate	*Width of entrance*	*Depth of water over sill MHW*
No. 1	649 ft.	92 ft.	33 ft.
No. 2	862 ft.	118 ft.	32 ft. 3 in.
No. 3	536 ft.	78 ft.	24 ft.

Slipways: The shipyard has 3 inclining slipways with lengths up to 715 ft. and capacities up to 15,000 tons.
AIRPORT: Norfolk Airport, and Patrick Henry Airport at Newport News, over 100 flights daily.
TIME: Eastern standard time, GMT minus 5 hours. Daylight saving time, GMT minus 4 hours, from April to October.
HOLIDAYS: New Year's Day; Lee's Birthday (January 19th); Washington's Birthday (February 22nd); Good Friday; Memorial Day (May 30th); Jefferson Davis Day (June 3rd); Independence Day (July 4th); Labour Day; Election Day (1st Tuesday after 1st Monday in November); Armistice Day (November 11th); Thanksgiving Day; Christmas Day. No work can be arranged on New Year's Day, Labour Day or Christmas Day.
TELEPHONES: On-board telephones only available at shipyards.
AUTHORITY: Virginia Port Authority, Norfolk.

HILO: Hawaii 19.46 N. 155.06 W. (Including Kawaihae 20.02 N. 155.50 W.) (See Plan)

DOCUMENTS:

- 4 Crew Lists.
- 4 Passenger Lists.
- Customs Documents.
- Clearance, Travelling Manifest.
- Local Manifests.
- Health Documents.
- Bill of Health and Vaccination Certificates.
- 4 Manifests.
- 4 Bills of Lading.
- Ship's Papers.
- Certificate of Registration or Enrolment.
- Annual Inspection Certificate.
- Load-line Certificate.
- Derat Certificate.
- Drinking Water Certificate.
- Radio Certificate and Licence.
- 4 Store Lists.

PILOTAGE: Pilots boats have VHF and Radio telephone Channels 2182, 2638, 2738. Pilot service is provided on a 24-hour basis upon suitable advance notice.

At Hilo, Pilot boards on starboard side in position 0.75 mile due East of Paukaa light. In picking up Pilot, vessels should be on Southerly course with enough speed for steerageway. Special instructions will be given by radio telephone.

At Kawaihae Pilot station in position 1 mile 287° true from No. 2 buoy. Pilot usually boards on port side with vessel on course for the entrance at dead slow speed.
ANCHORAGE: No safe anchorages either Hilo or Kawaihae for vessels awaiting Pilot. In this situation, a vessel should heave to or steam. Under good weather conditions, safe anchorage can be had in Hilo Bay. Anchorage is inside pilotage waters and requires local knowledge for safety; vessels should not anchor without Pilot.
RESTRICTIONS: At Hilo, under good weather conditions, vessels with draft up to 32 ft. 6 in. can be handled at any time.

At Kawaihae, vessels with draft up to 33 ft. handled anytime.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Honolulu Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Communicate through RCA or ITT stations in Honolulu.
TUGS: Tugs join vessels at entrance at Kawaihae and at Coconut Island at Hilo. Tugs lines are usually used at no extra charge.
BERTHING: There are many factors which affect berthing at Hawaii Island ports, the most important of which are surge and wind. Vessels should be well equipped with long mooring lines and sufficient additional line to make up 2 × 900 ft. buoy lines. In all instances, berthing instructions will be given after details concerning vessel and her cargo are received.
MEDICAL: All facilities available.
DENSITY: Variable in Hawaii area due to fresh water run-off.
FRESH WATER: Available from county of Hawaii by pipe-line.
FUEL: Can be supplied subject advance notice.
GANGWAY/DECK WATCHMEN: Required for tankers. Other ships as may be necessary due to special circumstances.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
CUSTOMS ALLOWANCE: 200 cigarettes, 50 cigars per man, and one bottle U.S. quart, wine or spirit.
IDENTIFICATION CARDS: Seamen's passports only required.
REPAIRS: Limited repair service available; almost any type of machine work, welding and ordinary electrical repairs can be handled.
REPATRIATION: Direct air service to Continental United States and to Honolulu International Airport.
AIRPORT: About 1 mile from Port of Hilo and is served by regular airlines.
POLICE/AMBULANCE/FIRE: *Hilo*: Police 9353311; Ambulance 961-4211; Fire 961-6022.

Kawaihae: Police 8857334; Ambulance 7757211 or 889699 or 8896211; Fire 961-6022.
TIME: GMT minus 10 hours all year round.
TELEPHONES: Special arrangements may be made with Hawaiian Telephone Co.
SHORE LEAVE: Allowed.
AUTHORITY: State of Hawaii, Department of Transportation, Harbours Division, Port of Hilo.

HOMER, Alaska: 59.36 N. 151.25 W.

APPROACHES: Via Cook Inlet. Port located at mouth of Kachemak Bay on Kenai Peninsula.
DOCUMENTS: See "Anchorage – Alaska".
PILOTAGE:

(1) Homer Pilots Association, Radio KTE 21, tel. 235-8526. Pilot boards 1 mile South of Homer Spit Light on Coal Point.

(2) The Southwest Alaska Pilots Association serves all ports in Cook Inlet, Prince William Sound, Resurrection Bay, Kodiak Island, the Aleutian Islands, Bristol Bay and Bering Sea. The pilot station for vessels entering Cook Inlet waters is Lat. 59° 36.2′N. Long. 151° 24.5′ W., approximately 1 mile South of Homer Spit Light on Coal Point. The pilot station cable address is "Homerpilot". The pilot station stands by on VHF Channels 10 and 16, 24 hours a day; call sign "WAB-917 Southwest Pilots". The pilot station also stands by on single side band radio as follows:

8284.4 mHz between 0800 and 1200 hrs. Alaska time, weekdays.
4136.3 mHz between 1300 and 1700 hrs. Alaska time, weekdays.
Call sign "WAB-917 Southwest Pilots".

MAX. SIZE: Harbour depth 40 ft. MLLW. Tidal range 18 ft. Max. draft for berthing 24 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
ANCHORAGE: Kachemak Bay is excellent anchorage for vessels of any size. Foreign vessels may enter bay to anchor, but must have a Pilot aboard to come to dock.
BERTH: 410 ft. face sloping bottom suitable for vessels with 20 ft. draft or less at chine. Inside and outside storage is available for holding and staging. Water, gasoline and diesel are available on dock.
RADIO: Homer Port Radio – WJU 71 on 5195 Khz. and WKD 32 on 2182 Khz.
BERTHING: Homer City Dock, 480 ft. long and 50 ft. wide. Limited to draft of 24 ft. 3-ton mobile crane.
TUGS: 1 tug available.
FRESH WATER: Available from the berth.
FUEL: Available for small craft only.
REPAIRS: No facilities for repairs.
MEDICAL: Homer Hospital is a nine-bed hospital with 2 full-time doctors.
EMERGENCIES: Police department and a volunteer fire department are available plus a rescue truck.
AIRPORT: Daily air service.
AUTHORITY: City of Homer Harbour Master.

HONOLULU, Hawaii (including Barbers Point and Pearl Harbour): 21.19 N. 157.52 W. (See Plan)

PILOTAGE: Pilot requested by Agent. Pilot station telegraphic address on VHF (only) Channel 16, call KFQ 907. Pilot boat, 36 ft. cabin cruiser, white house, black hull. Only "G" flag necessary for vessel requiring Pilot. Pilot station, Lat. 21° 16′ 12″ N., Long. 157° 53′ 24″ W., no alternative.

DOCUMENTS:
4 Crew Lists.
4 Passenger Lists.
Customs Documents.
Clearance, Travelling Manifest.
Local Manifests.
Health Documents.
Bill of Health and Vaccination Certificates.
4 Manifests.
4 Bills of Lading.
Ship's Papers.
Certificate of Registry.
Annual Inspection Certificate.
Load-line Certificate.
Derat Certificate.
Radio Certificate and Licence.
4 Stores Lists.

Vessels scheduled to call at Pearl Harbour are required to furnish 6 copies of crew lists and passenger lists, if applicable, at least 1 working day prior to arrival, for Naval security requirement.

The United States Immigration Service requires that the Master of vessels manned by alien crew members arriving from a foreign port present the United States Immigration and Naturalisation Service's Officer with a current crew list (Form I. 418) properly visaed in their possession. An I. 94 should be prepared for each passenger prior to vessel's arrival.

U.S. Immigration Department representatives are not stationed at any Hawaiian outports. Customs officials, however, are stationed at all entry ports and accomplish both Customs examination and Immigration.

The United States Agriculture Service examines and seals ship's stores from restricted ports. Special arrangements for garbage disposal may also be required by this agency, if for example meat aboard has been purchased in a port where there is a high incidence of "hoof and mouth" disease. All garbage should be disposed of prior to arrival in port.

All regulatory bodies assess overtime charges for services of their personnel if rendered on Saturdays, Sundays, holidays or after hours on week-days.

RESTRICTIONS: Entry at any time subject to harbour control signals. 24 hours notice of arrival is obligatory.

MAX. SIZE: Controlling depth 33 ft. MLLW. Length depends on availability of berths.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Honolulu Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Call KHK, HF—8 mc/s., 12 mc/s., 16 mc/s.; LF-500. VHF Channel 16, call KFQ907, Aloha Tower Harbour Control Station.

TUGS: Tugs normally join vessel within harbour limits. Both ship's lines and tug's lines used depending on conditions.

BERTHING: Berthing given on a first-come-first-served basis according to type of vessel and particular requirements as to cargo bunkering, etc.

STEVEDORES: Gangs must be ordered 24 hours in advance. General cargo, average load per hour: 15 L/tons; average discharge per hour: 15 L/tons.

MEDICAL: Agents would like as much advance notice as possible. Complete medical facilities available. Vaccinations in accordance with U.S. Public Health requirements.

TANKERS: 4 tankers berths, max. draft 35 ft. No slop discharge facilities.

Barber's Point: Tanker berths, tugs not normally required. Mooring Master attends berthing procedure. Fresh water not available. Fuel available ex pipe-line.

Pearl Harbour: U.S. Navy Terminal. Max. LOA 800 ft. Max. draft 38 ft. 6 in.

DENSITY: Pure salt water, no fresh water allowance.

FRESH WATER: Delivered via 2.5 in. fire hose with meter on pier. Rate of delivery between 30 and 60 t.p.h., depending on the berth.

FUEL: All U.S. grades available, no advance notice other than establishment of credit.

FIRE PRECAUTIONS: Fire wires required by tankers berthed alongside.

DEVELOPMENTS: Additional container facilities being developed at Sand Island.

GANGWAY/DECK WATCHMEN: Services of watchman recommended, usually arranged by Agent.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCE: 200 cigarettes, 50 cigars per man, and one bottle, U.S. quart, wine or spirits.

IDENTIFICATION CARDS: Seamen's passports needed.

CONSULS: The following countries are represented in Honolulu:
Belgium
China
Great Britain
Japan
Denmark
Finland
India
Norway
Panama
France
Germany
Korea
Netherlands
Philippines
Portugal
Sweden
Thailand

REPAIRS: All types of deck and engine repairs possible. Hull repairs below water-line in accordance with dry dock capacities.

DRY DOCKS: Commercial within Honolulu Harbour. Dry dock: 2,800 L/Ton lifting capacity, 385 ft. long, 56 ft. wide. Marine railway: 1,400 L/Ton lifting capacity, 223 ft. long, 65 ft. wide.

REPATRIATION: All facilities, crews generally leave State within 24-hour period.

AIRPORT: International airport, served by all major airlines, 5 miles from harbour.

HOLIDAYS: New Year's Day (January 1); President's Day (February 21); Kuhio Day (March 26); Good Friday; Memorial Day (May 30); Kamehameha Day (June 11); Independence Day (July 4); Labour Day (September 1); Veterans' Day (November 10); Thanksgiving Day (November 27); Christmas Day (December 25).

Admission Day (August 20) and Colombus Day (October 11).

POLICE/FIRE AMBULANCE: Police, Ambulance, Fire dial 911.

TIME: G.M.T. minus 10 hours all year round.

TELEPHONES: Telephones can be placed on board at any dock.

SERVICES: All services found in major U.S. ports are available.

SHORE LEAVE: No restrictions if papers are in order.

AUTHORITY: State of Hawaii, Department of Transportation, Harbours Division.

HOUSTON, Texas: 29.45 N. 95.20 W. (See Plan)

DOCUMENTS:
1 Visaed Crew List.
3 Passenger Lists.
3 or more copies of complete Manifests of Cargo for discharge at all U.S. ports.
2 or more copies of Manifest of Cargo for each individual U.S. port.
1 Souvenir List.
1 Stores List.
Ship's Register.
Tonnage Tax.
Load-line Certificate.
Nationality Certificate.
No health document required.

PILOTAGE: Compulsory. Radio to local Agent who arranges Pilot and specifies boarding time. U.S. Coast Guard requires 24 hours notice in advance of arrival Galveston Bar. Pilot boats and station on VHF Channel 12, Bridge to Bridge is Channel 13 and tugs for docking and off-docking on Channel 14. 3 Pilot boats marked HP No. 1 – 53 ft., HP No. 2 – 61 ft. and HP No. 3 – 106 ft. in length. Pilot boats contacted by light in International Morse code; no sound signal. Pilot taken on board at Sea Buoy No. 1, located 6.7 miles from Galveston. Seldom, if ever, is water too rough for boarding at above location. Anchorage located in Bolivar Roads, 6.7 miles inward from Sea Buoy No. 1.

ANCHORAGES: Anchorage for Houston is only in Bolivar Roads in Galveston, Texas, which has ample space and depth for all Houston bound vessels.

RESTRICTIONS: None with respect to time of day or night, or with state of tide.

Houston Ship Channel Dimensions:

Section of Channel	*Miles*	*Width (ft.)*	*Depth (ft.)*
Bolivar Roads to Morgan Point	25.6	400	40
Morgan Point to Exxon Co. Slip	4.8	400	40
Exxon Co. Slip to Shell Oil Co. Slip	8.8	400	40
Shell Oil Slip to Hunting Bayou	4.6	300	40
Turning Point at Hunting Bayou	0.2	600	40
Hunting Bayou to Clinton Island Turning Basin	2.8	300	40
Clinton Island Turning Basin	0.2	1,000	40
Clinton Island Turning Basin to Wharf No. 15	3.6	300	36
Turning Basin	0.8	250 to 970	36
Total miles	51.4		

MAX. SIZE: Max. 850 ft. long, 115 ft. breadth and 39 ft. draft. Tide minimal, effected primarily by wind only. Should a vessel's draft exceed 39 ft., permission to enter must be obtained from the U.S. Coast Guard.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: International Telephone and Telegraph – ITT – Galveston call letters KLC.

TUGS: Tugs come alongside just off dock or immediately prior to entering turning basin if vessel is to turn, or at Pilot's discretion.

BERTHING: No special requirements other than authority from terminal operator local Agent.

Public Wharves – Port of Houston Authority Facilities:

Wharves	*Berth Length Feet*	*Berthing Capacity No. of Ships*
No. 1	600	1
No. 2	525	1
No. 3	802	2
No. 4	779	2
No. 8	624	1
No. 9	581	1
No. 10	600	1
No. 11	530	1
No. 12 (2-storey)	530	1
No. 13 (2-storey)	460	1
No. 14	480	1
No. 15	480	1
No. 16	603	1
No. 17	600	1
No. 18	600	1
No. 19	577	1
No. 20	593	1
No. 21	600	1

Public Wharves – Port of Houston Authority Facilities:

Wharves	*Berth Length Feet*	*Berthing Capacity No. of Ships*
No. 22	600	1
No. 23	600	1
No. 24	600	1
No. 25	600	1
No. 26	600	1
No. 27	600	1
No. 28	600	1
No. 29	600	1
No. 30	600	1
No. 31	576	1
Nos. 41-48	3,428	8
Manchester No. 1	296	1
Manchester No. 2	500	1
Manchester No. 3	500	1
Bulk Plant No. 1	650	1
Bulk Plant No. 2 (Lay Berth)	600	1
Barbours Cut LASH Ship Berth	900	1

Petty Terminal Corporation (PETCO) Dock:

Deepwater shipside terminal located on South side of channel. One ship berth 720 ft. long with water depth of 40 ft. One covered warehouse 100,000 sq. ft. with rail track inside warehouse and on outside concrete apron. Complete services available for discharging and shipping general cargo. Owned by Intercontinental Terminals Company and operated by Petty Terminal Corporation.

Manchester Terminal Company:

3 ship berths – 1,650 ft. in length (including 1 piling cluster).

Served by 1 marginal track and 2 outside tracks behind docks plus loading tracks to all other facilities. Special loading-unloading docks for motor trucks available.

Equipment: 62 Lift Machines; 7 Tractors; 1 Towmotor, 30,000 lbs. capacity; 4 Sweepers, 3 Scrubbing Machines.

Manchester Terminal Company also has 18,000 cargo pallets.

New Terminal Warehouse Corporation:

Capacity 3 ship berths. Wharf 1,400 ft. long. Open storage areas of 50,000 sq. ft. Covered storage areas of 200,000 sq. ft.

Other Wharf Facilities:

In addition to the for-hire terminals. Port of Houston has some 43 ship berths plus various barge facilities on the Ship Channel maintained and used exclusively by industries. Most of these facilities are tanker ship berths at the refineries. There are also 4 liquid-bulk terminals for hire: Amerada Hess Terminal and General American Tank Storage Terminals, the latter having 2 separate locations; South Coast Terminals; Robertson Terminals, Inc.

Barbours Cut: A new facility owned by the Port Authority has been opened at Barbours Cut, 25 miles across Galveston Bay from Bolivar Roads, where the ship channel moves inland at Morgans Point. This is a 500 ft. pier with mooring dolphins for handling the new, large barge-carrying vessels (LASH).

BULK HANDLING FACILITIES:

Public Grain Elevators: Back of Wharves 14 and 15. Capacity 6,000,000 bushels.

Equipped to unload from 110 to 120 cars in 10 hours, or deliver a combined total of 80,000 bushels per hour to 2 ships. 12 mechanical grain trimmers are in use at the Elevator as well as other major equipment including 2 car dumpers and 7 hopper scales of 150,000 lbs capacity. 2 modern grain truck dumpers can unload up to 30 trucks per hour.

Public Bulk Materials Handling Plant: At Greens Bayou.

Loading/unloading capacity is 1,000 long. t.p.h. free digging rate. Fully automatic plant handles dry bulk commodities rapidly to and from ships and barges through the loading and unloading towers, conveyor systems, hoppers, pits, surge bins and scales; with rail and truck facilities and ample ground storage. Rail cars are rapidly moved with large rubber-tyre tractors. These tractors are equipped with two-way radios for instant communication with unloaders. Boom of unloading tower reaches 76 ft. from face of dock, bucket capacity is 10 tons; loading tower boom reaches out 61 ft. from dock face and is equipped with automatic trimmer. Both towers can travel the full length of the dock. Mooring facilities for a waiting vessel have been installed next to existing dock. Also available: a boxcar unloading system (Augermobile), 2 heavy-duty front-end loaders and 4 heavy-duty car shakers.

Elco Shipside Elevator Company:

Two million bushel capacity elevator which loads up to 25,000 bushels per hour to vessels berthing at Dock 2 of the Port Authority's Manchester Wharves.

Goodpasture, Inc. and Continental Grain Company:

Grain elevator with 12 million bushel capacity – 4 ship berths. Also general cargo handling. Max. draft 38 ft. Loading rate 1,000 t.p.h.

Union Equity Co-Operative Exchange:

Grain elevator with 6 million bushel capacity, 1 grain berth, 1 lay berth, each 980 ft. long, water depth of 40 ft. for all berths. Loading rate 1,200 t.p.h.

Adams Terminal: Phillips Terminal Company.

2,700 linear ft. capacity 5 vessels. Bulk cargo loading conveyor system rated at 400 t.p.h.; horizontal boom, hammerhead-type clamshell unloader equipped with five-yard ore bucket, rated at 150 to 250 t.p.h.; 2 gantry cranes, capacity 40 tons at 30 ft. radius; Robbins heavy-duty car shakeout; 20-ton truck mounted crane. One D & H gantry crane modified to handle five-yard bucket for bulk ore discharge. 100 t.p.h. Specialists in import and export bulk cargo. Covered storage – 73,000 sq. ft.

Jacintoport Terminal:

Deepwater shipside terminal located on the North side of the Ship channel some 15 miles downstream from the Turning Basin.

Three ship berths with water depth alongside the wharf at 32 ft. 24,000 sq. ft. of transit sheds; 60,000 sq. ft. of back covered storage warehouse space, and 300 acres available for open storage. Rail service by the PTRA and Missouri Pacific. 200 igloos provide storage with less than 4° change in temperature year around. 500 cargo pallets. Slip is 4,200 ft. long and 400 ft. wide. 3,600 ft. marginal trackage. Owned and operated by Bethlehem Steel Corporation.

Cargill, Inc.

Grain elevator with a capacity of 3.5 million bushels. Two ship berths. Max. draft 38 ft. Loading rate 1,500 t.p.h.

CRANES: (Capacities 1 ton=2,000 lbs.)

Locomotive Cranes: Crane No. 15 – American, Diesel Electric: Capacity at 45 ft. radius – 17 tons.

Other Cranes:

Mobile No. 1 Crane – Diesel: Capacity 7.5 tons
Mobile No. 2 Crane – Diesel: Capacity 20 tons
Mobile No. 3 Crane – Diesel: Capacity 20 tons
Mobile No. 4 Crane – Diesel: Capacity 50 tons
Mobile No. 5 Crane – Diesel: Capacity 50 tons
Mobile No. 6 Crane – Diesel: Capacity 80 tons
Mobile No. 7 Crane – Diesel: Capacity 80 tons
Mobile No. 8 Crane – Diesel: Capacity 150 tons
Mobile No. 9 Crane – Diesel: Capacity 80 tons
Mobile No. 10 Crane – Diesel: Capacity 80 tons
Gantry, American Revolver R-25 Electric: Capacity at 65 ft. radius – 50 tons
Gantry, Clyde Whirley, Diesel Electric: Capacity at 45 ft. radius – 30 tons
Gantry, Portainer, Electric: Capacity at 81 ft. reach – 27.5 tons
Gantry, Portainer, Diesel Electric: Capacity at 113 ft. reach – 44 tons
Gantry, Portainer, Electric: Capacity at 140 ft. reach – 30 tons
Stiff Leg Derrick, Electric: Capacity at 50 ft. reach – 75 tons

BRIDGES: One bridge crosses channel immediately East of Public Wharf 31, clearance of 139 ft.

STEVEDORES: Stevedore, on advice from representative of local Agent, must order laour prior to 1700 for 0700 or 0800 hrs. start the following day. Can order at 0800 for 1000, 1100 for 1300 and 1700 for 1900 hrs. start. Gangs must be ordered prior to 1700 hrs. on Saturday for Sunday or holiday.

MEDICAL: Give sufficient notice to order doctor or ambulance. Numerous hospitals available. Seaman's health certificate required.

TANKERS: No specific requirements for oil carriers with respect to load/discharge lines. Tankers must be gas free to enter turning basin area. Approximately 12 tanker berths, excluding Humble Oil & Refining Co. in Baytown, Texas.

DENSITY: Classed as full fresh but varies with rainfall and tide, usually 4 to 5 in. allowance on full draft.

FRESH WATER: Available at all terminals through pipe and hose.

FUEL: All grades and viscosities available.

FIRE PRECAUTIONS: All standard precautions per code of Federal Regulations plus local ordinances. Tankers, unless gas free, not permitted at wharves in the immediate turning basin area.

GANGWAY/DECK WATCHMEN: Not required, but are available and can be arranged by local Agent at Master's request.

OPENING/CLOSING HATCHES: By stevedores only – vessel will be charged for this work if done by crew.

CUSTOMS ALLOWANCE: Tobacco, 300 cigarettes, 100 cigars, 1 lb. of tobacco or combination for each man. Wine and/or Spirit, 1 quart bottle for each crew member.

CARGO GEAR: Cargo gear safety certificate required.

IDENTIFICATION CARDS: Immigration Form I-95 card required.

CONSULS:

Argentina
Belgium
Bolivia
Brazil
Chile
China
Columbia
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Great Britain
Guatemala
Haiti
Honduras
Israel
Iceland
Italy
Japan
Jordan
Korea
Netherlands
Luxembourg
Mexico
Netherlands
Nicaragua
Norway
Panama
Paraguay
Peru
Portugal
South Africa
Spain
Sweden
Uruguay
Venezuela

REPAIRS: All types available.

DRY DOCKS: Todd Shipyard, 12,000 ton drydock at Greens Bayou.

REPATRIATION: Danner Guard Service can handle all phases.

AIRPORT: Approximately 0.5 hour by car; served by regular airlines.

TIME: Central Standard with daylight saving time effective from April to October.

HOLIDAYS: January 1; February 22; March 2; May 30; June 19; July 4; First Monday in September; November 11; December 25. No work performed on first Monday in September and December 25 except in emergency.

POLICE/FIRE/AMBULANCE: All services provided or available.

TELEPHONES: Currently no arrangements for placing telephones aboard but easily accessible on wharves.

SERVICES: All services available.

SHORE LEAVE: Shore leave granted except when individual not qualified.

DEVELOPMENTS: Channel depths to be maintained at 40 ft. Bayport development East and South of Morgans Point to have deep draft berths for liquid bulk and general cargo.

SHIPMASTER'S REPORT: December, 1975

Customs:

Bond remained sealed.

2 Copies of Curio Lists.

2 Copies Store Lists.

1 Crew List.

Immigration:

No visit. 1 Crew List.

Agents:

Given Travelling copies of Clearance last port, Tax Tonnage receipt last port plus cargo manifests.

Agricultral Dept. Re-sealed Meat and vegetable rooms. Inspected Galley Messrooms, etc. Garbage cans to be covered.

Provisions and Stores. Satisfactory. Select own ship chandler.

Laundry. Facilities available but not used.

Coast Guard. No visit.

National Cargo Bureau: Same as New Orleans.

Watchmen: None placed on board. Security at gate fairly strict.

Telephone: None placed on board. Use dock office.

Fresh Water: Available.

Fuel: Available by barge if required. Do not over stem.

Engineering and Repairs: Efficient and satisfactory. Price high compared to N.Z.

Radio Messages: Send ETA after departure New Orleans to Agents and Houston Pilots with draft. Notify Agents of any explosives.

Stevedores: Hours of work. 0800 to 1200 hrs., 1300 to 1800 hrs., 1900 to 2300 hrs. Weekday gangs will work through meal hours to finish. At weekend, day labour works right through to midnight if necessary on time and a half then double time for meal hours.

Crew must not clean hatches. Labour has claim on cleaning and has to be paid in addition to crew. Crew open and close hatches, but not until hatch foreman present. Not before labour working hours.

Working heavy lifts with ship's gear loading rate very slow, especially at end of shift. Due to nature of deck cargo; 11 ton lifts 52 ft. long.

Constant supervision needed for deck cargo.

Head stevedore checks Factory Act Book before starting.

No plan makers. Details sent back to New Orleans for redistribution to discharge ports.

General: Pilot boards from large grey metal cutter off fairway buoy. Flash every 2.5 seconds. Give good lee and have ladder 8/10 ft. above water with usual manropes, heaving line, etc.

If you have to anchor most vessels use the Eastern anchorage about 1.5 miles East of fairway buoy and clear of fairway marked channel. Soft mud bottom. Use plenty of cable.

Berth; Ships spaced very close to each other. Rise and fall of tide about 1 ft.

Moorings: at least 4 head lines and stern lines plus 2 springs each end. Ships frequently passing and channel narrow consequently a good deal of surge. Lines to be frequently looked at and kept tight. Parted 3 springs in as many days!!! Gangway also to be watched. General rule is to use ship's gangway. Wide apron in front of sheds with rail lines but fork-lifts used most.

Agents have office on wharf with direct line to city office and outside lines.

Wooden piling which acts as fenders. Bollards of the large cleat type. Sufficient but not plentiful. Two linesmen each end when arriving and departing. No permanent cranes but mobile ones can be hired. Quay about 25 ft. above water.

Recommended not to walk about or up to bus especially at night. Better for 2 or more to get a taxi. Fairly good 3–4 dollars to Houston.

Seamans Mission near by. Very good, new and modern.

Tugs: Used for berthing and unberthing. Had 2 on arrival due to strong wind and close proximity of mast top to bridge.

Sailing had 1 tug lashed up alongside forward shoulder.

Tugs use own lines.

Bridge: There is a bridge above Upper Clinton Bend from Manchester on the South to Clinton Park on the North. This is a relatively new bridge to be passed under with a clearance of only 135 ft. Check the rise of tide on way up.

AUTHORITY: Port of Houston Authority.

HUENEME, California: 34.09 N. 119.12 W.

(See Plan)

DOCUMENTS: See "San Francisco".

PILOTAGE: It is requested that ships entering port stand by 1 mile off harbour entrance and await port Pilot who will board from a tug. The U.S. Coast Guard Station at the harbour entrance maintains a radio beacon.

All vessels 300 gross registered tons and over entering, leaving and shifting within the Port of Hueneme, including area of the Oxnard Harbour District, must be piloted by a port Pilot duly licensed to perform the services of piloting vessels within the Port of Hueneme. The Oxnard Harbour District does not maintain Pilots; licensed Pilots are available on a 24-hour-a-day basis from the Commanding Officer, Naval Construction Battalion Center. As a service to all vessels, requests for Pilots may be made by Agent or ship to General Manager of Oxnard Harbour District, who will act for ship in obtaining necessary Pilots. They can also be obtained by an electronic message request addressed to "CO, CBCEN, PORHUE" or by direct request to the Port Services Officer, U.S. Naval Construction Battalion Center. It is not necessary to change Pilots at this port.

ANCHORAGE: If there is a wait for Pilot caused by weather, visibility, congestion in harbour, or any other reason, the best anchorage area is W.S.W. of the harbour entrance where there are no hazards and there is some protection afforded by the natural curve of the coastline.

RESTRICTIONS: The length of entrance channel is 2,300 ft. The narrowest width of harbour entrance channel is 330 ft. However, because of prevailing fresh winds, this is a one-way channel; thus, deep-draft ships not able to manoeuvre easily in a restricted channel have precedence over smaller craft.

RADIO: The U.S. Coast Guard Station, Channel Islands Marine, located at the entrance to harbour, guards the following frequencies: 2182 kc/s., 156.8 mc/s., and VHF Channels 12, 16, 21, 22, 23 and 83. After initial call up the Coast Guard can shift to 2670 kc/s., 2694 kc/s., 5080 kc/s. The Naval Construction Battalion Center (Port Hueneme Control) guards Channel 16. The harbour tugs guard Channel 16 continuously. The harbour Pilots, when expecting a commercial merchant vessel guard Channel 16 voice circuit and voice call "Port Hueneme Pilot".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Los Angeles Quarantine Station.

Ships required to pass quarantine may enter port and moor. "Q" Flag is to be flown. Upon mooring, ship must post gangway watch until ship has passed quarantine. When Port of Hueneme is its port of first arrival in the United States from foreign ports or from States other than California, a ship must be inspected by the Department of Agriculture. There is a local representative in Oxnard. The Oxnard Harbour District will order officials if requested by ship or Agent.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Tug services for port of Hueneme are furnished by the Commanding Officer, Naval Construction Battalion Center, Port Hueneme, California. Requests for tug services may be made to the General Manager of the Oxnard Harbour District, who will act as Agent for ship in forwarding them. 2 tugs are available on a 24 hour basis. They are Class YTB, with 2,000 shaft horsepower. The number of tugs to be used on any movement is determined by port Pilot in charge of the movement. Tugs are not available for deep-sea towing, except in case of emergency to save life or property. As a service to all vessels, the Oxnard Harbour District, acting as Agent for vessel, will pay all necessary tug fees to United States Government, subject to reimbursement conditions as arranged between the vessel, her owners, or Agents, and the General Manager, Oxnard Harbour District. Seldom are tug charges more than the minimum due to the short transit time to berths.

BERTHING: Berthing arrangements should be made with the General Manager by Agent as far in advance of arrival date as possible, specifying dates of arrival and sailing, and nature and quantity of cargo to be handled. The Oxnard Harbour District also has a licence agreement with the U.S. Naval Construction Battalion Center, Port Hueneme, for the use of additional berths and terminal facilities on an "as available" basis. Prior arrangements must be made, should use of these additional facilities be desired or necessary. The Port of Hueneme has three 600 ft. berths with depth 35 ft. MLW and appropriate terminal facilities. At the present time there are 10 deep-draft berths within the entire port area.

Bottom is sand and mud. Mean low water is + 1.5 ft. Height of wharf above the MLLW is 13 ft.

STEVEDORES: All stevedore work is presently performed by resident stevedores, the Marine Terminals Corporation, who also have offices in San Francisco, Long Beach, etc. They maintain an office at 111 Ponoma Street, Port Hueneme. They provide modern handling equipment to suit cargo's need. There is no special fixed bulk handling equipment available as yet. Longshoremen are members of the International Longshoremen's and Warehousemen's Union and conform to the Pacific Coast Longshore Agreement. Hours of work are as outlined in this agreement. Longshoremen at this port do all covering and uncovering of hatches and rig the gear. There are 8 gangs available in the port. Day and night gangs for Tuesday through Saturday (except Monday through Saturday, 1900 hrs. initial start) must be ordered by 1530 hrs. the previous day. Night gangs required Monday for a 1900 hrs. initial start, and Sunday and Monday gangs must be ordered by 1100 hrs. Saturday. Cancellation time is same as ordering time, if gangs which have been ordered are cancelled after the aforementioned deadlines, the agreement's 4 hour minimum applies. Normal day shifts begin at 0800 hrs. and normal night shifts at 1800 hrs. Each shift consists of 8 hours and on sailing day 10 hours may be worked by the final shift. There are no obstructions on the wharf to keep all hatches from being worked concurrently.

MEDICAL: Patients are provided with medical attention at the Medical Center, Port Hueneme, or St. John's Hospital, Oxnard California. Temporary visa must be obtained from Department of Immigration and Transportation if a crew man or passenger must remain after the ship sails.

FRESH WATER: Fresh water is available. There are hydrants along the wharf and delivery to ship is effected by hose. Water is good to taste but is hard. It is suitable for boilers. Contact wharfinger on duty for delivery of water.

FUEL: Diesel oil is obtainable from a local port-based tenant. Quantities beyond the capability of that tenant's ability can be delivered by tank truck direct to ship's tanks. In an emergency, the Navy will make Navy special black oil available.

REPAIRS: Minor repairs may be made in port. Machine shops in Ventura and Oxnard are qualified for normal voyage repair work.
GANGWAY/DECK WATCHMEN: Gangway or special wharf watchmen are available upon request.
TELEPHONES: 2 pay-telephone booths are located at the East end of Wharf 1 adjacent to the wharfingers office and maintained for the convenience of ships berthed at Wharf 1. The wharfinger's office has a telephone which may be used by people calling in to contact the ship. This phone is manned 24 hours a day for convenience. Its number is (805) 488-4615. The Port of Hueneme office telephones are available to ship's officers and Agents for local calls or collect long distance calls. Wharf lines permit a telephone to be installed at a nominal charge if desired by Agent.
HEAVY LIFT EQUIPMENT: The U.S. Navy, in special circumstances, makes available a 100 ton floating derrick barge, subject to its prior needs. The General Manager of the Oxnard Harbour District will assist those desiring derrick barge services.
HOLIDAYS: U.S. Federal and State holidays are observed by the Port and Terminal management. If stevedoring is required on holiday it is performed in accordance with the International Longshoremen's and Warehousemen's Union-Pacific Coast Longshore Agreement.
AUTHORITY: The U.S. Navy (Commanding Officer, U.S. Naval Construction Battalion Center) exercises overall Port Control Authority; the Oxnard Harbour District is solely responsible for its commercial operations.

Oxnard Harbour District Board of Harbour Commissioners, Port Hueneme.

HURON, Ohio: 41.24 N. 82.35 W.

Refer to "St Lawrence Seaway" for important general information.
PILOTAGE: None required other than what is required for Great Lakes.
ANCHORAGE: Depth 3 to 10 fathoms.
MAX. SIZE: Length 716 ft., breadth 75 ft., draft 26 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: WMI Lorain.
TUGS: Meet vessel at the Pier Head. Use ship's lines.
BERTHING: Norfolk and Western Ore Dock, operated by the Lake Erie Dock Co., can handle 15,000 tons of ore in 8 hours. Ore slip is 1,400 ft. long with 26 ft. of water.

Limestone Dock, 700 ft. length with 26 ft. of water.

Grain loading facilities operated by the Pillsbury Company. Load speed, 20,000 bushels; unload speed, 15,000 bushels; berthing space, 832 ft.; max. length, 610 ft.
STEVEDORES: None available.
FRESH WATER: Available.
FUEL: None available.
IDENTIFICATION CARDS: Required by Immigration.
CONSULS: Nearest at Cleveland.
REPAIRS: No facilities.
REPATRIATION: No facilities.
AIRPORT: 50 miles from port (Cleveland International Airport).
POLICE/AMBULANCE/FIRE: 433-4114.
SHORE LEAVE: Allowed.
AUTHORITY: The Huron Joint Port Authority.

JACKSONVILLE, Florida: 30.20 N. 81.40 W.

(See Plan)

DOCUMENTS:
Public Health:
Maritime Quarantine Declaration Form HSM 13.19.
Customs:
3 U.S. Customs Manifests for cargo to be discharged at first port of entry.
2 U.S. Customs Manifests covering all other cargo on board vessel for discharge at other than first port of entry.
3 Stores Lists.
3 Crew Lists.
3 Passenger Lists.
3 Curio and Crew Personal Items Lists.
Vessel's Clearance from last port.
Vessel's Register and Load Line Certificate.
Vessel Utilization and Performance Report.
Form MA.578 for dry cargo vessels.
Immigration:
1 Certified Crew List and Landing Permit form I-95A for each crew member.
Valid passport for each crew member.
PILOTAGE: Vessels approach Pilot Entrance Buoy STJ No. 2 (Red) approximately 6 miles at sea off jetty entrance to St. John's River. Pilot station located just inside jetty on river channel at Mayport Naval Station. Pilot station operates both VHF and UHF frequencies, VHF Channels 16 and 18 A. UHF Frequencies 2738 and 2182. Pilot cable address "Jaxpilot". Pilot boards from Pilot boat "Jaxpilot" just East of sea buoy STJ No. 2. Pilot boat does not maintain station at sea but answers call or is dispatched on information by vessels' agents. Vessels anchoring awaiting Pilot should achor as near entrance buoy as safely possible.
ANCHORAGES: 2 anchorages located inside harbour near dock sites with depth of about 31 ft.
RESTRICTIONS: For vessel drawing not more than 30 ft. water no restrictions and vessel can enter and clear harbour on 24 hour basis. Pilots and tug assistance available all hours day or night. Vessels drawing more than 30 ft. required to await tide.
MAX. SIZE: Draft should not exceed 36 ft. for dry cargo vessels and tankers.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Tropical Radio, Miami, Fla. Call letters WAX. Lantana Radio, Boynton Beach, Fla. Call letters WOE.
TUGS: Under normal conditions with vessels able to proceed under own power, tugs approach vessel in vicinity of pier at which vessel is to dock. Tugs use own lines but no charge made.
BERTHING: Vessels can dock day or night. Transit time from pilot station to berths about 2 hours.

Blount Island Terminal: Operator: Jacksonville Port Authority. Length of berth, 3,300 ft. Depth alongside at MLW 38 ft. (11.5 m.). Containers and general cargo are handled. One 45 gross ton Alliance container crane, 1×45 gross ton IHI container crane, 1×100-ton Clyde revolving gantry crane and 1×50-ton Clyde revolving gantry crane are available. 1 bridge crane with a span of 450 ft. and lifting capacity of 900 m. tons is now under construction over the graving dock of Offshore Power Systems at Blount Island.

2 Roll-on/Roll-off ramps are available. 1 measures 234 ft.×18 ft. and the other 212 ft.×18 ft. These ramps are designed for use with vessels having side ports.

Also see "Developments".

Tallyrand Docks and Terminals: Operator: Jacksonville Port Authority. Length of berth 2,400 ft. Depth alongside at MLW 34 ft. (soon to be 38 ft.). Cargo handled – General, Cars, Lumber and Petroleum.

Also see "Developments".

Sealand Terminal: Operator: Sea-Land Service, Inc. Adjacent to Tallyrand Docks and Terminals (See Plan). Length 1,200 ft. Depth alongside at MLW 34 ft. 2 container cranes, capacity 27.5 tons and 30 tons.

8th Street Terminal: Operator Joyserv Ltd. Adjacent to Sealand Terminal (See Plan). Length of berth 707 ft. Depth alongside at MLW 34 ft. Cars are handled.

McGiffin & Co. Terminal: Operator: McGiffin & Co. Inc. Finger Pier: Length 440 ft. depth alongside at MLW 30 ft.
Marginal Wharf: Length 1,120 ft. depth alongside at MLW 30 ft. Cargo handled: General cargo, containers, lumber and cars.

Commodores Point Terminal: Operator: Eller and Company. Length of wharf 2,750 ft. Depth alongside 34 ft. Cargo handled: Oil, cement, general cargo and chemicals. Storage facilities: Charter Oil; 340,000 barrels. Glidden – Durkee: 60,171 barrels for chemical storage. Atlantic Cement; 6 silos capacity 40,000 tons. Universal Atlas Cement; 6 silos capacity 32,000 tons.

Jacksonville Bulk Terminals: A subsidiary of Occidental Petroleum. Length of loading berth 1,000 ft. Depth at MLW maintained at 36 – 38 ft. 2 fixed loading towers capable of loading vessel at a rate of 2,850 long tons of phosphate per hour. Maximum outreach 81 ft., clearance above MLW of 40 ft. Terminal also capable of loading phosphate rock, zircon sand (of sufficiently low moisture), granular fertilizers, tackonite, ilmenitite and multite. Storage facilities: 6 concrete silos, each with a designed capacity of 5,000 tons of phosphate rock.

Dunns Terminal: Length of wharf 1,000 ft. Depth 38 ft.

Kaiser Gypsum Company†: Tel. (904) 764-0504. Berth: 635 ft. (205 m.) with dolphins. Depth: 32 ft. (9.8 m.). Terminal for receipt of gypsum rock by self-unloading vessels.

† Negotiations with Celotex Division for purchase, name may be changed.

Kerr-McGee Terminal: Tel. (904) 353-8411. Berth: 620 ft. (190 m.) with dolphins. Depth: 30 ft. (9.2 m.). Receipt and shipment of fertilizer materials.

The above material was extracted from a publication produced by Howard Publications, Jacksonville.
BRIDGES: Only 1 bridge that vessel would have to negotiate and that only if docking at Commodore Point terminal.
STEVEDORES: Master should keep Agents closely advised by radio of ETA and any amendments to first ETA given. Recommended that Master give ETA 72–48–24 hours in advance to arrival. Enables ordering gangs or cancelling gangs ordered in event of delayed ETA.
MEDICAL: Hospital facilities available. International Vaccination Certificates required by all crew members.
TANKERS: All petroleum terminals provide own hose ranging from 8 in. to 12 in. Prior to arrival, Master should request information from Terminal Company size of connection required.
Private Terminals:

Amerada Hess: Tel. (904) 765-4427. Berth: 200 ft. (60.1 m.) with dolphins. Depth: 30 ft. (9.2 m.). Tank storage capacity: 460,000 barrels. Receipt of petroleum products.

Alton Box Board Company: Tel. (904) 353-3611. Berth: 750 ft. (230 m.) with dolphins. Depth: 24 ft. (7.2 m.). Receipt of residual fuel oil.

American Petrofina: Tel. (904) 355-3151. Berth: 262 ft. (80 m.). Depth: 35 ft. (10.1 m.). Tank storage capacity: 350,000 barrels. Receipt of petroleum products.

Eastern Seaboard Petroleum Company: Tel. (904) 355-9676. Berths 250 ft. (80 m.) with dolphins (1); 160 ft. (48 m.) with dolphins (2). Depth: 18 ft. (5.5 m.). Tank storage capacity: 1,266,000 barrels.

Shipping of petroleum products by barge; loading of barges for bunkering vessels at berth in the harbour; fueling of tugs and small vessels.

Gulf Oil & American Oil: Berth: 200 ft. (60.1 m.) with dolphins. Depth: 33 ft. (11.5 m.). Tank storage capacity: 900,000 barrels.
Gulf: Tel. (904) 765-5541.
American: Tel. (904) 768-2583.
Receipt of petroleum products and loading of barges.

Phillips Petroleum Company: Tel. (904) 353-6740. Berth: 205 ft. (60.2 m.) with breasting dolphins. Depth: 34 ft. (10.5 m.). Tank storage capacity: 243,000 barrels. Receipt of petroleum products.

Shell Oil Company Wharf: Tel. (904) 355-5521. Berth: 230 ft. (98 m.) with dolphins. Depth: 33 ft. (10 m.). Tank storage capacity: 448,500 barrels. Receipt of petroleum products; occasionally fuels towboats and loads barges for bunkering vessels at berth in the harbour. Light marine diesel fuel only.

Standard Oil Company Terminal: Tel. (904) 353-1094. Berths: Barge–300 ft. (92 m.) with dolphins; Tanker–760 ft. (230 m.) with dolphins. Depth: Barge–10 ft. (3.1 m.); Tanker– 32 ft. (9.8 m.). Tank storage capacity: 595,000 barrels. Receipt and shipment of petroleum products. No bunkering of vessels.

Texaco Pier: Tel. (904) 356-6344. Berth: 550 ft. (167 m.) with dolphins. Depth: 32 ft. (9.8 m.). Tank storage capacity: 320,000 barrels. Receipt and shipment of petroleum products; fuels towboats.

DENSITY: Varies from fresh water 1.000 density to mixed salt water 1.0075 density. St. Johns River is fed from fresh water sources and for most practical purposes may be considered fresh.

FRESH WATER: Potable water is available through hose connections at all berths operated by the Port Authority. No water barges.

FUEL: Most grades marine fuels available ranging from bunker "C" to light marine diesels with intermediate blends in between. Most major oil companies have bunkering facilities.

FIRE PRECAUTIONS: No smoking except in officers' lounge and crew's lounge. No open flames. No sparking from funnel.

DEVELOPMENTS: The entire river channel from the jetties on the Atlantic Ocean to the Chaseville Turn has been dredged to a minimum depth of 38 ft. MLW. Dredging is now in progress with an anticipated completion date of the Spring of 1977 to complete the project to Mile 20 which is at the Southernmost boundary of Tallyrand Docks and Terminals.

At Blount Island Terminal an additional 300 ft. of berthing space under construction and a further 900 ft. is planned.

A 50 ton revolving gantry crane is under construction at Tallyrand Docks and Terminals.

GANGWAY/DECK WATCHMEN: Watchmen services available but not necessary.

OPENING/CLOSING HATCHES: Crew may open hatches prior to vessel's arrival at dock. After arrival at dockside this work reserved for longshoremen. Vessels equipped with McGregor type or other automatic opening devices, crew may open hatches at any time. Longshoremen do not open and close these type hatches.

CERTIFICATES: Vessel Register, Load Line, Gear Certificate, Derat.

CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes per man. If vessel remains in port over extended period of time, sea stores can be opened under Customs supervision and additional allowances made. Wine/Spirits: No specific limits as to quantity allowed per man; Customs accept Masters' recommendations for allowances so long as they are reasonable. This applies to beers, wines and spirits.

IDENTIFICATION CARDS: Form I–95A only.

CONSULS: Norway, Denmark, Sweden, Finland, Italy, France, Guatemala, Uruguay, Dominican Republic, Germany.

REPAIRS: All types engine and deck repairs possible. 2 well-equipped shipyards.

DRY DOCKS: 3 large dry docks of 18,000 to 33,000 tons capacity and 6 smaller with capacity of 1,000 to 12,000 tons.

REPATRIATION: Facilities available to effect crew changes and repatriation.

AIRPORT: Airport 20 miles. Daily flights to all major U.S. cities.

TIME: Eastern Standard Time and Daylight Saving Time during Summer months late April through October.

HOLIDAYS: Holidays observed by Stevedores: New Year's Day (Jan. 1st); Martin Luther King's Birthday (Jan. 15th); Lincoln's Birthday (Feb. 12th); Geo. Washington's Birthday (Feb. 22nd); Memorial Day (May 30th); Independence Day (July 4th); Labor Day (First Monday September); Columbus Day (October 12th); Armistice Day (Nov. 11th); Thanksgiving (Fourth Thursday November); Christmas (December 25th).

When holidays fall on Sunday, the following Monday observed to the extent of paying overtime and 8 hour minimum pay period shall apply. No work performed on the following holidays: New Year's Day, Independence Day, Labor Day, Christmas Day.

POLICE/AMBULANCE/FIRE: Police 633–4111; Ambulance 633–2211; Fire 633–2211.

TELEPHONES: No facilities available for placing phones on board vessels except in shipyards.

SERVICES: Compass-Adjusting, radar, navigational equipment. No tank-washing or tank-cleaning services available.

SHORE LEAVE: No restriction on shore leave if not detained by Immigration.

REGULATIONS: No garbage to be disposed overside, no pumping of dirty ballast into river. Smoke emissions must be controlled to minimum.

AUTHORITY: Jacksonville Port Authority.

AGENT: Southern Shipping Company, PO Box 4668, Jacksonville, Fla. 32201. Telephone Area 904 355–4751. Cable address "Soshipco".

JUNEAU, Alaska: 58.18 N. 134.24 W.

Located at N.E. side of Gastineau Channel, 8 miles from Stephens Passage. Juneau is the capital of Alaska. Open all year.

APPROACHES: Via Chatham Straits, Lynn Canal and Stephens Passage.

DOCUMENTS: See "Anchorage, Alaska".

PILOTAGE: Pick-up point is Guard Island.

ANCHORAGE: 16 fathoms in centre of Juneau Harbour.

MAX. SIZE: Harbour depth 15/19 fathoms. Tides: diurnal range 16.4 ft. Also see "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

CUSTOMS: Quarantine, Immigration and Customs, local.

BERTHING: 1. Foss Alaska Line Dock: berthing length 550 ft. 36 ft. LW. No cranes.

2. Juneau Cold storage (capacity 8,000,000 lb.): berthing length 250 ft., 36 ft. LW. Cranes, 2 electric hoists, 3 lift trucks, 40,000 sq. ft. covered shed space. Fresh water.

3. Juneau Ferry Terminal: berthing length 350 ft. 32 ft. LW. No cranes. This is a roll-on, roll-off facility for wheeled vehicles and self-propelled or towed. 35 tons capacity. No covered shed space. Fresh water.

4. Coast Guard Dock: 750 ft. long, 31 ft. deep at face. No storage.

STEVEDORES: 1 gang.

REPAIRS: Minor engine repairs only.

WATER: Available.

FUEL: Not available.

MEDICAL: Hospital available.

TRANSPORTATION: Air and ferry.

DEVELOPMENTS: Berner's Bay under construction 40 miles North, will produce pulp and lumber for export.

KAHULUI, Hawaii: 20.53 N. 156.28 W. (See Plan)

DOCUMENTS:
- 4 Crew Lists.
- 4 Passenger Lists.
- Customs Documents.
- Clearance, Travelling Manifest.
- Local Manifests.
- Health Documents.
- Bill of Health and Vaccination Certificates.
- 4 Manifests.
- 4 Bills of Lading.
- Certificate of Registry.
- Annual Inspection Certificate.
- Load-line Certificate.
- Derat Certificate.
- Radio Certificate and Licence.
- 4 Store Lists.

PILOTAGE: Request for Pilot normally made through Agent or through Harbour Master's office. Contact Pilot on VHF Channel 16. 36 ft. pilot boat, black hull, white cabin. Pilot boards 0.25 mile East of Waihee Reef lighted buoy No. 2. Anchorage 0.5 mile East of buoy.

ANCHORAGE: No anchorage inside breakwaters. Only anchorage 0.5 mile East of Waihee Reef lighted buoy No. 2 in 9 to 12 fathoms.

RESTRICTIONS: 24 hours notice of arrival is obligatory. No tide restrictions.

MAX. SIZE: Max. length 700 ft. Max. draft 32 ft. 6 in.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Honolulu Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Communicate through RCA or ITT stations in Honolulu.

TUGS: 1 × 1,500 h.p. tug stationed at Kahului. Additional tugs dispatched from Honolulu if necessary. Tug joins vessel between breakwater and Waihee Reef lighted buoy No. 2 Tug's lines normally used. No extra charge.

CARGO HANDLING: Kahului has 1 berth specially equipped to load bulk sugar. Matson Navigation Company operates a straddler to move Matson containers. Other containers are normally barged to Kahului on roll-off chassis.

STEVEDORES: To be ordered by 1500 hrs. of day prior to operations.

MEDICAL: Hospital facilities available.

TANKERS: Discharge only. 8 in. line for heavy fuel oil, 6 in. lines for light fuel oils. No slop discharge facilities. 2 berths available for tankers, max. draft 32 ft. 6 in.

FRESH WATER: Available from water line at each berth. Rate of delivery about 150 gallons per minute.

FUEL: Small amount of diesel fuel and heavy fuel available in an emergency only.

GANGWAY/DECK WATCHMEN: Services of watchman recommended, usually arranged by Agent.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCE: 20 cigarettes, 50 cigars per man, and 1 bottle wine or spirits.

REPAIRS: Minor deck and engine repairs only.

AIRPORT: Distance to airport 1 mile. Served by regular airlines.

TELEPHONES: Arrangements made with Hawaiian Telephone Co., to install on board.

DELAYS: Occasional delays due to limited berthing space and shortage of stevedore gangs.

POLICE/FIRE/AMBULANCE: Police 244-7811; Ambulance 244-9056; Fire 244-4860.

TIME: GMT minus 10 hours all year round.
AUTHORITY: State of Hawaii, Dept. of Transportation, Harbors Division. Kahului.

KETCHIKAN, Alaska: 55.20 N. 131.38 W.

DOCUMENTS: See "Anchorage, Alaska."
APPROACHES: Port located on Revillagigedo Island. Open all year round. Ships coming from Hecate Straits or outside Graham Island proceed into Dixon Entrance to vicinity of Guard Island where the Pilot will meet them.

Vessels coming up the inside passage from Vancouver BC, are met at Lucy Island pilot station.

PILOTAGE: South Eastern Alaska Pilots Association, Box 1539, Ketchikan Alaska 99901. Telegraphic address; Alaska Pilots Ketchikan.

The Alaska Pilot Service required 5 days, 48 hours, and 12 hours advance notice of ETA and can be contacted on Channel 16 VHF or 2182 kHz.

The pilot boat "Magdalene" (WA 7513) normally rendezvous with the vessel 0.75 miles from Guard Islands.

ANCHORAGE: Safe anchorage can be obtained in the area for deep-draft vessels; however there are no specified anchorage areas.
MAX. SIZE: The largest vessel to be berthed to date is a 26,000 ton freighter; however larger vessels could be accommodated.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Cables to Agent, Receivers, and Pilots can best be routed through AKM Juneau.
TUGS: Tugs can be arranged through the ship's Agent. Lines from tug are normally used with no additional charge.
BERTHING: Alaska Line Dock: berthing length 400 ft., depth 26 ft. at North end, 39 ft. at South end at low water, no cranes.

Talbots' Inc: private berth length 300 ft., depth 35 ft. low water.

Ketchikan Spruce Mill: berthing length 450 ft., depth 33 ft. low water. Height of pier at low water 22 ft.

Ketchikan Pulp Company (at Wards cove, 6 miles North of Ketchikan): private dock, berthing length 800 ft., depth 33 ft. at low water.

STEVEDORES: Stevedores obtained through shipping Agent. 24 hours notice normally required.

4 or possibly 5 gangs available dependent on obtaining casual labour.

MEDICAL: Medical matters may be referred to shipping Agent. Excellent hospital and out-patient treatment facilities are available.
FRESH WATER: Ample fresh water available at no cost.
FUEL: Fuel available for deep-draft vessels: No. 2 Diesel and gasoline.
TANKERS: Tow-away lines required fore and aft.
GANGWAY/DECK WATCHMEN: Recommend security watch for passenger vessels. Watchmen can be arranged through the shipping Agent.
OPENING/CLOSING HATCHES: Done by longshoremen.
IDENTIFICATION CARDS: Crew identification cards are required by Immigration officials.
CONSULS: The nearest Consul is in Anchorage, Alaska.
REPAIRS: Repair facilities are limited. Excellent welding and machine-shop services are available, however.
REPATRIATION: Repatriation matters can be handled through the shipping Agent and Immigration officials.
AIRPORT: Daily flights to and from Seattle as well as points North may be obtained.
TIME: Ketchikan is on GMT minus 8 hours during the Winter and GMT minus 7 during the Summer. Time changes the third Sunday in April through the third Sunday in October.
AUTHORITY: Captain of the Port, c/o U.S. Coast Guard Base, Ketchikan, Alaska.

KINGS BAY, Georgia: 30.49 N. 81.31 W.

DOCUMENTS:

Crew List, from foreign movements, 1 Crew List visaed by American Consul in or near foreign port of departure; Coastwise, U.S.A., 3 copies, 1 for Customs, 1 for Immigration and 1 for the Agents' office.

Curio List, 3 copies, both from foreign and coastwise movements.

Stores List, 3 copies, both from foreign and coastwise movements.

5 copies of Foreign Manifest.

Permit to sail from foreign.

International Vaccination Certificates and/or other health certifcates.

PILOTAGE: Channel entrance is between Cumberland and Amelia Islands, and is approximately 11 miles in length, 200 ft. wide and 32 ft. deep at MLW. Kings Bay Pilot usually boards vessels at the St. Mary's Entrance Sea Buoy No. 1 or 1 mile East of St. Mary's Entrance Buoy No. 2. Pilot may be reached by marine phone (ship-to-shore), Fernandina Beach, Florida, tel. 261-3824 or 261-3495. There are 2 turning basins, one 2,400 ft. long by 800 ft. wide with project depth of 32 ft. at MLW, and the other is 1,996 ft. long by 800 ft. wide with project depth of 32 ft. at MLW.
ANCHORAGE: 2, capable handling deep draft vessels. Pilot handles this phase.
MAX. SIZE: 650 ft. in length, project depth 32 ft. at MLW.
HEALTH: See "Health: All Ports" before first U.S. port Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Kings Bay has only marine ship-to-shore telephone facilities. Cables arrive through R.C.A. Communications via Lantana, Fla., Radio, and Chatham, Mass., Radio via Western Union.
TUGS: Available from Brunswick.
BERTHING: Daylight berthing and sailing only.
STEVEDORES: All stevedoring performed by St. Mary's Stevedoring Company, St. Mary's, Ga., on high explosives. General cargo outside stevedores permitted.
FRESH WATER: Plenty of fresh water available, pumped into ship's tanks via hose.
FIRE PRECAUTIONS: Smoking in the warehouses, on wharf or on any vessel while unloading or discharging any inflammable or explosive cargo is strictly prohibited. In the event of a fire occurring on board any vessel berthed at the Kings Bay Marine Terminal, except vessels under way, such vessel may sound 5 prolonged blasts of the whistle or siren as an alarm indicating fire on board or at the dock to which the vessel is moored. Fire hose on dock and water running therefrom when loading plus fire extinguishers placed at various intervals.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Crew open, stevedores close.
CUSTOMS ALLOWANCES: Tobacco and wine/spirits – reasonable quantities for personal use.
IDENTIFICATION CARDS: Immigration issues landing permit.
REPATRIATION: Via airlines at Jacksonville, Florida, 41 miles away.
TIME: Eastern Standard Time.
HOLIDAYS: New Year's Day (1st January); Lincoln's Birthday (12th February); Washington's Birthday (22nd February); National Memorial Day (30th May); Independence Day (4th July); Labor Day (1st Monday in September); Colombus Day (12th October); Thanksgiving Day (4th Thursday in November); Armistice Day (11th November); Christmas Day (25th December). In the event of one of the above holidays falling on a Sunday, the following Monday will be observed.
POLICE/AMBULANCE/FIRE: Police Departments St. Mary's and Kingsland, Ga., plus County Sheriffs. Ambulance, Kingsland. Fire, both Kings Bay and St. Mary's Ga.
TELEPHONES: Only 3 lines and all in office of Blue Star Shipping Co. No telephone service to be placed on board vessel.
SHORE LEAVE: Only via Immigration landing permit. No taxi service, no bus lines operate from Kings Bay, Ga. Since nearest town is 11 miles away, crew as a rule remain aboard vessel.
AUTHORITY: None. Blue Star Shipping Corporation, St. Mary's, Ga., operates the port.

KODIAK, Alaska: 57.47 N. 152.24 W.

Located near the N.E. tip of Kodiak Island in the Gulf of Alaska, South of Anchorage and East of the Alaska Peninsula.

APPROACHES: South of Trinity Islands then N.W. to Cape Chiniak and meet Pilot.
DOCUMENTS: Also see "Anchorage, Alaska".
PILOTAGE: Pick-up point in the vicinity of Cape Chiniak.
MAX. SIZE: Harbour depth in excess of 30 ft. Tides; diurnal range approximately 10 ft. Also see "Berthing".
HEALTH: See "Health: All Ports" before first U.S.A. ports (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
ANCHORAGE: Fair weather anchorage only.
CUSTOMS: Quarantine, Immigration and Customs, local.
BERTHING: 1. Kodiak City Dock: made of timber, pile and steel deck. 1 berth only. 350 ft. by 50 ft. Covered warehouse on half of pier 200 ft. by 150 ft. 35 ft. MLLW. Heated space available.

2. Woman's Bay Naval Base: Finger Pier 600 ft. operated by U.S. Navy. Depth of water in excess 40 ft. U.S. Navy permission required for commercial use.

TUGS: From Anchorage.
STEVEDORES: 2 gangs.
REPAIRS: Limited. Divers available.
WATER: Available.
FUEL: Light fuels only.
MEDICAL: 26-bed hospital, 3 doctors, 2 dentists, 1 optometrist.
TRANSPORTATION: Air and ferry.

LAKE CHARLES, Louisiana: 30.13 N. 93.15 W.

(See Plan)

PORT LIMITS: Buoy No. 26, In Calcasieu Ship Channel, 3 miles off Cameron, Louisiana.
DOCUMENTS:

U.S. Customs: If foreign cargo on board for discharge at any port:

3 copies of Cargo Manifest of all Cargo.
3 copies of Crew List.
3 copies of Store List.
3 copies of Curio List (crew personal effects).
3 copies of Passenger List if carrying passengers.

If vessel in ballast, only 2 copies of above documents required.

If vessel in ballast and carrying passengers, 3 copies of above documents required.

1 copy of Clearance from last port.
2 copies of Customs Form 1300 (Master's Oath).
2 copies of Customs Form 1301 (General Declaration).

U.S. Customs Boarding Officer must examine Load Line Certificate, Safety Equipment Certificate, Tonnage Tax Receipt, Certificate of Financial Responsibility (Oil Pollution), Ship's Register, and Ship's Certificate of Nationality (if any).

2 copies of Customs Form 721 (Inbound Utilization Report).
1 copy of Certified Crew List (If American Ship).

Bonded lockers will be sealed by Customs.

U.S. Immigration:

1 copy of Visaed Crew List from American Consul at foreign port of clearance (if any).
1 I-95 (Identification Card) for each crew member on board.
All passports must be validated for each crew member.

U.S. Bureau of Etomolgy:

All meat lockers and freezers with restricted meat will be sealed. All fruit from prohibited countries will be confiscated. All animals or birds from foreign countries must remain on board.

PILOTAGE: Radio Agent ETA, who will arrange Pilot board at Calcasieu Bar.

ANCHORAGE: At Calcasieu Bar only.

RESTRICTIONS: Entrance channel 40 ft. depth. Distance 40 miles.

MAX. SIZE: 1,000 ft. length, 38 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.

AGRICULTURE: See "Agriculture" before first USA port (Albany).

RADIO: Tropical – New Orleans, WNU.

VHF: Pilots may be contacted on Channel 12.

TUGS: Meet vessel 30 minutes away from berth. Use tugs' own lines. 2 for berthing, 1 for unberthing.

BERTHING: General Cargo Berths: 5 with total length: 5,675 ft. All have draft of 36 ft. (fresh water).

CRANES: Mobile pneumatic and track cranes available with lifts up to 50 tons.

BULK HANDLING FACILITIES: 3 bulk-loading berths: No. 1, West bank of Calcasieu River, 8 miles below main port facilities, 800 ft. length, 35 ft. depth, loading rate 1,250 t.p.h.

No. 2, Contraband Bayou Section, main port, 850 ft. length, 35 ft. depth, loading 480 t.p.h. 1,600 tons storage facilities.

No. 3, Contraband Bayou Section, main port, 600 ft. length, 35 ft. depth, loading rate (bulk rice) 180 t.p.h. from stationary tower. Twin 1,250 tons storage tanks adjacent.

Cities Service Oil Co. B-Dock, 673 ft. length, 40 ft. depth; C-Dock, 660 ft. length, 40 ft. depth; C-Dock 665 ft. length, 40 ft. depth.

Continental Oil Co. Berth 1, 1,000 ft. length, 40 ft. depth; Berth 3, 1,000 ft. length, 40 ft. depth.

Columbia Southern Dock, 650 ft. length, 30 ft. depth.
Olin Mathieson Dock, 400 ft. length, 28 ft. depth.
All have 40 ft. draft (Fresh water).

SPECIALIZED CARGO HANDLING FACILITIES: 1 berth suitable for Roll-on/Roll-off traffic. 1 berth at main port for liquid chemicals. Private berth to be constructed for private firm for receiving LNG.

BRIDGES: 1 with vertical clearance of 127 ft.

STEVEDORES: Notice of firm ETA and request for gangs must be received prior to 1600 hrs. CST for work following day.

TANKERS: *Shipmasters Report:* January 1977:

Cities Services Oil Co., Clifton Ridge:
Location: 30° 09′ 32″ N., 93° 19′ 30″ W.
Max. Size: Length 805 ft., beam 115 ft., draft 39 ft. (FW).
Density: 1005.
Restrictions: Vessels may berth and unberth at any stage of the tide day or night.
Anchorage: At Bar: 2 miles East of seabuoy in depth of 42 ft. For Bunkering: South of Clooney Island in Old Calsasieu River Channel in midstream.
Distance to Berth: Seabuoy to berth 45 miles.
Terminal Information: Ship's hoses used. 2 × 10 in. Chiksan arms. Max. discharge pressure 150 p.s.i. Derricks not required. Accommodation ladder not required.
Services: Fresh water, provisions, machine shop, fuel oil, diesel and lube, doctor, hospital, airport and laundry.

The following services are not available: Repairs, drydocks, Lloyd's Surveyor and slop tanks.

Telephone Numbers: Dock 318-583-2432. Terminal Supervisor 318-491-6437.

MEDICAL: Hospital facilities available.

DENSITY: Saltwater in Summer, fresh water in Winter. Allow density 1000 for drafts.

FRESH WATER: Available at all berths.

FUEL: Bunker "C" and diesel available at Cities Service berths; other berths none available except light marine diesel delivered by tank truck.

FIRE PRECAUTIONS: Usual.

DRY DOCKS: None.

SURVEYORS: National Cargo Bureau.

GANGWAY/DECK WATCHMEN: Not required.

HATCHES: Rigging performed by stevedores. McGregor-type hatches opened by crew, others by stevedores.

CARGO GEAR: Shore cranes available at ship's request.

CUSTOMS ALLOWANCE: At the discretion of Customs officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

REPAIRS: Small repairs carried out only; very limited facilities.

REPATRIATION: Facilities exist. Arrange through Agent.

AIRPORT: 7 miles from port. 1 line (TI) 9 flights per day.

TIME: CST, that is GMT minus 6 hours.

HOLIDAYS: Only 2 days affected on which no work carried out – Labor Day and Christmas Day.

POLICE/AMBULANCE/FIRE: Police, 439-4511; Ambulance, 477-5530; Fire, 433-4633.

TELEPHONES: None on board ship.

SHORE LEAVE: Allowed if not detained by Immigration.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I-95, issued for the same vessel.

DELAYS: Very few delays encountered at any berth.

DEVELOPMENTS: Under construction – high speed facility for loading wood chips. In operation: Grain elevator.

AUTHORITY: Lake Charles Harbour and Terminal District, Director of Port.

LONG BEACH, California: 33.45 N. 118.13 W.

(See Plan)

DOCUMENTS:

Certificate of Registry.
International Load Line Certificate – Tonnage Certificate (Admeasurement).
Inspection Certificate.
Derat certificate.
Radio Safety Certificate.
Inbound cargo for discharge – United States must have a Travellers' Manifest (Form 7527), original manifest, and dock inspection copy covering cargo to be discharged at first U.S. port of entry, Custom's Utilization Form 7801 (Inbound), Form 7802 (Outbound) must be filed within 10 working days after vessel's entry at first U.S. port. Landing permits must be made out prior to arrival (Form I-95-A) for each crewman of alien origin for the U.S. Department of Immigration (and Form I-94 for each passenger of alien origin). 3 sets of crew lists (Form I-418) must be presented to U.S. Customs, plus 2 sets to the Immigration Inspector, and 1 for the U.S. Public Health Service (Quarantine), and 3 sets stores lists plus 3 sets curio purchases list for U.S. Customs.

American Ships from Foreign:

Safety Equipment Certificate.
Cargo Ship Safety Construction Certificate.
Customs Form 3415 Affidavit of Repairs Abroad.
Certified Crew List.

Foreign Ships:

1 copy of Visaed Crew List for Immigration (Form I-418 & 5 copies). Other forms may be necessary under certain circumstances, but normally can be taken care of after the vessel's arrival.

If a foreign vessel from a foreign port departs for a foreign port, 2 copies of (Form I-418) covering crew changes in the United States must be submitted to the Department of Immigration upon sailing of the vessel.

- *(a)* Number of copies required: all single except as noted.
- *(b)* The reports mentioned above are all government laws, requested by U.S. Customs, U.S. Immigration, Department of Agriculture, Public Health Service, and B.I.A.
- *(c)* Purpose of documents: to record all vessel movements such as cargo, crew changes, health standards, etc.
- *(d)* Procedure of presenting documents: documents must be presented to Quarantine Boarding Officer and Customs Broker and/or Agent, during or immediately after Quarantine.

PILOTAGE: Pilots ordered by local Agents. Order placed by telephone to 435-6354. Local tariff requires at least 1 hour notice prior to arrival. Pilot station contacted on VHF radio Channel 12 (156.6 mHz) or Channel 16 (156.8 mHz). Call sign KMA-372 Long Beach Pilots. Pilot boats motor cruisers, light grey, fly International Flag "H". Local whistle signal for a Pilot on ship's whistle, 1 short and 1 long blast. Pilot boat normally meets vessels in vicinity Long Beach Sea Buoy or approximately 1 mile South of breakwater entrance. Vessels should have a Pilot ladder on starboard side, weather permitting. In bad weather vessels may be required to proceed inside breakwater entrance prior to Pilot boardg.

ANCHORAGE: Preferably outside anchorage approximately 0.5 mile S.E. of Long Beach Sea Buoy in 66 ft. of water. Inside anchorage available N.E of channel in outer harbour at approximately 8 fathoms of water depth. Special explosive anchorages available by request, on both sides of entrance channel in 48 ft. of water.

RESTRICTIONS: Vessels with dangerous cargoes aboard or loading or discharging such cargo within port district shall obtain permit from U.S. Coast Guard, countersigned by Long Beach Fire Prevention Bureau and Long Beach Port Authority, subject to safety inspection prior entry to assigned anchorage or berth. (Application for entry or handling dangerous cargoes must be requested by Steamship Company or authorised Agent and approved prior entry.)

MAX. SIZE: (1) Designed depth of water at general cargo berths is 30–36 ft. at MLLW.

The Entrance Channel is maintained at 60 ft. MLLW.

(2) No restriction as to length or breadth of vessel at general cargo berths.

(3) Dry bulk facility berths designed depth at MLLW is 42 ft. No restriction on length. However, ships with over 130 ft. beam might experience some difficulty in loading without turning ship.

There are 5 bulk oil facilities, 2 with 55 ft. of water at MLLW and 3 with 49 to 37 ft. of water at MLLW alongside berths. It is feasible that vessels over 1,000 ft. in length could use the deep-water oil facilities. There are no restrictions as to beam. A sixth bulk oil terminal is planned which will accommodate vessels in the 200,000 d.w.t. class, drawing up to 62 ft.

HEALTH: See "Health; All Ports" before first U.S.A. port (Albany). Illness reports made to Los Angeles Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (albany).

RADIO: Station KOU Marine Operator, San Pedro.

Channel 1—ship transmit on 2009 kHz
ship receive on 2566 kHz
Channel 4—ship transmit on 2126 kHz
ship receive on 2522 kHz

Station KOU also monitors Channel 16 (156.8 mHz) and Channel 26 (157.3 mHz) for distress, safety and calling.

RADAR/VHF: Radar service provided to vessels only if Pilot aboard, in which case radar advisory information will be fed from shore-based radar at Pilot station.

Station	*Channel*	*Frequency (mHz)*
Distress, Safety and Calling	16	156.8
Marine Exchange	12	156.6
	14	156.7
Long Beach Pilots	12	156.6
Los Angeles Pilots	14	156.7
Harbour Tugs	65	156.275
San Pedro Tugboat Co. "Red Stack Tugs" Company Office	10	156.5
Wilmington Transportation Co. Company Office	7A	156.35
H-10 Water Taxi	7A	156.35
San Pedro Telephone Marine Operator Station KOU	26	157.3

TUGS: Tugs will meet vessel inside breakwater prior reaching inner harbour area. Pilot and tugs are in communication.

BRIDGES: No restrictions into port of Long Beach. The Gerald Desmond Bridge over Back Channel has vertical clearance of 155 ft. Cerritos Channel which connects Long Beach through back channel to Port of Los Angeles has 2 bridges which must be opened for passage of vessels.

Signal for Opening: 3 long blasts on horn or whistle. During inclement weather, call through a megaphone or loud and distinct stroke of bell.

BERTHING: No requirements as to time of entry providing berthing arrangements have been made with Port Authority. Assignments classified as follows:

Preferential Assignments. Secondary Assignments, Subordinate Right granted for use of Preferential Assigned Berth. Temporary Assignment – temporary permission granted to use certain berth.

Note: All berth assignments shall be held by Assignee subject provisions of Port of Long Beach Tariff as to charges, rates, rules and regulations applicable thereto, and to all of terms, conditions and provisions contained in such assignment.

General Cargo:

	No of berths	*Total length (ft.)*	*Depth (ft.)*
Pier A	10	6,312	30–36
Piers B, C, D	12	7,686	31–36
Pier F	4	2,467	32–36
Piers 1 and 2	6	3,000	36

BULK HANDLING FACILITIES: *Berth 28–29:* Length 993 ft., depth alongside 43 ft. 1 fixed bulk loading tower with hinged cantilevered boom with 31 ft. 6 in. outreach. Max. loading rate 800 t.p.h. Cargo handled: Borax, coal, coke, iron ore, pitch, potash, soda ash and zinc ash.

Berths 30–31: Length 992 ft., depth alongside 43 ft. 3 electric, travelling, revolving, high-tower, full-portal gantry cranes, each with lifting capacity of 30 tons. Cranes can be equipped with buckets and hooks, or electric magnets. Loading rate 200 t.p.h. each crane. Types of cargo handled: steel and iron scrap, pig iron, steel slabs, ore, urea, bauxite, rutile sand.

Berths 210–211 (Grain Terminal); Length 1,100 ft., depth alongside 40 ft. Grain gallery with 5 loading spouts extends 335 ft. along rear of Berth 211. Loading rate up to 43,000 bushels per hour. Gallery equipped with electric, belt-conveyor system and connects with an approach gallery extending from 2,225,000-bushel grain elevator. There is an aerveyor system for ship discharging. Plans for expansion to double capacity to 4 million bushels.

Berths 212–215 (Bulkloader); Length 2,110 ft., depth alongside 34 ft. Depth 9 ft. off the berth is 40 ft. Breasting camels 20 ft. wide available. Stockpile area 85,682 sq. ft. (7,960 sq. m.). 1 electric, travelling, bulk shiploader with retractable, straight-line bridge boom having 58-ft. outboard reach-height of 60 ft. above MLLW. Boom equipped with 48-in. electric belt conveyor and a telescopic loading spout with mechanical trimming head. Loading rate 4,000 long tons per hour. Shiploader travels along rear of face for distance of 1,485 ft. Bulk materials are handled by 48-in. and 54-in., electric belt conveyor system extending to shiploader through tunnel reclaim from car unloading sheds and storage areas. Types of cargo handled: iron ore, coke, coal.

Open storage: 225,000 tons.

Covered storage: 270,000 tons.

CONTAINER HANDLING FACILITIES: *Berths 227–228–229:* Length 1,950 ft., depth alongside 42 ft. Pier G expansion: New land has been created on the East side of Pier G to provide for a 65-acre (26.3 hectares) container terminal which is leased to Sea-Land Service Inc. This terminal is complemented by an adjacent 16.3 acre, (6.6 hectares) container freight station, also leased to Sea-Land. The project includes a reinforced concrete wharf, 4 travelling 30 long ton container cranes with 100 ft. span and 115 ft. outreach, surfaced storage area. There is space for storing 6,541 TEU containers, including 242 spaces for refrigerated containers.

Berth 230: Length 650 ft., depth alongside 42 ft. 2×30 long ton, travelling container cranes with 100 ft. span and 115 ft. outreach. Has space for storing 1,784 TEU containers, including 50 spaces for refrigerated containers.

Berths 232–233–234: Length 2,300 ft., depth alongside 36-42 ft. 4×30 long ton electric, travelling Paceco container cranes, each with hinged cantilevered boom with 113 ft. outboard reach. 3 Paceco 40 ton capacity transtainers. Has space for storing 7,323 TEU containers on chassis, plus 200 empty chassis and 140 spaces for refrigerated containers.

Berths 245–246–247: Length 2,100 ft., depth alongside 36 ft. 2 travelling shore container cranes of 45-ton and 40-ton capacity and one 40-ton transtainer. The only public container terminal in Southern California. Expansion of container freight station provides 88,600 sq.ft. inside storage area. Has space for storing 7,435 containers TEU.

SPECIALISED CARGO HANDLING FACILITIES: *Berths 32–33 (Tallow, Coconut Oil, Bulk Copra):* Length 824 ft., depth alongside 36 ft. 2×6-in. pipe-lines extend from Berth 32 to 9 coconut oil storage tanks, total capacity 7,750,000 lb.; 12 tallow storage tanks, total capacity 48,211,300 lbs. (24,105 short tons). Dry storage 7,500 tons.

Berth 83 (Gypsum, Lumber, Oil, Gasoline): Length 600 ft., depth alongside 38 ft. Vessels unload gypsum rock into an adjustable, elevated, receiving hopper at pier face, served by an elevated 36-in., electric belt-conveyor system extending to a 60,000-ton capacity dome-roof storage building in rear. Open storage: 335,075 sq.ft.

Berth 122 (Auto or Multi-purpose); Length 765 ft., depth alongside 40 ft. Multi-purpose open berth capable of handling vessels with self-contained or mobile cranes, lumber, steel and other general and special cargoes. Also ideally suited for automobiles. An adjacent 12.4 acre storage area is available for autos and other commodities. Dolphin and cat walk design to accommodate large vessels.

Berths 243–244: Length 1,200 ft., depth alongside 42 ft. These berths are shared by Port Auto Terminal No. 1, operated by Toyota Motor Sales and covering 35 acres, and Port Auto Terminal No. 2, operated by the Pasha Group and covering 40 acres. Toyota's facility provides for offices, warehousing, dewaxing, painting, repairing and accessory installation, with 28,000 sq.ft. under roof and storage for 6,000 automobiles. Pasha's facility furnishes an automobile preparation centre, offices and dewaxing operation, with 41,000 sq.ft. under roof, plus storage area for up to 21,250 automobiles.

Berth 208 (Bananas); Length 550 ft., depth alongside 40 ft. 4 electric, travelling banana unloaders, total capacity 3,000 banana boxes per hour. Electric, belt-conveyor system transfers banana boxes from unloaders to 2 rail car and truck loading platforms and to interior of harbour banana warehouse. Banana warehouse is divided into cold storage and ripening areas. Truck loading platform along West side.

Berth 209 (Salt): Length 550 ft., depth alongside 38 ft. Vessels unload bulk salt into a receiving hopper at outer end of a moveable, inclined, 48-in., electric belt conveyor. This conveyor serves an adjustable elevated receiving hopper at outer end of an elevated, 48-in., electric belt-conveyor system extending to a large open storage area in rear. Unloading rate: 800 t.p.h.

Berth 242 (Liquid Bulk): Length 700 ft., depth alongside 36 ft. Storage capacity: 12,920,800 gallons in tanks ranging in size from 6,000 to 3,000,000 gallons. Product handling equipment: the pumping and pipe-line system is designed to load and unload products to and from barges, ships, rail cars and trucks. Large, heavy-duty pumps efficiently handle a variety of bulk liquids. Molasses is the principal cargo handled.

CRANES: Barge cranes available capacity 45-175 tons. A U.S. Navy floating crane capacity 385 tons available for hire. There is also a derrick barge in the area capacity 500 tons that can handle 750 tons over the stern.

MEDICAL: Advance notice preferable. Adequate hospital and medical facilities available for providing necessary or emergency care. From information available, Public Health Department may, if required, request certain information prior to granting free pratique for inoculations, Vaccination/Fever Certificates.

TANKERS: There are 4 tanker berths available, operated by private companies, in addition to the 7 municipal tanker berths now in operation and 1 in planning stage. Berths have 55 to 37 ft. of water alongside at MLLW. The range between MLLW and MHW is about 3.7 ft. Extreme range of about 9 ft. may occur at times of maximum tide. Chiksan loading and discharge arms are used and adapters available for various size fittings. Tanks available for discharge of ship's residue and SG and API local type oil (loading or discharging).

Petroleum Handling Facilities; Berths 84–87. Length 1,970 ft. Depth alongside 52 ft. Mechanical equipment discharge capacity 32,000 bbls/hour. 24 in. pipe-line to storage and tank farm.

Berths 118–119: Length 1,210 ft. Depth alongside 55 ft. Discharge capacity 50,000 bbls/hour. 14 in. – 24 in. pipe-line to storage and tank farm.

DENSITY: Local water density 1025 or pure sea water at all stages of tide.

FRESH WATER: Potable fresh water available all Municipals berths through 2 in. lines . Rental charge for use of each 50 ft. length water hose when furnished.

FUEL: All grades (viscosities) of bunker fuels available in any amount through pipe-lines at most Municipal berths, and by barge at anchor or at berths if desired. Notify quantity and type desired to local Steamship Company or Agent.

FIRE PRECAUTIONS: 2 fire boats and 1 fire station; in addition City fire service available.

Special fire precautions required at all berths handling petroleum products or dangerous cargoes. In addition to all applicable provisions of Long Beach Municipal Code, flammable and combustible liquids and flammable gases shall be handled and stored at Marine Petroleum Terminals in accordance with minimum fire safety requirements promulgated by Chief, Department of Fire, City of Long Beach.

DEVELOPMENT:

(1) The complete containerisation complex consists of 12 cranes, 10 berths and nearly 300 acres.

(2) A new bulk oil terminal is planned to accommodate vessels up to 200,000 d.w.t., drawing 62 ft.

GANGWAY/DECK WATCHMEN: Normally used, but only compulsory when detainees aboard.

OPENING/CLOSING HATCHES: Crew can open or close hatches at sea or at anchor. If closed or opened at dockside, the use of longshoremen compulsory.

CUSTOMS ALLOWANCE: Tobacco, each crew member entitled to 300 cigarettes, 50 cigars and 3 lb. of tobacco or combination of above. If the stay in port is such that additional tobacco is required, Customs will so issue. Wine and/or Spirit, not to exceed 1 quart of alcoholic beverage each adult non-resident. This exemption for alcoholic beverages may be applied to more than one kind but not to an aggregate volume of more than 1 quart for each adult crew member.

Note: Upon arrival of vessel from foreign port, or vessel engaged in foreign trade from a domestic port, sea stores and ship's stores not required for immediate use or consumption on board while vessel in port, and articles acquired abroad by officers and members of crew, for which no permit to land has been issued, shall be placed under seal, unless Customs Officer is of the opinion that circumstances do not require such action.

CARGO GEAR: Employer shall not use ship's cargo handling gear until he has ascertained that vessel has a current and valid Cargo Gear Register and Certificate indicating that cargo gear has been tested, examined and annealed in accordance with requirements of International Labor Organization Convention No. 32.

IDENTIFICATION CARDS: U.S. Department of Justice Immigration and Naturalization Service Form I-95-A (Form I-94 for passengers) must be completed.

CONSULS: In Los Angeles.

	Tel. No.		Tel. No.
Argentina	938-2073	Korea	931-1331
Austria	380-7550	Latvia	620-0300
Belgium	385-8116	Lebanon	462-5384
Bolivia	624-7299	Liberia	388-3017
Botswana	628-7341	Lithuania	474-1185
Brazil	937-4044	Luxembourg	451-4161
Canada	627-9511	Malawi	889-4173
Chile	624-6357	Malaysia	681-2033
China	389-1215	Malta	685-6365
Colombia	935-5143	Mexico	624-3261
Costa Rica	879-1860	Monaco	392-4060
Denmark	387-4277	Netherlands	380-3440
Dominican Republic	469-2522	New Zealand	477-8241
Ecuador	628-3014	Nicaragua	622-2761
El Salvador	622-2984	Norway	626-0338
Estonia	463-5542	Panama	383-6608
Ethiopia	879-1222	Peru	625-1893
Finland	385-1779	Philippines	387-5321
France	272-5452	Portugal	277-1491
Germany	384-2141	Senegal	477-6696
Great Britain	385-7381	South Africa	625-3545
Guatemala	629-1901	Spain	931-1284
Guyana	386-7980	Sri-Lanka	553-0555
Haiti	748-3506	Sweden	628-6309
Honduras	622-1804	Switzerland	388-4127
Iceland	462-5070	Thailand	380-4400
Israel	658-7945	Turkey	277-0595
Italy	473-2981	Venezuela	622-0133
Ivory Coast	272-5150	Western Samoa	666-2154
Japan	624-8305		

REPAIRS: Within greater port area facilities to accomplish all types of deck and engine repairs.

DRY DOCKS: Within greater port area 3 large private commercial dock yards, Bethlehem Shipbuilding and Repair, and Todd Shipyard Corporation, and California Shipbuilding and Drydock Co. with large floating dry docks and repair facilities. Also, 3 large capacity graving docks located at Naval Shipyard available for emergency use by merchant vessels when not occupied by naval vessels.

REPATRIATION: Through U.S. Department of Justice Immigration and Naturalization Service, and clearance of personal effects by U.S. Customs.

AIRPORT: Los Angeles International Airport approximately 18 miles from port, and provides regular scheduled and international airline service.

TIME: GMT minus 8 hours. United States observes Daylight Saving Time, begins at 0200 hrs. on last Sunday of April each year and ends at 0200 hrs. on last Sunday of October of each year.

HOLIDAYS: The subject Legal holidays are defined as follows: New Year's Day (1st January); Lincoln's Birthday (12th February); Washington's Birthday (3rd Monday February); Memorial Day (Last Monday May); Independence Day (4th July); Labor Day (1st Monday September); Admission Day (9th September); Columbus Day (2nd Monday October); Veterans' Day (4th Monday October); Thanksgiving Day (4th Thursday November); Christmas Day (25th December).

Notes: (1) Also, every Statewide Election is a holiday.
(2) Also, any other legal holiday that may be proclaimed by State or National authority is a holiday.
(3) When one of the above days falls on Sunday, the following Monday shall be observed as a holiday.

POLICE/AMBULANCE/FIRE: Port of Long Beach – Police 436-9811; Ambulance 436-9811 or 436-8211. Fire 436-8211; Harbour Security Officer 437-0041; U.S. Customs 436-3916.

In an emergency and unable to dial direct – dial operator giving telephone number and exact location where emergency exists.

TELEPHONE: Installation of telephone aboard ship at Municipal berths.

GENERAL: For information regarding various social organisations, call 436-9041. Long beach recreation Department, for information.

SERVICES: All services from tank cleaning to compass and instrument repair available at various locations within greater port area.

SHORE LEAVE: Crewmen allowed shore-leave providing necessary application presented to U.S. Immigration Officer is approved and crewmen's Landing Permit issued (Form I-95A). Customs declaration required for articles to be landed by crew members (1 quart of alcoholic beverage with seal broken is allowed).

DELAYS: Arrival at berths are normally on time as scheduled. However, there are times of inclement weather or lack of cargo at a berth which create a short delay. Shortage of longshoremen can also cause a delay in discharging or loading cargo. No delay experienced in bunkering.

AUTHORITY: Board of Harbor Commissioners, Port of Long Beach.

LONGVIEW, Washington: 46.10 N. 122.55 W.

(See Plan)

DOCUMENTS:

3 Complete Cargo Manifests.
3 Store Lists.
3 Possession Lists.
3 Crew Lists on Immigration forms.
Vessel Documents.
Tonnage Tax Statement.
Quarantine Form completed.

At first port of arrival, ship is boarded and inspected by Customs, Immigration, Public Health and Agriculture officials. At each subsequent port only Customs Agent will board prior to docking.

PILOTAGE: See "Portland, Oregon".

ANCHORAGE: Safe anchorages indicated by Columbia River Pilots.

RESTRICTIONS: None in regard to arrival time or state of tide. Channel depth 40 ft. at mean low water and tidal range varies between 2.5 and 4 ft.

MAX. SIZE: No limitation on length or breadth. Draft limited to 40 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Columbia River Pilots have knowledge of tug positions and other knowledge pertaining to tugs aiding a vessel.

BRIDGES: One bridge crossing Columbia River at Longview has sufficient clearance so as not to present a problem. Clearance 169–185 ft. depending on season.

BERTHING: 7 berthing facilities are operated by the Port of Longview starting immediately adjacent to the Longview Bridge and running upstream for a distance of 0.91 miles.

Berths 1 through 4 form one continuous wharf 2,155 ft. long. Berths 1, 2 and 3 are equipped to handle general cargo, logs, tallow, petroleum products and a limited number of containers. 2 multi-purpose travelling gantry cranes serve Berths 1 and 2 and a 600-ton capacity twin-boom derrick for heavy equipment lifts is located at Berth 3. The 3 berths are served by a system of pipe-lines through which petroleum can either be received from tankers and barges or pumped to vessels for bunkering purposes. A bulk liquid plant used for the storage and transferring of tallow serves Berth 2. 5 transit sheds with a total capacity of 144,876 sq. ft. are located along the 3 berths, and railway trackage consists of 1,500 ft. of surface track on the wharf apron plus 2 spur tracks under the gantry cranes.

Berth 4 is used primarily for the receiving and shipping of grain and serves a 5,165,000 bushel capacity grain elevator leased to the

Continental Grain Company. The 655 ft. berth is equipped with an overhead grain gallery extending along the wharf with 5 loading spouts. A marine leg at the rear of the wharf is used for unloading grain from barges.

Berth 5, located upstream from Berth 4, is a 515 ft. wharf which extends to 691 ft. with mooring dolphins fore and aft. It was constructed primarily for receiving alumina by self-unloading vessels, but can be adapted to handle most types of bulk ores, minerals or chemicals with modifications. The berth is also used for loading logs from the river with ship's gear and for handling barge traffic. 2 storage tanks are located near the berth with a total capacity of 25,000 tons of alumina.

Berths 6 and 7 form a continuous wharf 1,500 ft. long, with the last 96 ft. upstream portion at an 8 ft. lower level. The berths are equipped to handle general cargo, logs, lash barges, containerized cargo and, at the lower portion, Roll-on/roll-off vessels. Adjacent to the cargo handling area is an open storage site of approximately 14 acres and 2 transit sheds with a total capacity of 120,604 sq. ft. A gantry crane serves both berths and 3 rail tracks are located along the length of the wharf apron.

The Port operates its own facilities and performs all terminal services between ship's tackle and consignees or inland carriers. The only exception is the operation of the grain elevator facility, which is leased to the Continental Grain Company.

In addition to these facilities operated by the Port, there are 9 other berths operated privately in the Longview Port District. Weyerhaeuser Company owns 6 berths and Reynolds Metals Company, International Paper Company and Longview Fibre Company each operate 1 berth apiece. 6 of the 9 berths are used primarily for export while the other 3 are used mainly for receiving raw materials used by the mills.

BULK/HANDLING FACILITIES:

Containers: The Berth 6–7 area serves as a multiple use facility, handling both break-bulk and containerized cargo. This complex includes a berthing facility 1,500 ft. long, incorporating a ro-ro dock at the extreme upstream end, an open storage and marshalling site capable of accommodating all sizes of containers, and 2 storage sheds with 120,000 sq. ft. of covered space. The dock and cargo handling area is a 120 ft. wide concrete surfaced area equipped with 3 rail tracks and a crane track.

In addition to the Berth 6–7 area, containers are being handled at Berths 1–2 where there is also considerable back-up storage area available for the storage of containers.

Grain: The Continental Grain Company operates the 5,165,000 bushel capacity grain elevator at the Port of Longview Terminal. An overhead gallery equipped with 2 × 36 in. electric belt conveyors extends from the elevator to the grain berth and then for 255 ft. along the length of the wharf where it serves 5 vessel-loading spouts. Vessels can be loaded with grain through any 2 spouts at a combined rate of 29,000 bushels per hour.

Incoming waterbourne grain is unloaded from barges moored alongside the rear of the wharf by a bucket-type marine leg at a rate of 12,500 bushels per hour. The marine leg feeds grain onto a conveyor system located beneath the dock which then carries back into the elevator.

The elevator has a rail car tipper for unloading grain from box cars at a rate of 9 cars per hour; facilities for emptying hopper-type rail cars; a hydraulic truck dumper; a portable-type marine leg for unloading grain from vessels to trucks at a rate of 5,000 bushels per hour; and a spout for loading rail cars.

Other equipment includes a fumigation system, washer, separators, scourer, dryer and scales.

Ore: A facility for unloading aluminium ore is located at Berth 5. The discharge equipment consists of 2 travelling hoppers with boom conveyors which extend over the face of the wharf to the side of self-unloading vessels. The hoppers feed ore onto a 60 in. electric belt conveyor located along the rear of the wharf. This conveyor feeds onto another conveyor which travels from the berth to 2 storage tanks which have a total capacity of 25,000 tons. A metering system located at the storage tanks fills hopper-type rail cars for outbound movement of the ore.

Roll-on/Roll-off: A 240 ft. extension to the upstream end of Berth 7 to accommodate Roll-on/roll-off vessels is now available at the Port of Longview. 96 ft. of the extension are constructed at a level 8 ft. lower than the remainder of the dock and will serve as the loading/unloading area to accommodate a ro/ro vessel's stern ramp. This section will have a width of 50 ft. from the wharf face to the access ramp leading to the upper level of the dock. The entire extension is constructed of concrete and steel on timber piling.

CRANES: 2 electric-powered gantry cranes serve Berths 1 and 2 on 550 ft. of track. They are readily adaptable for handling various types of bulk cargoes, containers, logs, machinery and large equipment. 1 crane is equipped with a 130 ft. boom and has a capacity of 60 tons at a 45 ft. radius. The other crane has a 120 ft. boom with a 50 ton capacity at a 45 ft. radius. Both cranes are served by two 400 ft. railroad tracks permitting direct handling between rail cars and vessels.

A third gantry crane serves Berths 6–7 on 1,050 ft. of track. This crane has a 165 ft. boom with a capacity of 50 tons at a 45 ft. radius. 2 × 1,000 ft. rail tracks are located between the crane tracks for handling rail cars at shipside.

The 600 ton capacity 'Columbia Giant', a fixed twin-boom derrick is located at Berth 3.

STEVEDORES: At least 24 hours notice necessary to arrange gangs before ETA. Arrange through port Office via Ship's Agent.

MEDICAL: Hospital facilities available.

TANKERS: Petroleum discharge lines consist of 1 × 12-in. and 3 × 8-in. pipelines. 1 tanker berth available.

DENSITY: Columbia River is fresh water at Longview.

FRESH WATER: Available through 8-in. line with 2.5 in. connections. Rate of delivery approx. 14.5 t.p.h.

FUEL: Bunker C fuel available through 12-in. line at 850 b.p.h., and light diesel fuel through 8-in. line at 1,200 b.p.h.

GANGWAY/DECK WATCHMEN: Not needed, but arrangements can be made if necessary.

OPENING/CLOSING HATCHES: Work carried out normally by stevedores.

CUSTOMS ALLOWANCE: See "Portland Oregon".

IDENTIFICATION CARDS: Advisable but not necessary.

CONSULS: At Portland, Oregon.

REPAIRS: Some deck and minor engine repairs are possible at Longview.

REPATRIATION: No facilities for effecting crew changes or repatriations.

AIRPORT: Nearest airport served by regular airlines is in Portland. Charter flights may be arranged from a small local airport.

TIME: GMT minus 8 hours. In addition, clocks are moved ahead 1 hour on the last Sunday in April and returned back 1 hour on the last Sunday in October, at 0200 hrs. local time on those 2 days.

HOLIDAYS: New Year's Day (Jan. 1); Washington's Birthday (Feb. 22); Memorial Day (May 30); Independence Day (July 4); Labor Day (first Monday in September); Veteran's Day (Nov. 11); Thanksgiving Day (fourth Thursday in November); Christmas Day (Dec. 25). Cargo work can be arranged on most of these holidays.

POLICE/FIRE/AMBULANCE: Police 423-1424; Fire 423-3212; Ambulance 425-3820.

TELEPHONES: Available at dockside.

SHORE LEAVE: Crews allowed ashore if papers are in order.

AUTHORITY: Port of Longview.

LOS ANGELES, California: 33.43 N. 118.17 W.

(See Plan)

PORT LIMITS: The seaward boundary of the port of Los Angeles is, for most purposes, the breakwater through which arriving vessels pass at Angeles Gate Light.

DOCUMENTS: First Port of Arrival.

1 Complete Manifest deposited with customs, original and traveller.
1 Complete Manifest returned to vessel.
1 Manifest of first port cargo deposited with customs broker.
2 Quarantine Declarations (Form PHS 43).
2 Agriculture Declarations (Form AIQ 43).
1 Visaed Crew List (Form I-418) 5 additional copies.
1 Crewman's Landing Permit (Form 1-95A) for each crew member and (Form I-94) for each passenger.
1 Dangerous Cargo Manifest deposited with Captain of the port. 1 copy in hands of Chief Officer for review by the Fire Department.

The Coast Guard Captain of the Port must be informed of vessel's ETA 24 hours prior to vessel's arrival.

Second and each subsequent Port of call in U.S.

2 Manifests of Cargo for second U.S. port left with customs.
1 Travelling Manifest returned to Master.

(*Note:* Travelling Manifest is carried and deposited with customs at final port of discharge in U.S. – in addition to above required documents 4 additional copies should be available.)

PILOTAGE: Request made through Agent. Contact can be made through VHF Channels 14 (156.7 mHz) or 16 (156.8 mHz). Not less than 1 hour notice of arrival or departure. 1 long and 1 short blast on ship's whistle or siren, or international signal. Pilot will board in vicinity of sea-buoy (LA entrance buoy, lighted bell buoy "L.A." black and white vertical stripes. Radar reflector).

ANCHORAGES: Anchorages defined on charts. No permit required to anchor less than 10 days. Permit for over 10 days obtained from Captain of the Port, USCG and Harbour Department Port Warden. Permit is required for Explosive anchorage.

MAX. SIZE: Restrictions on draft only. Main channel and inner harbour 35 ft. Super tanker terminal in outer harbour has fairway of 51 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Los Angeles Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: International Telephone and Telegraph, call letters "KOK" Los Angeles radio.

RADAR/VHF: The Los Angeles harbour Pilot's station equipped with radar for use of Pilot. The Pilots also monitor VHF Channels 14 (156.7 mHz) and 16 (156.8 mHz).

TUGS: On stand-by 24 hours a day. However, should be ordered prior arrival. Tugs join vessel in main channel, tug lines used, except when towing astern.

BERTHING: Generally arranged through Agent. Berthing under control of Port of Los Angeles' Chief Wharfinger. There are 32 general cargo berths with depth alongside 35 ft.

BRIDGES: Highway suspension bridge (Vincent Thomas) crosses main channel between berth 95 and berth 225; overhead clearance of 185 ft. in centre. 2 bridges on Cerritos channel separating Los Angeles and Long Beach harbours, 1 a double leaf-bascule (Badger Avenue Bridge) the other is a lift bridge (Schuyler F. Heim), as these bridges are less than 50 ft. apart they will be treated as one, overhead clearance 155 ft. at centre of Heim bridge.

CONTAINER HANDLING FACILITIES:

Terminal name and location	*APL Marine Terminal berths 87-93 ABC*	*Los Angeles Container terminal berth 131*	*Wilmington Container Terminal berths 130-131*	*Available container terminal berth 200 A*	*Matson Terminal berths 207-209*	*Overseas terminal berths 228 D/E 230 A/B*	*Seaside Container Terminal berths 232C/235*
Operated by	Consolidated Marine Terminal PO Box 1551 San Pedro, CA 90733 (213) 831-2311	Los Angeles Container Co. Inc. PO Box 271 San Pedro, CA 90733 (213) 835–4861	Crescent Wharf & Whse. Co. Berth 200–A PO Box 398 Wilmington, CA 90744 (213) 835–7111 for Seatrain Lines	Crescent Wharf & Whse. Co. Berth 200–A PO Box 398 Wilmington, CA 90744 (213) 835–7111	Matson Term. Inc., 1001 New Dock Street Terminal Isl. CA 90731 (213) 547-5531	Overseas Shipping Co. PO Box 3128 Terminal Isl. CA 90733 (213)832-3341	Evergreen Marine Corp of Calif. 400 Oceangate Ave. Long Beach, CA 90802 (213) 432-5904
Number of berths	B. 87–89 (1) B. 90–93 (3) 1 berth (798 ft.) used for containers and 3 berths for general break-bulk and Passenger vessels	B. 126–129 (3)	B. 130–131 (1)	B. 200A (1) This berth is not in use for containers at the present time	B. 207-209 (2) Used for both container and roll-on/roll-off cargo	B. 228 D/E (1) B. 229–230 (2) 2 berths used for containers and one berth used for both break-bulk cargo and containers	B. 233–235 (1) 1 berth (1,014 ft.) used for combination LASH/container vessels Berth 232 CDE (1,368 ft.) used for LASH barge operations
Length of berths	3,775 ft.	750 ft. (Quay length of 2,532 ft. for cont. vessels)	970 ft.	738 ft.	1,572 ft.	2,359 ft.	2,382 ft.
Elevation of wharf deck (nearest 0.5 ft.)	15 ft.	15 ft.	15 ft.	15.5 ft.	15.5 ft.	15 ft.	15 ft.
Depth of water (existing/proposed)	35/45 ft. MLLW	35/45 ft. MLLW	35/45 ft. MLLW	35/45 ft. MLLW	35/45 ft. MLLW	35/45 ft. MLLW	35/45 ft. MLLW
Number of container spaces (stacked one high)	1,485 (20 ft. equiv.)	1,800–2,000 (20 ft. equiv.)	1,420	N/A	2,600 (20 ft. equiv.)	926 (20 ft. equiv.)	1,021 (20 ft. equiv.)
Number of reefer outlets	90	130	0	198	193	20	0
Container crane:							
Number	1	1-twin lift	1	N/A	3	2	
Lifting capacity	40 long tons	40 long tons	40 long tons		37 tons, 2–25 tons	35, 40 long tons	
Outreach offshore	107 ft.	106.5 ft.	107 ft.		102 ft., 102 ft.	81 ft., 113 ft. 6 in.	
Outreach inshore	88 ft.	91 ft.	90 ft.	(2–25 long ton cranes moved to B. 207-209 in Dec., 1971)	73 ft., 74.5 ft.	20 ft., 61 ft.	
Wheel span	50 ft.	50 ft.	50 ft.		34 ft., 34 ft.	70 ft., 50 ft.	
Container capacity	30–20'hr.	96–20'hr.	30–20'hr.		56–20'hr., 40–20'hr.	30–20'hr., 40–20'hr.	
Built by	Star Iron	PACECO	PACECO		Star Iron PACECO	Houben Industries Star Iron	
Owner	Am. Pres. Line	Port of Los Angeles	Port of Los Angeles		Matson Term., Inc.	Overseas Ship. Co.	Port of Los Angeles
Date installed	1972	1968	1976		1973, 1971	1969, 1971	1976
Container handling equipment (add. handling equip. is available from stevedoring co. on an "as needed" basis)	(numerals in parenthesis indicate the number of containers that can be stacked vertically by type of equipment)						
Travel crane	—	5-Drott, 40 ton/cap. (3)	—	N/A	1–PACECO 25 ton/cap. (2)	2–PACECO, Drott 30 ton/cap. (3)	—
Straddle carrier	6-Star Karricons, 40 ton/cap. (3) 6–Ross, 25 ton/cap. (1)	—	—	—	10–Clark, 25 ton/cap. (2) 2–Taylor/Clark 25/30 ton/cap. (3)	Various types 20 ton/cap. (2)	Straddle carrier operation
Fork Lifts	8-Hyster, Clark 15–30 ton/cap. (1)	3-Hyster, 7 ton/cap. (3)	—	—	—	2-Rayco Wagner 35 ton/cap. (3)	—
Chassis	200–40 ft. 150–20 ft.	400–40 ft. 400–20 ft.	—	—	100–20 ft. 150–40 ft. 500–24 ft.	8–41' yd. chassis 8-yard trucks	—
Container freight station	200 ft.×1,008 ft. 201,600 sq. ft. for containers	335 ft.×70 ft. 24,500 sq. ft.	0	731×60 ft. 45,860 sq. ft.	776 ft.×80 ft. 62,080 sq. ft.	880 ft.×160 ft. 137,200 sq. ft. Main use is for break-bulk cargo	0
Railroad and truck service	Yes	Yes	Yes	Yes	Yes	Yes	Yes

SPECIALISED CARGO-HANDLING: There are at least 7 terminals capable of handling the port's roll-on/roll-off traffic.

The bulk loading facility,especially designed to handle iron ore and iron ore pellets, also handles other commodities such as coal and other dry bulk materials. Wharf length 800 ft. Depth alongside 51 ft. Loading rates up to 3,000 t.p.h., and unloading 500 t.p.h. The grain and tallow terminals at berth 174 have 13 silos that hold 410,000 bushels. Vessels can be loaded at a rate of up to 400 t.p.h. Accommodating vessels up to 35 ft. draft, any length.

Other specialised facilities include the GATX Petro Chemical Terminal, designed especially to receive petro chemicals; the Hugo Neu Corporation installation, where old automobiles are reduced to scrap metal for export; Coos Head and Sun Lumber Terminals; Cargill and National Molasses Terminals; United Fruit Company's Banana Terminals; and the processing and shipping plant of the U.S. Boron Company.

STEVEDORES: Agents make necessary arrangements.

MEDICAL: Necessary to notify Agents of required medical attention: this can be done when final ETA is determined. Hospital facilities available (private).

Vaccinations/fever certificates, etc., shall conform with rules and models prescribed by the International Sanitary Regulations.

TANKERS: Load and discharge lines have 6-and 8-in. standard flanges (super-tanker terminal has 12-in. lines with standard flanges). If not so equipped ship must furnish its own "C" clamps. Recommend ship have reducers on board to handle 6-and 8-in. flanges. Residue discharge facilities available for limited quantities. All types and grades of petroleum available. 20 tanker berths available in inner harbour, 35-ft. draft at MLLW, 2 are available outer harbour 51 ft. draft at MLLW.

DENSITY: Average density 0.026 (exception during or after heavy rain).

FRESH WATER: Availability unlimited, delivery universal, rate of delivery 100 t.p.h.

FUEL: Unlimited fuel, all grades at attractive rates. 48 hours advance notice generally required.

FIRE PRECAUTIONS: Whenever vessel bunkering, sufficient serviceable fire hose with suitable nozzles attached to reach all parts of vessel shall be connected to fire main on vessel and made ready for instant use at all times during bunkering operations. If no adequate water pressure available on board, connections shall be made to shore lines to obtain adequate pressure. All Tank Ships shall be moored bow seaward and have wire towing pendants rigged fore and aft readily available for emergency use, fire hoses shall be connected as above at all times while vessel in port.

International fire signals will be used in case of fire (5 prolonged blasts of ship's whistle or siren of 4 to 6 seconds duration).

DEVELOPMENTS: Depths at Los Angeles will be increased in the Inner Harbour from 35 ft. to 45 ft. by 1975, and from 50 ft. to 80 ft. in the Outer Harbour by 1978.

A new container wharf is to be constructed in the main Channel of the port on the site of berths No. 233–235. The new facility will serve conventional containerised cargo.

GANGWAY/DECK WATCHMEN: Gangway watch recommended. Tankships and vessels handling dangerous cargo required to have gangway and deck watch.

OPENING/CLOSING HATCHES: Automatic hatches may be opened and closed by crew, manual hatches opened and closed by stevedores.

CERTIFICATES: *Passenger Vessels:*

Safety Certificate, with 50 or more passengers must comply with 1966 amendment (fire safety amendment) to Solas 60.
Load-line Certificate.
Radio Certificate.
Radio Telephone Certificate, if aboard.

Cargo Vessels:

Safety Equipment Certificate.
Load-line Certificate.
Certificate of Inspection/home Certificate.
Trading Certificate.
Cargo Gear Certificate.
Radio Certificate, Radio Telephone Certificate, if aboard.
If carrying passengers from U.S. ports, vessels must have PAC (Persons in Addition to Crew) Certificate issued by USCG.

Tanker Vessels:

Same as cargo. Exception: if carrying exotic cargo, required to have cargo facilities plan, reviewed and approved by USCG, Washington, D.C. On vessel's first visit it will be inspected and receive a letter of compliance.

CUSTOMS ALLOWANCES: Tobacco, either 300 cigarettes, 50 cigars, or 3 lb. of smoking tobacco, for the personal use of crew member. Wine and/or Spirit, 1 quart for personal use of crew member.

CARGO GEAR: Gangway net attached between ship and dock; extending 5 ft. beyond turntable in one direction and 5 ft. beyond point of intersection of gangway and stringpiece in the other direction. Preventer guy must be rigged separately to head of boom from working guy. Exception if cast head of boom is capable of withstanding the stress of all the lines attached thereto. (This is a West-Coast requirement.)

IDENTIFICATION CARDS: 1 crewmans landing permit (Form I-95A) or immigration card (Form D-1).

CONSULS:

Argentina – Consul
Australia – Consul General
Austria – Consul General
Belgium – Consul General
Bolivia – Consul General
Botswana – Consul
Brazil – Consul General
Canada – Consul General
Chile – Consul
China – Consul General
Columbia – Consul General
Costa Rica – Consul General
Denmark – Consul General
Dominican Republic – Consul General
Ecuador – Consul General
El Salvador – Consul General
Estonia – Vice-Consul
Finland – Consul
France – Consul General
Germany – Consul General
Great Britain – Consul General
Guatemala – Consul General
Haiti – Consul
Honduras – Consul General
Israel – Consul General
Italy – Consul General
Ivory Coast – Consul General
Japan – Consul General
Jordan – Consul
Korea – Consul General
Latvia – Consul
Liberia – Consul
Lithuania – Consul General
Luxembourg – Consul
Lebanon – Consul General
Malawi – Consul
Malaysia – Consul
Malta – Vice-Consul
Mexico – Consul General
Monaco – Consul
Netherlands – Consul General
New Zealand – Consul General
Nicaragua – Consul General
Norway – Consul General
Panama – Consul General
Paraguay – Consul
Peru – Consul General
Philippines – Consul General
Portugal – Consul
Senegal – Consul
South Africa – Consul
Spain – Consul General
Sri Lanka – Consul
Sweden – Consul General
Switzerland – Consul General
Thailand – Consul General
Turkey – Consul General
Uruguay – Consul
Venezuela – Consul
Western Samoa – Consul

Commercial Representatives of foreign Governments:

Australia – Trade Commissioner
Austria – Trade Delegate
Belgium – Commercial Officer
Brazil – Trade Commissioner
Canada – Trade Commissioner
Denmark – Consul Attache
France – Commercial Counsellor
Finland – Trade Commissioner
Germany – Deputy Consul General
Great Britain – Commercial Consul
Hong Kong – Trade Development Council
Israel – Consul
Italy – Trade Commissioner
Japan – Consul
Korea – Consul
Mexico – Commercial Attache
Netherland – Vice-Consul
Nicaragua – Commercial Attache
Philippines – Trade Representative
Portugal – Trade Office
Sweden – Trade Commissioner
Switzerland – Vice Consul
Yugoslavia – Trade Commissioner

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: Largest dry dock 659 ft. by 97 ft., 22,000 displacement tons. 3 smaller dry docks (17,500, 15,000, 10,000 tons).

REPATRIATION: Arrangements can be made through immigration on request of Agent to have crewman change ship or return to home port.

AIRPORT: Approximately 20 miles to International Airport which serves all major airlines.

TIME: Standard Time, GMT minus 8 hours. Daylight saving time GMT minus 7 hours (April through October).

HOLIDAYS: Cargo may be worked on holidays with holiday pay scale. Exception: the first Thursday in July, at which time it is almost impossible to find working crews, although there are now exceptions to this practice.

POLICE/AMBULANCE/FIRE: The telephone numbers are all the same (area code 213) 831-9211, simply ask for Police, Ambulance or Fire. Fire Alarm boxes adjacent to all cargo sheds.

TELEPHONES: Connections for passenger vessels at passenger terminals only.

SERVICES: A ship-reporting service "The Marine Exchange" located at entrance to main channel, Los Angeles harbour. They monitor Channels 14 (156.7 mHz) and 16 (156.8 mHz) VHF and have Channel 9 (156.45 mHz) VHF as their own. Primary duties are reporting arrivals, departures and locations of vessels.

SHORE LEAVE: Crew members are allowed ashore.

REGULATIONS: Permits required for hot work (welding, cutting etc.). Permit required for any dangerous cargo. Permit to discharge ballast (clean water) required. Restrictions on bunkering operations (scuppers plugged, valves closed).

DELAYS: No delays in berthing, load or discharge or bunkering can be expected.

AUTHORITY: The Harbor Department, City of Los Angeles.

MAGPETCO, Texas: 30.02 N. 93.59 W.

DOCUMENTS, PILOTAGE, RADIO, etc.: Refer to "Port Arthur". Also see "Port Neches".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

METLAKATLA, Alaska: 55.08 N. 131.35 W.

Located on Annette Island. Open all year.

DOCUMENTS: See "Anchorage, Alaska".

PILOTAGE: Ships coming up from the Hecate Straits or outside of Graham Island proceed into Dixon Entrance to the vicinity of Point McCartey where the Pilot will meet them. Vessels coming up the inside passage from Vancouver, B.C. are met at Lucy Island Pilot Station.

MAX. SIZE: Depths in harbour 120 ft. Tides: diurnal range – 14.7 ft. Also see "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

ANCHORAGE: Good anchorage in gravel and mud.

CUSTOMS: Quarantine, Immigration and Customs, from Ketchikan.

BERTHING: 2 berths: 1. City Dock: 400 ft. long and 60 ft. wide. More than 35 ft. deep. Due to shallow water at East end, a starboard landing is usually made. No covered storage, temporary open storage. 4 fork-lifts, 2 of 20,000 lb capacity.

2. Annette Island Canning Co.; 200 ft. long and 23 ft. deep. 15 ton crane and 2 fork-lifts. 1 25-ton fork lift.

TUGS: Available in Ketchikan.

STEVEDORES: 4 gangs available.

REPAIRS: Facilities at Ketchikan.

SUPPLIES: Bonded and unbonded stores from Ketchikan.

WATER: Available.

FUEL: Not available.

MEDICAL: Hospital available in Ketchikan; small clinic in Metlakatla.

AIRPORT: Small charter plane only. Jet to Juneau and Seattle from nearby Annette. (Water transportation to Ketchikan.)

MIAMI, Florida: 25.46 N. 80.11 W.

DOCUMENTS: See "Jacksonville".

PILOTAGE: Address: Biscayne Bay Pilots, PO Box 134, Miami Beach, Florida.

Advance notice, 1 hour. To call pilot office: call on VHF Channel 16 and switch to 12. Pilot boat can be called on 2182 kc/s or 2738 kc/s. Pilot boat black hull with orange deck. 36 ft. long. Fly code flag G for a Pilot. Pilot boat flies code flag H. Pilot boat moors at Pilot station at Government Cut, 2 miles west of sea buoy.

ANCHORAGE: Vessel can anchor near sea buoy. Anchorage area located Eastward of a line about 1.5 nautical miles offshore and Northward of a line about 0.5 nautical miles North of sea buoy at the entrance to the ship channel. Area marked by spar buoys to North and South. Depth of water is 26 ft. at MLW to over 100 ft.

ENTRY RESTRICTIONS: Pilots available 24 hours per day. Channel, turning basin and main channel have 36 ft. MLW. Mean range of tide at harbour entrance 2.5 ft. and in bay 2 ft. Tidal current average velocity of 2 knots. Extreme tidal range at entrance of 4.5 ft. Main ship channel can have tidal current velocity of 3 to 4 knots through main ship channel.

MAX. SIZE: Recommended draft restriction of 33 ft. at MLW. Size restricted by size of turning basin which has 36 ft. at MLW, is 1,700 ft. North and South; 1,650 ft. East and West. No limit to length at new port which has 9,000 ft. of straight bulkheading and 31 ft. at MLW. A 1,000 ft. ship can be handled in turning basin if draft under 33 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: The Coastguard can be raised on 2182 kc/s (distress and calling). Pilot station can be raised on VHF Channel No. 16. Telephone contact to Agents, receivers, etc., can be made via Miami Marine Operator.

TUGS: Large tugs up to 2,000 h.p. available 24 hours per day. Request tug service via Pilot station. Big tugs privately owned by Belcher Oil Company who work closely with Pilots. Smaller tugs available on Miami River and operated by Backus Towing Inc.

BERTHING: All berths assigned on a basis of first come first served. Request for a berth must be made by Ship's Agent on a port form. This request should be made as far in advance as possible, but at least 7 days when possible. 3 roll-on/roll-off ramps available, 100 ft. by 40 ft. each and 7.5 ft. above MLW. A berth will be held about 4 hours then reassigned if necessary.

BRIDGES: There are no bridges between the open sea and the port. To enter Miami River requires passage through a highway and railroad bridge. This bridge manned 24 hours per day. Only smaller ships enter Miami River which is dredged to 15 ft. at high water and is 150 ft. wide for a distance of 3 miles above entrance. A bridge about half a mile from entrance is closed from 0700 to 0900 hrs. and 1600 to 1800 hrs.

TANKERS: No slop (residue) discharge facilities. One tanker berth (1,000 ft.) available. Max. draft 30 ft. at MLW. No special fittings required.

FRESH WATER: Available every 240 ft. at new port on Dodge Island. Delivered via hose.

FUEL: All grades; bunker, intermediate and marine gas oil, Diesel, bunker C. Ships fuelled at dockside from Belcher Oil Co. barges.

FIRE PRECAUTIONS: Usual safety precautions on smoking, flying baker, mooring pendant available, ample persons aboard to fight fires, fire hose led out, etc.

DEVELOPMENTS: A passenger terminal to serve 7 ships simultaneously on main approach channel where ships may turn at berth site in the 900 ft. width provided, completed. Additional dredging of all main channels and turning basin approved to 36 ft. MLW underway.

GANGWAY/DECK WATCHMEN: Usual shipboard watches to tend lines. Special guards (security) through Wackenhut, Burns Security, etc.

OPENING/CLOSING HATCHES: Work normally done by longshoremen.

CUSTOMS ALLOWANCES: See "Jacksonville".

IDENTIFICATION CARDS: Definitely needed in order to return to ship at night. A security guard at new port will check.

CONSULS:

Argentina	Tel. 373–7794	Haiti	Tel. 377–3547
Austria	,, 373–5511	Honduras	,, 358–3477
Belgium	,, 932–4263	Italy	,, 371–5393
Bahamas	,, 373–6295	Jamaica	,, 374–8431
Bolivia	,, 358–3450	Japan	,, 667–4633
Brazil	,, 377–1734	Korea	,, 949–2442
Chile	,, 373–8623	Mexico	,, 371–5444
Colombia	,, 373–3087	Netherlands	,, 358–5621
Costa Rica	,, 377–4242	Nicaragua	,, 373–6996
Denmark	,, 446–5911	Norway	,, 358–4386
Dom. Rep.	,, 373–4862	Panama	,, 379–7280
Ecuador	,, 371–8366	Paraguay	,, 672–1921
El Salvador	,, 371–8850	Peru	,, 373–5061
Finland		Spain	,, 661–5001
France	,, 374–2626	Sweden	,, 751–1851
Germany	,, 573–0878	Thailand	,, 373–7571
Guatemala	377–3201	Venezuela	,, 373–4311

REPAIRS: All deck and engine dockside repairs available.

DRY DOCKS: To 1,000 tons plus 2 small facilities.

AIRPORT: 8 miles or 15 minutes from airport by expressway. Serviced by 24 foreign and 10 United States scheduled air carriers.

TIME: Eastern Standard Time, GMT minus 4 hours. Daylight Saving Time in effect from last Sunday in April to last Sunday in October and adds 1 hour to Eastern Standard Time.

HOLIDAYS: Official holidays are New Year's Day (January 1); Memorial Day (May 30th); Independence Day (July 4th); Labor Day (first Monday in September); Columbus Day (October 12th); Thanksgiving Day (last Thursday in November); Christmas (December 25th). Cargo can be worked on holidays by advance arrangement and payment of double time.

POLICE/AMBULANCE/FIRE: Police Department, tel. 377-7011; Fire Department 377-6231 (Rescue Squad 377-6231).

TELEPHONES: Telephone jacks available at every other bay which places the jacks 240 ft. apart.

SERVICES: All types of special services such as tank cleaning, compass adjusting, admeasurement, radar/radio repairs, rathometer repairs, etc., available.

SHORE LEAVE: Crew members are allowed ashore after clearance by customs, immigration and quarantine.

AUTHORITY: Port of Miami.

MILWAUKEE, Wisconsin: 43.01 N. 87.53 W.

(See Plan)

PORT LIMITS: The Port of Milwaukee limits are generally considered to be the harbour breakwall housing the harbour entrance lighthouse. However, unless specifically declared to the contrary in the covering charter party, a vessel will be considered an "arrived ship" upon anchoring outside the harbour breakwall, in the event that a proper berth and/or anchoring space inside the harbour breakwall is not available.

DOCUMENTS:

Vessels from Canadian ports
Dominion clearance and Public Health Pratique (both issued at Montreal).
Vessels from all other nations
Inward Foreign Manifest(s)
Stores Lists, over Master's oath.
Curio Lists, over Master's oath.
Permit to Lade and Unlade.
Discharge Manifest.
Inspection by U.S. Dept. of Immigration (Crew List).
Inspection by U.S. Dept of Agriculture.
Receipt of Entrance fee.
Receipt of Tonnage Tax.

Additional documents may be required, dependent on commodity involved in the carriage, point of origin, flag or any unusual circumstances existing.

PILOTAGE: Pilot boards at Montreal and at several other stations along St. Lawrence Seaway route.

ANCHORAGES: The chart does not delineate anchorage area for large vessels but shows the 28 ft. depth just East of South Piers 1,2, and Liquid Cargo Pier. This deep area, about 2,400 ft. × 5,400 ft., used by large vessels for anchorage.

MAX. SIZE: 739 ft. × 75 ft. with 26 ft. draft. No tidal effect, although lake levels vary seasonally. Minimum depth above low water level 27 ft.

HEALTH: See "Health: All Ports" before first U.S. port (Albany). Illness reports made to Chicago Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Radio station at City Heavy Lift Dock. Harbour Master and Dock Superintendent can be reached at this facility Monday through Friday between 0800 and 1630 hrs; 156.8, 156.6 and 156.5 megacycles.

TUGS: Normally pick up vessel inside breakwater. Tugs optional at discretion of ship's Master. Fee for use of tug's lines.

BERTHING: The time of passing harbour entrance lighthouse establishes order of berthing, provided vessel is ready to work.

BRIDGES: Bridges closed between 0730 and 0830 hrs.and 1630 and 1730 hrs. except on Sundays and 8 legal holidays. In addition, 2 hours' notice required for opening bridges across Milwaukee River North of and including Buffalo Street.

SPECIALISED CARGO HANDLING FACILITIES: In addition to the 3 general cargo terminals of approx. 340,000 sq. ft. covered area (9 berths), and dry bulk terminal of 60,000 sq. ft. covered area (2 berths), the port is served by a refrigerated warehouse of 10,000 sq. ft.; 1 open dock area (2 berths) for handling bulk commodities such as pig iron; 1 open dock (3 berths) for heavy lifts and equipped with a 200-ton stiff leg crane and 2 gantry cranes of 70 and 50 tons; 1 liquid cargo pier for edible and inedible fats, greases and tallow; 2 grain elevators of 3.5 million and 2.5 million bushel capacity and 2 scrap iron loading facilities. The port is also equipped with a mobile heavy crane lift/container crane capable of serving all berths.

STEVEDORES: Vessel should provide a stowage plan, manifest of inbound cargo and exceptions list (unusual vessel or cargo characteristics affecting facilitation of cargoes). Vessel should comply with the U.S. Dept. of Labor's safety regulations.

MEDICAL: Advance notice desirable. Hospitalisation available.

TANKERS: Diameter of load lines and discharge lines 8 in. and 10 in. No slop residue facilities. 4 berths available, with draft to seaway depth.

FRESH WATER: Potable water available at most berthing areas.

FUEL: All grades of fuel oil available by truck delivery at shipside.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: At the option of ship, if terminal stevedores perform operation, it is based on cost plus 20%.

CERTIFICATES:
Registry of Ship.
Master's Licence.
1st, 2nd and 3rd Officer's Licences.
Radio Licence.
Wireless Operator's Licence.
Ratification Certificate (done each year).

(Additional certificates may be required, dependent upon Registry, cargo, trade route engaged in, nationality of crew, etc.).

CUSTOMS ALLOWANCES: Tobacco, 10 packages or 200 cigarettes in possession at any time. Wine and/or Spirits, 1 bottle per officer.

IDENTIFICATION CARDS: U.S. Immigration rules.

CONSULS: The following countries are represented:

Costa Rica
Ecuador
Nicaragua
Norway
Sweden

REPAIRS: Limited to above water line, and boiler repairs.

REPATRIATION: Local Agents effect repatriation.

AIRPORT: 5 miles distant.

TIME: U.S.A. Central Time. Central Daylight Time from late April to late October—5 hours behind GMT. Central Standard Time from late October to late April—6 hours behind GMT.

HOLIDAYS: Easter Sunday; May 30 (if on a Saturday, previous day is a holiday); July 4 (if on a Sunday, Monday is a holiday); First Monday in September; Fourth Thursday in November and following day; Christmas Day; New Year's Day. Cargo can be worked on these days at holiday pay.

POLICE/AMBULANCE/FIRE: Police — non-emergencies 273-8660; Emergency, including emergency ambulance service 765-2323; Fire, including rescue squad service 347-2323.

TELEPHONES: Can be arranged, but unnecessary because sufficient phones available in dockside offices.

GENERAL: Chandlery services for foodstuffs, ship complements and laundry services available. Garbage and waste disposal are available through private operators, chandler usually making the arrangements.

The Liquid Cargo Pier is also available for non-petroleum liquid cargoes.

SHORE LEAVE: Crew allowed ashore.

DELAYS: Little or no delay.

DEVELOPMENTS: A 20-acre container terminal is to be constructed close to the breakwater entrance.

AUTHORITY: Board of Harbor Commissioners, City of Milwaukee.

MOBILE, Alabama: 30.40 N. 88.02 W. (See Plan)

DOCUMENTS:

3 copies Cargo Manifest (Forms 7527-A or 7527-B), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I.418).
2 copies Crew List (Form I.418).

Customs boarding Officer will also examine Ship's Register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:

Health Pratique.
Master's Oath (Customs Form 3255).
All foreign clearances.
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certified Crew List.

PILOTAGE: Pilotage is compulsory.

ANCHORAGE: If berth is congested, vessel may anchor at the bar (35 miles from harbour).

RESTRICTIONS: Controlling depth: 40 ft. for entrance, channel and anchorages. Mean tidal range 1.5 ft. Nature of bottom: soft mud. Vessel can dock and sail at any hour at any stage of the tide.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: There are 7 tugs available 24 hours with max. horsepower of 1,800.

BERTHING: There are 34 berths at most of which, direct loading or unloading can be effected from quayside tracks.

Public Grain Elevator: Depth alongside 42 ft. 2 berths, each with 5 loading spouts. Unloading rate for grain 40,000 bushels/hour at each berth. Loading rate 115,00 bushels/hour for grain and 1,000 t.p.h. for meal.

McDuffie Terminals: Bulk coal handling plant, depth alongside the berth is 40 ft. Shiploader can load over 4,000 t.p.h. The stacker/reclaimer can handle 4,000 t.p.h., a rail car tipple rated at 4,000 t.p.h. and a barge unloader that works 3,500 t.p.h. A conveyor belt system connects the entire complex.

Bulk Handling Plant: 3 berths, depth alongside 40 ft. Total quay length 1,600 ft. 4 unloading towers which can unload 2,200 t.p.h. and 2 loading conveyors, rate 2,000 t.p.h.

Depth alongside other public berths as follows:

Pier 2	38 ft. MLW	Pier River End B	38 ft. MLW
Pier 3	38 ft. MLW	North Pier B 1	40 ft. MLW
Pier 4	38 ft. MLW	Pier North B 2	40 ft. MLW
Pier 5	38 ft. MLW	Pier North B 3	40 ft. MLW
Pier 6	38 ft. MLW	Pier South C1	41 ft. MLW
Pier 7	38 ft. MLW	Pier South C 2	41 ft. MLW
Pier 8	38 ft. MLW	Pier South C 3	41 ft. MLW
Pier South A	37 ft. MLW	Pier River End C	38 ft. MLW
Pier River End A	30 ft. MLW	Pier North C 1	39 ft. MLW
Pier North A 1	38 ft. MLW	Pier North C 2	37 ft. MLW
Pier North A 2	38 ft. MLW	Pier D Cold Storage	37 ft. MLW
Pier North A 33	38 ft. MLW	Berth 1 tipple	Under repairs
Pier South B 1	41 ft. MLW		
Pier South B 2	41 ft. MLW	Berth 2 tipple	44 ft. MLW
Pier South B 3	41 ft. MLW	Berth 3 tipple	40 ft. MLW

CRANES: 75 ton stationary crane, 50 ton mobile crane, 80 ton floating crane and 45 ton container crane available.

TANKERS: Max. length 950 ft. restricted by turning basin. American Bituminals & Asphalt Co. – Jetty berth dredged to 38 ft.

Magazine Point: Hess Terminal: Jetty berth dredged to 43 ft.

FRESH WATER: Available ex wharf at all berths.

FUEL: Most grades fuel/diesel available via pipe-line, barge or truck.

STEVEDORES: Normal working hours for the port are 0800/1700 hrs. Monday through Friday.

REPAIRS: *Alabama Dry Dock & Shipbuilding Company* – Dry Docks ranging from 5,000 to 18,000 tons displacement all serviced by 51-ton gantries. Dock length range from 380 ft. to 620 ft. Also available is a 70-ton floating crane. Any type of repair can be effected.

Bender Ship Repair. 1 dry dock of 2,500 tons displacement. Majority of repair work is top-side. 100-ton floating crane available.

DENSITY: 1,000 (Fresh Water).

DEVELOPMENTS: A 15 million dollar expansion programme, improving the present bulk materials handling plant, construction of the container facility, widening the turning basin and various updating projects.

CUSTOMS ALLOWANCES: At the discretion of customs officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I.95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I.95, issued for the same vessel.

HOLIDAYS: Absolutely no work is performed on New Year's Day, Easter, July 4th, Labor Day and Christmas Day. Working holidays are Mardi Gras Day, Veteran's Day and Thanksgiving Day.

AUTHORITY: Port of Mobile, Alabama State Docks Dept.

MOREHEAD CITY, N. Carolina: 34.43 N. 76.42 W. (See Plan)

DOCUMENTS:

3 copies Cargo Manifest (Form 7527-A or 7527-B), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Passenger List (Form 1418).
2 copies Crew List (Form 1418).

Customs Boarding Officer will also examine Ship's Register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:

Health Pratique.
Master's Oath (Customs Form 3255).
All Foreign Clearances.
U.S. Certificates of Payment of Tonnage Tax (Customs Form 1022).
Certified Crew List.

PILOTAGE: Pilots obtained from Morehead City Pilots' Association, Morehead City, North Carolina 28557. Tel. 726-6134.

The Port Terminal at Morehead City is 3.5 miles from the sea buoy. The port is located on the Intracoastal Waterway and is situated 75 miles S.W. of Cape Hatteras and 14 miles W. of Cape Lookout.

Pilots should be given 24 hours notice and then contacted by VHF Channel 16 about 2 hours before arrival at sea buoy R "2BI".

Pilot boat is about 40 ft. long, with white hull and superstructure; the hull is marked with "PILOT" in black letters on both sides.

RESTRICTIONS: The channel and basin at Morehead City are maintained at a controlled depth of 35 ft. – mean low water. A 40 ft. channel is projected.

The wharf is constructed of concrete and steel and has marginal tracks and crossovers for full length. Truck ramps are located at various points for easy roll-on/roll-off access.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Fort Monroe Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available. Service provided by Carteret Towing Co. Inc., Radio Island, Morehead City, North Carolina 28557. Tel. 919-726-5440.

BERTHING: The wharf is 5,300 ft. long. This length enables the port to provide berths for 10 × 500 ft. general cargo ships and 1 petroleum tanker at any given time.

Adjacent to the general cargo dock area is a 1,000 ft. deep water berth for out-loading through the bulk handling facility.

Morehead City also provides a barge terminal with 1,200 ft. of modern berths. This terminal was developed as a part of the bulk handling facilities, but is also used for the loading or off-loading of a variety of cargoes.

The bulk handling facilities of the port terminal at Morehead City are designed to out-load bulk and aggregate cargoes at a rate of 3,000 t.p.h.

The out-loader is served by a 1,200 ft. gallery which feeds from a 106,000 ton storage warehouse, and in turn is fed by a portable conveyor system from the barge terminal. The entire system is automated.

Wharf: 5,300 ft. of continuous concrete wharf. 1,000 ft. deep-water berth for bulk-handling facility. Additional 2,000 ft. projected.

Barge Terminal: 1,200 ft. of dock space providing 4 × 300 ft. berths.

Bulk Handling Facilities: 3,000,000 ton annual capacity bulk facility for receipt, conveyance, storage and shipment of bulk cargoes. Loading capacity 3,000 t.p.h., storage capacity 106,000 tons.

CRANES: 2 × 115-ton capacity gantry cranes and container handling facilties.

FUEL: Available from Blue Ridge Fuel Company, Esso Oil Company, and Texaco Inc.

CONSULS: Finnish Vice-Consul, Wilmington, N. Carolina 28401. Tel, 763-5451.

Royal Norwegian Consulate, Wilmington, North Carolina 28401. Tel. 763-8271

IDENTIFICATION CARDS: Standard U.S. Immigration Forms 195 to be made up for each crew member on arrival. Not necessary for crew man already holding Form 195, issued for the same vessel.

SERVICES: There are no shipyards in the port. Service on any kind of electronic equipment is not available.

REPATRIATION: This is possible but should be avoided as there is no Immigration Office. Closest airport is about 1 hour's drive from the town.

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours from April to October.

AUTHORITY: Manager, State Port Terminal.

MYRTLE GROVE, Louisiana: 29.38 N. 89.57 W.

West Bank of Mississippi River, about 62 miles from sea.
DOCUMENTS/PILOTAGE: For all general information refer to "New Orleans".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: 2 tugs required for vessels under 25,000 d.w.t. 3 tugs for vessels over 25,000 d.w.t.
BERTHING: Mississippi River Grain Elevator Co. berths: distance between buoys 900 ft., alongside 400 ft. dock, depth 40 ft. Loading rates, 80,000 to 120,000 bushels per hour.
FRESH WATER: Not available.
FUEL: Not available.
DENSITY: Fresh Water (1000).

NAWILIWILI, Hawaii (including Port Allen): 21.57 N. 159.21 W. (See Plan)

DOCUMENTS:
4 Crew Lists.
4 Passenger Lists.
Customs Documents.
Clearance, Travelling Manifest.
Local Manifests.
Health Documents.
Bill of Health and Vaccination Certificates.
4 Manifests.
4 Bills of Lading.
Ship's Papers.
Certificate of Registration or Enrolment.
Annual Inspection Certificate.
Load-line Certificate.
Derat Certificate.
Drinking Water Certificate.
Radio Certificate and Licence.
4 Store Lists.
PILOTAGE: Vessel's Agent orders Pilot 48 hours in advance by telephone, correcting ETA as necessary with 4 hours final notice if a last-minute change occurs. Tug-boat Lihue III serves as Pilot boat for Nawiliwili and Port Allen, 64 ft. long, hull black, house white, topsides orange. Radio telephone and VHF communication within 1 hour of arrival and while tug is working. 2638 and 2738 kc/s. and Channels 6, 12 and 16 on VHF. Pilot boards 1 mile East of Nawiliwili and 0.5 miles South of Port Allen. Signals in accordance with International Code.
ANCHORAGES: Nawiliwili: between Nawiliwili Light and Carters Point in 5–9 fathoms. Not good in strong trade-wind weather. Fair holding ground. Not recommended.
Port Allen: 0.5 mile South of Port Allen breakwater light in 5–10 fathoms. Fair holding ground. Untenable in Kona or S.W. storms which occur from November to March.
RESTRICTIONS: 24 hours notice of arrival is obligatory. Nawiliwili; no entry at night. From October 21 to March 21 Pilot boards at 0630 hrs. Balance of year 0600 hrs. Port Allen: no time restrictions.
MAX. SIZE: Nawiliwili: Length 650 ft., beam 90 ft., draft 32 ft. 6 in.
Port Allen: Length 650 ft., beam 90 ft., draft 32 ft. on North side and 28 ft. on South side. Pier is 600 ft. long, so larger vessels overhang.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Honolulu Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Communicate through RCA or ITT stations in Honolulu. Also KQM marine operator for radio telephone and telephone to Kauai.
TUGS: One 1,100 horsepower tug meets vessels off port and in outer harbour. Both ship's lines and/or tug's line may be used. No charge for tug's line. Tug has bow fender and is used for pushing. Has radio telephone, WP 4371 and VHF with Channel 12 usually used. Extra tugs available from Honolulu.
BERTHING: Limited to 2 large vessels at Nawiliwili and 2 at Port Allen. Considerable barge traffic. Prior reservations by Agent necessary with District Manager. Berth conflicts usually solved in Honolulu by rerouting of Island ports.
CARGO HANDLING FACILITIES: Nawiliwili has 2 sugar loading gantries on Pier 2; no equipment or storage to handle grain, ore, coal, sulphur. Fertiliser is discharged by self-unloading barge, and the bulk hauled away via truck. There is a container yard but no facilities to off-load containers. Weekly service is by a self-unloader. Roll-on/roll-off cargo is moved on ramps furnished by barges. LPG and petroleum product lines are privately owned.
STEVEDORES: All stevedoring by McCabe Hamilton and Renny Co. Ltd., with headquarters in Honolulu and branches in outports. 48 hours notice by Agent for labour and equipment. Inward cargo is containers, general, bulk fertiliser, petroleum products, and building and construction materials. Outward is raw sugar, canned pineapple, general and molasses. Foreign vessels are subject to heavy fines for carrying stevedore gear inter-island without Customs clearance.
MEDICAL: 2 hospitals on Kauai with 2 doctors under contract to United States Public Health Service. Standard international inoculations and vaccination required. Advance notice by Agent desirable but not necessary.
TANKERS: All piers have pipe-line connections for incoming cargo and outgoing molasses. Fuel oil 10 in., molasses 10 in., water line 6 in., gasoline, kerosene and diesel 8 in. These are the main lines under the wharves. Hose connections to ships vary with the type of riser and hose so size of fittings should be checked with Agent. No slop discharge facilities available. 4 tanker berths available.
DENSITY: Varies from full salt to brackish in periods of heavy rainfall with freshets in the streams. No specifics available.
FRESH WATER: Available from 2 in. dock hydrants via ship's hose. About 100 gallons per minute.
FUEL: Bunker C not available for large vessels. Diesel fuel available via tank truck with 6 hours notice. Weekend and holidays order previous day.
DEVELOPMENTS: Turning basin may be enlarged to handle liners and large bulkers.Project depth 35 ft.
GANGWAY/DECK WATCHMEN: Tankers discharging gasoline required to have uniformed dock watchman. Usually off duty policeman. All ships provide own gangway and deck watch.
OPENING/CLOSING HATCHES: Normally done by stevedores. A few foreign ships prefer doing it with own crew.
CUSTOMS ALLOWANCES: 200 cigarettes, 50 cigars per man, and one bottle, U.S. quart, wine or spirits.
IDENTIFICATION CARDS: Desirable but not required by law.
CONSULS: All in Honolulu.
REPAIRS: Light machine shop, welding and burning and pipe work available. Plantations may do some heavy repairs if part can be sent to their shop. Their engineers are helpful in emergencies. Heavy or technical repairs must be done in Honolulu.
REPATRIATION: Agent can arrange by air via Honolulu. Immigration clearance necessary.
AIRPORT: Lihue is 3 miles from Nawiliwili and 20 miles from Port Allen; served by inter-island regular carriers. Numerous lines, and charter flights available.
TIME: GMT minus 10 hours, all year round.
HOLIDAYS: National: New Year's Day (Jan. 1); President's Day (Feb. 22nd); Memorial Day (May 30th); July 4th; Labor Day (first Monday in September); Election Day (first Tuesday in November); Veteran's Day (Nov. 11th); Thanksgiving Day and Christmas Day (December 25th). Cargo can be worked but at penalty rates.
POLICE/AMBULANCE/FIRE: Nawiliwili: Police 245–6721; Ambulance 2721; Fire 245–2222. Port Allen: Police 382–311; Ambulance 338–8311; Fire 335–5444, or call "O" for operator.
TELEPHONES: Arrangements by Agent.
SHORE LEAVE: Permitted after immigration check. Iron Curtain or Communist visitors may be restricted.
AUTHORITY: Department of Transportation, Harbors Division, administered by the District Manager.

NEW BEDFORD, Massachusetts: 41.38 N. 70.55 W.

DOCUMENTS: See "Boston".
PILOTAGE: 3 Massachusetts State pilots available, ordered through Agent. VHF monitored Channel 16. Pilot on station only after 12 hours notice. Small pilot vessel with basic communication equipment. Pilots board all vessels at Buzzards Bay Buoy at the entrance to New Bedford outer harbour situated at Long. 70° 50′ 07″ W. and Lat. 41° 30′ 42″ N.
ANCHORAGE: It is recommended that vessels delayed due to weather, etc., anchor 0.5 mile South of Buzzard's Bay Bell Buoy.
RESTRICTIONS: A modern harbour approach begins at Buzzard's Bay Buoy and runs a straight course of 7.5 miles direct to the pier facilities. The channel is 350 ft. wide and has a depth of 30 ft. MLW. The channel leads into a moderate size (1,000 yd.) turning basin.
MAX. SIZE: 700 ft. length. Vessels over 30 ft. draft restricted by tides.
HEALTH: See "Health: All Ports" before first U.S. port (Albany). Illness reports made to Boston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port ((Albany).
RADIO: RCA Chatham Radio, New Bedford Marine Operator for VHF, and Boston Marine Operator for ship to shore frequencies.
TUGS: Tugs join vessel in inner harbour. Tug lines used. 2 tugs available. Tugs are not normally used at the State Pier in docking and undocking of deep-water vessels. The large turning harbour basin, the wind-sheltered position of the pier and lack of tidal current minimise use of tugs. In extreme weather conditions tugs are used.
BERTHING: At State Pier, berthing space for 3 ships:
North side 600 ft. length, South side 775 ft. length, East side 450 ft. length.
Depth of water at all berths is 30 ft. MLW.
Maritime Terminal, depth 27 ft.
BRIDGES: Passage to upper reaches of harbour to Maritime Terminal requires navigation through the New Bedford and Fairhaven bridge only in daylight for larger vessels over 250 ft. length.
STEVEDORES: 24 hour notice required for New Bedford Stevedoring Corporation to prepare gear. 25 tons discharged or loaded per hour as average production per gang. Nearly all cargoes handled.
MEDICAL: 24 hours notice required. Excellent hospital facilities available.
TANKERS: Hurricane dike barrier gate 150 ft. wide with depth of 30 ft. MLW.
DENSITY: Static, since tidal variations light. Density same as ocean water.
FRESH WATER: Fresh water available.
FUEL: All types available, to be ordered in advance.

GANGWAY/DECK WATCHMEN: Watchmen available. Non police or police.
OPENING/CLOSING HATCHES: Depends on negotiated contract and cargo handled.
CUSTOMS ALLOWANCES: Designated by U.S. Customs with regard to particular circumstances.
CONSULS: Most Consuls available in Boston, 50 miles or 1 hour away.
REPAIRS: All types of minor ship repairs available.
REPATRIATION: Agent can handle formalities.
AIRPORT: 3 airports within 1 hour drive. All international services.
TIME: Shift ftom Standard to Eastern Daylight Saving Time. Local time GMT minus 6 hours.
HOLIDAYS: New Year's Day (January 1st); Washington's Birthday (February 22nd); Patriot's Day (April 19th); Memorial Day (May 30th); Independence Day (July 4th); Labor Day (first Monday in September); Columbus Day (October 12th); Veterans' Day (November 11th); Thanksgiving Day (last Thursday in November); Christmas Day (December 25th).
TELEPHONES: No telephones on board, but exist adjacent to pier.
SERVICES: All services can be obtained if required.
SHORE LEAVE: If U.S. Immigration has cleared crew member, he is allowed ashore.
AUTHORITY: Harbor Development Commission.

AGENT: New Bedford Stevedoring Corporation, PO Box A. 2090, 10 William Street, New Bedford, Massachusetts 02740. Tel. 617-9934522 (24 hours), 617-9979893 (home), 617-44264. Cable address: "NEBCO", New Bedford, Mass. U.S.A.

NEW HAVEN, Connecticut: 41.14 N. 72.55 W.

DOCUMENTS: Refer to "New York".
PILOTAGE: Compulsory. State Pilots are available on a 24-hour basis and are usually arranged through the ship's Agent or directly by shipping companies. Pilot will board vessel in vicinity of New Haven Sea Buoy, marked "N.H." – short and long flash; black and white vertical stripes. Boarding will be from a 34-ft. steel launch named *New Haven Pilot* – black hull with "Pilot" marked on both sides in white letters, or from a tug-boat. Contact can be made via VHF telephone, Channel 13 (156.65 mHz), Channel 16 (156.80 mHz), or Channel 24 (157.20 mHz).
RESTRICTIONS: Vessels can proceed to and from berths in New Haven Harbour at any hour during the day or night, weather and tide permitting. Entrance channel dredged to 34 ft. MLW.
MAX. SIZE: Draft up to 35 ft. subject weather and tides.
HEALTH: See "Health: All Ports;; before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Vessels arriving from North use Chatham Radio. Vessels from South use Amagansett Radio on Long Island.
TUGS: Assistance is available.
TANKERS: *Atlantic Refining Company:* is on the Eastern side of New Haven Harbour about 0.3 mile South of Tomlinson Bridge.
Humble Oil & Refining Company is on the Eastern side of New Haven Harbour about 0.6 mile South of Tomlinson Bridge.
T.A.D. Jones Coal Company is on the Eastern side of New Haven Harbour about 0.2 mile South of Tomlinson Bridge. Only used for loading oil barges.
Texas Company uses the North side of the New Haven Terminal Pier located on the Eastern side of the New Haven Harbour about 0.4 mile South of Tomlinson Bridge.
Wyatt Coal Sales Company Inc. is on the N.W. side of New Haven Harbour about 0.2 mile South of Tomlinson Bridge.
Gulf Oil Corp.: (Eastern side New Haven Harbour) 0.1 mile South of Tomlinson Bridge.
BALLAST: There are no slop lines available.
FUEL: Available from oil terminals or delivered by barge.
FRESH WATER: Available at all terminals.
MEDICAL: All facilities available.
CUSTOMS ALLOWANCES: At the discretion of Customs Officers. Normal allowance is 200 cigarettes or 2 lb. of tobacco and 1 quart wine/spirits per man. Additional allowances may be given if considered necessary, due length of vessel's stay in port.
AIRPORT: New Haven Airport 1 mile distant. New York International Airport 70 miles distant.
CONSULS: All countries represented in New York.
HOLIDAYS: New Year's Day (1st January); Washington's Birthday (22nd February); Memorial Day (30th May); Independence Day (4th July); Labor Day (first Monday in September); Colombus Day (12th October); Veteran's Day (11th November); Thanksgiving (fourth Thursday in November)' Christmas Day (25th December).
TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours from April to October.
AUTHORITY: State of Connecticut, Department of Transportation, Bureau of Waterways, State Pier, New London.

NEW LONDON: Connecticut: 41.21 N. 72.06 W.

DOCUMENTS: Refer to "New York".
PILOTAGE: Vessel usually notifies Agent 48 hours before arrival, who will arrange Pilot boarding. Pilot boards at Sarah's Ledge, which is close to anchorage at harbour entrance.
ANCHORAGE: In Thames River, and in Long Island Sound, approx. 2 miles W.S.W. of New London Ledge Light bounded by lines connecting points which are following bearings and distances from New London Ledge Light: 246°, 2.6 miles; 247°, 2.1 miles; 233°, 2.1 miles; and 235°, 2.6 miles.
RESTRICTIONS: Pilots recommend daylight docking but can dock at night if necessary. Entrance channel 33 ft. deep.
MAX. SIZE: Dry cargo vessels and tankers 700 ft. long are using the harbour. Facilities for larger vessels will be available when proposed dredging to 36 ft. is completed.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Vessels arriving from North use Chatham Radio on Cape Cod. Vessels from South use Amagansett Radio on Long Island. However, either one may serve the purpose.
TUGS: Usually join vessel at Ledge Light if a dry cargo vessel, and off Sarah's Ledge if a tanker. Tugs use ship's lines; if tug's lines are used this is part of charge.
BERTHING: Advance ETA must be made for berthing, and it is suggested to dock during daylight hours when possible.
State Pier No. 1: depth, 28 to 36 ft. MLW.
Dow Chemical Co. Wharf: depth, 22 ft. MLW.
City Wharf Ferry Terminal: depth, 22 ft. MLW.
BRIDGES: There are no bridges across Main Ship Channel. However, at New London, at the head of the Main Harbour, the Thames River is crossed by 1 drawbridge and a twin fixed bridge: the New York, New Haven and Hartford Railroad bascule bridge with a horizontal clearance of 151.5 ft. and a vertical clearance of 30.9 ft. at high water and a fixed highway bridge with a horizontal clearance of 200 ft. and a vertical clearance of 135 ft. at high water.
STEVEDORES: ETA of 72, 48 and 24 hours is required, as gangs must be requested by 1500 hrs. on weekdays. Average discharge, about 20 tons per gang per hour.
TANKERS: Discharge at Hess Oil Co. berth, 12 in. and 10 in. lines.
Hess Oil Dock: depth alongside 36 ft.
Texaco Wharf: depth alongside 18 ft.
Pfizer Wharf: depth alongside 18 ft.
MEDICAL: All facilities available.
FRESH WATER: Available at pier side through 2.5-in. and 1.5-in. hoses.
FUEL: Available at tanker berths or by barge.
GANGWAY/DECK WATCHMEN: Not required and not recommended.
OPENING/CLOSING HATCHES: Performed by stevedores.
IDENTIFICATION CARDS: Not required.
CONSULS: Nearest at New York.
REPAIRS: 3 waterfront marine repair plants are equipped to repair vessels at the port. The Nelseco Navigation Co. and Thames Shipyard Inc. each owns and operates a plant at New London on the right bank of the Thames River; the General Dynamics Corp., Electric Boat Division owns and operates a shipyard and marine repair plant at Groton on the left bank of the river.
DRY DOCKS: 1 floating dry dock, 1 graving dock and 3 marine railways are available to the public at 2 of the marine repair plants.
1 floating dry dock, steel construction, with a lifting capacity of 6,500 tons, located on the West side of the pier E, has an overall length of 448 ft. length of 435 ft. 6in. on the keel blocks, overall width of 97 ft. inside clear width of 70 ft. and depth of 26 ft. of water over the keel block when submerged.
1 graving dock, located South of Piers A, B, C, and E, has length of 515 ft., width of 70 ft., and 35.5 ft. depth of water over the sill and 34.5 ft. over the keel blocks at MHW.
REPATRIATION: Facilities exist.
AIRPORT: Nearest airport is Trumbull Airport, situated about 3 miles East of Groton, Connecticut. There are scheduled commercial airlines serving this field. Allegheny Airlines and Pilgrim Airlines run frequent connecting flights to Bradley and Kennedy International Airports.
TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours, from April to October.
HOLIDAYS: New Year's Day (1st January); Lincoln's Birthday (12th February); Washington's Birthday (22nd February); Good Friday; Memorial Day (30th May); Independence Day (4th July); Labour Day; Columbus Day (12th October); Veteran's Day; Thanksgiving Day; Christmas Day (25th December). Cargo work can be arranged on holidays.
POLICE/AMBULANCE/FIRE: Police, 443–4315; Ambulance, 443–4388; Fire, 443–4381.
TELEPHONES: Available if required.
SHORE LEAVE: Allowed.
DELAYS: Availability of berthing might cause some delay.
AUTHORITY: State of Connecticut, Dept. of Transportation, Bureau of Waterways, Office of the Deputy Commissioner, State Pier, New London.

NEW ORLEANS, Louisiana: 29.56 N. 90.04 W.

(See Plan)

DOCUMENTS:
3 copies Cargo Manifest (Forms 7527–A or 7527–B), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I–418).
2 copies Crew List (Form I–418).

Customs boarding officer will also examine Ship's Register and Load Line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States Port:

Health Pratique.
Master's Oath (Customs Form 3255).
All foreign clearances.
U.S. Certificates of payment of Tonnage Tax (Customs Form 1022).
Certified Crew List.

The Bureau of Customs at New Orleans, Louisiana, will not, regardless of the circumstances, accept Customs Entry Papers from vessels unless they are on the proper U.S. Custom Forms and properly prepared.

Specially referred to are Customs Forms 1303 (Ship's Stores Declaration), 1304 (Crew Effects Declaration) and 7527 (Inward Foreign Manifest).

U.S. Customs at New Orleans require that the 1303 be completed, that is all stores (deck, engine, etc.) be listed on the form; it must also include fire-arms and medicines. They will not accept "as per attached list".

Form 1304, Crew Effects List, must likewise be properly completed. All effects and curios will have to be listed on the form. The term "souvenirs" is not sufficient and may not be used. All values have to be listed. Attachments to the 1304 are not permitted. (This does not apply to American Flag vessels using the Form I–418 Crew List with Crew Declaration numbers listed for their souvenir list.)

The Inward Foreign Manifest must be Customs Forms 7527–A, 7527–B, or a manifest form approved by the Bureau of Customs, Washington D.C. Should the latter be used it must have the Bureau's approval number printed on the form.

PILOTAGE: Advise Agents ETA at sea buoy 48 hours in advance. Agent will arrange for Pilot. Pilot boat 46 ft. long, red hull, white cabin, flying blue and white Pilot flag. Pilot boards at sea buoy, requires Pilot ladder 6 ft. above water level. Pilot boats can be contacted by VHF, Channel 9 when 30 to 40 miles off, or ship-to-ship Channel 2738. Bar Pilot is exchanged for river Pilot at Pilot town, Head of Passes.

ANCHORAGE: Safe anchorage within 2 miles South pass or S.W. pass entrance. At the Point, below New Orleans, vessels may anchor without tug assistance.

RESTRICTIONS: Draft governed by S.W. pass, project depth 40 ft. Entrance day and night. New Orleans is 115 miles upriver.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available, and join vessel off berth if required. One tug normally used for berthing/unberthing at New Orleans.

BRIDGES: 2 bridges cross river at New Orleans, 1 at Baton Rouge and 1 at Donaldsonville. Sufficient clearance at all times.

BERTHING: *Public Grain Elevator.* No. 2 berth, 670 ft. long, 40 ft. depth; No. 3 berth, 650 ft. long, 40 ft. depth; No. 4 berth, 635 ft. long, 40 ft. depth.

Loading Rates 20,000 bushels per hour per belt, in berths 2 and 3; up to 40,000 bushels per hour per belt, in berth 4. Each berth has 2 loading belts.

Dockside Commodity Terminals: berth 1,200 ft. long, 38 ft. depth, Loading/discharge rates about 200 t.p.h. Bulk handling facility: No. 1 berth, 600 ft. long, 36 ft. depth; No. 2 berth, 600 ft. long, 36 ft. depth; No. 3 berth, 600 ft. long, 42 ft. depth. Loading/discharge rates about 600 t.p.h.

Southern Scrap Material Co: Berth 550 ft. long, 32 ft. depth. Loading 200 t.p.h. with cranes.

Chalmette: Humble Oil Terminal: tanker berth 30 ft. depth; Tenneco Oil Terminal: tanker berth 35 ft. depth.

Kaiser: Chalmette Wharf: Aluminium discharge facilities, max. draft 38 ft.

Terminals on West Bank of Mississippi:

Amesville: Texaco tanker loading berth, 34 ft. alongside. 2×8-in. hoses loading up to 12,000 b.p.h. No ballast facilities.

Avondale: American Liberty Tank Terminals berth, 60 ft. alongside. 4 × 6-in. hoses loading up to 18,000 b.p.h. No ballast facilities. International Tank Terminals berth, 45 ft. alongside. 12-in. hoses loading 150 t.p.h.

Gretna: Publicker Chemical Corp.: berth 30 ft. alongside. Southern Pacific Company: berth 600 ft. long, 35 ft. depth; dry cargo discharging only. Industrial Molasses Corp: berth 27 ft. depth; 2 × 10-in. pipe-lines, loading 200 t.p.h.

Marrero: Hess Terminal Corp: tanker berth 38 ft. depth; 6 × 12-in. hoses loading 500 t.p.h. Texaco: tanker berth 35 ft. depth; 6 × 16-in. lines loading 250 t.p.h. No ballast facilities.

St. Rose: Cities Service: tanker berth 35 ft. depth; International Tank Terminals: berth 35 ft. depth; no fresh water available.

Westwego: Continental Grain Elevator: berth 600 ft. long, 40 ft. depth; loading 1,000 t.p.h., 2 loading belts. Louisiana Dock: 28 ft. alongside, bulk oil products loaded 200 t.p.h. Pacific Molasses Co: berth 35 ft. alongside.

CONTAINER HANDLING FACILITIES: Handled at most docks. Full container facilities at Morrison Yard wharf, length 430 ft. France Road berth No. 1 with 830 ft. leased to Sea-Land. Napoleon Avenue wharf 1,520 ft. Nashville/Henry Clay wharf 2,820 ft.

STEVEDORES: Working hours 0800–1200 and 1300–1700 hrs. Monday to Friday.

MEDICAL: All facilities available.

DENSITY: Fresh water (1000).

FRESH WATER: Available ex-wharf.

FUEL: Only available by barge. Oil companies can supply Bunker "C" ex-terminals at Amesville and Marrero.

GANGWAY/DECK WATCHMEN: Recommended if any crew detained by Immigration.

DEVELOPMENTS: A second container berth under construction at France Road Container Terminal. Wharf will be 700 ft. long with crane capacity 40 tons.

CUSTOMS ALLOWANCE: At the discretion of Customs officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I–95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I–95, issued for the same vessel.

AIRPORT: New Orleans International Airport, served by most airlines.

TIME: Central Standard Time. Daylight Saving Time from May to October.

HOLIDAYS: New Year's Day (1st January); Martin L. King's Birthday (15th January); Good Friday; Memorial Day (30th May); Independence Day (4th July); First Monday in September (Labor Day); Veteran's Day (Last Monday in October); Fourth Thursday in November (Thanksgiving); Christmas Day (25th December), No work on New Year's Day, Independence Day, Labor Day and Christmas Day.

SHORE LEAVE: Allowed for any crew member not detained by Immigration.

DEVELOPMENTS: A 3-berth general cargo complex, to be built on part of the old Illinois Central-Gulf's Stuyvesant Docks site, beginning at Louisiana Avenue and extending several blocks upstream.

A third full-container berth and marshalling area at the France Road Container Terminal on the Industrial Canal.

A new roll-on/roll-off cargo-handling facility on the Industrial Canal adjacent to the Florida Avenue wharf, and new ship-repair facilities at the Alabo Street wharf on the Mississippi below the Industrial Canal.

The roll-on/roll-off facility completed 1974 and the other facilities during the next year.

SHIPMASTER'S REPORT: *December 1975*

Documents:

1 Crew List on Form I–418 to be visaed by US Consul at last port prior to arrival at a US port.
4 Crew Lists on Form I–418 (Another 2 copies if coastwise).
4 Store Lists on Form 1303 (Another 2 copies if coastwise).
4 Crew Effects Declaration 1304 (Another 2 copies if coastwise).
4 Ship Stores Declaration. 1303 (Shop List).
1 Crew Landing Permit Form I–95A is required by every crew member not having a plastic Permit Form I–184. also seamans Red I.D. Card or Passport (Discharge Book does not repeat Not qualify as a travelling document).

Masters Oath and General Declaration are normally completed by Agent.
Radio Pratique. No Form required.
Clearance from last port.
Ships Register with all certificates up to date.
2 Copies of Manifests covering cargo in transit.

Customs: Stores List. Curio List. 1 Crew List. Sealed High Duty Bond, Unchecked.

Immigration: Visaed Crew List. Seamans Red I.D. Card or Passport along with American Crew Pass. Typed. Question asked by Officials "How long at sea?" I.D. Card handed back to seaman with American Pass stamped. Department very thorough and efficient.

No mail or money to be distributed until Immigration completed, also no persons permitted ashore or onboard until formalities completed except for Agents and Officials.

If no visaed crew list Master signs official form. Cost US$10.0 for whole ship's company.

Port Health: Radio pratique not granted as seamens' cards not completed. No representative visited vessel. Report any death through Agents.

Agriculture Dept.: Inspected vessel. Galley, Messrooms, Store-rooms, etc. Meat and Vegetable rooms sealed.

Garbage bins to be covered (Collection expensive, retain on board until sail if possible).

Rat guards to be used.

Provisions and Stores: Select own supplier. Agent reticent to suggest anyone. Prices comparable UK with good quality expensive. Stores and Medicines ordered through providor.

Laundry: Satisfactory. Billed by weight. 24 hour service.

Watchmen: None placed on board but security police at section openings.

Telephone: None placed on board. Use office on quay side.

Water: Plenty available. Shore connections used. Cost, 23 cents per 1,000 gallons.

Bunkers: Delivered by barge. Charged for what is ordered. Do not over stem. Barge hired from private firm. Any bunkers not taken paid for and revert to barge owners.

Walport Films: Exchanged.

Coast Guard: Require number of Oil Pollution Certificate (Certificate of Financial Responsibility). Whether AMVER participant. Require ship's particulars including horsepower. Displacement tonnage on sailing. Name of Master and Chief Officer. Dangerous cargo particulars and stowage.

National Cargo Bureau: Representative from National Cargo Bureau comes onboard and requests ship's particulars also ports of call to and from. Inspector looked at hatches where cargo to be loaded. He then issues a Certificate of Readiness. Loading can then commence.

Code of Federal Regulations: Each ship should have a copy. Difficult to come by. Acquired 1970 copy from Agents. Equivalent to our 'Blue Book'.

Repairs: Select own firm. Anxious to please. Unable to judge as little work contracted out.

Money: Delivered by separate security firm. Satisfactory.

Radio Messages: Send ETA at least 48 hours before arrival to Agents and Branch Pilots with draft. Notify Captain of Port of any explosives for discharge or in transit. If all healthy and documentation correct ask for Radio Pratique. Confirm ETA at 24 and 10 hours. Inwards send ETA to Agents after passing Pilot Town. Agent will notify if radio pratique granted. Not necessary to fly "Q" flag going up river.

Stevedores: Hours of work 0800 to 1200 hrs., 1300 to 1700 hrs. Straight time. Weekday gangs will work until 1800 or 1900 hrs. to finish. Night: 1800 hrs. to midnight, 0100 to 0600 hrs. Head Stevedore checks Factory Act Book. Gangs will work continuously except for 3 hours in any 24 hours. 4 different Union Contracts. Plan maker makes own plan then airmails same to ports of discharge. Crew open hatches also close same. Crew not to do any cleaning.

General: Use S.W. Pass at all times. South Pass has only 18 ft. of water and shoaling all the time.

Pilot boards on lee side at Sea Buoy – Flash "A" (· –) from fast launch painted black. Ladder about 6 ft. from water level. Branch Pilot takes vessel to Pilot Town where River Pilot takes over. Ladder usually starboard side inward and port side outward 8 ft. above water. First come first served at sea buoy. About 1.5 to 2 hours from Sea Buoy to Pilot Town and about another 6 hours to berth. Proceed up river at harbour full speed. Reduce speed occasionally for long tows, dredgers and ships on loading berths.

River Pilot docks vessel.

Signals by day "H" flag. By night nothing.

Inland waterways rule of road applies.

We had clear daylight run up river and down at night. Mid December. Start of fog. Low fog experienced on water also some patches, fairly thick. If fog does develop it is worth remembering that once past Pilot Town Southbound, few if any places to anchor and one has to continue on.

Racon at entrance useful. Anchorages as per charts. When arriving contact Pilot on VHF Channels 9, 12, 13.

Berth: Satisfactory. 24/29 Market Street. Just past bridge. Quite a long walk to open section to get out of docks. Recommend at night get taxi back and if walking into town by day at least 2 persons.

Sufficient bollards. No cranes. Berth head up. Usually starboard side to.

Moorings. 4 headlines, 4 stern lines plus 2 springs each end. Passing traffic fairly heavy with considerable wash. Rat guards a requirement.

Ship's gangway. Quay about 25 ft. above water level. Wooden pile fenders very effective.

Tugs: Used for berthing and unberthing. 1 only alongside port forward shoulder. 2 tugs lines. When making fast tug passes portable Walkie Talkie on board to send up to Pilot on bridge. Pilot left by tug which used own ladder.

Radar: Satisfactory repairs carried out.

AUTHORITY: Port of New Orleans, Board of Commissioners.

NEW YORK, New York and New Jersey: 40.43 N. 74.00 W. (See Plan)

DOCUMENTS:

3 copies Cargo Manifest (Forms 7527–A or 7527–B), the original showing all cargo on board, and 2 copies showing only cargo for this port.

2 copies Crew Manifest (Curio List).

2 copies Stores List.

2 copies Passenger List (Form I–418).

2 copies Crew List (Form I–418).

Customs boarding officer will also examine Ship's Register and Load Line Certificate.

In addition the following documents will be required for formal entry, to be made within 48 hours of arrival from abroad:

Health Pratique.

Master's Oath (Customs Form 3255).

All Foreign Clearances.

U.S. Certificates of payment of Tonnage Tax (Customs Form 1002).

Certified Crew List.

PILOTAGE: Compulsory for foreign flag ships, and U.S. ships bound to and from foreign ports.

24 hours notice of ETA required. Pilot boat should be contacted on VHF Channel 16, or ship-to-ship Channel 2638 or 2738. Vessels requiring Pilot should hoist signal letter "G" in daytime. In foggy weather the letter "X" should be sounded on whistle.

Pilot boat is generally found about 1.5 miles West of Ambrose Light Tower. In bad weather Pilot tries to stay windward of normal Pilot station.

In poor visibility an inbound ship should make Ambrose Tower and then proceed at slow speed to the Ambrose Channel sea buoy while blowing the letter "X" on her whistle. If no Pilot is obtained by the time she is in the vicinity of the sea buoy she should then anchor about 0.5 mile to 1 mile North of the line from Ambrose Tower to the sea buoy and await Pilot.

RESTRICTIONS: Ambrose Channel, 10 miles long, maintained to a width of 2,000 ft. and a depth of 45 ft. MLW. The Northern approach to the harbour is through Long Island Sound into the East River. Main channels in the port are maintained to a depth of 45 ft. MLW.

MAX. SIZE: Restricted only by berth depth and location.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

ANCHORAGES: For ships entering from Sandy Hook there are anchorages in lower New York Bay, Gravesend Bay, Raritan Bay, and Arthur Kill off Perth Amboy. In the Upper Bay, anchorages available off Bay Ridge for 30 days, off Jersey City for 72 hours, and off Stapleton for 48 hours. For vessels entering via Long Island Sound there are anchorages in the Western end of the Sound and in the East River.

VHF: All vessels over 100 tons gross are required to keep continuous watch on VHF Channel 13 when in areas where U.S. Inland Water Regulations apply.

ANCHORS: Vessels entering New York harbour are required to have 2 working anchors, by U.S.C.G. regulations.

TUGS: Over 50 private towing and transportation companies registered in the port.

BERTHING:

Staten Island: Howland Hook Container Terminal, 3 berths (32 ft. alongside).

Brooklyn: 57 general cargo berths, including 2 container berths at Northeast Terminals, and 27 Modern breakbulk berths at the Brooklyn Port Authority Piers (depth alongside range 30-34 ft.).

East River: 3 berths general cargo piers on Manhattan shore.

Hudson River: New Passenger Ship Terminal on Manhattan Shore between 48th and 52nd Streets provide 6 ship berths. 3 berth passenger ship facility at Houston St.

Hoboken Port Authority Marine Terminal: 3 piers, 6 general cargo berths.

Weehawken: 2 berth container facility at Port Seatrain.

Jersey City: 2 berth container facility at Port Jersey (Global Terminal).

Newark, N.J.: Port Newark (22 general cargo, 5 specialized, and 4 container berths). Depth range alongside 30-34 ft.

Elizabeth, N.J.: Elizabeth Port Authority Marine Terminal, 22 full container berths, channel depth 35 ft.

CONTAINER FACILITIES: *Newark and Elizabeth, N.J.:* Port Newark and Elizabeth Marine Terminal on the Western shore of Newark Bay, most intensively developed container terminal area in the world with almost 4 miles of berthing space, over 1,265 acres of container marshalling area, 23 container gantry cranes with capacity range of 30-70 tons. An international railroad container transfer yard serves both terminals.

Jersey City: A 2 berth, 84 acre container facility (Global Marine Terminal, Port Jersey) with 1,800 ft. of berthing space and 3 container cranes of 40 ton capacity.

Staten Island: A 3 berth container terminal at Howland Hook at the Northwest corner of Staten Island of 187 acres with 2,500 ft. of berthing space, 4×30-ton and 1×40-ton gantry cranes.

Weehawken: A 2 berth container facility at Port Seatrain of 87 acres and 1,885 ft. of berthing space equipped with 3 × 45-ton gantry cranes.

Brooklyn: 2 container berths of 87 acres with 2 gantry cranes of 50 and 70 tons capacity located between 29th and 39th Streets.

CRANES: Mobile floating cranes with capacity up to 500 tons available.

STEVEDORES: 13 stevedoring firms are active in the port, many of whom are also terminal operators. Normal working hours 0800-1700. Bulk Cargo work usually continues through 24 hours.

TANKERS: *Brooklyn:* Paragon Oil Terminal, 2 berths, depth 37 ft.; Patchoque Oil Terminal, 2 berths, depth 29 ft. and 35 ft.; Whale Oil Terminal, 1 berth, depth 36 ft.

Hudson River: Tappan Oil Co., 1 berth, 35 ft.

Bayonne, N.J.: Public Oil Terminal, 3 berths, 32 ft. depth; Humble Oil Terminal, Constable Hook, up to 38 ft. depth; Ross Oil Co., 3 tanker berths up to 38 ft. depth; Texas Oil Co., 4 tankers berths, up to 32 ft. depth; Texaco, 4 berths up to 32 ft. depth.

Kill Van Kull: Lehigh Tanker Terminal, chemicals, 35 ft. depth; Humble Oil Co., 3 tanker berths, up to 38 ft. depth; Texas Oil Co., 4 tanker berths up to 32 ft. depth; Ross Oil Co., 1 berth up to 32 ft. depth.

Newark, N.J.: 4 berths, 31 and 32 ft. depth.

Elizabeth N.J.: Chevron Oil Company, 1 tanker berth, 26 ft. depth; Crown Central, 1 tanker berth, 30 ft. depth.

Arthur Kill: **Perth Amboy:** Chevron Oil Co. (tanker berth, 26 ft. depth); Hess Oil Co. (tanker berth 30 ft. depth); Cities Service (tanker berth, 34 ft. depth); **Sewaren,** Royal Petroleum Co. (tanker berth, 32 ft. depth); Public Service Co. (tanker berth, 35 ft. depth); Shell Oil Co. (tanker berth, 35 ft. depth). **Port Socony,** Mobil Oil Co. (2 tanker berths, 27 and 30 ft. depths). **Carteret,** American Oil Co. (tanker berth M, 25 ft. depth); General American (2 tanker berths, 25 and 35 ft. depth). **Linden,** Cities Service (tanker berth, 32 ft. depth); Humble Oil Co. (tanker berth, 35 ft. depth); Sinclair Oil Co. (tanker berth 31 ft. depth). **Gulfport,** Gulf Oil Co. (tanker berth, 32 ft. depth).

Shipmaster's Report: December 1976:

Greater New York Terminal, Astoria, Long Island:

Location of Berth: 40° 47′ N., 73° 53.7′ W.

Distance from Entrance to Berth: 28 miles.

Max. Size at Berth: LOA, 900 ft. Draft, Pilot stated 34 ft.

Restrictions: Vessel should be ballasted sufficiently to pass under Brooklyn Bridge, clearance 127 ft.

Vessels may berth and unberth day and night but only at certain stages of the tide.

Anchorage: At Stapleton as designated by USCG.

Terminal Information: Starboard side manifold to barge at Stapleton Anchorage, use 6 in. hoses. Port side manifold use at the berth, ships hoses not required. The connection is 12 in. running into 18 in. Nearest shore tank 1,000 ft. from berth. Line fitted with steam jacket but not efficient. Max. pressure allowed 125 p.s.i. Shore gantry used at berth. Derrick used at anchorage for discharging into barge. Product handled: Fuel Oil (Heating Oil). No slop tanks available.

General: Pilotage compulsory. Ambrose Pilot requires 24 hours notice of arrival. Radio station handling traffic is Chatham. Most services are available at the berth, however it is advisable to take stores and send laundry from Stapleton Anchorage as there is no means of delivery at the berth other than carrying by hand. Stapleton Launch Service, tel. 981-8333/8384. Fresh water may have to be taken by barge in very severe weather as shore lines become frozen.

Approaching: From a Line from Rockaway Inlet to Ambrose thence Highlands Light, vessel must remain on VHF Channel 13 for ship-to-ship communication. When Pilot on board he maintains this Channel and ship can use own VHF other Channels. Marine operator on VHF 26 (call). For the passage of East River (Remember Brooklyn Bridge Clearance 127 ft.). One tug each bow alongside. After Hell's Gate and passing Port Morris to port, vessel cants to starboard to pass between North and South Brothers to starboard and Rikers Island to port through 500 ft. wide buoyed channel (some unlit) South to berth (inwards). It is preferable to come through Hell's Gate at HW or LW slack, thus avoiding cross currents between Brothers at other times.

FRESH WATER: Available at most piers in the port district at a nominal rate. Water barge available to serve vessels at anchor in emergency but this is expensive.

FUEL: All grades of fuel readily available. Except for tankers loading or discharging, bunkers are normally delivered by barge. It may be economical to shift vessel to refuelling berth.

GANGWAY/DECK WATCHMEN: Available and recommended if any crew detained by Immigration.

CUSTOMS ALLOWANCE: 200 cigarettes or 2 lb. tobacco, 1 quart wine/spirits per man.

IDENTIFICATION CARDS: Standard U.S. Immigration forms I–95 to be made up for each crew member on arrival.

CONSULS:

Australia	tel. Circle 5–400
Belgium	tel. Judson 6–5110
Brazil	tel. Plaza 7–3080
Canada	tel. Judson 6–2400
Chile	tel. 682–9120
Denmark	tel. 679–5101
Finland	tel. 832–6550
France	tel. Lehigh 5–0100
Germany	tel. Murray Hill 8–3523
Great Britain	tel. Plaza 2–8400
Greece	tel. Yukon 8–5500
India	tel. Trafalgar 9–7800
Italy	tel. Regent 7–9100
Japan	tel. Yukon 6–1600
Liberia	tel. Mu. 7–1025
Netherlands	tel. 246–1429
Norway	tel. Wh. 4–6920
Panama	tel. Circle 6–3773
Portugal	tel. Circle 6–4580
South Africa	tel. Templeton 8–1700
Spain	tel. Eldorado 5–4080
Sweden	tel. 751–5900
Venezuela	tel. Plaza 7–7750

And many others.

REPAIRS: All facilities available for any size vessels.

DRY DOCKS: 4 docks with lifting capacities up to 25,000 tons (Bethlehem) and 1 dry dock capable of handling vessels of up to 1,100 ft. LOA, 140 ft. beam and 120,000 d.w.t.

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours from April to October.

AIRPORT: Kennedy International Airport, Newark International Airport, La Guardia Airport.

HOLIDAYS: New Year's Day (1st January); Lincoln's Birthday (12th February); Washington's Birthday (22nd February); Good Friday; Memorial Day (30th May); Independence Day (4th July); Labor Day (first Monday in September); Columbus Day (12th October); Armistice day (11th November); Thanksgiving (fourth Thursday in November); Christmas Day (25th December). No work on New Year's Day, Independence Day, Labor Day and Christmas Day.

SHORE LEAVE: Allowed except for crew members detained by Immigration.

AUTHORITY: Port Authority of New York and New Jersey.

NIKISKI, Alaska: 60.41 N. 151.24 W.

Located on West side of Kenai Peninsula between Homer and Anchorage. Pan and brash ice in Inlet from November to March. Never freezes solid. Open all year.

APPROACHES: Via Cook Inlet.

DOCUMENTS: See "Anchorage, Alaska".

TUGS: From Anchorage.

PILOTAGE: Pilot pick-up point 1 mile South of Homer Split light. Also see "Homer" Pilotage.

MAX. SIZE: Harbour depth excess 40 ft. Max. size 80,000 d.w.t. Tides diurnal range 28 ft. Also "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

ANCHORAGE: Good anchorage.

CUSTOMS: Quarantine, local. Immigration and Customs from Anchorage, Alaska.

BERTHING: 1, Port Nikiski Dock: 3 sided, 550 ft long, 200 ft. on each side, 1,000 ft. wide, 12 feet at MLLW. 400 ft. by 75 ft. covered storage.

2. 3 finger piers for tankers and bulk carriers. All exceed 40 ft. depth.

All 3 berths are dolphin berths ideal for rapid bulk loading. Main products, *(a)* Collier Chemical Dock: bulk area and ammonia gas. *(b)* Phillips Petroleum Dock: petroleum products and liquid natural gas. *(c)* Kenai Pipe-line Dock: refined and crude Petroleum products.

STEVEDORES: 2 gangs.

REPAIRS: Some at Kenai.

WATER: Limited.

FUEL: Not available.

MEDICAL: Health Centre, 3 doctors, 3 dentists.

TRANSPORTATION: Highway to Anchorage and Homer. Air transport available.

OAKLAND, California: 37.50 N. 122.18 W.

(See Plan)

Also See "San Francisco" *for Documents, Pilotage, etc.*

HEALTH: See "Health: all Ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

BERTHING: *Outer Harbour Terminal:* Operator: Marine Terminals Corporation., 1401 Terminal Street, Oakland, Ca. 94607. Tel. (415) 832-1682. Berth 10 operated by Crescent Warehouse Co., 1625 Maritime Street, Oakland, Ca. 94607. Tel. (415) 763-1550.

4 break-bulk and 1 combined break-bulk/container berth. Length 2,245 ft. (839 ft. at berth 10). Depth 35 ft. at MLLW. Facilities: Fork-lift and tractor break-bulk cargo operations. 250 ton mobile crane, equipped to handle 20 and 40 ft. containers (Berth 5), rail tracks alongside berth.

Sea-land Container Terminal: Operator: Sea-land services, Inc., 1425 Maritime Street, Oakland, Ca. 94607. Tel. (415) 271-1000.

Berths: 2, Length 1,355 ft., water depth 40 ft. MLLW.

Container handling facilities: 4 Paceco, 30-ton cranes; 2 truck scales; 250 refrigerated container outlets. Chassis operation.

Matson Container Terminal: Operator: Matson Terminals, Inc., 3050 7th Street, Oakland, Ca. 94607. Tel. (415) 893-2456.

Berths: 3, including 1 for roll-on/roll-off operations. Length 2,220 ft., depth 35 ft. MLLW.

Container-handling facilities: 3 container cranes – 27.5 ton Star; 30-ton Paceco; 33-ton Star. 1 truck scale; 200 refrigerated container outlets. Container yard is straddle carrier-type operation (containers stored 2 or more high).

Oakland Container Terminal: Operator: Oakland Container Terminal Co., 5100 7th Street, Oakland, Ca. 94607. Tel. (415) 834-5822.

Berths: 1, length 638 ft., depth 35 ft. MLLW.

Container handling facilities: 1 low-profile Paceco, 30-ton container crane; 1 truck scale; 115 refrigerated container outlets. Container yard utilises wheeled Paceco transtainers. Containers are stored 5 abreast and 2 or more high.

7th Street Public Container Terminal: Operator: Marine Terminals Corporation, 5190 7th Street, Oakland, Ca. 94607. Tel. (415) 839-6490.

Berths: Three. 2 container, 1 roll-on/roll-off and combination break-bulk/container. Length 2,325 ft., water depth 35 ft. MLLW.

Container handling facilities: 2 Paceco low-profile, 40-ton container cranes; 1×140-ton Manitowac crawler crane; 2 truck scales; 96 refrigerated container outlets.

United States Lines Container Terminal: Operator: United States Lines, 1579 Middle Harbor Road, Oakland, Ca. 94607. Tel. (415) 465-4010.

Berths: 1, Length 722 ft., water depth 35 ft. MLLW.

Container-handling facilities: 2 Alliance low-profile, 51-ton container cranes, 1 crane modified for 125ft. outreach at 39 tons; truck scales and outlets for 51 refrigerated containers. Container yard is chassis-type operation.

Middle Harbour Public Container Terminal: Operator: Marine Terminals Corporation, 1567 Middle Harbor Road, Oakland, Ca. 94607. Tel. (415) 839-6490.

Berths: 1. Length 721 ft., water depth 35 ft. MLLW. 50 Refrigerated container outlets, cranes available from adjoining container terminals.

American President Lines/Seatrain Container Terminal: Operator: American President Lines, Inc., 1395 Middle Harbor Road, Oakland, Ca. 94607. tel. (415) 271-8000.

Berths: 2. Length 1,300 ft., water depth 35 ft. MLLW.

Container handling facilities: 2 Alliance low-profile, 55 ton container cranes, 1 crane modified for 125 ft. outreach at 47 tons.; 3 truck scales; 108 refrigerated container outlets. Container yard is chassis-type operation.

Grove Street Terminal: Operator: Unassigned: Contact Port of Oakland for information. 3 berths, length 1,742 ft., depth 35 ft, at

MLLW. Facilities: Break-bulk cargo operation utilising fork-lifts and tractors. Rail tracks alongside berths.

9th Avenue Terminal: Operator; Marine Terminals Corporation, foot of 9th Avenue, Oakland, Ca. 94606. Tel. (415) 452-3742.

Berths: 3. Length 2,052 ft., depth 35 ft. at MLLW.

Facilities: Import steel and bulk cargo-handling centre. 2 Manitowac crawler cranes (capacity 150 and 100 tons). 2 Manitowac truck cranes (capacity 100 and 80 tons). Bulk-loading facilites with 10 steel storage silos capable of holding 9,750 cu.ft. each. Rail track alongside berth.

TANKERS: *Outer Harbour Terminal, Oil Pier:* Operators: Mobil Oil Co. and Ashland Oil Co. Length, 623 ft. (Lower Side) 683 ft. (Upper Side). 50 ft. (Face). Depth at MLLW. 33 ft. (Lower Side). 35 ft. (Upper Side). 36 ft. (Face).

Mobil Oil: Pipe-lines 4×10-in., 2×8-in., 3×6-in. and 1×4-in. 14 storage tanks, total capacity 522,100 barrels.

Ashland Oil: Pipe-lines 2×8-in., 3×6-in. 9 storage tanks, total capacity 142,300 barrels.

AUTHORITY: Port of Oakland.

OGDENSBURG, New York: 44.42 N. 75.30 W. (See Plan)

Refer to "St. Lawrence Seaway" for important general information.
PILOTAGE: Seaway Pilot boards at Cape Vincent or Snell Lock and acts as docking Pilot.
ANCHORAGE: Anchorage area West of city at open roadstead area.
RESTRICTIONS: No tide. No restrictions other than Pilots' discretion as to wind and visibility.
MAX. SIZE: Largest vessel to enter 600 ft. long. Draft 27 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Western Union to OCN Corp. VHF Seaway Channel via Maria Radio Cardinal.
TUGS: No tugs necessary.
BRIDGES: Ogdensburg/Prescott International Bridge – 126 ft. clearance MWD.
BERTHING: By prior notice only. Port Authority Terminal, length 600 ft., depth 27 ft. One Grain Elevator capacity 500,000 bushels.
CRANES: Available, up to 82 tons capacity.
STEVEDORES: Order by 1800 hrs. day preceding arrival. Advise any change of ETA.
MEDICAL: Excellent medical service and availability of doctors. No vaccination necessary.
DENSITY: Fresh water.
FRESH WATER: Available by pipeline at Port Authority Terminal.
FUEL: One day's notice, all grades. Diesel, bunker "C", Kerosene.
GANGWAY/DECK WATCHMEN: Normally not used.
OPENING/CLOSING HATCHES: By stevedores.
CUSTOMS ALLOWANCES: Tobacco, wine/spirits, normal Customs allowance U.S. Ports.
CARGO GEAR: 25-ton mobile crane, fork trucks to 13 tons capacity. Ship's gear to be in good working order.
IDENTIFICATION CARDS: Needed as per Immigration department requirements.
REPAIRS: Limited dockside repairs available.
REPATRIATION: Can be arranged.
AIRPORT: (0.5 mile from city). Allegheny Airline – 3 flights daily to Syracuse, New York, etc.
TIME: 5 hours difference Eastern Standard Time. Daylight Saving time in Summer.
HOLIDAYS: New Year; Washington and Lincoln's Birthdays; Memorial Day; 4th July. Labour Day, Veteran's Day,
POLICE/AMBULANCE/FIRE: Police, 393–1551; Ambulance, 393–1221; fire, 393–1010.
TELEPHONES: Available at Pierside (315) 393–7580.
SHORE LEAVE: Crew members allowed ashore.
AUTHORITY: Ogdensburg Bridge and Port Authority.

OLYMPIA, Washington: 47.00 N. 122.53 W. (See Plan)

DOCUMENTS, PILOTAGE, etc.: Refer to "Tacoma".
ANCHORAGE: Good with muddy bottom found anywhere North of the channel entrance and the Olympia shoal.
MAX. SIZE: Olympia's turning basin is 800 ft. width; the pier, 2,000 ft. in length; depths in channel, 30 ft., and alongside pier, 35 ft.; both at MLLW. Depth at Berths No. 1 and 4, 35 ft. and at Nos. 2 and 3, 40 ft. MLLW.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Tugs normally join vessels in outer channel, use ships lines and are primarily engaged for turning vessel in turning basin on entry.
STEVEDORES: Available.
FRESH WATER: Available.
FUEL: Available.
CARGO GEAR: Usual requirements only as good facilities are available.
REPAIRS: Most types of repairs undertaken.
AIRPORT: Located 4 miles South of Olympia, fronts on Interstate Highway 5. Operates twice daily service to and from Seattle and Portland.
TELEPHONES: Shipboard telephone service is provided.
SERVICES: Most services are available upon request.
SHORE LEAVE: Allowed.
AUTHORITY: Port of Olympia.

ORANGE, Texas: 30.06 N. 93.44 W. (See Plan)

DOCUMENTS: Crew Lists, Passenger List and Customs Documents.
PILOTAGE: Radio to Agent, 12 hours and Pilots 2.5 hours in advance of ETA. Pilots contacted by VHF Channel 12 and 13. Pilots board at Sabine Pass, Sea buoy position 29° 36′ N., 93° 48′ W. or upon request board at 29° 25′ N., 93° 40′ W. Pilot boats FM (VHF) Channel 65 – 156.275 mc/s.
ANCHORAGE: Off Sabine bar – 40 ft.
RESTRICTIONS: Sabine River Channel: project depth 30 ft.; bottom width 200 ft., including slip at port; marked and lighted for 24-hour navigation. Turning basin, 1,000 ft.×3,000 ft.
MAX. SIZE: Length – no limit, breadth – no limit, draft – 30 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: RCA – Global Communications.
TUGS: Join vessel in port turning basin. Tug's line used, no charge.
BERTHING: 2,308 ft. mooring space to accommodate 4 deep-sea vessels; all concrete docks; additional berthing space in slip for laying-up 4 vessels.
STEVEDORES: 5 stevedore companies – handled through Agent.
MEDICAL: Local facilities – complete.
TANKERS: Limited to 30 ft. draft.
DENSITY: Brackish.
FRESH WATER: Ample fresh water, through 2.5 in. connection, rate of delivery about 500 gallons per minute.
FUEL: All grades available; 8 hours advance notice required.
FIRE PRECAUTIONS: No welding or burning without U.S. Coast Guard welding permit; also special authority required for ships loading explosives.
DEVELOPMENTS: Additional 37 acre tract on Sabine River for future development.
CONSULS: None available locally.
REPAIRS: Facilities available.
DRY DOCKS:

Levingston Shipyard – Orange.
400 ft.×126 ft. 11,000 tons, 17 ft. draft over blocks.
350 ft.×60 ft. 3,000 tons, 15 ft. draft over blocks.
250 ft.×72 ft. 3,000 tons, 11 ft. draft over blocks.

REPATRIATION: Can be arranged through area immigration.
AIRPORT: Local, no scheduled airlines. Mid County Airport with scheduled airline service – 30 miles.
HOLIDAYS: New Year's Day; Martin Luther King's Birthday; Lincoln's Birthday; Washington's Birthday; Texas Independence Day; Good Friday; Memorial Day; Emancipation Day; Independence Day; Labor Day; Columbus Day; Veterans Day; Thanksgiving Day; Christmas Day; Any holiday which falls on Saturday or Sunday will be recognized on the following Monday. No work performed on Labour Day or Christmas Day.
POLICE/AMBULANCE/FIRE: Police 883–5654; Ambulance 883–4333; Fire 886–7431.
TELEPHONE: Can be connected on board.
GENERAL: No strong tidal currents at the berths, excellent shelter during tropical storms.
AUTHORITY: Orange County Navigation and Port District.

OSTRICA, Louisiana: 29.22 N. 89.32 W.

East Bank of Mississippi river about 42 miles above S.W. Pass entrance.
DOCUMENTS/PILOTAGE: For all general information refer to "New Orleans".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
ANCHORAGE: Available in river downstream of docks.
TUGS: Not normally required.
BERTHING: Gulf Refining Co. Terminal, tanker berth 45 ft. depth. 2×8-in. hoses loading 34,000 bbls. per hour. Ballast line 18 in. for slop discharge.
FRESH WATER: Not available.
FUEL: Bunker "C" available ex-wharf.
DENSITY: Fresh water (1000).

OSWEGO, New York: 43.28 N. 76.30 W. (See Plan)

Oswego harbour is located on the South shore of Lake Ontario about 15 miles from its East end at the outlet to the Oswego River. It is the first major port on the Great Lakes off the seaway. It is also the Great Lakes entrance to the Great Lakes – Hudson River Waterway which connects with the Hudson River at Troy.
PILOTAGE: No requirements.
RESTRICTIONS: Average navigation season – April 1st to December 15th.

Approaches: Through entrance between the Arrowhead Breakwater pier heads and detached breakwater.

Entrance is 750 ft. wide with a depth of 25 ft. at LW datum.
Controlling depth of water 25 ft. at datum.
No Vessel length and beam limitations.
Approach open 24 hours a day.
Navigation lights available

Harbour: Controlling depth – front of each terminal open for public use. 21 ft. on West side. 28 ft. on East side.

Turning Basin – 115 acres.
Accessible 24 hours per day.
No Vessel length and beam limitations.

TUGS: Towage facilities available on request.

BERTHING: The general cargo facilities are operated by the Port of Oswego Authority. The West Side Facility is a finger pier 1,000 ft. long providing 4 berths and has 21 ft. of water alongside at LW datum. 28,000 sq. ft. of covered storage is available with limited open storage. A million bushel grain elevator is situated on this pier. The East Side Facility is a marginal wharf 1,900 ft. long, providing 3 berths and has 27 ft. of water alongside at LW datum. 134,000 sq.ft. of covered storage is available with unlimited open storage.

Oswego exports general cargo. It imports grain, cement, wood pulp, petroleum and general cargo.

New Marginal Wharf: Length of berth 1,750 ft. Depth 25 ft at LW datum.

BRIDGES: None.

CRANES: Mobile heavy lift equipment available.

BULK HANDLING FACILITIES: One 1,000,000 bushel capacity elevator equipped with 3 loading spouts, 2 Marine legs and 2 car pits.

FRESH WATER: Available at all general cargo docks.

FUEL: Seaway Terminal of Metropolitan Petroleum Corporation, 4 tanks – Capacity 327,000 barrels of No. 2 and No. 6 oil. Coal bunkerage available by truck delivery.

CONSULS: None.

REPAIRS: Above waterline repairs available.

AUTHORITY: Port of Oswego Authority.

PALM BEACH, Florida: 26.46 N. 83.03 W. (See Plan)

LOCATION: Port is located on a salt water sound known as Lake Worth and lies 1.3 miles from the 27 ft. contour of the Atlantic Ocean to which it is connected by an artificial cut at the North end of Lake Worth known as Lake Worth Inlet. The Inlet is located within the boundaries of the City of Riviera Beach, Florida.

PORT LIMITS: Sea buoy at channel entrance. Dockage charges commence when vessel is made fast to wharf, and are on a 24 hour basis or fraction thereof.

DOCUMENTS: See "Jacksonville". All vessels shall, upon arrival, report to Port Director all cargo to be discharged. Such report shall be in form of copies of Ship's Manifest, or certified statements, and shall show number of units, commodity, weight, destination, consignee, and all other information which port of Palm Beach deems necessary for compilation of commercial statistics, for reserving of necessary warehouse or wharf space, or other purposes.

All vessels shall, before sailing, report to the Port Director all cargo loaded into such vessels. Such reports shall be in the form of copies of the ship's manifest, or certified statements, and shall show numbers of units, commodities, and all other information which the port of Palm Beach deems necessary for compilation of commercial statistics, or other purposes.

PILOTAGE: Compulsory. Provided by Pilots' Association of the port of Palm Beach, 130 East Port Road, Riviera Beach, Florida, 33404.

CHANNEL: Entrance to the harbour is by a dog-leg channel running due West through the jetties and then turning Southwesterly to the terminals. The channel is 400 ft. wide, narrowing to 300 ft. in width as it continues across the lake another 3,000 ft., leading into a trapezoidal turning basin, 1,400 ft. by 1,310 ft. adjacent to the port terminals on the West shore. Present depth of entrance channel is 35 ft. at MLW.

ANCHORAGE: Anchorage is designated by the Bar Pilots, which in most instances is at sea. Port has no established anchorage.

MAX. SIZE: Vessels up to 620 ft. in length with draft of 34 ft. have used facilities.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Port has no communication equipment. U.S. Coast Guard Station, Peanut Island, Riviera Beach, Florida, can be reached on 2182 kHz – 2678 kHz – 156.8 mHz.

TUGS: Available to assist berthing. Service is provided by the Port Towing Corporation, PO Box 12425, Lake Park, Florida 33403. Office Tel. 844-4781 or 844-6422, at night 844-4244 or 844-6422.

BERTHING: 2 slips and 3 marginal wharves for docking vessels; with 4 ramps for roll-on/roll-off facilities:

Berth		*Length* (ft.)	*Depth* (ft.)
No. 1	South Marginal	190	35
No. 2	East Half, South Side of Slip 2	325	35
No. 3	West Half, South Side of Slip 2	325	35
No. 4	West End of Slip 2	225	35
No. 5	West Half, North Side of Slip 2	325	35
No. 6	East Half, North Side of Slip 2	325	35
No. 7	Middle Marginal	150	35
No. 8	East Half, South Side of Slip 1	345	25
No. 9	West Half, South Side of Slip 1	345	25
No. 10	South Ramp, West End of Slip 1	40	25
No. 11	Middle Ramp, West End of Slip 1	40	25
No. 12	North Ramp, West End of Slip 1	40	25
No. 13	West Half, North Side of Slip 1	345	25
No. 14	East Half, North Side of Slip 1	345	25
No. 15	South Half, North Marginal	330	27
No. 16	North Half, North Marginal	430	27

Supplementing the berths are 157,400 sq. ft. of warehousing space. Open storage area is within easy reach of all berths.

All vessels, their Owners or Agents, desiring a berth at wharves, shall, as far in advance of date of docking as possible, make application to port specifying date of docking, sailing, nature and quantity of cargo to be handled, and name of the vessel.

SPECIALISED CARGO HANDLING FACILITIES: Ramps for roll-on/roll-off cargo and wharfside accommodation for equipment to handle containerised cargo only.

STEVEDORES: The recognised working hours of port shall be from 0800 until 1200 hrs. and from 1300 until 1700 hrs., Monday through Friday, holidays excepted. During the recognised working hours services will be charged for on a straight time basis.

When vessels are loading or discharging cargo the port may furnish checker-foremen to supervise release of cargo being loaded and/or check cargo being discharged. The charge for each man furnished will be based on labour-furnished rates for foremen, with the Port reserving right to furnish as many men as they deem necessary to protect their interests. Charges for this service will be rendered against the vessels, their Owners, or Agents.

TANKERS: The port receives tankers each month in the 15 to 18 thousand gross ton limit.

FRESH WATER: Fresh water delivered to vessels at wharves or docks.

FIRE PRECAUTIONS: Smoking is strictly prohibited in transit sheds, warehouses, or on apron of wharves and on vessels, handling dangerous, hazardous, or inflammable cargo. Smoking is also strictly prohibited in any areas where gasoline or like materials are being handled or serviced to equipment.

Explosives and hazardous or highly inflammable commodities or materials may be handled over, or received on, the wharves or other facilities of port of Palm Beach by special arrangements with and at the option of the Port Director, and the receiving, handling, or storage of such commodities shall be subject to Federal and State laws, rules and regulations.

In all cases where explosives and hazardous or highly inflammable commodities or materials are to be handled, prior consent by the U.S. Coast Guard must be received and a copy of the consent filed with the Port Director. Responsibility for safeguarding of life and property will be the duty of the shipper. Proof of sufficient liability insurance must be presented to Port Director prior to arrival of such materials.

DEVELOPMENTS: A section to the North of Berth 16 is being filled. After bulkheading and Roll-on/Roll-off ramp are completed the adjacent waters will be dredged to 25 ft. This area will be devoted to containerised cargo.

CARGO GEAR: Crane capacity can accommodate single lifts up to 300 tons. Also available are 2×150-ton cranes, 1×200-ton crane, 1×65-ton crane and 1×40-ton crane also 1×23-ton fork lift.

HOLIDAYS: New Year's Day; Washington' s Birthday; Decoration (Memorial) Day; Independence Day; Labor Day; Veteran's (Armistice) Day; Thanksgiving Day; Christmas Day. When any one of these falls on Sunday, the following Monday is observed as a holiday. When any one of these falls on Saturday, the preceding Friday is observed.

GENERAL: Marine terminal 1.3 miles from the open sea, served by U.S. Highway 1 and is directly connected by port-owned belt-line railroad to the Florida Coast Railway.

Broad aprons (80 ft.) with ship-side rail, and warehouses backed by open storage areas. The slips and wharves are located on a salt water sound, fully protected from the sea by barrier islands; departures from the slips average only 15 minutes through inlet to open sea.

AUTHORITY: Port of Palm Beach.

PANAMA CITY, Florida: 30.10 N. 85.40 W. (See Plan)

DOCUMENTS:

2 Passenger Lists.
2 Crew Lists.
2 Curio Lists.
2 Stores Lists.
Register.
Load-line Certificate.
Tonnage Tax Certificate.

PILOTAGE: Compulsory. Pilots board at sea-buoy. Guard Channel 16 VHF. Safe anchorage at sea-buoy if waiting for Pilot. Pilot boat black hull with white lettering.

ANCHORAGE: Several safe anchorages inside bay with 32 or more ft. depth.

RESTRICTIONS: Maximum safe draft over bar is 32 ft. No other restrictions except in case of bad weather.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Preferably WLO Radio, Mobile, Alabama, U.S.A. Also good service from RCA. Vessel should radio ETA and cash requirements.
TUGS: 3 tugs available. Tug is used only to assist in berthing. Always uses ship's lines.
BERTHING: Any time, except for unusual weather. Good safe port. Berths are about 1 hour from Pilot station.
STEVEDORES: Must have ETA by 1500 hrs. local time in order commence loading 0800 hrs. next day. Normal work day 0800–1200 hrs., then from 1300–1700 hrs.; Monday through Friday.
MEDICAL: Medical and hospital service available.
TANKERS: No slop discharge facilities. 1 tanker berth – 29 ft. max. draft.
DENSITY: Salt water. 1.5 ft. tide range.
FRESH WATER: Available all berths but ships must supply hose.
FUEL: Only on advance notice – limited supplies.
GANGWAY/DECK WATCHMEN: Only if required by ship's Owners or Master.
OPENING/CLOSING HATCHES: Normally done by stevedores. In some cases, is done by ship's crew.
CUSTOMS ALLOWANCES: Tobacco, 1 carton 200 cigarettes. Wine/Spirits, reasonable quantity – 1 or 2 bottles.
CARGO GEAR: Must show safety inspection if requested.
IDENTIFICATION CARDS: All crew must have U.S. Immigration Landing Permit.
CONSULS: None.
REPAIRS: Limited deck and engine repairs can be effected.
REPATRIATION: Available.
AIRPORT: Approximately 4 miles from port. Served by 2 scheduled air lines.
TIME: Central Standard Time (GMT minus 6 hours or 90° Meridian). Central Daylight time in Summer (minus five or 75° Meridian time).
HOLIDAYS: No work holidays: New Year's Day; Easter; 4th July; Labor Day; Christmas Day; Working holidays; Lincoln's Birthday (February 12); George Washington's Birthday (Third Monday in February); Memorial Day (Last Monday in May); Veterans Day (Fourth Monday in October); Fall Festival Day, Thanksgiving Day (Fourth Thursday in November).
POLICE/AMBULANCE/FIRE: Dial operator, or 785-6161.
TELEPHONES: Placed aboard only by very special arrangement – not normally available.
SERVICES: Most repairs to radio, radar and other such equipment. Advance notice required.
SHORE LEAVE: Any time – any berth.
DELAYS: Normally, delays infrequent and for short durations.
AUTHORITY: Panama City Ports Authority.
AGENTS: Fillette, Green & Co., Inc., PO Box 1640, Panama City, Florida 32401 U.S.A. address: 432-a Magnolia Avenue. Tel. 904–763–7675–6–7. Teletype 510–738–7897. Office phone answered 24 hours a day, 7 days a week.

Steamship Agents & Brokers – Freight forwarders – Stevedoring Arrangement personnel. Phones: Vice-President and Manager 904–763–1916. Operations 904–785–8798. Dock Superintendent 904–763–1912.

PASADENA, Texas: 29.43 N. 95.13 W.

Refer to "Houston" for all general information.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

PASCAGOULA, Mississippi: 30.21 N. 88.34 W.

(See Plan)

PORT LIMITS: Subject to Charter-Party Terms, an "arrived ship", subject to jurisdiction of the Port Authority, occurs when a ship arrives at Horn Island Sea Buoy.
DOCUMENTS: See "New Orleans".
PILOTAGE: Pascagoula Bar Pilots' Association (no code address). Pilot boat to be contacted on VHF Channel 16, pilot boat has black hull with white house, International light and sound signals to be made by vessel requiring a Pilot. Pilot to be taken aboard vessel in vicinity of Horn Island sea buoy. Usual safety measures are required, with respect to boarding. Vessels may anchor in this area while awaiting Pilot, there is a 35 to 50 ft. depth with good holding bottom.
ANCHORAGES: Only anchorages permitted are in vicinity of Horn Island Sea Buoy or seaward.
RESTRICTIONS: Under normal conditions there are no entry restrictions as to time or state of tide.

From Horn Island Sea Buoy to Horn Island Pass the channel is 350 ft. wide by 40 ft. deep; from Horn Island Pass to Pascagoula River Turning Basin the channel is 350 ft. wide and 38 ft. deep; the Pascagoula River Turning Basin is 950 ft. wide and 38 ft. deep.

Channel into Bayou Casotte (East Harbour) from Junction Buoy to mouth of Bayou Casotte Harbour is 225 ft. by 38 ft. deep; thence at inner harbour channel is 300 ft. wide and 38 ft. deep into the Bayou Casotte Turning Basin; the Bayou Casotte Turning Basin is 1,000 ft. wide and 38 ft. deep. All dimensions listed are project dimensions; depths refer to MLW datum.

MAX. SIZE: Length of vessel is restricted to approx. 900 ft. by turning basin, no breadth restriction, draft 38 ft. at MLW. Normal tidal range 1.6 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Mobile Marine operator, Station WLO best for vessels to route ETA cables to Agent. Also, TRT Telecommunications, New Orleans (WNU) as WLO is closed from approximately 2230 to 0630 hrs.
RADAR/VHF: Radar and VHF radio on pilot boat, Channel 16.
TUGS: Tugs will join vessels in harbour or off docks. No escort required.
BRIDGES: None affecting 38 ft. channels.

2 bridges across the Pascagoula River above the turning basin, not passed through between channel and harbour.

BERTHING: Private and public berths are available, by prior arrangement, in both the Pascagoula River Harbour (West Harbour) and the Bayou Casotte Harbour (East Harbour).

West Harbour – Public: Grain Elevator, 3,100,000 bushel capacity, 900 ft. berth at 780 ft. wharf and 38 ft. deep.
Terminal 'A' with transit shed, 500 ft. wharf and 38 ft. deep.
Terminal 'B' with transit shed, 544 ft. wharf and 38 ft. deep.
South Clusters, 1 ship berth approximately 600 ft. by 24 ft. deep.

West Harbour – Private – Ingalls Shipbuilding: Note. These berths are normally occupied with ships being outfitted and are not normally available.
West Bank Shipyard, 4,410 ft. bulkhead, 5 berths by 32 ft. deep.
East Bank Shipyard, three 600 ft. piers, one 800 ft. pier each 32 ft. deep.

East Harbour – Public:
Terminal 'E' with transit shed, 517 ft. wharf by 38 ft. deep;
Terminal 'F' with transit shed, 737 ft. wharf by 38 ft. deep;
Terminal 'G' with transit shed, 516 ft. wharf by 38 ft. deep;
Terminal 'H' with transit shed, 556 ft. wharf by 38 ft. deep.

East Harbour – Private: Corchem/Corhart, 550 ft. wharf by 24 ft. deep;
Standard Oil Company, Wharf No. 1, 2 ship berths by 38 ft. deep;
Standard Oil Company, Wharf No. 2, 1 tanker berth by 38 ft. deep;
Mississippi Chemical Company, 2 loading docks each 475 ft. by 34 ft. depth;
Chicago Bridge & Iron Company, 400 ft. bulkhead by 10 ft. deep.

SPECIALIZED CARGO HANDLING: Standard Oil Company Wharf No. 1 has facilities for handling acid, caustic, ammonia, and LPG, in addition to petroleum products.

Mississippi Chemical Company loading docks are equipped for handling phosphate rock and other bulk materials, liquid and dry.

Terminals E & F are equipped for exporting bulk ores.

CRANES: The Port has a heavy lift capability of 400 tons by an arrangement with Ingalls West Bank Facility.
STEVEDORES: 12 hours notice requested to arrange stevedore gangs.
MEDICAL: Agents to be advised if immediate medical attention is required. Free pratique granted except in case of communicable diseases aboard, inoculations required by Public Health Service, etc. Doctors and hospital services readily available.
TANKERS: The Standard Oil Co. owns and operates 3 wharves on East side of Bayou Casotte harbour. Facilities have 6, 8 and 12 in. lines with adaptors, discharge tanks with a capacity of 60,000 tons, 3 tanker berths with a 38 ft. draft. Wharf No. 2 for receiving crude oil from large tankers. Wharf designed and built for 50 ft. draft, but presently limited to 38 ft. draft on account of channel and seaward.
DENSITY: Density varies with the state of tide and wind, from fresh to salt water.
FRESH WATER: Potable water is available at most berths. Water at public terminals can be delivered at flow rate of 50 g.p.m.
FUEL: Large vessels are bunkered at berth in the harbour by 2 tank barges, operated by Fuel Services, Inc. All grades fuel are available.
FIRE PRECAUTIONS: Usual safety precautions required. Verify unusual procedures for approval of US Coast Guard.
GANGWAY/DECK WATCHMEN: Port guards are furnished for the general cargo terminals at the port's expense. At least 1 person must be on duty aboard vessel.
HATCHES: Opening/closing hatches by the crew is at the discretion of the ship.
CUSTOMS ALLOWANCE: Each crew member is allowed either 300 cigarettes or 50 cigars or 3 lbs. of tobacco. In addition, each member is allowed 1 quart of alcoholic spirits as regulated by provisions of the Mississippi Alcoholic Beverage Commission rules.
CARGO GEAR: No requirements for cargo gear other than it be certified by a recognised International organisation.
CONSULS: Many countries have consuls within a 100-mile radius of Pascagoula. (Mobile and New Orleans).
REPAIRS: Most deck and engine repairs could be arranged within port facilities.
DRY DOCKS: Ingalls Shipbuilding Corporation, West Bank Shipyard, has 1 launch pontoon (dry dock) with 38,000 ton capacity.

Ingalls Shipbuilding Corporation, East Bank Shipyard, has 1 graving dock, 485 ft. inside length, 75 ft. wide gate, 34 ft. deep, with loading capacity of 1 ton per sq. ft.

Walker Shipyard has one 800 ton dry dock.

Flechas Shipyard has one 600 ton dry dock.

There are several marineways in vicinity, capacities 50–100 tons.

SURVEYORS: Licensed Marine Surveyors are available in Port.
REPATRIATION: The city of Pascagoula is served by regularly scheduled transporation.
AIRPORT: An airport is available approx. 35 miles from the city and is served by regularly scheduled airlines.

TIME: The port of Pascagoula is on Central Standard Time, GMT minus 6 hours; clocks are moved ahead 1 hour during Summer months.

HOLIDAYS: Longshoremen observe Easter Sunday, George Washington's Birthday, Federal Memorial Day, New Year's Day, Mardi Gras Day, Independence Day, Martin Luther King's Birthday, Labor Day, Veterans Day, Thanksgiving Day and Christmas Day. When any of the holidays named fall on a Sunday, the following Monday shall be deemed as that holiday.

POLICE/FIRE/AMBULANCE: Telephone numbers for emergency services are: Fire 762–1133; Police 762–2211; Ambulance 762–6332. Universal emergency No. 911.

TELEPHONES: Telephones can be installed aboard vessels at a nominal charge.

SERVICES: Facilities are available for compass adjusting. Tank cleaning and receipt of tank washings can be arranged by contract services available in the area.

SHORE LEAVE: Allowed for any crew member not detained by Immigration Office.

IDENTIFICATION CARDS: Standard Immigration Form 1-95 to be made up for each crew member on arrival. Not necessary for crewmen already holding Form 1-95 issued for the same vessel.

DEVELOPMENTS: A dry bulk handling facility with a 3,000–6,000 t.p.h. loading capacity, scheduled for operation during 1978, built South of the Corchem, Inc. plant.

DELAYS: Berths at Public Terminals and the South Clusters are assigned by the Traffic Manager of the Jackson County Port Authority. Berths at private docks are assigned by the respective owners. No exceptions to this are allowed. Berth at Grain elevator is assigned by the Lessee-Operator, the Louis Dreyfus Corporation. No delays are encountered by following this procedure, emergencies excepted.

GENERAL: Some difficulty encountered by unscheduled tows who use harbour for shelter in inclement weather. Pilot Association aware of current situations. Study of traffic control system is being undertaken by the Port Authority, particularly considering hazards of tankers in Bayou Casotte 225 ft. wide channel. Ample barge storage is available in Barge Fleeting Area South of Ingalls Westbank Shipyard – capacity is 96 barges, operated by Colle Towing Company.

AUTHORITY: Jackson County Port Authority.

PENSACOLA, Florida: 30.25 N. 87.13 W. (See Plan)

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

BERTHING:

Number	Length (ft.)	*Depth at* MLW (ft.)	*Use*
No. 2	400	35	General Cargo
No. 3	425	35	General Cargo and Lumber
No. 5	425	35	General Cargo
No. 6	580	35	General Cargo

BULK HANDLING FACILITIES: No. 1 Berth. Length 600 ft. Depth at MLW 35 ft. Discharge of bulk materials by conveyor, rate 400 t.p.h.

No. 1 Berth is also used for the discharge of oil, creosote oil and liquid chemicals into private facilities.

FRESH WATER: Available.

AUTHORITY: Port of Pensacola, Department of Transportation.

PETERSBURG, Alaska: 56.49 N. 132.57 W.

Located on Mitkof Island, Northern end of Wrangell Narrows. Open all year.

DOCUMENTS: See "Anchorage, Alaska".

PILOTAGE: (From sea via Dixon Entrance up Clarence Strait to Guard Island.) Under pilotage from Guard Island.

MAX. SIZE: Harbour depth 24 ft. MLLW. Tides: diurnal range 15.7 ft. Also see "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

ANCHORAGE: Good anchorage in Scow Bay, mud bottom.

CUSTOMS: Immigration, Guard Island. Quarantine and Customs, local.

BERTHING: Pacific American Fisheries Inc.: 75 ft. long, 65 ft. wide. Should dock at slack water. Strong current.

TUGS: One 320 h.p.

STEVEDORES: 1 gang.

REPAIRS: Marine Ways to 35 tons.

WATER: State approved water available.

FUEL: Diesel and Gasoline available.

MEDICAL: 21 bed hospital.

TRANSPORTATION: Scheduled and Charter Airlines and ferry.

PHILADELPHIA, Pa.: 39.57 N. 75.10 W. (See Plan)

AMERIPORT (Ports of Philadelphia)

DOCUMENTS:

3 Crew Lists Form I.418 (suggest 6 be made).
3 Passenger Lists Form I.418 (suggest 6 be made).
3 Customs Stores Lists (suggest 6 be made).
3 Curio Lists (own ship Form) (suggest 6 be made).
3 Narcotics Lists (own ship Form) (suggest 6 be made).
Manifest (Ship Cargo List). If Philadelphia first port of call, require 1 copy for Customs and 1 copy to be used as "traveller" surrendered last port of call. If Philadelphia not first port of call, required 2 copies, all cargo to be discharged at Philadelphia.

For Immigration Service:

Visaed Crew List.
Valid passport or Seaman's Book for each person on board.
Crewman's landing card (Form I.95) for each crew member.

PILOTAGE: The pilot boat serving the Delaware river and ports of Philadelphia is a 165 ft., 1,000 gross ton steam vessel, painted light blue with letter "P" on stack. All pilots carry portable radios for bridge-to-bridge traffic to facilitate movement of vessel (VHF 156.7). Pilot boat is on permanent station in Cape Henlopen on a 24-hour basis and guards following frequencies: 156.65 VHF and 2738 and 2182 khz. Telegraphic address is Del. Riv. Pilots, 214 S. 11th St., Phila., Pa. 19107. Arrangements for Pilot are normally made by ship's Agent but can be made direct by vessel.

No particular advance notice is required and incoming vessels are served as they arrive. Normally no delays are encountered. There are no particular boarding or safety measures required, other than the usual practice of good seamanship. In event of an unscheduled delay in berth availability, a deep-water anchorage is readily available in the bay adjacent to pilot boat. There are 18 anchorage areas available along the Delaware.

RESTRICTIONS: There are no restrictions imposed upon entry except those dictated by vessel draft. Throughout most of its length, the Delaware river is dredged to 40 ft. at MLW. In addition there is a mean tidal range of about 5.7 ft. Vessels of 38 ft. draft can readily navigate the river.

MAX. SIZE: Deep-draft vessels (oil-carriers) can off-load to barge in the lower Bay in water capable of handling vessels up to 60 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Philadelphia Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: RCA Global Communication. "WSC" Tuckerton, N.J.

TUGS: Tugs normally join vessels adjacent to berth. Ship's lines are used.

BERTHING:

Northern Metal Co. Terminal	9 berths depth 25 ft. to 32 ft.
Tioga Terminal	7 ,, ,, 40 ft.
Delaware River Terminal	4 ,, ,, 29 ft. to 32 ft.
Port Richmond	10 piers depth alongside 26 ft. to 36 ft.
Delaware River	21 ,, ,, ,, 26 ft. ,, 35 ft.
Greenwich Point Tide-water Ore Terminal	2 berths 850 ft. length, depth 37 ft. to 42 ft.
Girard Point	3 piers depth alongside 28 ft. to 36 ft.
Camden	3 ,, ,, ,, 30 ft. ,, 40 ft.
Gloucester	Ore Pier, depth alongside 25 ft. and 31 ft.

Packer Avenue Terminal, 5 berths, depth alongside 35 ft.
Port of Wilmington, 5 berths, depth alongside 35 ft.

CONTAINER HANDLING FACILITIES: *Tioga Marine Terminal:* Handles containerised and roll-on/roll-off cargoes. The terminal is equipped with 2 container cranes and a 300-ton mobile crane. Length of the marginal wharf is 3,300 ft., upper slip berth 725 ft. and lower slip berth 625 ft.

Packer Avenue Marine Terminal: Handles containerised and roll-on/roll-off cargoes. The terminal is equipped with 2 container cranes. The marginal wharf is 3,200 ft. in length and the roll-on/roll-off slip berth is 825 ft. in length.

STEVEDORES: Ship's Agents make arrangements for stevedore gangs. Agents should be kept advised of any change in ETA.

MEDICAL: Advance notice of requirements desirable to the extent possible. Hospital facilities are available. Smallpox vaccination certificate required (see Quarantine Declaration Form).

TANKERS: There are 83 petroleum handling berths along the Delaware River. All terminals are equipped with reducers. There are slop (residue) facilities at most terminals. Some main terminals listed below:

Fort Mifflin	Atlantic-Richfield	40 ft. depth
Point Breeze	Atlantic Richfield	32 ,, ,,
	Ballast Wharf	32 ,, ,,
Hog Island	Gulf Oil Terminal	40 ,, ,,
Paulsboro	Mobil Oil Terminal	30 ft and 40 ft. depth
	Patterson Oil Terminal	36 ft. depth
Marcus Hook	Sinclair Refining Co.	35 ,, ,,
	Sun Oil co.	33 ,, ,,
Westville (Eagle Point)	Texas Oil Terminal	40 ,, ,,
Pennsauken	Greater Valley Oil Co.	34 ,, ,,
Girard Point	Gulf Oil Co.	33 ,, ,,
Delair	Hess Oil Co.	31 ,, ,,

DENSITY: Philadelphia ports are fresh-water ports.

FRESH WATER: Fresh water normally not available directly at berth. Fresh water available by tank truck or through fire Department. No water barges available.

FUEL: Bunker C and diesel fuel available most oil terminals.

Vessel's Agent should confirm berthing space at least 24 hours in advance.

GANGWAY/DECK WATCHMEN: These services are left to the discretion of the Master. It is often recommended by ship's P & I club that watchmen be engaged when seamen are detained by U.S. Immigration. Ship is subject to have fines by U.S. Government if any detained seaman deserts vessel.

OPENING/CLOSING HATCHES: Normally opened/closed by stevedores.

CERTIFICATES: Ship's Register and Load-line Certificate are mandatory. If vessel is carrying passengers from the U.S. they will require a U.S. Coast Guard Certificate. This can easily be obtained in about 1 or 2 days subject to meeting the requirement for life-saving equipment.

CUSTOMS ALLOWANCES: No set rule. Reasonable amount allowed for personal use.

CARGO GEAR: For exceptionally heavy lifts, Philadelphia Naval Shipyard has a 350-ton crane. Special permission is required to use this machine when there are no commercial facilities available.

CONSULS: The following countries are represented in Philadelphia:

Belgium
Brazil
Canada
Chile
Colombia
Costa Rica
Denmark
Ecuador
Germany
Great Britain
Guatemala
Haiti
Honduras
Iceland
Israel
Italy
Japan
Liberia
Mexico
Netherlands
Norway
Panama
Paraguay
Peru
Portugal
Sweden
Switzerland
Thailand
Uruguay
Venezuela

REPAIRS: All types of ship repairs can be effected.

AIRPORT: Philadelphia International Airport is located approximately 6 miles from central harbour area.

TIME: Standard time GMT minus 5. Daylight Saving Time (minus 4) is usually implemented about the last week-end in April.

HOLIDAYS: New Year's Day (1st January); Lincoln's Birthday (12th February); Washington's Birthday (22nd February); Good Friday; Decoration Day (May 30th); Flag Day (14th June); Independence Day (4th July); Labor Day (1st Monday in September); Colombus Day (12th October); November Election Day (1st Tuesday in November); Armistice or Veteran's Day (11th November); Thanksgiving Day; Christmas Day; and any other national holiday as may be provided by executive authority.

POLICE/FIRE/AMBULANCE: Fire LO 3–6700; Police 231–3131; Port Disaster 609–WO 3–6420, WA 5–8780.

GENERAL: If garbage removal is required while in port, it must be done under supervision of the plant quarantine service.

AUTHORITY: Delaware River Port Authority.

PINEY POINT, Maryland: 38.08 N. 76.32 W.

(See Plan)

Steuart Petroleum Company Terminal on East bank of Potomac River, 82 miles from sea.

DOCUMENTS/PILOTAGE: Refer to "Baltimore".

ANCHORAGE: Unlimited, available in Chesapeake Bay.

RESTRICTIONS: Berthing 24 hours a day with max. draft of 38 ft. Vessels exceeding 725 ft. or 37 ft. draft, 2 tugs required docking – 1 sailing. Vessels under, 1 tug docking, none sailing.

MAX. SIZE: Limited by depth at berth, 38 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Baltimore Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: WMH Baltimore Radio. VHF channel 26.

TUGS: 2 tugs available for berthing, join vessel off berth.

BERTHING: 1 tanker berth only. Long lines required for first ashore.

FRESH WATER: Available at berth.

FUEL: Bunker "C" only, available ex-berth.

GENERAL: Nearest city with full services is Washington, 65 miles distance.

AIRPORT: Washington National or Friendship International.

TIME: GMT minus 6 hours.

SHORE LEAVE: Allowed.

AUTHORITY: Maryland Ports Authority.

PORT ADAMS, Texas: 29.45 N. 95.11 W.

Refer to "Houston" for all general information.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

PORT ANGELES, Washington: 48.08 N. 123.25 W.

DOCUMENTS, etc.: Refer to "Tacoma".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

PILOTAGE: Compulsory for all vessels except those in coasting trade. Pilot station at Ediz Hook serves all vessels bound for Puget Sound ports. Pilot boards off Port Angeles.

ANCHORAGE: In harbour, depth at least 42 ft. MLLW.

BERTHING: 4 principal wharves, depth alongside 28-38 ft. MLLW.

STEVEDORES: 8 local gangs, additional gangs may be imported if required.

HOLIDAYS: See "Tacoma".

MEDICAL: All medical facilities available. Local hospital.

DENSITY: Salt water.

FRESH WATER: Available at all wharves.

FUEL: Barge delivery only.

GANGWAY/DECK WATCHMEN: Required only if detainees aboard.

CUSTOMS ALLOWANCE: No definite quantities specified; reasonable allowance at discretion of Custom's Inspector.

PORT ARTHUR, Texas: 29.53 N. 93.57 W.

(See Plan)

DOCUMENTS:

Entrance Direct from a Foreign Port:

Master's Oath on entry on vessel in Foreign trade, Customs Form 1300 (2 copies).
General Declaration, Customs Form 1301 (2 copies).
Ship's Stores Declaration, Customs Form 1303 (2 copies).
Crew Effects Declaration, Customs Form 1304 (2 copies).
Clearance from last Port.
Inward Foreign Manifest, Customs Form 7527-B (2 copies)
Passenger/Crew List. Form 418 (3 copies).

In event import cargo is onboard, an additional copy of each of the above Forms is required for travelling Manifest. A copy of the Manifest for each port is also required.

Entrance from Domestic Port:

Clearance from Last Port.
Crew Effect Declaration, Customs Form 1304 (2 copies).
Stores List, Customs Form 1303 (2 copies).
Crew List, Customs Form 418 (2 copies).
Master's Oath, Customs Form 1300 (2 copies).
General Declaration, Customs Form 1301 (2 copies).

PILOTAGE: Come up in vicinity of the sea buoy. 24 hours notice of ETA should be given and revised if ship is delayed 1 hour or more. Telegraphic address is "Sabine Pilots, Port Arthur, Texas". Pilot station keeps 24 hour continuous watch on VHF Channel 12 – 156.6 mc/s. and on 2738 kc/s. Pilot boat is motor vessel with black hull, white housing flying Pilot insignia by day and Pilot light by night. Location of Pilot boat is in general vicinity of Sabine Pass sea buoy. Pilot ladder only on lee side of vessel.

Pilot will, upon request and at extra cost, board incoming vessels at buoy marked "SB" in position 29.25 N. 93.40 W.

RESTRICTIONS: The Port Arthur ship channel is in operation 24 hours per day. The only restrictions that might hamper vessel traffic would be the draft of the vessel (Port will be able to handle vessels taking up to 40 ft. of water) or extremely bad weather conditions such as fog or high winds. Also, vessels of the 85,000 ton or more class can only be moved during daylight hours.

MAX. SIZE: Port Arthur ship channel will be authorised to 40 ft. in depth and will vary from 400 to 800 ft. in width. Turning basin, which is located at mile 19 (only about 0.5 miles upstream from existing port facility) is 900 ft. in width. Bulk carriers going to grain elevator at Port Arthur or to one of the oil refineries would only be restricted by draft which would vary from 30 ft. to 40 ft. depending on load/discharge berth the vessel is en route to. See "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: For a vessel in the Gulf of Mexico, and en route to Port Arthur, the best way to route an ETA message is to radio "Port Arthur Radio" (Radio Marine Corporation of America) whose call sign is WPA. Port Arthur Radio will then either send the message through Western Union via its telefax machine or via telex if the receiver of the message has a telex machine. There are also radio stations located in Galveston, Texas (Mackay Radio, call sign KLC) and in Mobile, Alabama (call sign WLO).

TUGS: The exact position that the tug meets the vessel varies with each vessel but usually they meet just below Texaco Island. In some cases they meet as far up as Great Lakes Carbon (usually when vessel is in ballast and going to Gulf Oil Docks). Whether or not the tug uses the vessel's lines or its own lines depends entirely on the circumstances involved but the tugs usually use the ships lines. Port Arthur is served by 2 towing companies, (1) Moran Towing of Texas and (2) Sabine Towing & Transportation Company, Inc.

BERTHING: The first procedure for obtaining a berth at Port Arthur is to submit a Berth Request Form. The Berth Request will contain the following information and will be submitted, in duplicate, to P.O. Box 1428, Port Arthur, Texas: Date of request; type and name of vessel; loading ports; registry or flag; where vessel is to arrive from; ETA; where vessel is to sail for; estimated date of departure; what inbound cargo, if any, consists of; what outbound cargo, if any, consists of; date you expect to begin receiving outbound cargo. The Form must be signed by the Agent or Owner of the vessel. (Berth Request Form will be made available by the Port.) Upon receipt of a Berth Request from the Agent or Owner, the Port will then, upon determining availability of berth, return 1 copy of the initial Berth Request to the Owner or Agent as an assignment of berth. Berths are assigned on a first come first served basis at all times. All changes in vessel's ETA must be given to the Terminal

Office immediately. All mooring and unmooring will be done by the Port. Procedure may differ at the various private terminals which are not under the jurisdiction of the Port Arthur Navigation District.

Also see "Developments".

BRIDGES: There are no bridges that would require a vessel to arrive at any certain time at Port Arthur, however, the first bridge approached involves a vertical clearance of 136 ft. MHW.

STEVEDORES: Advance order for longshore gangs varies as to contract held by ILA (International Longshoremen's Association). In Port Arthur, gangs have to be ordered as follows: Order by 1900 hrs. for the next morning (either 0700 or 0800 hrs.); order by 1100 hrs. for 1300 hrs.; order by 1600 hrs. for 1900 hrs. Must order by 1900 hrs. day before for any starting time Sunday or Holiday.

MEDICAL: It is not usually required that the Agent be given advanced notice of required medical attention but in some instances it is helpful in arranging transportation to a hospital and in obtaining a bed in the event the hospitals are near full. Port Arthur is served by 2 hospitals; (1) St. Mary's Hospital and (2) Park Place Hospital, both of which are very well staffed and have adequate facilities for almost any emergency. Also, advance notice is helpful when vessel is scheduled to dock late in evening or during night, as doctors are not in their offices and have to be located.

Particular inoculations required by the Public Health Department vary as to the vessel's last foreign port of call. The only inoculation required of all vessels is smallpox. Any crew members who have not had the required inoculations can usually be given these inoculations on board either by the Public Health Officer or a Physician. This is usually arranged by the Agent or Owner.

TANKERS: There are 3 major Oil Companies: Gulf Oil Corporation; Texaco Oil Company, Inc.; and Petrofina Company. Gulf Oil Corporation and Texaco Oil Co., Inc. are 2 of the largest Oil refineries in the country. The diameter of load/discharge lines range anywhere from 4 in. to 12 in. depending on the grade of the petroleum product being loaded. As far as slop discharge facilities are concerned, ballast tanks at all major oil companies. Gulf Oil has 3,400 linear feet of berth accommodations and Texaco Oil Co. has 5,299 linear feet of berth accommodations together enough to accommodate 11 supertankers plus barges. Petrofina Co., being the smaller of the 3 oil companies, has berth accommodations for 3 vessels.

BULK HANDLING FACILITIES: Texas Oklahoma Port Company's Bulk Marine Terminal in the Port's deepwater industrial park is located at Mile 26, handles dry bulk commodities from rail cars to storage to vessels at rates up to 3,000 t.p.h. and has space available for shipper storage tanks on pads, with open storage for 300,000 tons. The terminal also includes a 750 ft. wharf and is located directly on the Sabine-Neches Waterway which presently offers an authorized channel depth of 40 ft. All terminals described above are served by subject waterway and limitations of depth will vary at the face of dock at individual terminals. The Texas-Oklahoma Bulk Terminal maintains 40 ft. depth at the face of their facility.

DENSITY: Varies from fresh water (1000) to pure salt water (1025) depending on amount of rainfall and tide variations. According to figures obtained from the National Cargo Bureau, average density is 50% salt water or (1012.5).

FRESH WATER: The Port has 4 ships service outlets for fresh water, each of which is served by a 4 in. water line. Watering barges are available in the area for facilities which are not equipped to provide watering services.

FUEL: Almost any grade of fuel or marine diesel is available. In some instances there are fuel lines running directly to docks, but if not, bunkering barge is available. An advance notice is usually required by bunkering barge depending on number of vessels awaiting bunkering.

FIRE PRECAUTIONS: The Port has, in each of 4 equally spaced indentations along the front of its transit shed, a fire hose outlet fed by an 8 in. water line and there are numerous fire hose boxes throughout the transit shed. In addition to this a 24 hour guard service is constantly on the watch and is in direct communication with the Port Arthur Fire Department which is only seconds away. Authorized on dock smoking areas are clearly defined for proper safety controls.

DEVELOPMENTS: Located only 19 miles from sea, the new Public Ocean Terminal of the Port is located on the Sabine-Neches Waterway, presently 40 ft. deep with a minimum bottom width of 400 ft. The initial facility encompasses 360,000 sq.ft. including 1 transit shed 180 ft. × 600 ft. or 108,000 sq.ft. Rail trackage totals 120 car-spots at dockside with a 150-car storage yard behind the wharves. The facility includes a Gantry Crane (handling dry bulk, magnet, container and heavy lift cargoes) which straddles 2 of the 3 marginal tracks, travelling the entire 1,200 ft. length of dock. Crane will lift 75 tons a distance of 75 ft. off the face of docks, with all areas brilliantly lighted for 24 hour cargo operations. In addition to the 25 acre facilities described above, the District owns a total of 73 acres or 1 mile of frontage for future development. The master plan calls for a total of 4 Transit Sheds, additional open-dock wharves and roll-on/roll-off facilities.

GANGWAY/DECK WATCHMEN: Under normal conditions a watchman is not necessary on most vessels. Under certain conditions such as a communicable disease or a malafide crewman a watchman would be feasible but the decision is left up to Master or owner of the vessel. There is a $1,000 fine if a malafide crewman disembarks from the vessel.

OPENING/CLOSING HATCHES: Paragraph 2, Rule No. 1 of the Deep Sea Longshore and Cotton Agreement for Texas ports and Port of Lake Charles, Louisiana, states as follows: "When vessel is in loading or unloading berth, loading and laying of dunnage and the opening and closing of hatches, when in connection with the handling of general cargo and/or cotton, is longshore work and will not be done by ship's crew." This agreement, however expires October 1st 1978.

CUSTOMS ALLOWANCE: Tobacco: Each crewman is allowed to keep 300 cigarettes out of bond while in port. Wine and/or Spirits; Each crewman is allowed to keep 1 quart of spirits out of bond while in port.

CARGO GEAR: A current certified Gear Certificate is required to be on board at all times and is to be kept up to date.

IDENTIFICATION CARDS: American crewman do not need any identification card. Foreign crewman need only the landing permit from Immigration Department in order to go ashore.

CONSULS: The nearest Consul-Generals are in Houston, Texas. Port Arthur has only 2 honorary Vice-Consuls, which are: Norwegian and Spanish. Houston is approximately 90 miles from Port Arthur.

REPAIRS: All types of deck and engine repairs can be accomplished. Main ship repairers are: Gulfport Shipbuilding Corp., Burton Ship Yards, Inc., Sabine Propeller Company and Sabine Neches Shipbuilding Corporation, Coastal Marine Service, all of which are located in Port Arthur.

SURVEYORS: American Bureau of Shipping, Goodhue Building, Beaumont, Texas; Captain Van & Co., 1341 Procter Street, Port Arthur, Texas; Robert K. Hansen, 295 Rosine, Beaumont, Texas; National Cargo Bureau, Inc., World Trade Building, Port Arthur, Texas.

DRY DOCKS: 2 dry docks, largest being Gulfport Shipbuilding Co., which occupies 50 acres with 3,300 ft. of frontage on The Port Authur Ship Channel. Yard designs, constructs and repairs barges, tugs and other vessels. It has fully equipped shops and 4 floating dry docks with lifting capacities of 500, 1,800, 4,000 and 4,200 tons. The smaller dry dock is Burton Shipyards, Inc., which occupies 60 acres with 3,200 linear ft. of frontage on Port Arthur Ship Channel. This yard also designs, constructs and repairs barges, tugs and other vessels. It has fully equipped shops, 2 marine railways with haulout capacities of 1,000 and 1,500 tons and 1 floating dry dock of 3,000 ton capacity.

REPATRIATION: There are facilities for effecting crew changes and repatriation.

AIRPORT: Port Arthur is served by Mid-Jefferson County Airport which is located approximately 10 miles North of Port Arthur on Highway 69. The Mid-Jefferson County Airport is served by TIA (Texas International Airlines) and Delta Airlines.

TIME: Central Standard Time during Winter. Beginning April 28th until October 27th Central Daylight Time (clocks are moved ahead 1 hour). Central Standard Time is GMT minus 6 hours.

HOLIDAYS: Longshore Holidays are: Columbus Day (Second Monday in Oct.), Veterans Day (Fourth Monday in Oct.), Thanksgiving Day (Fourth Thursday in Nov.), Christmas Day (Dec. 25th), New Year's Day (Jan. 1st), Martin Luther King's Birthday (Jan. 15th), Lincoln's Birthday (Feb. 12th), Washington's Birthday (Third Monday in Feb.), Texas Independence Day (March 2nd), Good Friday, Memorial Day (Last Monday in May), June 19th, July 4th, Labor Day (First Monday in September). At Lake Charles, LA., Mardi Gras Day to be substituted for Texas Independence Day. No work shall be performed on Labor Day or Christmas Day, except in case of fire or where property is in danger.

When holidays come on Saturday or Sunday, the following Monday to be recognized as the holiday. No work to be performed between 1600 hrs. and 1900 hrs. on election days. When Christmas falls on Saturday or Sunday, Monday will be an overtime day and gangs will work as ordered.

POLICE/AMBULANCE/FIRE: Police Department 983–5101; Fire Department 985–5511; Ambulance Service 985–5504 or 983–5666.

TELEPHONES: No facilities for placing a telephone on a vessel. However there is a coin-operated telephone on the dock for anyone's use.

GENERAL: On vessels arriving directly from a foreign port there are 3 Government Agency Representatives that must board. Already mentioned and explained are Customs and Immigrations. The remaining one, Animal and Plant Inspection Services. The Meat Quarantine representative boards the vessel to seal up all meat with the exception of what will be needed while in port. In the event a vessel is detained in port for some reason and more meat is needed the Meat Quarantine Rep. must return to the vessel and personally break the seal and then re-seal the remaining meats. This representative boards all vessels entering the port whether from foreign or coastwise.

The Plant Quarantine Rep. boards all vessels entering from a foreign port to check all fresh fruits and vegetables for any foreign insects such as the Khapra Beetle.

SERVICES: Tank cleaning done in port must be done by longshore labour. As stated before, all major oil companies have facilities for removing tank washings.

SHORE LEAVE: The question of whether shore leave is allowed is entirely up to the ship's Master. The only requirements being; each crewman on shore leave must have a landing permit issued by the Immigration Department and no malafide crewman may be granted shore leave. Port Arthur has no restrictions pertaining to shore leave.

DELAYS: Delays in berthing usually arise from vessels ETA being delayed and thereby causing a berth conflict. The port is on a first come, first serve basis.

AUTHORITY: Port of Port Arthur Navigation District of Jefferson County.

PORT CANAVERAL, Florida: 28.25 N. 80.35 W.

DOCUMENTS: Vessels arriving in the Customs Territory of the United States, Bureau of Customs Documentary Requirements:

1. The vessel's Register, Load-line International Certificate, Tonnage Tax Certificates, Clearance from last Foreign Port, and Public Health Pratique (if applicable) must be available for the Boarding Customs Inspector and later for entry at the Customhouse.

2. Additional Documents required:

(a) Original Manifest (lists) of:
All Cargo on Board.
All Passengers on Board.
Stores List.
Crew Purchase List.
Crew List.
Narcotic List.

(b) All items listed in Nos. 1 and 2 *(a)* must be presented to the boarding Customs Inspector and later at the Customhouse for entry. In addition a Customs Form 1300 (Masters Oath) must be presented at the Customhouse.

(c) Duplicate Manifest (lists) of:
1. All Cargo for discharge at this port.
2. All Passengers for discharge at this port.
3. Stores List.
4. Crew Purchase List.
5. Crew List.
6. Narcotic List.
7. CF3171 – Permit to Lade or Unlade (this will usually be furnished by the vessels agent prior to the arrival of the vessel.

(d) If vessel is proceeding coastwise from Port Canaveral with residue foreign cargo on board, prepare a Traveling Manifest which is a true copy of everything listed in the Original Manifest (*2(a)*). This must be presented to the boarding Customs Inspector and later at the Customhouse.

3. Other Documentary requirements: The Immigration Officer will require the original certificate crew list on form I-418. The same for passengers. He will also require the presentation of all passports and documents of seamen and pax as to their immigration status for entry into the United States. A supply of Seaman's Landing Permit Form No. I-95A and passenger Permit No. I-94 should be maintained and they should be typed and ready for landing.

The Public Health Officer will require a copy of the crew and the stores lists and the Quarantine Declaration Form PHS 43 already executed by the Master of the vessel. The Immigration and Quarantine Officers will want to inspect the entire crew. The Customs and Agriculture Officers will want to inspect the food storage areas and the quarters of the crew. The Agriculture Officer will also require a stores list. The Customs Officer will place a seal on the Bonded Stores Locker.

PILOTAGE: Pilotage is compulsory for all foreign vessels and for United States vessels under register in the foreign trade. Pilotage is optional for United States coastwise vessels who have on board a Pilot licensed by the Federal Government. Vessel applies for Pilot through Agent or Port Authority. May also call Pilot Office direct, 305–783–4645. Pilot will board at buoys 7 and 8 (28° 23.8′ N. 80° 33.4′ W.). Pilot boat is 30 ft. long with grey hull, white house and buff deck, has "Pilot" painted on sides. There is no particular signal for Pilot. Pilot boat stations itself 1 mile S.E. of buoys 7 and 8, 0.5 hour before ETA of vessel. Vessels may anchor anywhere in area. Pilot boat is equipped with VHF Channels 12 (156.60 mHz) and 16 (156.80 mHz), but no continuous radio watch is maintained. Advance notice of at least 24 hours should be given.

ANCHORAGES: Within the harbour itself, none. Vessels may anchor anywhere in the area of the Pilot station, buoys 7 and 8.

RESTRICTIONS: Docking and undocking carried on day and night. Draft restrictions – if vessel draft exceeds 33.6 ft. must await rising tide to enter port.

MAX. SIZE: Length and draft at Tanker Berth No. 1 and No. 2, 600 ft., with 32 ft. draft. Cargo dock length unlimited – 30 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. ports (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Pilot boat is equipped with VHF Channels 12 (156.60 mHz) and 16 (156.80 mHz) but no continuous radio watch is maintained. Advance notice of at least 24 hours should be given. Best to route ETA cables through Western Union Telegraph. Port Canaveral is equipped with VHF Port Operations frequency 156.6

TUGS: There are 2×1,800 h.p. tugs at Port Canaveral; most ships use the tugs for docking and undocking. Tugs normally join vessel inside jetties and tugs lines are used.

BERTHING: All vessels unless prevented by conditions will be turned around upon entering turning basin and will be berthed headed seaward. No berthing permitted without Port Pilot aboard.

STEVEDORES: Important vessel gives accurate ETA at least 24 hours in advance to enable Agent to order gangs.

MEDICAL: Advance notice for Agents not required, but if available is appreciated. No Public Health Clinic in area, but there are good hospital facilities available. A contract physician's office of the U.S. Public Health Service is in Cocoa Beach, just South of the port.

TANKERS: 2 Tanker Berths available, 32 ft. draft at these berths. No oil to be pumped overboard. Heavy fines imposed for oil pollution, however slight. The ship or ship's Agent will immediately report any spillage of oil on the wharf or on the water and the extent of the spill to the Port Manager and the Harbour Master. If spillage is considerable all cargo operations must stop and vessel prepare to undock.

FRESH WATER: All wharves have facilities for supplying fresh water, delivered by 4 in. water line.

FUEL: The general cargo wharf, and Tanker Berth No. 1 has facilities for supplying fuel. 24 hours notice requested.

FIRE: Ships discovering fire on board or close by on shore will sound repeated long whistle blast signals and use every other available means to report the fire. Gasoline Tankers: All deck scuppers must be plugged before starting to discharge cargo. Supply of sand or sawdust must be on hand near the discharge headers. Static cable must be connected to wharf. Min. 100 lb. pressure must be on water main and fire hose connected. Discharging must be stopped during severe lightning. Deck Officers must keep close check on hose connections for gasket leaks. Emergency Ship Movement Policy of Port Canaveral must be observed.

GANGWAY/DECK WATCHMEN: Not usually employed, this service left to discretion of Master.

OPENING/CLOSING HATCHES: Usually done by stevedores.

CERTIFICATES:
Ship's Register.
Load Line Certificate.
Tonnage Tax certificate.
Derating Certificate or Derating Exemption Certificate.

CUSTOMS ALLOWANCE: 300 cigarettes per crew member. Wine and/or spirits: 1 quart per crew member.

IDENTIFICATION CARDS: Required.

CONSULS: None.

REPAIRS: None – nearest port would be Jacksonville.

REPATRIATION: All facilities available for effecting crew changes and arranging any necessary repatriations.

AIRPORT: Two airports available, serviced by regular airlines, McCoy Airport, Orlando, Florida approximately 50 miles from the Port, Melbourne Regional Airport at Melbourne, Florida approximately 35 miles from Port. Also Ti-Co Airport approximately 25 miles from the Port, but this airport has only limited service.

TIME: GMT minus 5 hours normal, GMT minus 4 hours Daylight Saving Time.

HOLIDAYS: Numerous holidays do not effect operation of port, which operates 24 hours a day, 7 days a week.

POLICE/AMBULANCE/FIRE: Police/Fire, Tel. 783 8203; Ambulance, Tel. 632 1444 and 636 2929.

TELEPHONES: Arrangements are not available for placing on board.

GENERAL: All vessels, civilian and military, will provide wire ropes from the bow and stern with eyes that can be reached by tugs coming alongside. Pilots will make sure wires are in proper position before leaving vessel. All vessels will undock and proceed to outer anchorage when so ordered by Port Manager and/or Harbour Master in the event of: *(a)* a severe oil spillage; *(b)* fire is discovered on board a vessel laden with petroleum, explosives or a quantity of dangerous cargo; *(c)* vessel is in jeopardy due to conditions on shore. Emergency movement of ships will be made with an able sea watch without awaiting for return of other ships personnel.

SHORE LEAVE: Crew allowed ashore.

REGULATIONS: All radio frequency radiations from ships in Port Canaveral must be scheduled to prevent any possible interference to missile tests conducted on the Cape Canaveral Missile test Annex. The only exception is standard ship/shore HF harbour control frequencies. Vessels desiring to radiate will request permission from the Port Manager and/or Harbour Master.

AUTHORITY: Canaveral Port Authority.

PORT EVERGLADES (including Fort Lauderdale), Florida: 26.05 N. 80.05 W. (See Plan)

DOCUMENTS:
3 copies Cargo Manifest (Forms 7527-A or 7527-B), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I.418).
2 copies Crew List (Form I.418).

Customs Boarding Officer will also examine Ship's Register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:
Health Pratique.
Master's Oath (Customs Form 3255).
All foreign clearances.
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certified Crew List.

PILOTAGE: Pilot boards at Port Everglades sea buoy, located 26° 05′ 30″ N. Lat., 80° 04′ 45″ W. Long.

ANCHORAGE: The prescribed anchorage area at Port Everglades is outside the harbour and North of the channel. Vessels desiring to anchor off harbour of Port Everglades are required to do so in this area to avoid possible damage to cables laid on ocean floor South of the channel.

South of the channel, immediately offshore, there is a Government Restricted Area.

North of the channel, immediately offshore, there is a spoil bank visible at low water.

RESTRICTIONS: Entrance to Port Everglades is by a straight channel running in a due Westerly direction for a distance of 1.7 miles from the 50 ft. contour of the ocean to the turning basin. The channel is 500 ft. wide at its seaward end, narrowing to 300 ft. wide from jetty entrance to turning basin. The water depth is 39 ft. including the turning basin. All depths are at Mean Low Water.

MAX. SIZE: Max. draft 37 ft. MLWS.

BASIN: The main turning basin is 1,200 ft. East and West and 2,450 ft. North and South with a depth of 39 ft. The North extension of turning basin is 620 ft. wide East and West on the North limits and 900 ft. wide East and West on the South limits and 1,150 ft. North and South, with a depth of 33 ft. The South extension of turning basin is 1,300 ft. wide East and West by 1,300 ft. North and South, with a depth of 32 ft., except Berths 17 and 18, which have a depth of 37 ft. in the Westerly 400 ft. and 34 ft. in the Easterly 900 ft. All depths are at Mean Low Water.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: The following radio channels are available to communicate with facilities at Port Everglades:

Ship calling and safety: Channel 16, 156.8 mc/s.
Business and operation: Channel 14, 156.7 mc/s.; 7A, 156.35 mc/s.; 18A; 156.9 mc/s.
Port Everglades Bar Pilot: Channels 16, 13, 14, 18A, 19A.
Port Everglades Towing Co.: Channels 16, 13.

TUGS: 3 tugs available to assist berthing with up to 4,200 h.p. Available 24 hours a day.

BERTHING: Port Everglades has 16,200 linear ft. of berthing facilities, as follows:

Berth	*Length in feet*	*31 ft. depth*	*34 ft. depth*	*37 ft. depth*	*38 ft. depth*
1–2–3	1,601	1,300		301	
4	700			700	
5	700			700	
6	378			378	
7–8	1,200			1,200	
8A	300			300	
9–10	1,200			1,200	
11	500			500	
12–13	1,201			1,201	
14–15	1,201			1,201	
16*–17–18	1,648			1,648	
19–20	1,300		900	400	
21–22	1,325		1,325		
23	240				240
24–25	1,369				1,369
26–27	1,337				1,337
Total	16,200	1,300	2,225	9,729	2,946

*Berth 16 has a depth of 39 ft.

CRANES: Up to 300 ton mobile cranes available for hire.

STEVEDORES: These services are provided by licensed stevedoring firms. Arranged by Agent.

FRESH WATER: Available.

FUEL: Fuel oil available.

REPAIRS: Shipyard equipped with a 350 ft. Syncrolift dry dock with a capacity of 4,200 tons, 1×1,000-ton floating dry dock, complete machine-shop and all supporting facilities.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I.95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I.95, issued for the same vessel.

CUSTOMS ALLOWANCE: At the discretion of Customs officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

HOLIDAYS: New Year's Day (January 1); Martin Luther King's Birthday (January 15); Lincoln's Birthday (February 12); Washington's Birthday (February 22); Good Friday; Memorial Day (May 30); Independence Day (July 4); Labor Day; Columbus Day (October 12); Veteran's Day (November 11); Thanksgiving Day; Christmas Day (December 25). When any of the above holidays fall on a Sunday, they will be observed on the Monday following. Work on these holidays is by special arrangement only.

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight saving time, GMT minus 4 hours, from April to October.

AUTHORITY: Port Everglades Authority.

PORT HURON, Michigan: 42.59 N. 82.26 W.

Refer to St. Lawrence for important general information.

PILOTAGE: Compulsory, by Seaway Pilots.

ANCHORAGES: Near head of St. Clair River at Sarnia. Vessels should anchor as close to shore as safely possible to keep channel clear for passing vessels.

RESTRICTIONS: Navigation season from mid-March to end-December approx. Dock channel depth – 25 ft. Vessels size restricted by Seaway locks.

MAX. SIZE: 730 ft. length; 26 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Master must give at least 24 hours notice to Commander 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also, at least 24 hours notice of ETA at first U.S. discharge port is required. Port can be contacted through Marine Operator, Sarnia.

TUGS: Available. Not compulsory, but sometimes necessary in bad weather.

BERTHING: Port Terminal Co. Dock: 700 ft. long 26–31 ft. depth.

DENSITY: Fresh water.

MEDICAL: All facilities available.

FRESH WATER: Obtainable by pipe-line at all docks.

FUEL: All grades available by pipe-line at all docks.

REPAIRS: Machine shops available for limited deck and machinery repairs.

AUTHORITY: Port Huron Maritime Commission.

PORTLAND, Maine: 43.39 N. 70.14 W.

DOCUMENTS:

1 Crew List.
1 Passenger List.
2 Stores Lists.
2 Foreign Purchases Lists.
2 Inward Foreign Manifests uniform cargo.
Original Bill of Lading.
1 Form 3251 Masters Oath on entry of vessel.
2 Form 1374 Outward Foreign Manifest.

PILOTAGE: Ship's Agents usually notify Pilot approximately 48 hours in advance of arrival then changes are made at 24 and 12 hours. Pilot boat usually called on Channel 16 and then switched to Channel 11 to continue conversation. Pilot goes aboard ship in vicinity of lightship using ladder on lee side. When weather bad suggest vessel anchor approximately 1 mile North of lightship.

ANCHORAGES:

Anchorage A (General)

Beginning at Eastern corner of Grand Trunk Railway Company Pier No. 3; thence approximately 90°, 1,700 yd. to Brooklyn Ledge Buoy 16; thence 330°, 350 yd.; thence 25°, 780 yd.; thence 303°, 750 yd.; thence 254°, 560 yd.; thence 186°, 750 yd.; and thence to the point of beginning.

Anchorage B (General and Quarantine)

Beginning at Brooklyn Ledge Buoy 16, thence 58° to Little Diamond Island thence along the S.W. shore to the pier on the Southern end of Little Diamond Island; thence 143°, 1,200 yd.; thence 270.25° to House Island Light; thence along the Western shore of House Island to Fort Scammel Point Light; and thence 329°, 1,620 yd. to the point of beginning. Anchorage B is intended for general purposes, but especially for use by oil tankers and other deep-draft ships entering the harbour at night and intending to proceed to the dock allotted at daylight the following morning, or as soon as practicable. This area also is to be used for quarantine anchorage. Any vessel anchored in this area shall be ready to move on short notice.

Anchorage C

Bounded on the N.W. by House Island; on the North by a line running 90° from House Island Light to Peaks Island; on the East by the Western shore of Peaks Island, by a line running 198° from the Westernmost point on Peaks Island to Cushing Island, and by the shore of Cushing Island to its Westernmost point; and on the Southwest by a line running from the Westernmost point on Cushing Island to Fort Scammel Point Light. Anchorage C is intended for use only by small vessels and for temporary anchorage.

Anchorage D

Southerly and Westerly of a line beginning at Lighthouse Channel Buoy 1; thence 35° to Anchorage Buoy E; and thence 145° to the mainland. Anchorage D is for use only by small yachts and pleasure craft, and small, light draft coastwise freighters.

RESTRICTIONS: No entry restrictions at night. Deep draft vessels brought in on high water only.

MAX. SIZE: Size of vessel restricted to 45 ft. draft in harbour area. No outside installations at port yet.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Tugs in Portland Harbour use Channel 07. Vessels arriving Portland go through radio station in Chatham, Mass., RCA installations, or call station WOU via radio-telephone. VHF Harbour Control at Portland.

TUGS: Tugs join vessel at Spring Point in Portland Harbour. Tugs use own lines at no additional charge. Docking Pilots not supplied by Company but are available.

BERTHING: Tidal conditions govern arrivals and departures.

BRIDGES: No undocking on ebb tide through bridge.

STEVEDORES: 4 hours notice on ordering gangs.

MEDICAL: No advance notice required by Agent. 2 hospitals, Maine Medical Center and Mercy Hospital, who take bed patients. All seamen require certificate showing they have had a smallpox vaccination during last 3 years.

TANKERS: Tankers arriving at Portland Pipe Line, Pier 2, make preparations for 2×10 in. and 12 in. hoses.

Berth	*Depth Alongside*
American Oil Terminal	30 ft. MLW
Chevron Terminal	32 ft. MLW
Portland Pipe-line Pier No. 1	35 ft. MLW
Portland Pipe-line Pier No. 2	48 ft. MLW
Texaco Terminal	30 ft. MLW

DENSITY: Average density 1024.

FRESH WATER: Available by tug for boilers only at rate of tug hire. Drinking water available at piers.

FUEL: No. 6 diesel oil and blended interfuel oils. Delivery is via barge only and 24 hours notice required.
FIRE PRECAUTIONS: None – except at certain oil piers where information given to Shipmaster upon arrival at pier. Ample fire protection, salt water lines, sprinkler system on pier, local fire department.
DEVELOPMENTS: Plans under way for redevelopment of waterfront. Plans call for deepening Fore River from 35 ft. to 45 ft. and studies also under-way to provide offshore unloading of giant super-tankers. Plans to construct a $140 million oil transfer facility. In order to complete project, existing 40 ft. ledge will be removed to 90 ft. and dredging in the inner harbour of Hussey Sound will be done. No date set for final completion.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Ship's crew open hatches.
CERTIFICATES:

Load-line certificate.
Certificate of Foreign Clearance.
Ship's Safety Certificate.
U.S. tonnage tax certificate of previous trip if available
Radio Operator Licence.

CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes per man. Wine and/or Spirits, 1 bottle per person.
CARGO GEAR: No additional cargo gear necessary.
IDENTIFICATION CARDS: Form I-95 must be filled-out on arriving unless seaman has had a prior one made out for a previous arrival on same ship.
CONSULS:

Norwegian: Allan Kjos-Hanse, 30 Mayer Road, Portland, Maine, Vice-Consul.
French: Dr. Paul O. Proudian, 776 Main Street, Westbrook, Maine.
Finnish: Frank W. Bjorklund, 163 Main Street, Norway, Maine.
Italian: Dr. Domenico A. Santoro, 43 Deering Street, Portland, Maine.
Panamanian: Mary Navarro de Cerrillo, Lafayette Town House, Portland.
Swedish: Martin Johnson, Vice Consul, 443 Congress Street, Portland.

REPAIRS: Repair facilities for all types of machinery available.
DRY DOCKS: 3 basins divided into 7 berths which can handle a vessel up to 455 ft. long and 62 ft. wide (not currently activated). Also 3 other smaller marine slipways.
REPATRIATION: Arrangements must be made with Agent in advance by telegram.
AIRPORT: Portland Municipal Airport 3.5 to 4 miles distant. Served by Northeast Airlines and Executive Airlines.
HOLIDAYS: New Year's Day; Washington's Birthday; Patriots Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; Christmas and Veterans' Day. Possible to get gangs to work all days except Labor Day and Christmas.
POLICE/AMBULANCE/FIRE: Police 773–5651; Ambulance 772–5463; Fire 772–6531.
TELEPHONE: Arrangements can be made to have phone put on ship, but most docks have pay phones.
GENERAL: Discussions underway with Coast Guard and other officials to install fixed lighthouse stations to replace lightships at entrance.
AUTHORITY: Maine Dept. of Transportation Bureau of Waterways.

PORTLAND, Oregon: 45.30 N. 122.40 W.

PORT LIMITS: The seaward boundary of the Port of Portland is Astoria, 96 miles N.W. of Portland.
DOCUMENTS:

3 Cargo Manifests.
3 Store Lists.
3 Crew Curio Lists.
3 Crew Lists.
1 Clearance from Last Port.
1 Tonnage Tax Certificate.
1 Copy of Vessel's Register.
1 Itinerary of Vessel, port by port.

PILOTAGE: When entering from sea (without service of bar Pilot) vessels or Agents must give notice between 0800 and 1700 hours and at least 12 hours prior ETA at Astoria. Calls may be placed with Astoria office (325-4532) or Portland office (228-9325) or by radio to "Colrip Astoriaore". River Pilots board at Astoria in channel in vicinity Astoria Crossing Lighted Buoy No. 37. Signal for river Pilot 1 long, 3 short whistles. When ordering bar Pilots, request by radio via KLB, Seattle, Wash., about 12 hours before arrival. Address Bar Pilots, "Astoria, Ore.," giving date and time of arrival at lightship. When "Peacock" on station Pilot boards from small power boat; when "Columbia" on station Pilot boards directly from "Columbia". When Pilot boarding from small boat, maintain reduced speed about 4 knots. Do not change course or speed until signalled by Pilot vessel. Vessels having radio telephone contact Pilot vessels for instructions on following frequencies: radio phone watch Channel 16 VHF (156.8 mc/s.) also 2182 and 2738 kc/s. Pilot boat "Peacock" call WS 7217; Pilot boat "Columbia" WZU 7337; Astoria Bar Pilots' office (Channel 16) KOK 360.
ANCHORAGES: The only designated anchorages are at Tongue Point (Astoria), Oregon. 2 anchorages at No. 1 Lower Tongue Point, and No. 2 Upper Tongue Point. Additional locations on Columbia and Williamette Rivers where safe anchorages can be made upon advice of Columbia River Pilots. Anchorage in Portland harbour by permission of Harbour Master.
RESTRICTIONS: No restrictions on night entry. State of tide and draft restrictions not applicable to vessels drawing less than 40 ft.
MAX. SIZE: No restrictions length and breadth. Depth at Columbia River entry 48 ft. River channel to Portland/Vancouver maintained at 45 ft. by 600 ft. Seasonal tidal effect up to 3 ft. at Portland.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Route ETA cables through KLBITT Seattle, Washington.
TUGS: Tugs normally join vessel at designated berth. Tugs' lines used at no charge.
BERTHING: The port operates 5 public ocean cargo terminals containing 28 deepwater berths, including 5 container berths with 6 high-speed container cranes. Present depths alongside berths is 40 ft. min. at MLLW.

There are general cargo berths and berths for commodities which require special handling. Port facilities include 21 transit sheds, and 5 warehouses with 2.2 million sq. ft. of sprinkler protected storage area.

BRIDGES: No arrival times designated if coming from sea and in excess of 750 tons gross. Departures regulated, with bridge closures during peak traffic flow (0700 to 0900 hrs. and 1615 to 1815 hrs.) unless permission granted by Harbour Master.
SPECIALISED CARGO HANDLING FACILITIES: As well as the 6 container cranes, there are 6 whirley cranes, a 150-ton shear leg crane and a 175-ton mobile crane, largest of its kind on the Pacific Coast.

At Terminal Two is a 1,341 ft. container/general cargo pier with a 40 ton and a 50 ton straight line crane and 2×65-ton gantry cranes. Terminal Two contains a Roll-on/Roll-off berth. Pier has a 25-acre open storage yard with rail and truck service. 4 straddle carriers, capable of stacking 20 ft. containers 3 high, or 40 ft. 2 high, serve the yard. Pierside warehouse and container freight station 90,000 sq.ft.

At Terminal Four there is an 8.1 million bushel capacity grain elevator, with box car tipper, truck dumper and barge unloading facility. Log dock is equipped with 2 whirley cranes. There is a Dravo bulk unloader with digging capacity of 900 t.p.h. Tanks are available for special cargoes such as petroleum, molassses, tallow and ore concentrates.

Terminal Six has a container pier, length 1,800 ft., with 3×50-ton straight line cranes and a 60,000 sq.ft. container freight station. Also a dock for Columbia River container-on-chassis barge service.

STEVEDORES: Allocation for gangs Monday to Saturday must be confirmed at 1100 hrs. to longshore hiring hall. Allocation for gangs Sunday and Monday made at 1100 hrs. Saturday for both day and night gangs. Same procedure applies to allocation of night gangs, but night gangs may be cancelled by 1400 hrs. in afternoon if night gangs are to work.
MEDICAL: Any type medical treatment provided and hospital facilities available. Only inoculation requirement for entry to U.S. is smallpox, except when vessels have called at an area infected by another disease.
TANKERS:

Berth	*Max. Size Vessel* *Length*	*Draft*
Shell Oil Company	575 ft.	32 ft.
Standard Oil	660 ft. – 700 ft.	35 ft.
Texaco Inc.	650 ft.	30 ft.
Phillips Petroleum Co.	No maximum	30 ft.
Time Oil Co.	600 ft.	40 ft.
Mobil Oil Corp.	550 ft.	31 ft.
Richfield	600 ft.	31 ft.
Union Oil Co.	550 ft.	30 ft.

DENSITY: Fresh water at all times.
FRESH WATER: Available at all berths delivered through pier-side connections.
FUEL: Viscosity grades of B and lower. No advance notice required. Barging essential.
FIRE PRECAUTIONS: Fire precautions respecting tankers administered by U.S. Coast Guard, which enforces shipboard regulations under the Code of Federal Regulations, Part 46, Sub-Part D, Sections 20 to 40; the Police Harbour Patrol, which controls port movements, boards vessels to warn Master regarding harbour regulations, including spilling of oil, etc.; Fire Marshal exercises jurisdiction regarding fire regulations at shoreside facilities serving tankers.
GANGWAY/DECK WATCHMEN: Option of vessel owner/agent and available through private firms.
OPENING/CLOSING HATCHES: While ship at dock, opening and closing is work of longshoremen. Ship may open or close own hatches while underway.
CERTIFICATES: Registered tonnage certificates.
CARGO GEAR: Valid cargo gear certificate required, acceptable to U.S. Bureau of Labor Standards.
IDENTIFICATION CARDS: Immigration Dept. requires form No. 595 and No. 31 (Repatriation). Changes can be effected at any U.S. Consulate.
CONSULS: The following countries are represented in Portland:

Austria
Belgium
Costa Rica
Denmark
El Salvador
Finland
France
Germany
Ghana
Great Britain
Iceland
Italy
Japan
Korea
Lebanon
Mexico
Netherlands
Nicaragua
Norway
Panama
Peru
Senegal
Sweden
Venezuela

REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: 3 floating docks, largest 661 ft. long by 114 ft. wide.
REPATRIATION: Arrangements possible for crew changes or other repatriation.
AIRPORT: Airport 10 miles distant, served by 8 regularly scheduled airlines with direct service and/or connections domestically and world wide.
TIME: GMT minus eight hours. Daylight Saving Time becomes effective annually on the last Sunday in April through the last Saturday in October.
HOLIDAYS: *New Year's Day; President's Day (Feb. 21); Memorial Day (May 30); *Independence Day (July 4); *Labor Day (first Monday in September); Veterans' Day (Nov. 11); Thanksgiving Day, *Christmas Day (Dec. 25), State-wide Election Days. Other legal holidays may be proclaimed by state or national authority. When holiday falls on Sunday, the following Monday is observed as holiday. Longshore work performed on any of above listed days is overtime, which is one and a half time rate. Days marked (*) are stop-work days, i.e. no ships will be worked. This also applies to July 5, which observed locally on unilateral basis.
POLICE/AMBULANCE/FIRE: Police 226-7551; Fire 232-2111; Ambulance: provided by several private firms, but can be obtained through police or fire number.
TELEPHONES: Available by order from terminal superintendents at $5.00 connection charge.
SERVICES: All services available such as compass adjusting, major or minor repairs either with work barges or at ship repair berths; lay berths available; charts available from private companies; all chandlery supplies available.
SHORE LEAVE: Crew members permitted ashore except where vessel has made first arrival from Communist-controlled port.
AUTHORITY: Port of Portland.

PORT LAVACA/POINT COMFORT, Texas: 28.40 N. 96.35 W.

DOCUMENTS:
2 Cargo Manifests.
2 Stores Lists CF1303.
2 Crew's Effects Declaration CF1304.
1 Clearance from last Port.
Vessel's Register, tonnage, tax receipts, etc.
2 Copies Crew List.
2 Copies Passenger List.

PILOTAGE: Ship's Agents usually notify Matagorda Bay Pilots as to vessel's ETA. Pilot boat can be contacted on VHF Channel 16, then switch to Channel 26 to continue conversation. Pilot boards at buoy 1-A at position 28° 23′ N. 96° 17′ W.
ANCHORAGES: Marked on chart of Matagorda Bay and approaches.
RESTRICTIONS: Vessels may enter any time day or night. Entrance channel depth 38 ft. Bay Channel depth 36 ft.
MAX. SIZE: Alcoa dock – size restricted only by channel depth of 38 ft. Public Dock – max. length approximately 600 ft. Draft controlled by channel depth of 38 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Galveston Radio (ITT Mackay Marine) and Port Lavaca Marine operator can be contacted on VHF Channel 16, then switch to channel 26 for continued conversation.
TUGS: 1 tug available joining vessel shortly before arriving at berth.
BERTHING: Ore carriers berth at Alcoa private dock. All other vessels berth at Public Dock.
STEVEDORES: Richard Bugg & Co. Inc., PO Box 457, Corpus Christi, Texas. At Alcoa's Dock all plant labour is used.
MEDICAL: No advance notice required. Several clinics and 1 hospital available in Port Lavaca.
DENSITY: Average density is 1010/1012.
FRESH WATER: Fresh water available alongside berth.
FUEL: Not readily available, must be barged or trucked from either Houston or Corpus Christi. Very expensive.
DEVELOPMENTS: Plans for lengthening dock and another warehouse are now being considered.
OPENING/CLOSING HATCHES: At public Dock this is done by stevedores. At Alcoa Dock this is done by ship's crew.
CERTIFICATES: Load line, foreign clearance, safety equipment, financial responsibility (oil pollution), tonnage tax receipts, will be required.
IDENTIFICATION CARDS: Immigration Crew Landing Permit I-95 required for each man.
CONSULS: Only Norwegian Vice-Consul Tel. 512-987-2311.
REPAIRS: Only minor repairs possible. No dry docks.
REPATRIATION: Arrangements are possible but preferably should be accomplished in larger ports.
AIRPORT: Nearest airport 20 miles at Victoria, Texas, served by Texas International only, Corpus Christi airport about 90 miles; Houston airport about 150 miles.
TIME: Central Standard Time during Winter. Beginning last Sunday in April until last Sunday in October, Daylight Saving time (clocks are moved ahead 1 hour).
HOLIDAYS: All holidays observed by contract with ILA. See "Houston".
POLICE/AMBULANCE/FIRE: Police Department, 552-6767; Fire Department, 552-2222; Ambulance Service, 552-2988.
TELEPHONES: Telephones are available ashore only. Telephone booth on Public Dock.
AUTHORITY: The Calhoun County Navigation District, Port Lavaca.
Private Dock owned by Aluminium Company of America with its Agent being Alcoa Steamship Company Inc., Point Comfort.

PORT NECHES, Texas: 30.00 N. 93.57 W.

DOCUMENTS, PILOTAGE, RADIO, etc.: Refer to "Port Arthur".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Meet vessel in Neches River before arriving at berth. Normally 2 tugs used for docking, 1 for undocking.
BERTHING: Jefferson Chemical Co.: distance from sea 30 m., depth at berth 36 ft. Texaco terminal: distance from sea 34 m., depth at berth 32 ft.
MEDICAL: All facilities available.
DENSITY: Fresh water.
FRESH WATER: Available by barge.
FUEL: Bunker C not available ex wharf at Texaco terminal, only by barge from Port Arthur or Beaumont.
GANGWAY/DECK WATCHMEN: Not required unless crewmen detained by Immigration.
CUSTOMS ALLOWANCE: 300 cigarettes and 1 quart wine or spirits for each man.
IDENTIFICATION CARDS: Foreign crew require only Immigration Landing Permit.
CONSULS: Nearest at Houston.
REPAIRS, DRY DOCKS: See "Port Arthur".

PORT ST. JOE, Florida: 28.49 N. 85.19 W.

DOCUMENTS:
All documentation must be on United States forms. At least:
3 Passenger Lists.
3 Crew Lists (1 for visa crew list).
3 Curio Lists.
3 Stores Lists.
2 Complete Manifests.
Clearance Papers from last port.

PILOTAGE: Apply for Pilot through ship's Agent – address is "Port St. Joe, Pilots" and advance ETA 18 hours. "VHF – Channel 16". Pilot boat station is at Sea Buoy, Port St. Joe only and location of anchorage for vessel awaiting a Pilot is 1 mile West of Sea Buoy.
ANCHORAGES: Local harbour charts indicate safe anchorage.
MAX. SIZE: Draft 28 ft. 6 in.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Call sign WLO, Mobile, Alabama.
TUGS: None presently available.
STEVEDORES: ETA must be received by 1800 hrs. in order to have gangs at 0800 hrs. following day.
MEDICAL: No notice required. Hospital facilities available. Inoculations required same as public health U.S. Government requirements.
TANKERS: Discharge lines 8 in. No residue discharge allowed. 2 tanker berths 32 ft. draft.
DENSITY: Salt water – heavy concentration.
FRESH WATER: Available in unlimited quantities by hose connection from dock to ship, 1.5 in. to 2.5 in. size at 60 p.s.i.
FUEL: Fuelling facilities limited. Tanker trucks only. 2 days advance notice advisable. 2 grades of fuel oil available: *(a)* grade 6 – Bunker C – 156SSF at 122 degrees Fahrenheit; *(b)* Diesel oil – 36.5 SSU at 100 degrees Fahrenheit; *(c)* Gasoline, kerosene and motor oils available.
GANGWAY/DECK WATCHMEN: Only when requested by ship.
OPENING/CLOSING HATCHES: Work can be performed by either stevedores or crew.
CUSTOMS ALLOWANCE: 1 carton of cigarettes per week per crew member permitted. Further allowances would depend on circumstances. Wine and/or Spirits 1 bottle per crew member as allocated by Customs.
CARGO GEAR: Must be in compliance with "U.S. Government Longshoremen Safety Codes".
CONSULS: None.
REPAIRS: None.
DRY DOCKS: None.
REPATRIATION: Can be accomplished by Agent and Immigration but should be accomplished in larger ports if possible.
AIRPORT: Served by regular airlines. (Southern Airways, National Airways). 6 combined flights a day. Distance 40 miles.
TIME: Saving time from first Sunday in May to last Sunday in October. GMT minus 5 hours Standard Time. GMT minus 4 hours daylight saving time.
HOLIDAYS: No Work Holidays – No work performed New Year's Day, Fourth of July, Labor Day, Christmas Day, or December 24 & December 26, and Easter Sunday, except handling of mail, baggage and perishables (except bananas) or unless a ship is in distress, such as fire or leaking bottom, or, other causes that would damage cargo or vessel. In event work done on New Year's Day, Fourth of July, Labor Day, Christmas Day, December 24 & December 26, or Easter Sunday, rate of pay for such ship work shall be double the

normal time rate. Should above holidays fall on Sunday, double time will be paid. Following Monday will be paid at time and one-half.

Working Holidays – Armistice Day, Thanksgiving Day and Memorial Day are to be paid for at overtime rate – one and one-half times straight-time rate. Should any of above holidays, except Sunday fall on Sunday, the following Monday will be observed.

POLICE/AMBULANCE/FIRE: Police 227-3181; 227-4526; Ambulance 227-3511 (Comforter), 277-2491 (Prevatt), 227-4011; Fire 227-4011.

TELEPHONES: None available for placing aboard.

GENERAL: In sending ETA when ship is going to arrive over weekends (Saturday and Sunday), a notice wire should be placed and notice ETA should arrive prior to 1700 hrs. Friday.

SHORE LEAVE: Shore leave allowed when cleared by Immigration.

REGULATIONS: Normal working hours of longshoremen from 0800 to 2230 hrs. only 7 days a week.

DELAYS: Only when due to port congestion.

AUTHORITY: Port St. Joe Port Authority.

PORT SAN LUIS, California: 35.10 N. 120.45 W.

TERMINAL OPERATORS: Union Oil Company, Avila Beach, California. Tel. 805 595 2069.

MAX. SIZE: Tankers up to 750 ft. length and 26 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Los Angeles Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Vessels should contact Union Oil Company through Marine Operator. "Walkie-talkie" sets used for communication with terminal. VHF station KTD 411, Channels 10 and 16.

BERTHING: Tanker berths only at Union Oil Company Pier. Vessels tie off pier at berths No. 4 and 5. Depth alongside 36 ft. MLW.

2×12-in. and 1×16-in. load/discharge lines. Ballast discharge available through 1×8-in. line to ballast tank of 20,000 barrels max. capacity.

DENSITY: Salt water, 1025.

FRESH WATER: Limited amounts only available from the pier.

FUEL: Not available.

CONSULS: Nearest consuls situated at Los Angeles and San Francisco.

AIRPORT: County Airport, San Luis Obispo, situated 12 miles distant. 2 flights daily to Los Angeles and to San Francisco.

AUTHORITY: Port San Luis Harbor District.

PORT SULPHUR, Louisiana: 29.28 N. 89.41 W.

DOCUMENTS, etc: Refer to "New Orleans".

PILOTAGE: A vessel coming into port from sea can arrange to pick up a Bar Pilot (Associated Branch Pilots) by furnishing ETA to the ship's Agents, radio contact by VHF Channel 9 and AM Channels 2738 and 2183. Bar Pilot is exchanged for river Pilot at head of Passes, Pilot town, Louisiana. River Pilot (Crescent River Port Pilot's Association) can be arranged through ship's Agent in New Orleans and radio contact as above. Vessel awaiting Pilot for departure may remain at dock until Pilot arrives. Advance notice of 3 hours is required for departing Pilots. This can be arranged by the ship's Master with the shipping foreman.

ANCHORAGES: Anchorage is available on East bank of river opposite to Freeport Sulphur Company dock. Depth of water at anchorage is 40 ft., the controlling depth in the river.

RESTRICTIONS: No restrictions for entry because of time of day, nor conditions of tide or draft except the controlling depth of Mississippi river to Port Sulphur (35–40 ft. as published in reports by U.S. Army Corps of Engineers).

MAX. SIZE: Max. permissible length – 560 ft., breadth not limited, draft equal to controlling depth of river.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Tropical Radio WNU New Orleans.

TUGS: Tugs not normally required. Shore crews usually handle ship's lines. Tug may join the vessel opposite the dock. Charges for handling ship's lines.

STEVEDORES: Not normally required. When requested, stevedoring services can be obtained from port of New Orleans; contact ship's Agents for particulars.

MEDICAL: Advance notice for personnel requiring medical service is required through ship's Agents. Hospital facilities are available.

TANKERS: 1 tanker berth, permitted draft equal to or greater than controlling depth of Mississippi river. Diameter of loading/discharge lines is 12 in. and 16 in. respectively.

DENSITY: Density in port not affected by tide. Fresh water.

FRESH WATER: Fresh water is available, can be loaded with 1.5 in. fire line.

FUEL: Fuel may be loaded by barge with vessel at anchor. Fuel transfer is not permitted at dock.

FIRE PRECAUTIONS: No welding repair permitted at dockside. Fuel transfer is not permitted. No other specific precautions observed except for "no smoking" precautions, etc.

GANGWAY/DECK WATCHMEN: Services of watchmen desirable but not required. Port does not furnish this service.

CERTIFICATES: Certificate of condition of cargo handling gear required when use of gear is necessary.

IDENTIFICATION CARDS: Immigration form I–95.

CONSULS: Consuls offices are located in New Orleans, Louisiana.

REPAIRS: Engine and deck repairs are possible when the dock is not otherwise occupied.

AIRPORT: New Orleans International Airport, served by most major airlines. 55 miles from Port Sulphur.

TIME: Local time is Central Standard Time, except from May/October, Daylight Saving Time is in effect.

HOLIDAYS: Vessels are loaded on all holidays except Christmas Day.

POLICE/AMBULANCE/FIRE: Port Sulphur, Louisiana, 564–2525; 564–2525; 564–3231, respectively.

TELEPHONES: Jacks for telephones are provided at no additional cost to tankers loading at port.

SHORE LEAVE: Crew members are allowed ashore.

DELAYS: Loading will not commence until all holds are clean of scale and other foreign matter.

AUTHORITY: Private port, Freeport Sulphur Company, Port Sulphur.

REDWOOD CITY, California: 37.50 N. 122.28 W.

(See Plan)

DOCUMENTS, PILOTAGE and all general information refer to "San Francisco".

HEALTH: See "Health: All ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RESTRICTIONS: Though a natural deep water channel extends down the bay to Redwood City there is controlled depth channel 500 ft. wide and 30 ft. deep across San Bruno Shoal. The entrance channel to the port is 2 miles long and 30 ft. deep (all depths are at MLLW) and 300 to 350 ft. wide. There are 2 large turning basins at either end of the port harbour channel.

BRIDGES: The San Mateo Hayward Highway Bridge with a vertical clearance of 138.5 ft. and horizontal of 500 ft. crosses the ship channel.

BERTHING: *Wharf No. 1*, 500 ft. of berth space, and *Wharf No. 2*, 355 ft. of berth space, are dredged to a depth of 32 ft. alongside. Wharf No. 1 has 32,000 sq. ft. There are pipe-line connections for petroleum products and bulk cement.

Wharf No. 3 is an open wharf, 450 ft. long, and is used primarily for handling lumber and gypsum rock. It also has petroleum pipe-lines.

Wharf No. 5 has 500 ft. of berthing space with a depth of 33 ft. alongside. It was designed to accommodate large oil tankers and freighters, and for handling heavy lifts.

Capabilities include complete facilities to handle LASH (Lighter Aboard Ship) system.

AUTHORITY: Port of Redwood City.

RICHMOND, California: 37.56 N. 122.25 W.

(See Plan)

(a) *STANDARD OIL COMPANY OF CALIFORNIA TERMINAL.*
(b) *OTHER TERMINALS AT RICHMOND.*

(a) STANDARD OIL COMPANY OF CALIFORNIA TERMINAL.

DOCUMENTS and all general information, refer to "San Francisco".

LOCATION: Richmond Long Wharf and Point Orient Wharf are situated on N.E. side of San Francisco Bay, a protected harbour. The refinery and storage tanks are near the wharves.

The exact position of the Long Wharf is Lat. 37° 55′ 20″ N. Long. 122° 24′ 35″ W. Wharf heading is 324° to 144°.

The exact position of the Point Orient Wharf is Lat. 37° 57′ 20″ N. Long. 122° 25′ 39″ W. Wharf heading is 356° to 176°.

There is adequate anchorage and room for manoeuvring in the bay.

MAX. SIZE: The main ship channel into San Francisco has a project depth of 50 ft. However, the 35 ft. depth of the Southampton Shoal channel restricts the size of ships to wharves.

LIGHTENING: When a lightening operation is necessary the terminal management will direct the ship to anchorage 9. The ship to be lightened will install fenders before the lighter ties alongside. The terminal will provide the fenders. The lightening supervisor and ship's officer will hold a meeting to discuss the cargo transfer. During transfer, follow the same precautions and safety regulations that apply to cargo transfer at the wharf. The transfer rate will be regulated by the lightening vessel. The lightening supervisor will observe all the lightening operations. The terminal wil provide oil spill recovery equipment during lightening.

HEALTH: See "Health: All Ports" before first U.S.A port (Albany). Illness reports made to San Francisco Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: San Francisco harbour advisory radar system, designated bridge-to-bridge frequency: VHF Channel 18a (156.9 mHz).

Federal communication regulations require that at any time VHF radio is in operation, Channel 16 must be monitored (156.8 mHz distress and calling frequency).

The 2-3 mc. radio telephone call letters for the San Francisco Bay area are KLH.

Richmond Long Wharf (radio call – Chevron Shipping) is equipped with VHF radio, manned 24 hours per day. Channel 10 (156.5 mHz) is the operating frequency. While at anchor, in San

Francisco Bay, vessels should maintain normal listening watches on VHF Channel 10.

The Master of a vessel bound for San Francisco Bay is requested to advise Chevron Shipping (Cables address: Chevronship Richmond Sanfrancisco) of ETA, 7 days, 3 days and again 1 day (24 hours) before arrival at the wharf. First ETA message should include:

Estimated time of arrival at the wharf (local time).
Last port of call.
Estimated deep draft at arrival.
Quantity of ballast to be discharged.
Quantity and grade of cargo to be transferred.
Distance from bow to cargo and bunker manifolds.
Size and type of cargo and bunker connections.
Quantity and grade of bunkers and lubes required.
Quantity of fresh water required.
Number of crew replacements expected.
Amount of provisions and stores to be loaded.
Repair work anticipated.
Make 24-hour ETA as accurate as possible and whenever arrival time changes, by 1 hour or more, send a correcting message promptly.

BERTHING: At least 1 hour before docking contact Chevron Shipping, in Richmond, by VHF radio (Channel 10, 156.5 mHz) and request a berth assignment. They will try to berth as soon as you arrive. However, if no berth is available, anchor in the prescribed anchorage (as directed by the Captain of the port) and maintain radio contact with Chevron Shipping, Richmond.

There are 2 piers that accommodate oil transfers. They are referred to as Richmond Long Wharf and Point Orient Wharf.

Long Wharf: Richmond Long Wharf, a "T"-head pier, has an overall length of 2,464 ft. It consists of concrete and wooden piles and a concrete superstructure connected to the shore, 4,200 ft. away by a piled causeway. The fender-to-fender width is 114.5 ft.

There are 4 deep water berths on the West side, each approx. 600 ft. long. They are numbered 1 to 4 from South to North. Water depth is 38 ft. at MLLW. Carefully observe deep draft during periods of low water. There is an inner berth, No. 5 that may be used for bunkering small ships; water depth is 18 ft. at MLLW. The other inner berths, Nos. 6 to 12, are used primarily for barge loading.

Point Orient: The Point Orient Wharf, an "L"-head pier, is 2.25 miles North of the Long Wharf. It is 504 ft. long and 60 ft. wide. It is supported on wooden piles and has a causeway that extends 1,200 ft. to the shore.

There is one ship berth, No. 1 where the water depth is 36-40 ft. at MLLW. There is also one barge berth No.2.

LOADING AND UNLOADING: All berths are fitted with 4-, 6-and 8-in. hoses for cargo transfer. Berth No. 4 is fitted with 1×8-in. and 2×12-in. Chiksan loading arms. Berth 1, at the Long Wharf has a similar Chiksan system – 2×12-in. arms. All flange facings are ANSI 150-pound rating.

Several products can be loaded at each berth.

BALLAST: The terminal has facilities to receive some ballast (max. capacity 25,000 bbl/s – normal capacity 15,000 bbl/s). However, arrangements for this to be made through Agent before arriving at the wharf. All ballast to be discharged must be pumped to shore while berthed at wharves.

POLLUTION: The Federal Water Pollution Control Act prohibits the discharge of oil or oily waste in the waters of San Francisco Bay which causes a film or sheen on the water or discolours it or causes a sludge or emulsion beneath the surface of the water.

Regulations enforced by the Bay Area Pollution Control District also prohibit the emission of smoke and soot. Vessel can be fined if it emits visible smoke (Ringelmann 1) for more than 3 minutes in one hour, or blows its boiler tubes enough to create a soot nuisance on shore.

In addition, the terminal has certain regulations designed to eliminate obnoxious odours. Vessel may, therefore, be required to follow special procedures before tank cleaning, loading or ballasting. If, in spite of precautions, vessel does cause such odours, loading or unloading operations may be stopped.

MEDICAL: No facilities at wharves. Local ambulance may be reached at: Cadillac Ambulance Service (415) 234-3242; Alhambra Air-ground Ambulance Service (air) (415) 228-1096; California Aviation Service Inc. (air) (415) 569-3855.

FUEL: Many grades of bunkers, diesel and lubricating oils are available in bulk or drum quantities. Agents order them from Traffic and Distribution or Chevron International at least 48 hours before vessel arrives, otherwise, vessel may be delayed.

To take on bunkers and diesel, vessels must be able to connect to terminal's 3-in., 4-in., or 6-in. 150-lb. ANSI flanges.

PROVISIONS: Provisions and stores will be loaded only at Richmond Long Wharf, and only when loading does not interfere with cargo or ballast transfer. If vessel is large and not equipped with booms, Agent need to supply a crane for the loading. Stores will not be handled by wharf personnel.

FRESH WATER: Potable water provided. Make arrangements through Agent.

REPAIRS: Terminal Management approval required for any repairs, hot work or maintenance work at the piers. No repairs will be allowed that delay cargo transfer or lengthen the time it takes.

SHORE LEAVE: Ship's personnel are not permitted ashore and shore personnel are not permitted aboard for any purpose whatsoever until pratique has been granted. Once it is granted, no one may walk to shore on the Long Wharf causeway.

AUTHORITY: Standard Oil Co. of California, Richmond, California.

(b) OTHER TERMINALS AT RICHMOND

BERTHING: *Parr-Richmond Bulk Commodity Wharf:*

Owners: Parr-Richmond Terminal Co.

Operated by: Parr-Richmond Terminal Co.

Use: Receipt and shipment of various dry-bulk commodities.

Water Depth: 35-36 ft.

Mechanical handling facilities: On wharf; 4×50-ton electric, travelling full portal gantry cranes, each with 100-ft. boom and 2×45-ton electric travelling full portal gantry cranes, each with 118-ft. boom, 36-in. belt conveyor for shiploading with 10,000-ton-capacity covered storage warehouse.

Santa Fe Sugar Dock:

Owned and operated by: Atchison, Topeka and Santa Fe Railway Co.

Use: Receipt of sacked sugar by inland waterway vessels for transfer to railroad cars.

Dimensions: Length of face 545 ft., lower end 51 ft.; depth alongside at MLLW 24 ft.

Levin Metals Corporation:

Owner: City of Richmond Port Commission.

Operated by: Levin Metals Corporation.

Use: Scrapping of ships, consideration of scrap and export loading of cargo.

Dimensions: Length of face 555 ft. each; Pier 1 depth 35-38 ft., Pier 2, 17 ft.

Richmond Terminal No. 3 General Cargo Wharf:

Owners: City of Richmond.

Operated by: Canal Industrial Park.

Use: Receipt and shipment of general cargo in foreign and domestic trade, automobiles; bulk liquids, including petrochemicals, chemicals, and vegetable oils.

Dimensions: Length of face 900 ft.; depth alongside at MLLW 35 ft.; usable berthing space with dolphins 960 ft.

Mechanical handling facilities: Forklift trucks and other types of cargo-handling equipment are available.

Remarks: Face of wharf is in line and contiguous with the face of adjacent wharf providing 1,340 ft. of continuous berthing.

Richmond Terminal No. 4 Wharf:

Owners: City of Richmond.

Operated by: Richmond Terminal Agency, Pacific Molasses Co. Ltd., & Dorward & Sons Co.

Use: Bulk Liquids.

Dimensions: Length of face 1,047 ft.; South side 175 ft.; North side 100 ft.; depth alongside at MLLW 32-50 ft.

Canal Industrial Park and Willamette Iron & Steel Co.:

Owner: City of Richmond Port Commission.

Operated by: Canal Industrial Park (Pasha Truckway) & Willamette Iron & Steel Co.

Use: Import service and delivery of foreign automobiles; ship repairs.

Dimensions: Length of face 700 ft.; depth alongside at MLLW 35 ft.; usable berthing space with dolphin 900 ft.

Mechanical handling facilities: Mobile handling equipment available. Complete range of crane and ship facilities for major ship repair.

TANKERS: *Atlantic Richfield Tanker Dock;*

Owned and operated by: Atlantic Richfield Co.

Use: Receipt and occasional shipment of petroleum products; bunkering vessels.

Dimensions: Length of face approx. 250 ft.; lower and upper sides 40 ft. each.

Atlantic Richfield Barge Dock:

Owned and operated by: Atlantic Richfield Co.

Use: Receipt and shipment of petroleum products by barge; bunkering vessels.

Dimensions: Length of face 150 ft., depth alongside at MLLW 34 ft.

Richmond Terminal No. 1 Wharf:

Owners: City of Richmond.

Operated by: Petromark Inc.

Use: Receipt and shipment of petroleum products, chemicals and petrochemicals.

Dimensions: Length of face 557 ft.; depth alongside at MLLW face 35 ft.

Richmond Terminal No. 3 Liquid Cargo Wharf:

Owners: City of Richmond.

Operated by: Canal Industrial Park.

Use: Receipt and shipment of vegetable oils, chemicals and petrochemicals.

Dimensions: Length of face 380 ft.; depth alongside at MLLW 35 ft.

Texaco Wharf:

Owners: Texaco Inc.

Operated by: Texaco Inc.

Use: Receipt and shipment of petroleum products.

Number of berths: 1.

Water depth: 35 ft.

Time Oil Company Wharf:

Owned and operated by: Time Oil Co.

Use: Receipt and shipment of petroleum products.

Number of berths: 1.

Water depth: 35 ft.

Special remarks: 3×10-in. pipe-lines extend to 25 steel storage tanks in rear; total capacity of 618,000 barrels.

Union Oil Co. Tanker Dock:

Owned and operated by: Union Oil Co. of California (also services GATX Terminal).

Use: Receipt and occasional shipment of petroleum products; bunkering vessels.

Dimensions: Length of face 225 ft.; lower end 45 ft.; upper end 45 ft.; depth alongside at MLLW 35 ft.

Mechanical handling facilities: Hosehandling at wharf is by ship's gear and small tractor crane.

Union Oil Co. Barge Dock

Owned and operated by: Union Oil Company of California.

Use: Shipment and occasional receipt of petroleum products; bunkering vessels.

Dimensions: Length of face 150 ft. (approx.); lower end 45 ft.; depth alongside at MLLW 35 ft.

Mechanical handling facilities: Hosehandling at wharf is by ship's gear and small tractor crane.

Remarks; Wharf and Tanker Docks are spaced about 230 ft. apart; together they provide 1 large tanker berth.

RICHMOND, Virginia: 37.32 N. 77.25 W.

DOCUMENTS: See "Hampton Roads".

PILOTAGE: Entrance through Hampton Roads. Virginia Pilots Assn. original contact same as for Norfolk, Virginia. Pilots will arrange for change of Pilots to proceed up the James River.

ANCHORAGE: Hampton Roads anchorage, also river anchorage approximately 40 miles up river, shown as "Upper Brandon" on charts.

RESTRICTIONS: Navigation of river above Upper Brandon recommended in daylight hours, except vessels under 250 ft. length.

MAX. SIZE: Max. length recommended by Pilots 550 ft., draft 21 ft. 6 in. any tide, depth of channel 25 ft. MLW tide, change 3 ft. 5 in.

HEALTH: See "Health: All ports" before first U.S.A. port (Albany). Illness reports made to Fort Monroe Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: See "Hampton Roads".

TUGS: Not needed for berthing unless vessel is to be turned around on arrival. Tug available at Terminal on reasonable notice.

BERTHING: Vessels berth alongside wharf 1,200 ft. long.

BRIDGES: 2 bridges across river between Hampton Roads and Richmond. No specific time or notice required.

STEVEDORES: Arrangements to be made through Agents. 48 hours notice requested.

MEDICAL: Vessels cleared by U.S. Health officials at Hampton Roads before proceeding up river.

DENSITY: Water considered as 100% fresh.

FRESH WATER: Available at pier.

FUEL: Bunkers available only at Hampton Roads.

GANGWAY/DECK WATCHMEN: None required, unless crew detained by U.S. Immigration.

OPENING/CLOSING HATCHES: On bulk cargo usually opened and closed by ship's crew, also steel hatches handled by ship's crew, sometimes determined by terms of Charter.

CERTIFICATES:

Ship's register.
Load-line Certificate.
Safety Certificate.
Tonnage tax receipts.
Certificate of nationality.
Passenger Certificate.

CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes (1 carton for 2/3 days) if further allowance is needed Customs Officer will return on request of Master. Wine and Spirit, 1 bottle per officer, Customs Officer will return on request of Master.

IDENTIFICATION CARDS: Immigration landing permit required.

CONSULS: No consuls in Richmond, handled through Hampton Roads if needed.

REPAIRS: Only minor repairs, no shipyards.

REPATRIATION: Handled through Norfolk, Virginia.

AIRPORT: Approximately 10 miles from port, regular airline service.

TIME: Eastern time GMT minus 5 hours. Daylight saving time from first Sunday in May to last Sunday in October.

HOLIDAYS: January 1, May 30, July 4, Labor Day (1st Monday in September), Thanksgiving Day, Christmas Day.

POLICE/AMBULANCE/FIRE: Police 780-9461; Ambulance 780-9404; Fire 780-9191.

TELEPHONES: No arrangements for placing aboard vessels.

SHORE LEAVE: Allowed. Proper papers should be available.

AUTHORITY: Port of Richmond Advisory Commission.

RIVERHEAD, Long Is., New York. Petroleum fuel storage terminal operated by Northville Industries Corporation. (See Plan)

DOCUMENTS: See "New York".

LOCATION: Steel berthing jetty, with North and South berths, is situated in latitude 41° 00′ 01″ North and Longitude 72° 38′ 50″ West.One and two-tenths nautical miles offshore from Long Island and 4 miles 257° true from Mattituck Inlet Light. A white flashing bell buoy is situated three-tenths mile W.N.W. of the jetty which has 4 navigation lights situated on each corner of the structure flashing every second.

PILOT: Pilot arranged by ship's Agent. Generally Pilot boards off Brenton Reef Lightship or at S.E. buoy, Block Island. Distance from Brenton Reef 65 miles and 69 miles from Block Island.

ANCHORAGE: Vessels arriving at night or at times not suitable for mooring should anchor 1 to 1.5 miles N.E. of lighted bell-buoy marking area. Holding ground good and 75 fathoms of chain (5 shackles) in the water is considered safe. Mooring Master and crew will board about 1 hour prior scheduled mooring time. Generally launch does not arrive before this time except for emergency.

MAX. SIZE: Length in North berth 1,150 ft. LOA and draft not to exceed 60 ft. Length in South berth 550ft. LOA and draft not to exceed 50 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUG SERVICE: Arranged by ship's Agent. Tug boats generally come from New Haven. When ordering tug, sufficient time should be allowed for tug to cross Sound, a distance of approximately 18 miles.

RESTRICTIONS: Vessels are moored on any stage of the tide and during daylight hours only.

COMMUNICATION: Telephone at Riverhead Park 7-5600 (Code for station to station: dial 516 Park 7-5600). Cable Address Northville Riverhead New York. Radio I.T.T. Amagansett.

BALLAST: No ballast disposal facilities. Long Island Sound is inland water and United States Anti-pollution Regulations rigidly enforced. No bilge water, oil-contaminated water, garbage or any waste matter which may pollute sea water is to be discharged overboard while vessel within Long Island Sound and approaches.

STORES/FRESH WATER/FUEL: No fresh water facilities. Small quantities provisions may be purchased at local stores in Riverhead, 4 miles inland. All services contingent upon Mooring Master's approval and on weather conditions.

QUARANTINE, CUSTOMS AND IMMIGRATION: New York City is port of entry for Northville. Entry and clearance must be arranged by ship's Agent. Boarding officers board in the anchorage prior to arrival within mooring area. Pertinent Government officials should be advised in sufficient time, usually not less than 24 hours Monday through Friday and 48 hours on Saturday and Sunday. Generally, entry and clearance can be arranged by Agent who should advise Customs well in advance of vessel's arrival, thus saving necessity of having Master go to Custom House in New York.

MEDICAL: Hospital in Riverhead. Medical attention must be arranged by ship's Agent. U.S. Public Health Service not available locally.

BERTHING: North berth: Vessels berthed during flood tide current will moor starboard side to and during the ebb tide current will moor port side to. Forward and stern spring lines are secured to the breasting dolphins and bow and stern lines are secured to 4 mooring buoys situated South of the jetty.

South berth: Vessels berthed during flood tide current will moor port side to and during the ebb tide current will moor starboard side to. Forward and stern spring lines are secured to the breasting dolphins in the South berth and bow and stern lines are secured to the North berth breasting dolphins.

Masters will note that jetty is situated in an open roadstead and that all mooring equipment must be in proper working order and in good condition. If, in the opinion of the Mooring Master, the vessel's mooring equipment is inadequate the vessel will not be permitted to remain in the berth.

Vessels must be equipped with manilla or better mooring lines of not less than 8 in. circumference and not less than 90 fathoms length.

Vessels having wire moorings secured on warping winches with brake are acceptable. Warping winches must be adequate to handle mooring lines under heavy strain. Efficient stopper lines must be readily available to "stop off" mooring lines for transfer from winch to bitts without loss of tension.

Mooring Master will pilot vessel into moorings, supervise mooring and unmooring operation and connecting and disconnecting of steel loading arms.

OIL TRANSFER CONNECTIONS: In the North berth there are 2×16-in. and 2×12-in. steel loading arms and in the South berth there are 2×12-in. steel loading arms, all with appropriate reducers.

LOADING AND DISCHARGE OF CARGO: Oil transfer operations are entirely in accord with the Rules and Regulations of the United States Coast Guard. Declaration of Inspection by the Dock Person in Charge and the Vessel Person in Charge must be completed prior to commencement of any oil transfer operations.

WEATHER AND TIDE: Strong winds from North and N.W. experienced during Winter and Spring. Tide during maximum ebb and flood often reaches 3.5 to 4 knots velocity.

VHF: Communication with shore and launch via portable VHF radiophone. This equipment on continuously during vessel's stay. Mooring Master's crew maintain radio watch and constant communication with shore for general purposes and emergencies.

DENSITY: Flood tide density 1025. Ebb tide density 1020.

CUSTOMS ALLOWANCE: Tobacco, Wine and/or Spirit Allowance: Same as permitted in New York Harbour.

IDENTIFICATION CARDS: Issued by Immigration Officer.

CONSULS: All Consuls Offices located in New York City.

REPAIRS: No repair facilities available.

DRY DOCKS: At New York Harbour.

REPATRIATION: Agent arranges all crew repatriation via New York.

AIRPORT: New York Airports 80 miles distant.

TIME: Standard time GMT minus 5 hours. Daylight Saving Time first Sunday of May to last Sunday of October GMT minus 4 hours.

POLICE/AMBULANCE/FIRE: Terminal attends Police/Ambulance and Fire services.
SHORE LEAVE: Shore leave permissible.
LAUNCH SERVICE: The terminal does not provide launch service for crew shore leave. There is a local contractor who has launch service available and arrangements must be made by the vessel's local Agent.
AUTHORITY: Northville Industries Corp.

ROCHESTER, New York: 43.17 N. 77.36 W.

(See Plan)

Refer to "St. Lawrence Seaway" for important general information.
PILOTAGE: Not necessary.
ANCHORAGE: No anchorage available within harbour limits.
MAX. SIZE: Channel depth 23 ft. (LW). All depths in channel or alongside wharves should be checked carefully against the latest recorded elevated or lake level. This may vary from month to month. Entrance width 300 ft., turning basin depth 23 ft., 600 ft. in width.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Available. Arrange via ship's Agent.
BERTHING: Entrance piers are parallel to each other, and about 450 ft. apart. The West Pier is 3,036 ft. long and the East Pier 2,699 ft. long. Fog horn and beacon on West Pier, East pierhead lighted. Radio beacon. Port Authority Terminal located on West bank of Genesee River at end of Lake Pier. Has a quay wall of about 1,400 ft. in length. Depth of water alongside 23 ft. (LWD). Charlotte Docks located about 2 miles upstream from mouth of river on West bank.
CRANES: No floating cranes available. Stationary cranes available on order.
BRIDGES: New York Central Railroad swing bridge near mouth of the river and upstream from Port Authority Terminal. Traffic lift bridge about 0.25 mile upstream from railroad bridge.
STEVEDORES: Available by request. Charges to suit individual commodities.
DENSITY: Fresh water.
FRESH WATER: Available at both docks.
FUEL: Oil may be furnished direct from trucks at Port Authority Terminal.
IDENTIFICATION CARDS: Required.
CONSULS: None.
REPAIRS: Minor only.
REPATRIATION: Can be arranged.
AIRPORT: Approximately 10 miles from port.
POLICE/AMBULANCE/FIRE: Police, 232-3311; Ambulance/Fire, 232-2121.
SHORE LEAVE: Allowed.
AUTHORITY: Rochester-Monroe County Port Authority.

SACRAMENTO, California: 38.32 N. 121.30 W.

(See Plan)

DOCUMENTS: See "San Francisco."
PILOTAGE: Pilots board vessel in San Francisco Bay.
RESTRICTIONS: *Ship Channel:* Distance, Fort Point to Sacramento, 79 nautical miles (146 km.). Bottom width in river reach 300 ft. (91.4 m.). Bottom width in channel reach 200 ft. (61.0 m.). Min. depth at MLLW tide 30 ft. (9.1 m.).

Harbour: Area 60 acres (24.3 hectare). Min. depth at MLLW tide 30 ft. (9.1 m.). Tidal variation average 5 ft. (1.5 m.).
MAX. SIZE: 750 ft. LOA and 110 ft. beam, 30 ft. deep at MLLW.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: KBA 386, 156.9 megacycles (24 hours).
TUGS: Join vessel at Light 99 (turning basin).
BERTHING: Anchor – ships will have at least 1 anchor ready to let go in case of emergency, when docking or undocking. Anchor will be raised immediately upon ship being made fast to wharf.

Insurance lines are required on off-shore side, fore and aft, immediately after ship is made fast to wharf.

A cargo net shall be securely placed under gangways. Save-all nets shall be rigged abreast of holds at which general cargo is being handled.

Rat guards, at least 3 ft. in diameter, shall be placed on all mooring lines immediately after docking, and shall be maintained in place until ship's departure.

Pier 1:
Owned and operated by: Port of Sacramento.
Use: Bulk-loading rice facility.
Construction: Concrete with timber fender piles, length 600 ft. (182.9 m.).
Water depth: 32 ft. (9.8 m).
Storage capacity: 22,000 tons; 8 silos at 2,200 tons each; 6 silos at 470 tons each; silos at 270 tons each.
Mechanical handling facilities: 3 loading spouts dockside, conveyor system to storage facility.
Loading rate: 600 t.p.h.

Wharf 2:
Owned and operated by: Port of Sacramento.
Use: General cargo.
Construction: Concrete with timber fender piles; apron width 60 ft. (18.3 m.); length 600 ft. (182.9 m.).
Water depth: 30 ft. (9.1 m.).
Transit sheds: One, 40,000 sq. ft.

Pier 5:
Owned by: Port of Sacramento.
Operated by: Cargill of California, Inc., as a public utility.
Use: Bulk-grain facility.
Construction: Concrete and steel silos; concrete with timber fender piles; length 600 ft. (182.9 m.).
Water depth: 32 ft. (9.8 m.).
Storage capacity; 1,250,000 bushels (30,000 tons); 17 concrete silos; total capacity 500,000 bushels; 6 steel silos; total capacity 750,000 bushels.
Mechanical handling facilities: Conveyor system to storage facility.

Wharf 6:
Owned and operated by: Port of Sacramento.
Use: General cargo and containers.
Construction: Concrete with timber fender piles; length 600 ft. (182.9 m.)., apron 60 ft. (18.3 m.).
Water depth: 30 ft. (9.1 m.).
Mechanical handling facilities: 2 gantry cranes, 45 tons each.
Remarks: 6 acres of open wharf; 70,000 sq. ft. off dock warehouse.

Wharves 7-8:
Owned and operated by : Port of Sacramento.
Use: Bulk-material facility and general cargo.
Construction: Concrete with timber fender piles; apron 60 ft. (18.3 m.), length 600 ft. (182.9 m.).
Water depth: 30 ft. (9.1 m.).
Storage capacity: Covered 75,000 tons, open 850,000 tons.
Mechanical handling facilities: Conveyor-belt system from truck to storage, from ship to storage; from storage to ship, or from storage to truck; 2 gantry cranes.
Loading rate: 600 t.p.h.

STEVEDORES: Same as San Francisco.
MEDICAL: All normal medical facilities available.
DENSITY: Full fresh.
FRESH WATER: Available at all berths.
FUEL: All grades available with 24 hours notice. Delivered by barge.
GANGWAY/DECK WATCHMEN: Each ship shall have a security detail in readiness on board at all times it is in port. The security detail shall perform tasks of an emergency nature and shall have information concerning cargoes aboard in case of need for fire fighting purposes.
OPENING/CLOSING HATCHES: Opening/closing hatches is stevedore work while docked in port.
IDENTIFICATION CARDS: A pass signed by the Master or his designated officer will be required for crew members, passengers and their personal property to leave the port's fenced area. Property may be subject to physical inspection before leaving the fenced area.
CONSULS: Nearest at San Francisco.
REPAIRS: Limited repair facilities available.
REPATRIATION: Can be arranged through local Agent.
AIRPORT: 16 miles from port and served by regular airlines.
TIME: GMT minus 8 hours.
HOLIDAYS: Only days not worked are 4th and 5th July, Christmas Eve and Day, New Year's Eve and Day.
POLICE/AMBULANCE/FIRE: Tel. 371-8000. Extensions 252 and 228.
TELEPHONES: Telephones not available.
SHORE LEAVE: Crew members allowed ashore subject to Immigration clearance.
GENERAL REGULATIONS: Ships will not blow boiler tubes while in port. Bilge water or oil will not be discharged into harbour. Accidents will be reported immediately to the Terminal Superintendent. Splash boards will be placed over disposal vent-pipe openings on inboard side of vessel.

Garbage – United States and California State laws make it unlawful to dispose of ship's garbage except in approved ways. Port makes approved garbage disposal available – contact the Terminal Superintendent. Garbage retained on board must be kept in tightly closed containers.

Smoking – Smoking prohibited in and around cargo compartments, and on open decks except that it may be permitted in marked areas under sheltered portion of weather decks on offshore side. Smoking prohibited on wharfs and piers except in marked areas. Smoking prohibited on or near ship while it is bunkering.

Welding/Burning – Welding or burning will not be done until written approval is obtained from the Terminal Superintendent and the Fire Marshal. All requirements of both the Superintendent and Marshal will be strictly adhered to.

Fire Signal – Upon detection of a fire, regardless of location or size, the alarm of fire will be sounded. The alarm shall be sounded by telephone and/or whistle or siren blasts. 5 each, 5 second blasts repeated as necessary.
AUTHORITY: Sacramento-Yolo Port District.

SAN DIEGO, California: 32.41 N. 117.07 W.

(See Plan)

PORT LIMITS: The seaward boundaries of the port of San Diego at which a vessel is considered to be an "arrived vessel" is that time when the vessel is boarded by a Port Pilot at Seabuoy No. 1 and (subject to charter party terms) lay time commences when notification of readiness is tendered at berth.

DOCUMENTS:

Crew Lists.
Passenger Lists.
Customs Documents.
Manifests.
Stores Lists.
Crew Curio Declaration List.

If the vessel arrives from foreign direct, 3 copies each of the above documents are required.

If the vessel movements are between U.S. ports, 2 copies each of the above documents are required.

Health Documents. Arrival from foreign direct, 1 copy only. All crew members should be in possession of valid vaccination certificates.

Manifests. Arrival from foreign direct, 1 copy of travellers manifest which remains with vessel, and 3 copies each of U.S. Customs inward foreign manifest. Bills of lading, ship's papers carried aboard vessel varies with steamship companies.

PILOTAGE: The San Diego Pilots do not maintain Pilots on station. Service is rendered according to ETA received from vessel. If any vessel's arrival or departure is delayed over 1 hour, an additional charge will be made. Telegraphic address of pilot station – radio ETA to "Pilots", San Diego. Advance notice of ETA required – 24 hours prior to arrival of vessel. Pilot boat is 54 ft. in length, painted white. The exact area where Pilot boards the vessel is No. 1 sea buoy.

ANCHORAGE: 3 miles S.E. of Point Lima Light.

MAX. SIZE: Length, breadth – no restrictions. Max. draft alongside face of terminal, 36 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to San Diego Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: All radio messages go through the Los Angeles station for relay.

TUGS: Tugs normally join vessel approximately 1 mile before berth. 5 available with h.p. ranging from 200–1,700. There is no charge for the use of tug's lines.

CONTAINER FACILITY: A new generation, high-speed, all-electric container crane capable of handling 20 ft. and 40 ft. units, or single hook lifts of 40 long tons at National City Marine Terminal. This 17.4 acre facility will include 32,500 sq. ft. for a container freight station, a container steam-cleaning facility, office, maintenance shop, truck scales, railroad spur, and paved storage for 2,280 containers including electrical outlets for 45 refrigerated containers. Depth 35 ft.

SPECIALISED CARGO HANDLING FACILITIES: High-speed bulk-loading facilities exist with 800 ft. of 37 ft. deep water berthing space and bulk storage for 13,600 metric tons, plus a bulk loader boom that travels 500 ft. laterally and can be extended or raised enough to load nearly any size or type of ship.

High-speed bagging of bulk commodities is available for bagging of bulk materials from powder to pellets at the rate of 1,000 tons per 8-hour shift.

STEVEDORES: Advance notice of 24 hours desired in order to arrange gangs.

MEDICAL: Agents should receive notification of medical attention required 24 hours prior to ETA of vessel. Complete hospital facilities available.

TANKERS: Diameter of load/discharge line 6 to 8 in. Slop (residue) discharge facilities available upon request. 2 tanker berths – max. draft 30 ft. There are also 2 new Tanker Berths at National City Marine Terminal with 12 in. discharge lines.

DENSITY: Salt water in bay.

FRESH WATER: Fresh water available, delivery via pipeline.

FUEL: Diesel and bunker fuel available.

GANGWAY/DECK WATCHMEN: Available if considered necessary.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CERTIFICATES: Registered Load-line Certificate, Certificate of Inspection, Safety Certificate.

CUSTOMS ALLOWANCE: Tobacco: Per each crew member U.S. Customs allowed 2 cartons of cigarettes and 1 box of cigars. Wine and/or Spirits: Quantity allowed per each crew member – 1 quart.

CARGO GEAR: Up-to-date certification of all cargo gear required in order to comply with Pacific Coast Marine Safety Code.

IDENTIFICATION CARDS: U.S. Immigration requires completion of Form 95, U.S. Coast Guard requires landing permits.

CONSULS:

Chile
Costa Rica
Denmark
Dominican Rep.
Ecuador
El Salvador
Finland
France
Honduras
Italy
Mexico
Netherlands
Norway
Panama
Peru
Sweden
West Germany

REPAIRS: All types of deck and engine repairs are available.

DRY DOCKS: Largest dry dock 700 ft. length, 104 ft. width. Capability can accommodate C–2 mariner type or San Diego type hulls (600 ft. length, 85 ft. width) and up to and including 28,000 displacement tons. 4 additional floating dry docks with capabilities up to and including 3,500 displacement tons.

AIRPORT: Distance from marine terminal approximately 5 miles. Airport is serviced by major airlines.

TIME: Local time GMT minus 8 hours. Daylight Saving Time becomes effective the last Sunday in April and continues to the last Sunday in October.

HOLIDAYS: Recognised holidays are: New Year's Day; Lincoln's Birthday; Washington's Birthday; Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Statewide Election Day, Christmas Day, or any other legal holiday that may be proclaimed by State or National Authority; when a holiday falls on a Sunday, the following Monday shall be observed as a holiday.

POLICE/AMBULANCE/FIRE: Police 238–7373; Emergency Ambulance 238–7373; Fire 238–1212.

TELEPHONES: Arrangements exist for placing telephones on board. No charge for hooking up.

SERVICES: Tank-cleaning equipment. Facilities for tank washings. Compass and radar adjustments, etc.

SHORE LEAVE: Permitted.

DEVELOPMENTS: Broadway Pier has been reconstructed for use as a passenger vessel facility, public park, for berthing of public visit Naval vessels, and for berthing and clearance of fishing vessels. U.S. Customs has an office at the end of the pier.

AUTHORITY: Port of San Diego.

SAN FRANCISCO, California: 37.48 N. 122.25 W.

(See Plan)

DOCUMENTS:

General Declaration (arrival) on Customs Form 1301.

Cargo Manifest (Customs Form 7257 A or 7527 B). One original copy indicating all the cargo on board, used for making formal entry. One copy listing all cargo on board, used as travelling manifest. One copy indicating cargo for this port only.

2 copies of Crew's Effects Declaration on Customs Form 1304.
2 copies of Ship's Stores Declaration on Customs Form 1303.
2 copies Passenger List (Form I 418).
2 copies Crew List (Form I 418).

Customs boarding officer will also examine ship's register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours of arrival from abroad, or 24 hours of arrival from a U.S. port:

(a) Health Pratique.
(b) Master's Oath (Customs Form 1300).
(c) U.S. Certificates of Payment of Tonnage Tax (Customs Form 1002).
(d) Certified Crew List (U.S. vessels only).

PILOTAGE: Pilotage in and around Golden Gate Region is provided by 2 groups of experienced, licensed ship Pilots.

The San Francisco Bar Pilots' Association, maintains a sea station 12 miles outside the Golden Gate, in the vicinity of the lightship for vessels arriving and leaving the area.

On station around-the-clock. Pilot boats are equipped with VHF radio-telephone, and maintain continuous watch for ship traffic and operate co-operatively with the Marine Exchange communication centre and lookout station. The Bar Pilots also carry portable VHF radios.

Some 8,500 ships are piloted annually into and out of the port complex, through the Golden Gate and the 2,000-ft. wide, 50-ft. deep main ship channel across the alluvial sand bar about 9 miles outside the Gate.

Considerable Summer fog is experienced on the pilot grounds. In Winter months radiation or tule fogs frequently occur. The tidal prism of hundreds of square miles of inland waters cause unusually swift and changing currents in the area. Pilotage for San Francisco Bar and entrance is compulsory and available 24 hours a day. The Pilot boat is at a station 3 miles outside Main ship Bar channel about 14 miles from San Francisco, VHF Channels 18A and 10 for radio contact. Vessels with a draft of 42 ft. or more are requested to arrive at the Pilot station for the inward passage about one hour before high water at the Golden Gate Bridge.

ANCHORAGE: Several anchorages available in San Francisco Bay for any type of vessel up to 50 ft. draft.

The well-protected bay affords excellent shelter and anchorage in all weather. The Captain of the Port (Coast Guard) will assign an anchorage to a vessel upon request. In San Francisco and San Pablo Bays, there are a large number of anchorages available for naval, quarantine, general and explosives.

RESTRICTIONS: The San Francisco Bay region is the first on the West Coast to have sea lanes established by the Coast Guard for greater safety in its ocean approaches. Use of the lanes is not mandatory, but is strongly recommended to reduce chance of ship collisions in congested approach and departure areas. The lanes are not intended to supersede or alter applicable rules of the road.

The lanes begin within 6 miles of the San Francisco Lightship, with each lane inbound and outbound separated by a buffer zone. The headings are: North lane outbound, 305°; North lane inbound 120°; main line outbound, 247°; main line inbound, 058.5°; Southern lane outbound, 169°; Southern lane inbound 343°.

The size of the bay and the narrowness of the Golden Gate cause tricky and sometimes difficult tidal and current conditions. The flood current sets into all parts of the bay and causes swirls as far East as Alcatraz and Angel Islands. At the San Francisco-Oakland Bay Bridge there are large current eddies near the foundation piers which may require care to maintain proper course.

The bar channel is dredged to 50 ft. MLLW by the U.S. Army Corps of Engineers. Entrance channels to the various ports are dredged to 35 ft., with the exceptions of Sacramento, Stockton and Redwood City, which are 30 ft. Stockton, however, is approved for a 5-ft. deepening, and study of similar deepening for Redwood City is being completed.

MAX. SIZE: The max. permissible draft for tankers at the oil installation is 35 ft., for regular freighters and passenger ships at

the San Francisco piers is 30 ft. No restrictions on length or berth. The best time to dock with max. draft is at a rising tide.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Radio station via RCA – Radio Corporation of America – Station KPH ITT – World Communications – Station KFS.

Safe and efficient navigation for all bay vessel traffic is maintained through a Ship Location and Reporting Service operated by the Marine Exchange. U.S. Coast Guard Vessel Traffic Service on Yerba Buena Island and at Port Bonita maintains 24 hour radar surveillance of all traffic from Golden Gate on the West (with 32 mile capacity beyond) to Oakland on the East, Dumbarton Bridge on the South and Port San Pablo on the North. Vessel Movement Reporting System (VMRS) extends beyond Port San Pablo all the way to the Ports of Stockton and Sacramento. Coast Guard urgently requests that all vessels as specified below, moving anywhere within the VMRS (including all area under radar surveillance), tune to Channel 13 (156.65 mHz., VHF FM): All ships of 300 gross tons and over, passenger ferries for hire over 100 gross tons, and tugs with tows of barges or dredging rigs of over 26 ft. length.
TUGS: Tugs available and normally join the vessel when approaching their pier. Tug's lines are always used, with no extra charge.
BERTHING: No restriction on berthing other than draft limitation and preferable at slack water.

Pier	*No. of Berths*	*Length (ft.)*	*Depth (ft.)*	*Remarks*
9	2	154 Face	35	General cargo
		800 North		
		800 South		
15-17	3	490 F	35	Importing newsprint
		800 N		
		800 S		
19	2	160 F	35	General cargo
		800 N		
		800 S		
23	2	160 F	35	General cargo
		800 N		
		800 S		
27 and 29	3	206 F	35	General cargo
		750 N		(some containers)
		1,340 S		
31	2	150 F	35	General cargo
		788 N		
		589 S		
33	2	150 F	35	General cargo
		787 N		
		807 S		
35	2	200 F	35	General cargo and
		802 N		passenger
		1,053 S		
39	2	140 F	35	Inactive
		878 N		
		937 S		
45 A-C	2	140 F	35	Importing newsprint
		1,314 S		and pulp
45 B-D	1	140 F	35	Container freight
		1,314 S		Station
		1,200 N		
26	2	200 F	50	General cargo
		620 N	35	Government meat
		635 S	35	inspection facility
28	2	150 F	35	General cargo
		541 N		
		675 S		
30 and 32	3	622 F	40	General cargo
		845 N	35	(Some containers)
		932 S	35	
34	2	139 F	30	Storing automobiles
		634 N	35	
		652 S	35	
46 A	1	201 F	30	Helicopter
		802 N	35	
		679 S	35	
46 B	2	1,035 F	35	Inactive
48 A	1	216 F	35	General cargo
		610 N	35	
48 B	1	155 F	35	General cargo
		636 S	35	
60		740 F	32	
		866	20	
64 North	2	48 & 130 F	30	Repairs: One 65-ton
		408 & 240 N	25	crane
		719 S	25	
64 South	2	126 F	25	10-ton Truck crane
		588 N	25	75 ft. boom. Repairs
		852 S	20	Bunkers. Receiving petroleum
70 and 72	2	723 F	25	Importing automobiles
92	1	702 F	35	Receiving automobiles,
		166	35	bulk animal and vegetables oils

Alameda: (Not part of the Port of San Francisco). Alameda, an island and city across the Inner Harbour channel from Oakland, is the home of Encinal Terminals, the largest privately owned and operated steamship terminal in the United States. There are 6 berths for vessels at Encinal.

Berths 1, 2, 3 and 4: Used for general cargo and bulk or drummed liquids. Total berthing length 2,125 ft. Depth 31 ft.

Berth 5: Used for general and containerised cargoes. Length 750 ft. Depth 35 ft. Berth equipped with Paceco container crane.

Berth 6: Used for receipt and shipment of bulk or drummed liquids. Depth 30 ft. Facility has tank storage of 12 million gallons.

BULK HANDLING FACILITIES: *Copra Terminal, Pier 84:* Pier assigned to Cargill Company for receiving bulk copra. Berthing for 1 vessel. Length of face 185 ft. and 430 ft. North side 120 ft. Depth alongside face 32 ft. Facilities include 4 portable pneumatic unloaders, total capacity 180 t.p.h.

Port of San Francisco Grain Terminal, Pier 90: Berthing for 2 vessels. Length 1,285 ft. Depth alongside 40 ft. The terminal is used for receiving, storing and loading of grain, feeds, chemicals, fertilisers and storing automobiles. Facilities consist of a 2 million bushel grain elevator. Rail holding yard for 100 cars. 6 marine loading spouts with capacity of up to 1,500 tons of bulk material per hour (no shifting required).
CONTAINER HANDLING FACILITIES: *Mission Rock Terminal, Pier 50:* Berthing for 6 vessels. Pier used for container traffic, general cargo and passengers. Length of face 1,000 ft. North side 1,480 ft. and South side 1,100 ft. and 582 ft. Depth alongside terminal 35 ft. Facilities include a 250-ton container crane rated at 25 containers per hour. Container wharf length 1,000 ft. and width 200 ft. Storage for 900 (20 ft.) containers on pier.

Pier 80: Berthing for 8 vessels. Length of face 1,296 ft. North side 1,138 ft. South side 2,657 ft. Depth alongside 40 ft. Pier equipped with container cranes.

Pier 94: New one-berth (716 ft. apron) container facility completed 1976 with 40 ft. alongside depth, 2×30-long-ton container cranes, and 16.5 acre container yard, with at least 50 acres available for expansion. Apron and crane rails are extensions of Pier 96 immediately to the South.

Pier 96: Berthing for 2 vessels. Depth alongside 40 ft. The facility is used by LASH vessels, container ships and general cargo vessels. Lifting equipment consists of 2 Paceco container cranes, miscellaneous fork lift and straddle carriers and mobile cranes.
STEVEDORES: Stevedores orders must be placed 1000 hrs. for night gangs and day gangs. 2×8-hour shifts 7 days a week. Sunday and Sunday night gangs must also be ordered on Saturday 1000 hrs.
MEDICAL: Medical, and all hospital facilities available. No advance notice required.
TANKERS: All major oil companies have their own oil discharging piers which are outside the jurisdiction of the Port Authority. Reducing pieces are available. The max. drafts are 35 ft. Tankers arriving with a greater draft are partly discharged in the bay before docking.

Davis Point: Union Oil Co. Oleum Refinery Wharf, depth up to 38 ft. MLW.

Martinez: Shell Oil Co. Wharf, depth alongside 30 to 42 ft. MLW. Phillips Petroleum Co. Amorco Wharf, 2 berths, depth 30-42 ft. MLW. Phillips Petroleum Co. Avon Wharf, depth alongside 35 ft. MLW. Urich Oil Co. depth alongside 35 ft.

Ozol: Oil Wharf, depth alongside 39 ft. MLW.

Hercules; Sequoia Ref. Corp. Terminals, depth 35 ft. MLW.
DENSITY: Average density in the bay is 1016.
FRESH WATER: Available at all piers rate between 25 and 50 t.p.h.
FUEL: Fuel available by barge or at the oil companies own pier. Special blends require some advance notice.
FIRE PRECAUTIONS: Any special instructions are given to the Master upon docking.
DEVELOPMENTS: At present a LASH terminal under construction at Pier 92 for lease to Pacific Far East Lines.
GANGWAY/DECK WATCHMEN: Not required but this service available at Master's request.
OPENING/CLOSING HATCHES: Normally done by stevedores. But crew may open and close before arrival at the dock or after departure.
CUSTOMS ALLOWANCE: Each crew member may land free of duty and/or taxes articles acquired abroad not exceeding $10 in value, plus 50 cigars or 300 cigarettes or 3 lb. of smoking tobacco, and not over 1 quart of alcoholic beverages.
IDENTIFICATION CARDS: Standard U.S. Immigration Forms I.-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I.-95, issued for the same vessel.
CONSULS: All Maritime countries represented at San Francisco.
REPAIRS: The major yards in the Golden Gate region have fully equipped machine-shop facilities capable of handling virtually any job; welding, heavy plate construction, turning, boring, facing, grinding, milling and rolling.

The larger yards also have facilities for pipe, sheet metal, electrical, carpentry, painting, rigging, machining and boiler work.

Pacific Ship Repair and Triple "A" Repair are both located in San Francisco and provide berth space for all types of ship repairs at plant and at any location in the San Francisco Bay area.
DRY DOCKS: Bethlehem Steel's San Francisco shipyard has 3 floating dry docks, 1 with 22,000 tons capacity and 654 ft. long, 1 of 11,400 tons capacity and 542 ft. long, and 1 of 6,500 tons capacity and 450 ft. long. With a recently completed pier, its tie-up and outfitting space totals 4,271 ft.

Todd Shipyards Corp. has 2 dry docks at Alameda. Their larger dry dock is 873 ft. long with a clear width between wing-walls of 140 ft. and a lifting capacity of 40,000 tons. The smaller dry dock has a lifting capacity of 10,000 tons and is 542 ft. long with a clear width between wing-walls of 86 ft. There are 3,500 ft. of berthing space for ships undergoing in-the-water repairs. Todd has 3 mobile units for out-of-yard work.

Williamette Iron and Steel Company's yard in Richmond has 5 concrete graving docks. 4 of these docks can each accommodate a vessel 600 ft. long with 83 ft. beam, and 1 dock can handle a vessel 750 ft. long by 83 ft.

Tonnage capacity is limited only by the above dimensions. Williamette's facilities include 1,500 ft. of concrete outfitting pier for in-the-water repairs. The graving docks are served by 4 gantry cranes of 60-ton capacity and 2 of 45-ton capacity, and the outfitting pier by 3×45-ton cranes. Williamette has fully equipped shops for repair and conversion work, and mobile units for out-of-yard work at all Bay Area piers.

Hunters Point Naval Shipyard: (Triple A Machine Shop) Under lease from the US Navy, graving docks and repair facilities available to all types of ships. Triple A operates 3 graving docks: (No. 4) 200 ft. beam×1,100 ft. length and 50 ft. depth; (No. 3) 150 ft.×1,000 ft. and 39 ft. depth; (No. 2) 100 ft.×800 ft. and 27 ft. depth, 17 repair berths can serve ships of any length. 12 gantry cranes of 50 ton capacity serve graving docks and repair berths. 50 ft. depth channel from Golden Gate to Hunters Point; unique to West side of San Francisco Bay.

DEVELOPMENTS: The channel over the bar will be deepened to 55 ft. A new channel will be cut 600 ft. wide and 45 ft. deep (at low water), through the upper bay and the channel through San Pablo and Suisun Bays will be deepened to 45 ft. Manoeuvring areas near Richmond and the refinery terminals will be widened. The Stockton Deep Water Channel will be deepened to 35 ft. and the channel alignment improved.

REPATRIATION: All facilities available for crew changes by sea, air or land.

AIRPORT: Distance about 10 miles from San Francisco and is served by regular airlines.

TIME: GMT minus 8 hours, Summertime from last Saturday in April till last Saturday in October GMT minus 7 hours.

HOLIDAYS: New Year's Day; Lincoln's Birthday (February 12); Washington's Birthday (February 22); Good Friday (afternoon); Memorial Day (May 30); Independence Day (July 4); Labor Day (1st Monday in September); Admission Day (Calif. only Sept. 9); Columbus Day (October 12); Veteran's Day (November 11); Election Day (1st Tuesday after the first Monday in November); Thanksgiving Day (last Thursday in November); Christmas Day.

When any of the holidays fall on Sunday, the holiday will be observed on Monday.

On a holiday the longshoremen are working at the overtime rate (time and a half) except on the following days when no work will be performed:

1. New Year's Day;
2. Bloody Thursday (July 5, memory of 3 longshoremen killed during the 1936 strike);
3. Labor Day;
4. Thanksgiving Day;
5. Christmas Day.

POLICE/FIRE/AMBULANCE: Police, tel. 533-0123; Fire, tel. 861-8020; Ambulance, tel. 431-2800.

TELEPHONES: On some piers telephone connections to ships are available, no extra cost for this service.

GENERAL: Vessels arrival has to be reported to the U.S. Coast Guard 24 hours prior arrival by agent

SHORE LEAVE: Crew members are allowed to go ashore after passing U.S. Immigration at first U.S. Port.

AUTHORITY: San Francisco Port Commission.

SAVANNAH, Georgia: 32.02 N. 81.07 W.

DOCUMENTS:

3 Crew Lists.
3 Store Lists.
3 Curio Lists.
3 Manifests.
3 Passenger Lists.

These documents required in order to enter vessel at U.S. Customs. *Direct Foreign Arrival* – Quarantine Pratique issued by Public Health Service representative; Cargo on Inward Foreign Manifest Form 7527 A or B or substantially similar form, in duplicate with abstract manifest of Savannah only cargo; Crew list on Form I–418, in triplicate; Passenger List on Form I–418, or other acceptable form, in triplicate; Crew curio list, in triplicate, with crew declaration on Form 5123, or crew list on Form I–418, in triplicate, with numbers of attached Forms 5129 endorsed thereon; List of sea stores and ship's stores, in triplicate; for American vessels, repair declaration on Form 3415; for American vessels, certified crew list; Clearance from last foreign port, if one issued.

Coastwise arrival with Residue Foreign Cargo or Passengers – Form 1385, "Permit to Proceed", in duplicate; Travelling Manifest; Abstract Manifest, in duplicate, of cargo to be discharged in Savannah – if none, 2 "pro forma" manifests; Stores list, in duplicate; Crew list, in duplicate; Crew purchase list, in duplicate, and any crew declarations on Customs form 5123 for Savannah; Passenger list, in duplicate, if passengers are disembarking in Savannah.

PILOTAGE: Savannah Pilots' Association, 204 East Bay Street, Savannah, Georgia, 31401 (telegraphic); Pilot required all vessels; ETA 24 hours advance notice, change ETA 8 hours; VHF Channel 16 (monitored at all times), 18, 12, 13 – Radio telephone 2182, MG, 2738; Pilot boards vessel 1 mile outside fairway buoy.

ANCHORAGES: Outside fairway buoy North and N.E. of fairway buoy; no anchorages in river.

RESTRICTIONS: 27 ft. at any time; over 27 ft. on incoming tide, no restrictions day or night.

MAX. SIZE: Abbreviation OT: Ocean Terminal. Vessels berthing at OT 10 A/B and OT 12 A/B should not exceed 550 ft. length and 26 ft. draft. For berths OT 14–15–16–17 vessels 550 to 600 ft. on slack water; vessels less than 550 ft. any time to berths 14 and 17; vessels docking or undocking at OT 15–16, with vessels in OT berths 14 and 17, can be docked or undocked during slack water. Vessels entering Stevens Terminals should not exceed 525 ft.; max. of 550 ft. could be handled under ideal conditions, i.e. slack water and all berths clear in slip. Vessels over 500 ft. undocking from berths 35–37–41–42, Stevens Terminals, should not be undocked during strength of ebb or flood tide, but may be undocked at or near high or low water slack. Vessels berthing at river front berths: vessels up to 650 ft. will be handled any time and vessels from 650 to 800 ft. on tide conditions; vessels will be handled at whatever drafts Bar Pilots will bring them in or out. Also see "Developments".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Vessels route ETA cables to Agents, etc., via Radio Lantana.

TUGS: Tugs join vessels at city front for berths above city; for berths below city, tugs usually meet vessels in vicinity of Fort Jackson or well below berth. Tugs' lines used all times.

BERTHING: The Georgia Ports Authority operates 17 general cargo berths, 2 tanker berths, 2 containership berths and 2 dry bulk cargo berths. Max. draft will vary from 34 ft. to 40 ft. depending on facility.

Special cargo-handling facilities: Located at The Garden City Terminal of the Georgia Ports Authority is a container facility consisting of 2 container ship berths and 2×45-ton container cranes. Also at Garden City Terminal is a dry bulk facility consisting of 1 loading berth, 1 unloading berth and dry storage for bulk cargo of many types.

BRIDGES: *Eugene Talmadge Memorial Bridge:* 135 ft. vertical clearance for 400 ft. at MHW.

STEVEDORES: In order to order gangs Agent should receive ETA from vessel no later than 1300 hrs. day prior to arrival, when vessel coming coastwise. When calling at Savannah from a foreign port Agent normally receives ETA 72 hours and again 24 hours prior to arrival.

MEDICAL: Agent should be advised as far in advance as practicable for required medical attention. U.S. Public Health Clinic in Savannah, also other extensive medical facilities. Standard information required as to inoculations, vaccinations, etc.

TANKERS: Standard requirements on diameters of load-discharge lines. No facilities for slop (residue) discharge facilities except American Oil Company. S.G. & A.P.I. of local types of oil is 36 gravity marine diesel fuel. 6 tanker berths in port, max. drafts 32 ft. (Draft at tanker berth will in all probability be increased to 34 ft. upon completion of the current improvement programme.)

DENSITY: Average density of water at 20° Centigrade in channels of Savannah Harbour are:

	High Water	*Low Water*
Savannah River Entrance		
Surface	1.0196	1.0090
Bottom	1.0196	1.0181
Port Area		
Surface	1.0022	0.99915
Bottom	1.0120	1.0075

FRESH WATER: Available at all terminals. Charge $1.05 per ton with a minimum charge of $15.75 for each service.

FUEL: Light marine diesel fuel (No. 2 Fuel), heavy marine diesel fuel (No. 4 Fuel), all Intermediate grades from Intermediate 2 (equals 200 secs. Redwood 1 scale at 100° F.) through No. 30 (equals 3,000 secs. Redwood 1 scale at 100° F.), Bunker "C" Fuel (No. 6 Fuel). All above grades available in either bonded or domestic except light marine diesel, which is domestic only. Advance notice required 24 hours.

FIRE PRECAUTIONS: No special fire precautions. All tanker berths have water and fire extinguishers on dock. Fire fighting equipment on dock. Fire fighting equipment on tugs.

DEVELOPMENTS: The Georgia Ports Authority is constructing a third container berth with Roll-on/Roll-off capabilities.

The channels project depth and width ranges from 40 ft. depth and 600 ft. width at the entrance to 38 ft. depth and 400 ft. width to the upstream end of Kings Island turning basin.

GANGWAY/DECK WATCHMEN: Garden City and Ocean Terminals of Georgia Ports Authority require that a watchman, or someone in authority, will be aboard any vessel tied to their facilities at all times. Seaboard Coast Line Terminal watchman furnished by Steamship

Company if watchman required. The Stevens Shipping and Terminal does not require a watchman.

OPENING/CLOSING HATCHES: By crew if mechanical; by stevedores if not mechanical.

CERTIFICATES: See "Documents". Current Registry Papers, Load Line Certificates, Certificates of Inspection, etc., are required.

CUSTOMS ALLOWANCE: Tobacco, a crew member may take ashore 50 cigars, 300 cigarettes, or 3 pounds of smoking tobacco, or a proportionate amount of each. An appropriate amount of tobacco products may be held out of bond for use of passengers and crew members while aboard ship when in port. Wine and/or Spirit, a crew member may take ashore one quart of alcoholic beverages for his own use. Container should be opened, that is the seal should be broken. An appropriate amount of wine and/or spirits may be held out of bond for consumption by passengers and crew while aboard ship when in port.

CARGO GEAR: Certified in accordance with U.S. Department of Labor Regulations. Supplied by stevedores.

IDENTIFICATION CARDS: Identification required by crew members coming ashore. U.S. Immigration & Naturalisation Service issues landing permit, Form I-94, to any crew member of a foreign vessel who is not considered a security risk. This form must be in man's possession any time he is ashore.

CONSULS: The following countries are represented in Savannah:

Brazil
Costa Rica
Dominican Rep.
France
Germany
Italy
Norway
Sweden
Venezuela

REPAIRS: All types of deck and engine repairs possible at Savannah Machine and Shipyard Company. Deck repairs from Diamond Manufacturing Company.

RADAR/VHF REPAIRS: Marine Industrial Electronics has qualified radar and RDF, also VHF men available. They can be contacted through ship's Agents or through the Pilots or Atlantic Towing if vessels should require service on arrival.

DRY DOCKS: Savannah Machine & Shipyard Drydock 540 × 72 × 21 ft.

REPATRIATION: Responsibility of Owner's Agents. Can be arranged to all points.

AIRPORT: Savannah Municipal Airport regularly served by Delta Air Lines with 13 scheduled flights daily and National airlines with 5 flights daily. Charter service also available. Distance to Garden City Terminal approximately 5 miles, to Ocean Terminal approximately 7 miles, and to Stevens Terminal and SCL Terminal approximately 9 miles.

TIME: Savannah maintains Romeo or Eastern Standard Time GMT minus 5 hours, from 0200 hrs. the last Sunday in October, to 0200 hrs. the last Sunday in April. Quebec or Eastern Daylight Saving Time GMT minus 4 hours maintained from April to October.

HOLIDAYS: New Year's Day (January 1st); Martin Luther King's Birthday (January 15th); Lincoln's Birthday (February 12th); George Washington's Birthday (February 22nd); Memorial Day (May 30th); Independence Day (July 4th); Labor Day (First Monday in September); Columbus Day (October 12th); Armistice Day (November 11th); Thanksgiving Day (Fourth Thursday in November); Christmas Day (December 25th); Good Friday.

No work will be performed on New Year's Day, Independence Day, Labor Day, and Christmas Day.

POLICE/AMBULANCE/FIRE: Police, City: 232–4141 and 233–9321, County: Police: 352–7780; Ambulance: Fields and Sons Ambulance Service, 233–0191, Fire: City: 232–5121.

TELEPHONES: G.P.A., Garden City and G.P.A., Ocean Terminals: telephones on board can be provided through local Agents. Stevens Shipping & Terminals – not available to ship (phones on dock). S.C.L. Terminal – not available to ship (phones on dock).

SERVICES: Compass Adjusting, Coste Compass Adjusters, 121 East 63rd Street, Savannah, Georgia 31405, Tel. 355–9607.

Radar, RDF, VHF, Marine Industrial Electronics, Inc., Savannah Industrial Park, Savannah, Georgia, Tel. 232–3489.

SHORE LEAVE: Crew members are allowed ashore provided they are not detainees.

DELAYS: With reasonable advanced notice of ETA no delay anticipated in berthing, loading, discharging or bunkering.

AUTHORITY: Georgia Ports Authority. Stevens Shipping & Terminal. Savannah Port Authority.

The Savannah Port Authority does not operate terminals; however, is engaged in port and industrial development for the City of Savannah and Chatham County, Georgia. Harbour regulations pier and bulkhead lines, etc., come under the jurisdiction of this organisation.

SEARSPORT, Maine: 44.28 N. 68.56 W.

DOCUMENTS:

1 Crew List.
1 Passenger List.
2 Stores Lists.
2 Foreign purchases Lists.
2 Inward foreign Manifest uniform cargo.
Original Bill of Lading.
1 Form 3251 Masters oath on entry vessel.
2 Form 1374 outward foreign Manifest.

PILOTAGE: Ship's agent notifies Pilot approximately 48 hours in advance of arrival, correcting at 24 hours. Pilot's boat called on Channel 16 and 13 VHF. Pilot boards at Monhegan Island, W.B. 14 m. When weather bad, suggest vessel heaves-to at 43° 45.3′ N. 69° 22.5′ W.

Shipmaster's Report: There is a second pilot station for ships approaching from the East.

The pilot station is located on Matinicus Rock Island. Pilot boards at Wooden Ball Light Bell Buoy "2WB." Lat. 43° 49′ N. Long. 68° 50′ W.

The pilot boat is a fishing boat with a white hull showing the international signals.

Pilot signal: 3 long and 2 short on ship's whistle.

Radio contact: VHF Channel 16 (156.8 mc/s).

36 and 24 hours ETA requested, cable "Penbay – Belfast/Maine", via Chatham Radio.

ANCHORAGES: No restrictions on anchoring.

RESTRICTIONS: No restrictions at night. Deep draft vessels brought in only on high water. Draft in concurrence with docks, 32 ft. low water. 10 ft. rise in tide – approach to Searsport 35 ft. – Bay 60 ft. limit.

MAX. SIZE: Size of vessel restricted to 38 ft. draft in harbour area. No outside installations at the port yet.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Tugs in Searsport Harbour use Channel 16 and 2182. Vessels arriving Searsport go through radio station at Chatham, Mass., RCA installation, or call station WOU via Radio-Telephone.

TUGS: Eastern Maine Towage Company, Inc., Marshall Wharf, Belfast, Maine 04915. Cable address: Eastow. Tel. (207) 338-3000. 24-hour service. Requested that orders for tugboat service be given during normal business hours, 24 hours in advance.

Tugs: "Clyde B. Holmes", steam 1,000 h.p.
"Evelyn M. Holmes", diesel 1,200 h.p.
"Candace A. Holmes", diesel 1,200 h.p.
"Pauline H. Holmes", diesel 600 h.p.

Radio: ship to ship, VHF 2182 Channels 16-13-14, 2638, 2738; Boston Marine; Cape Cod Canal.

Sea Pilots dock ship with tug's assistance.

BERTHING: Draft conditions govern arrival and departures.

STEVEDORES: 4 hours notice on ordering gangs.

MEDICAL: No advance notice required by Agent. 1 hospital, Waldo County, which takes bed patients. All seamen require Certificate showing they have had smallpox vaccination during last 3 years.

TANKERS: 2 berths at Searsport – 1 for No. 6 oil and 1 for light oil and gas. 2×8-in. hoses. 32 ft. low water.

DENSITY: Average density 1024.

FRESH WATER: Available by tug for boilers only at rate of tug hire. Drinking water available at piers.

FUEL: No. 6 oil at C. H. Sprague dock. Light oils delivered by tank truck at dock.

FIRE PRECAUTIONS: At certain oil piers information given to Shipmaster upon arrival at pier. Ample fire protection, salt-water lines, sprinkler system on pier, local fire department.

DEVELOPMENTS: 2 new 40,000 bbls. tanks for liquid fertiliser.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Ship's crew may open hatch after longshoremen boarded ship.

CERTIFICATES:

Load-line Certificate.
Certificate of Foreign Clearance.
Ship's Safety Certificate.
U.S. tonnage Tax Certificate of previous trip if have them.
Radio Operator Licence.

CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes per man. Wine and/or Spirit allowance 1 bottle per person.

CARGO GEAR: No additional cargo gear necessary.

IDENTIFICATION CARDS: Form I-95 must be filled out on arriving unless seamen has had a prior one made out for a previous arrival on same ship (on plastic card).

CONSULS:

Norwegian: Allan Kjos-Hansen, 30 Mayer Road, Portland, Maine, Vice-Consul.

French: Dr. Paul O. Proudian, 776 Main Street, Westbrook, Maine.

Finnish: Frank W. Bjorklund, 163 Main Street, Norway, Maine.

Italian: Dr. Domenica A. Santoro, 43 Deering Street, Portland, Maine.

Panamanian: Mary Navarro de Carrillo, Lafayette Town House, Portland, Maine.

Swedish: Martin Johnson, Vice Consul, 443 Congress St., Portland, Maine.

REPAIRS: All types of machinery repairs.

DRY DOCKS: None.

REPATRIATION: Arrangements must be made with Agent in advance by telegram.

AIRPORT: Bangor International Airport, 30 miles, Northeast Airlines.

HOLIDAYS: New Year's Day; Washington's Birthday; Patriot's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; Christmas Day and Veteran's Day. Possible to get gangs to work all days except on Labor Day and Christmas.

POLICE/AMBULANCE/FIRE: Police 548-2256; Ambulance 548-2900; Fire 548-2900.

TELEPHONE: Arrangements can be made to have phone put on ship, but most docks have pay phones.

AUTHORITY: Maine Port Authority, Portland.

SEATTLE, Washington: 47.36 N. 122.20 W

(See Plan)

PORT LIMITS: Port of Seattle limits are co-extensive with the boundaries of King County in which Seattle is situated. A vessel has "arrived" when it has tied-up to a berth.

DOCUMENTS (on arrival from foreign):

Clearance from Last Foreign Port.
2 Crew Lists on Form. I.418.
2 Passenger Lists on Form I.418 (if applicable).
Passenger Declarations if applicable.
2 Store Lists.
2 Crew Purchase (curio) Lists.
2 Manifests of Cargo for discharge on CF.7527-A or 7527-B.

If first arrival port on an inward voyage, must also have 2 sets of Manifests of complete cargo on CF.7527-A or 7527-B, one for Customs at this port and the other for use as a "Travelling Manifest" to go forward to other discharge ports.

A – For U.S. Public Health Quarantine Boarding Officer: "Quarantine Declaration" on Form PHS.43.

B – For U.S. Dept. of Agriculture Boarding Officer: "Shipmaster's Declaration and Warning Notice" on Form AIQ.43.

C – For U.S. Immigration Boarding Officer:

1. Crew List on Form I.418 visaed by U.S. Consul abroad.
2. Passenger List on Form I.418.
3. Attachment to Passenger List on Form I.92.
4. Form I.94 for each passenger.
5. Form I.95 or ID Card (Form 184) for each crewman. (These are reusable for multiple entries, but for seamen on first trip to United States a new Form. I.95 must be ready for presentation on arrival.)

D – For U.S. Customs Boarding Officer and Agent or Broker:

1. 3 copies Crew List (Form I.418).
2. 3 copies Cargo Manifest on Form 7527A or B.*
3. 3 copies Store List – no official form provided.*
4. 3 copies Crew Purchases or Curio List (no official form provided).*
5. 3 Passenger Lists on Form I.418.
6. For U.S. Ships – Declaration re foreign repairs on Form 3415.
7. For U.S. Ships – Certified Crew List from last U.S. port before going foreign.

*At subsequent U.S. ports of call 2 copies required of extracts Cargo Manifests of cargo for the port concerned, and 2 copies of lists of stores and curios remaining on board.

PILOTAGE: Compulsory for all vessels except those on coasting trade. Pilots may be obtained from Puget Sound Pilots' Association, Seattle, at short notice. Inward, Pilot boards vessel at pilot station off Port Angeles.

ANCHORAGE: Extensive anchorage in Eliott Bay, depths of 90 ft.

RESTRICTIONS: Only for Inner Harbour, entrance through Canal Locks, max. 800 ft. × 80 ft. × 29 ft. fresh water.

MAX. SIZE: Controlled by depth at berth.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available, 2nd tug normally used.

BERTHING: Over 62 berths for ocean-going vessels. Depths alongside, 30 to 73 ft. MLLW.

SPECIALISED HANDLING FACILITIES: Terminal 20 has among its equipment a 200-ton capacity shear-leg crane. Also has pipe-lines to carry molasses, tallow or other non-petroleum liquid cargo, and has a tank farm for storage.

Terminal 115 – 2 berths, capacity, Auto-Terminal.

Terminal 115 – Foss Alaska Barges, has specialised finger piers, to handle container-to-barge operations.

Terminal 128 – A barge terminal.

Terminals 5, 18, 46 and 25 – Container Terminals, equipped with large container cranes and yards to handle van shipments. Depth alongside, Terminals 18 and 25 – 50 ft. Terminals 5 and 46 – 40 ft.

Pier 86 – fully automated, deep water, Grain Terminal. With 1 berth it can accommodate a vessel with up to 73 ft. draft and length up to 1,400 ft. Storage capacity 4.2 million bushels. Loading rate 3,000 tph.

Terminal 5 – 4×33-ton container cranes and 1×40-ton gantry crane.

CRANES: *Terminal 18:* 3×45-ton and 2×33-ton container cranes.
Terminal 20: 3×50-ton revolving cranes and 1×200-ton sheer leg.
Terminal 25: 2×45-ton container cranes.
Pier 28: 1×50-ton gantry crane.
Terminal 46: 2×45-ton container cranes.
Terminal 115: 1×50-ton and 1×35-ton gantry crane.
Terminal 91: 1×45-ton and 1×35-ton gantry crane.

STEVEDORES: 58 local gangs available. Gang requirements must be made known to the contracting stevedore prior to 1100 hrs. on day before vessel plans to dock. Order before 1030 hrs. on Saturday for Saturday afternoon, Sunday, and Monday.

DENSITY: Salt water in Outer Port. Fresh water inside Canal Locks.

FRESH WATER: Available at all wharves.

FUEL: Available.

GANGWAY/DECK WATCHMEN: Watchmen required if detainees aboard.

OPENING/CLOSING HATCHES: Normally carried out by stevedores while in port.

CERTIFICATES:

Certificate of Registry.
Certificates for any previous U.S. tonnage tax payments within the past year.
International Load Line Cert.
Safety Radio Cert.
Deratisation Cert.
Cargo Gear Inspection Cert.
Cert. of Inspection (for U.S. vessels).

CUSTOMS ALLOWANCE: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.

IDENTIFICATON CARDS: Required.

CONSULS:

Austria
Belgium
Canada
Chile
China
Denmark
Ecuador
El Salvador
Finland
France
Germany
Guatemala
Honduras
Iceland
Italy
Japan
Mexico
Netherlands
Nicaragua
Norway
Peru
Philippines
Sweden
Switzerland
United Kingdom

REPAIRS: All types of repair possible.

DRY DOCKS: 10 dry docks for vessels up to 20,000 tons.

REPATRIATION: All facilities exist.

AIRPORT: Seattle International Airport.

TIME: Pacific Standard Time, GMT minus 8 hours; Pacific Daylight-saving Time, from end April to end October, is GMT minus 7 hours.

HOLIDAYS: New Year's Day (January 1) no work; Lincoln's Birthday (February 12); Washington's Birthday (February 22); Memorial Day (May 30); Independence Day (July 4) no work; Bloody Friday (July 5) no work; Labor Day (1st Monday in September) no work; Colombus's Day (October 12); Veteran's Day (November 11); Thanksgiving Day (November 27) no work; Christmas Day (December 25) no work.

SHORE LEAVE: Allowed, except for crewmen detained by Immigration.

AUTHORITY: Port of Seattle.

SEWARD, Alaska: 60.06 N. 149.27 W.

DOCUMENTS:

3 copies Cargo Manifest (Forms 7527-A or 7527-B) the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I.-418).
2 copies Crew List (Form I.-418).

Customs boarding Officer will also examine Ship's Register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:

Health Pratique.
Master's Oath (Customs Form 3255).
All Foreign clearances.
U.S. Certificates of payment to tonnage tax (Customs Form 1002).
Certified Crew List.

PILOTAGE: Alaska Marine Pilot's Association, Box 273, Homer, Alaska 99603. 48 hours advance notice. 2182 calling frequency KC-KTE-21. Anchorages as noted on chart. C. & G. S. 8529 Resurrection Bay.

Pilot boards at Cains Heads in Resurrection Bay.

MAX. SIZE: Harbour depth 35 ft. MLLW.

ANCHORAGE: Suitable anchorage in 30 fathoms depth available for deep draft vessels at the head of the Bay, South of marked buoy.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: KWA 346 (AM) Alaska Railroad Dock, frequency monitored 2182 kc/s. KWA 364 (SSB) Alaska Railroad Dock frequency monitored 4-6-8-12 Megs.

TUGS: No regular tug service available. Prior arrangements need be made with tugs from Cook Inlet. Foss Tug & Barge or Puget Sound Tug & Barge Company.

BERTHING: 24 hour berthing. Berthing permit required. Advance notice of 48 hours requested.

200 ft. by 735 ft. steel and concrete finger pier.
East Side — 600 ft. long with 35 ft. depth of water.
West Side — 600 ft. long with 35 ft. depth of water.
South End — 200 ft. long.
(East and West Berths serviced by railroad spurs).

STEVEDORES: Northern Stevedoring and Handling Corporation supply labour force.

MEDICAL: Fully staffed 30 bed hospital. All medical facilities available.

DENSITY: 1.0248 water density at Mean High Water.

FRESH WATER: Available at berths. 4 in. water line; 67 lb. pressure.

FUEL: Diesel fuel available from pipeline at West Berth only. Other grades delivered by tank wagon.

OPENING/CLOSING HATCHES: Handled by crew, if done before berthing ship. By stevedores if tied to dock.

IDENTIFICATION CARDS: U.S.C.G. Port Security Card or Seaman's Card required.

REPAIRS: Radio, radar, welding, machining and light engine repairs can be effected.

AIRPORT: 1 mile. Charter Service. No regular air service.

TIME: Alaska Standard Time.

HOLIDAYS: All holidays are time and one half. Cargo can be worked on all except Christmas, New Year's and Labor Day.

POLICE/FIRE/AMBULANCE: Police, tel. CA 4-5201; Ambulance, tel. CA 4-3042; Fire, tel. CA 4-3444.

AUTHORITY: The Alaska Railroad.

SITKA, Alaska: 57.03 N. 135.20 W.

Located on the Western side of Sitka sound, Baranof Island. Open all year.
APPROACHES: 3 natural channels: Western, Middle and Eastern.
DOCUMENTS: See "Anchorage, Alaska".
PILOTAGE: Pilot pick-up point – close aboard vicinity Eckholm Light.
ANCHORAGE: Jamestown Bay.
MAX. SIZE: Harbour depth 22 ft. MLLW. Tides: diurnal range – 9.9 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
CUSTOMS: Quarantine, Immigration and Customs, local.
TUGS: 7 tugs 300 h.p. to 1,200 h.p.
BERTHING: 3 wharves.

1. Conway Dock: Berthing length 160 ft., depth 30 ft. MLLW. No cranes, 3 lift-trucks; 10,000 sq. ft. covered shed space; fresh water.

2. Japonski Dock: Government dock only for limited commercial use.

3. Alaska Lumber & Pulp Co.: (Private) Berthing length 700 ft., depth 35 ft. LW. Walking cranes only. Not less than 12 lift-trucks, 30,000 sq. ft. covered shed space; fresh water. (Located at Silver Bay, Sawmill Cove, 4 miles South of Sitka). 30,000 sq. ft. open storage.

STEVEDORES: 3 gangs.
REPAIRS: Light repairs only.
FRESH WATER: Available.
FUEL: Not available.
MEDICAL: Sitka Community Hospital and U.S. Public Health Service Hospital on Japonski Island.
TRANSPORTATION: Air and ferry.

SKAGWAY, Alaska: 59.27 N. 135.18 W.

Located at the Northern end of Lynn Canal, 14 miles North of Haines.
APPROACHES: Via Lynn Canal.
DOCUMENTS: See "Anchorage, Alaska".
PILOTAGE: Pick-up point located in vicinity of Point Retreat.
MAX. SIZE: Harbour depth 30 ft. running out to 300 ft. Tides diurnal range 16.7 ft. Also see "Berthing".
ANCHORAGE: In Lutak Inlet, 14 miles South of Skagway.
HEALTH: See "Health: All ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
CUSTOMS: Quarantine, and Customs, local. Immigration from Haines.
BERTHING: 1. White Pass and Yukon Railroad Dock: Containerized cargo to Vancouver and Whitehorse is the principal use, also used for tankers and cruise ships. 900 ft. long, 100 ft. wide; depth at face varies from 20 to 43 ft. Southern end in poor condition. No covered storage. Open storage 80,000 sq.ft. 1 fork-lift is available. Containers presently loaded and unloaded with ship's gear. 2 straddle cranes for containers on dock.

2. Skagway Terminal Co.: Ore loading facility. 1,000 ft. berth, fender dolphins, and walkway. 42.5 ft. deep at face. Sole use for bulk cargo ships. Adjacent to the berth is a warehouse of 108,000 sq.ft. Also available are 50 acres for open storage. Loading equipment consists of 1 fixed loading spout with a capacity of 1,500 t.p.h.

TUGS: 3 available from Haines.
STEVEDORES: 3 gangs.
REPAIRS: None.
WATER: Available in small quantities in temperate seasons only.
FUEL: None.
MEDICAL: Medical clinic and one nurse.
TRANSPORTATION: Rail, ferry and air.

SMITHS BLUFF, Texas: 30.00 N. 93.59 W.

DOCUMENTS, PILOTAGE, RADIO, etc.: Refer to "Port Arthur".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Meet vessel in Neches River before arriving at berth. Normally 2 tugs required berthing/unberthing.
BERTHING: Pure Oil Co.: distance from sea 38 miles, depth at berth 37 ft. Sun Oil Co.: distance from sea 38 miles, depth at berth 36 ft.
MEDICAL: All facilities available.
DENSITY: Fresh water:
FRESH WATER: Available ex wharf at Pure Oil Terminal, otherwise by barge.
FUEL: Available ex wharf at Pure Oil Terminal. All grades available by barge from Port Arthur or Beaumont.
GANGWAY/DECK WATCHMEN: Not required unless crewmen detained by Immigration.
CUSTOMS ALLOWANCE: 300 cigarettes and 1 quart wine or spirits for each man.
IDENTIFICATION CARDS: Foreign crew only require Immigration Landing Permit.
CONSULS: Nearest at Houston.
REPAIRS: DRY DOCKS: See "Port Arthur"
AUTHORITY: Port Director, Port of Beaumont.

STOCKTON, California: 37.57 N. 121.19 W. **(See Plan)**

DOCUMENTS: See "San Francisco".
PILOTAGE: Pilots commissioned by Stockton Port District. Pilots obtained by contacting Secretary of California Inland Pilots' Association, located at Marine Exchange, World Trade Center, San Francisco, California (KBP 386).
ANCHORAGE: Emergency anchorage only permitted in Turning Basin, 32 ft. depth.
RESTRICTIONS: Restrictions only in effect if water at flood stage. See "San Francisco".
MAX. SIZE: No restrictions to length or breadth; draft restrictions of 30 ft. at low tide, 32 ft. at high tide.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Ship to shore Radio (KBP 376) enables constant contact with Pilots who therefore aware of any problem that may develop up or down river. Arrangements also may be made for readiness of ordered gangs within 15 minutes of ship's arrival.
TUGS: Tugs join vessel 0.5 mile up river from Main Channel; generally, ship's lines used, however, tug lines may also be utillised.
BERTHING: *Port Stockton Rough and Ready Island Wharf, Berths 14-15:*

Owners: U.S. Government.
Operated by: Stockton Port District.
Use: Receipt and shipment of general cargo.
Dimensions: Length of face 1,200 ft., East side 60 ft.; depth alongside at MLLW 30 ft.; usable berthing space 1,200 ft.; width of apron 51.7 ft.
Mechanical handling facilities: Cranes and forklift trucks and other cargo-handling equipment are available.

Port Stockton Bulk Material Wharf, Berths 12-13:
Owned by: City of Stockton and Stockton Port District.
Operated by: Stockton Port District.
Use; Shipment of dry-bulk commodities, including iron ore and petroleum coke; receipt of molasses and petroleum products.
Dimensions: Length of face 566 ft.; lower side 13.5 ft., upper side 13.5 ft.; depth alongside at MLLW 35 ft.; usable berthing space 566 ft.
Mechanical handling facilities: Max. vessel iron-ore loading rate 800 long t.p.h. 2 small bulldozers available for trimming cargo in holds of vessels, in addition to 360° spout trimmer.
Remarks: Car dumper has an operating rate of 550 tons iron/ore /hour.

Port Stockton Ore Wharf, Berths 10-11:
Owned by: City of Stockton and Stockton Port District.
Operated by: Stockton Port District.
Use: Container-handling dock; receipt of molasses and petroleum products.
Dimensions: Length if face 810.5 ft., lower side 102 ft.; depth alongside at MLLW 32 ft.; usable berthing space 810.5 ft.
Mechanical handling facilites: Loading tower located at centre portion of wharf.
Remarks: Face of wharf is in line and contiguous with face of Berth 9 providing a total of 1,455.5 ft, of berthing.

Port Stockton General cargo Wharf, Berth 9:
Owned by: City of Stockton and Stockton Port District.
Operated by: Stockton Port District.
Use: Receipt and shipment of general cargo, receipt of molasses.
Dimensions: Length of face 645 ft., upper side 75 ft.; depth alongside at MLLW: Face 37-34 ft., upper side 35 ft.; usable berthing space; Face 645 ft. upper side 110 ft. with dolphin; width of apron: Face 41.25 ft.
Mechanical handling facilities: Forklift trucks and other types of cargo-handling equipment, owned by the Port District and by stevedoring companies, are available as needed.

Port Stockton Wharf No. 8:
Owned by: City of Stockton and Stockton Port District.
Operated by : Stockton Port District.
Use: Receipt and shipment of general cargo; Liquid sugar facility and receipt of molasses.
Dimensions: Length of 396 ft.×88 ft.; depth alongside at MLLW 37-36 ft.; usable berthing space 484 ft. with trestle.
Mechanical handling facilities: 1×32-ft., hinged boom, 4×6-in. stainless-steel pipe-lines for loading wine into ocean tankers.

Port Stockton Wharf No. 7:
Owned by: City of Stockton and Stockton Port District.
Operated by: Stockton Port District.
Use: Receipt and shipment of general cargo.
Dimensions: Length 516 ft. depth alongside at MLLW 37-36 ft.: usable berthing space 516 ft.; width of apron 31 ft.

Port Stockton Wharf No. 6:
Owned by: City of Stockton and Stockton Port District.
Operated by: Stockton Port District.
Use: Receipt and shipment of general cargo.
Dimensions: Length 418 ft.; depth alongside at MLLW 37-36 ft.; usable berthing space 418 ft.; width of apron 31 ft.

Port Stockton Wharf No. 5:
Owned by: City of Stockton and Stockton Port District.
Operated by: Stockton Port District.
Use: Receipt and shipment of general cargo.
Dimensions: Length of face 428 ft.; depth alongside at MLLW 34-32 ft.; usable berthing space 429 ft.; width of apron 31 ft.

Port Stockton Grain Wharf No. 4:
Owned by: City of Stockton.
Operated by: Stockton Port District.
Use: Receipt and shipment of general cargo, receipt of bulk phosphate rock by self-discharging vessel; and shipment of bulk fertilisers.
Dimensions: Length of face 461 ft.; depth alongside at MLLW 32-35 ft.; usable space 462 ft.; width of apron 31 ft.

Port Stockton Wharf No. 3:
Owned by: City of Stockton.
Operated by: Stockton Port District.
Use: Receipt and shipment of general cargo.
Dimensions: Length of face 461 ft.; depth alongside at MLLW 32-36 ft.; usable berthing space 461 ft.; width of apron 31 ft.

Port Stockton Open Wharf No. 2:
Owned by: City of Stockton.
Operated by: Stockton Port District.
Use: Receipt and shipment of general cargo; shipment of logs, and handling of heavy-lift cargo.
Dimensions: Length of face 506 ft.; depth alongside at MLLW 32-36 ft.; usable berthing space 506 ft.; width of apron: open.
Remarks: Wharf has 39,000 sq. ft. of open storage area with an additional 2.3 acres of open storage area in rear. At the Industrial Park approx. 104 acres of open storage area are located South of W. Washington Street; over 50 acres of this area are used for storing logs awaiting shipment. An additional 56 acres of open storage are located North of W. Washington Street.

Logs are transferred to wharf by trucks and by tractors equipped with log clamps.

Stockton Elevators Grain Elevator Main Wharf No. 1:
Owned by: Stockton Elevators Inc.
Operated by: Stockton Elevators Inc.
Use: Shipment of grain by vessels and by ocean going and inland waterway barges; receipt of grain by self-unloading barges.
Dimensions: Length of face 564 ft., West side 20 ft., East side 20 ft.; depth alongside at MLLW 35-37 ft.; usable berthing space 564 ft.; width of apron, open end 20 ft.
Mechanical handling facilities: 2 towers on wharf, each with 13-in. diameter, telescopic, mechanically operated, grain-loading spout; loading rate, 900 short t.p.h. (29,877 bu.) at East tower; 800 (26,557 bu.) at West tower; combined rate, 900 short tons.
Remarks: Grain gallery connecting towers on wharf has a 30-in., electric-belt conveyor; and gallery extending from East tower to grain elevator has two 30-in. belt conveyors.

BRIDGES: Fixed-span high-level toll bridge across Carquinez Strait, with min. clearance of 135 ft. above MHHW. Southern Pacific Railroad lift span bridge crosses Suisun Bay 6.5 miles upstream from Carquinez bridge, with min. clearance above MHHW of 70 ft. when closed and 135 ft. when open. Horizontal clearance on lift span 290 ft. A third bridge, 22 miles above Southern Pacific bridge, near Antioch, has min. clearance 70 ft. when closed and 135 ft. when open. Horizontal clearance of span 265 ft.

STEVEDORES: *General Cargo* – For gang start at 0800 hrs., orders must be placed at 1600 hrs. of previous day; night gangs must be ordered by 1100 hrs. These times pertain to week-day gangs. For week-end gangs, 1100 hrs. Saturday for Saturday night, Saturday morning, Sunday night and Monday morning. Day shifts run from 0800 to 1700 hrs. Night shifts 1700 to 0300 hrs. Arrangements can be made for a special third shift from 0300 to 0800 hrs. Rates quoted on request.

Bulk Ore and Grain Cargoes—Orders for gangs must be placed at same time as for general cargo. This operation on 24 hour basis; day shift, 0800 to 1600 hrs., night shift 1600 hrs. to midnight, swing shift, midnight to 0800 hrs. Also see "Radio".

MEDICAL: Arrangements with San Joaquin Medical Society for physicians, surgeons and dentists. 5 hospitals within radius of 6 miles from port. Ambulance service readily available. Telephone number for this service is 466-9535 (day or night).

TANKERS: 2 berths, 32 ft. depth available.

FRESH WATER: Available through pipelines.

FUEL: All grades of fuel available with 1 day's advance notice.

DEVELOPMENTS: Deepening of channel to 35 ft. proposed.

GANGWAY/DECK WATCHMEN: Services of watchmen not necessary. Available if requested.

OPENING/CLOSING HATCHES: Hatches may be opened prior arrival and closed after ship sailed from port; any opening or closing of hatches at dockside must be performed by stevedores.

CERTIFICATES: See "San Francisco".

CUSTOMS ALLOWANCE: Tobacco, Wine and/or Spirit, see "San Francisco".

CARGO GEAR: Safety regulations require strict adherence to max. loading or unloading weight capacity of ship's gear.

IDENTIFICATION CARDS: Not required.

CONSULS: See "San Francisco".

REPAIRS: Minor types of repairs carried out.

DRY DOCKS: Nearest dry docks, San Francisco.

REPATRIATION: No facilties in Stockton for effecting crew changes and arranging any necessary repatriations. Special arrangements may be made through Customs.

AIRPORT: Stockton Metropolitan Airport located approx. 6 miles from port. Serviced by United Air Lines and Air West.

TIME: Pacific Standard Time in effect from last Sunday in October to last Sunday in April; Pacific Daylight Time goes into effect on last Sunday of April until last Sunday in October, when clocks are advanced 1 hour.

HOLIDAYS: New Year's Day; Lincoln's Birthday; Washington's Birthday; Memorial Day; Independence Day; Labor Day; Admission Day; Columbus Day; Veteran's Day; Thanksgiving Day; Christmas Day are all holidays. In addition to above. General Election Day, both State and National, as well as any day proclaimed by Governor of California or President of United States shall be observed as holiday. Work can be arranged for all holidays.

POLICE/AMBULANCE/FIRE: Security Force on duty 24 hours a day and can be reached by dialling extension 246 for any emergency that might arise. Stockton Police Department's emergency telephone number (209) 466-6843. Stockton Fire Department (209) 464-4646. Ambulances may be secured by telephoning (209) 466-6869; 464-4846; 463-3202; 466-1601; 464-4611; 464-1546.

TELEPHONES: Telephones placed aboard on request.

ELECTRIC CURRENT: At wharves where current available for ship's use, it is 110 volt, single phase, 60 cycle for lighting and 440 volt, 3 phase, 60 cycle for power.

SHORE LEAVE: Permitted.

REGULATIONS: Port of Stockton requests notice of ship's intent to come into port at least 7 days prior to arrival; vessels, who have made prior arrangements, will have precedence over vessels who sail into port without previous notice.

AUTHORITY: Port of Stockton.

TACOMA, Washington: 47.14 N. 122.28 W.

(See Plan)

DOCUMENTS (on arrival from foreign):
Ship's document.
Clearance from Last Foreign Port.
2 Crew Lists on Form I.418
2 Passenger lists on Form I.418 (if applicable)
Passenger declarations if applicable.
2 Store Lists.
2 Crew Purchase (curio) Lists.
2 Manifests of cargo for discharge on C.F. 7527—A or 7527-B.

If first arrival port on an inward voyage, must also have 2 sets of Manifests of complete cargo on C.F. 7527-A or 7527-B, one for customs at this port and other for use as a "Travelling Manifest" to go forward to other discharge ports.

A – For U.S. Public Health Quarantine Boarding Officer: "Quarantine Declaration" on Form PHS.43.

B – For U.S. Department of Agriculture Boarding Officer: "Shipmaster's Declaration and Warning Notice" on Form A1Q.43.

C – For U.S. Immigration Boarding Officer:
1. Crew List of Form I.418 visaed by U.S. Consul abroad.
2. Passenger List on Form I.418.
3. Attachment to Passenger List on Form I.92.
4. Form I.94 for each passenger.
5. Form I.95 of ID Card (Form 184) for each crewmen. (These are reusable for multiple entries, but for seamen on first trip to United States a new Form. I.95 must be ready for presentation on arrival.)

D – For U.S. Customs Boarding Officer and Agent or Broker:
1. 3 copies Crew List (Form I.418).
2. 3 copies Cargo Manifest on Form 7527A or B.*
3. 3 copies Store List – no official form provided.*
4. 3 copies Crew Purchases or Curio List (no official form provided).*
5. 3 Passenger Lists on Form I.418.
6. For U.S. Ships – Declaration re foreign repairs on form 3415.
7. For U.S. Ships – Certified Crew List for last U.S. port before going foreign.

* At subsequent U.S. ports of call 2 copies required of extracts Cargo Manifests of cargo for the port concerned, and 2 copies of lists of stores and curios remaining on board.

PILOTAGE: Is compulsory for all vessels except those under coasting trade on West coast of the United States, including Alaska and British Columbia. Pilots board off Port Angeles Pilot Station.

ANCHORAGE: The depths as a rule are too great for convenient anchorage, but vessels occasionally anchor under the Northern shore about 1 mile Eastward of Brown's Point. Vessels may anchor in about 60 ft. 450 yd. N.N.W. of the outer end of Puyallup Waterway West Jetty.

City regulations permit anchorage in any part of the bay outside harbour lines so as not to interfere with vessels arriving or departing from their docks.

MAX. SIZE Length over 1,000 ft. (centre to centre dimensions of mooring dolphins), draft subject to berth depth.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available, join vessel in Commencement Bay, approx. half way between Brown's Point and the designated Dock. Tug's lines are used and there is a charge for tug's lines.

BERTHING: 29 deep water berths.

General Cargo: 1,327,000 sq.ft. warehouse space, 86 acres of open storage area serving all piers.

Water depths: 30 to 70 ft. below MLLW.

BULK HANDLING FACILITIES: 1,800-ft. pier with 40 to 50 ft. water depth. 5 heavy lift whirley cranes and bulk unloading crane with 750 to 1,500 t.p.h. capacity; 150,000 tons capacity alumina storage structure with load-out facility; 30-acre stockpile area including holding area for 300 rail cars.

2 Bulk grain elevators: United Grain: Pier 1, 4.5 million bushel capacity; loading rate: 600 t.p.h.; 700 ft. dock; 50 ft. water depth.

Continental Grain: 3 million bushel capacity: loading rate: 2,400 t.p.h.; 450 ft. dock with dolphins to 800 ft.; 70 ft. water depth.

Bulk Liquid Facility: 3.5 million gallon capacity; heated tanks and piping for both rail and truck shipping and receiving; serves vessels at Pier 1, 2,220 ft., 35 ft. water depth, and Pier 5, 570 ft., 33 ft. water depth.

BRIDGES: The 11th Street Bridge: All ships are required to notify for opening 2 hours in advance. The Puyallup River Bridge on 11th Street has been deactivated. The Blair and Hylebos Bridges have no restrictions. Closed periods apply to the 11th Street Bridge and the hours are as follows: 0645 – 0745 hrs., 1530 – 1730 hrs.

STEVEDORES: Seattle Stevedoring Company, Jones-Washington Stevedore Company, Crescent Wharf and Warehouse Co., American President Lines Terminals Northwest.

Gang requirements must be made known to contracting stevedore prior to 1100 hrs. on day before the vessel plans to dock. (1030 hrs. on Saturdays for gangs on Saturday p.m., Sunday and Monday.)

Stowage of cargo for discharge or load determines the gang size requirements. Sufficient information for intelligent gang orders is a necessity – i.e. advance cargo plans, unusual size and/or weight, etc.

TANKERS: Loading/discharge lines 8 in. and 10 in. 150 ASA flanged connections. Slop discharge facilities not available. Fresh water available. Coast Guard regulations strictly enforced.

DENSITY: The average density in the port is 16.8 at 15° C.

FRESH WATER: Available. Delivers to vessel through portable meter hose.

FUEL: Available.

Grade	*Viscosity at 122°SSF*
Bunker "C"	165–175
PS–400	112–116
Bunker Special	50-60
PS–300	32–35

Advance notice required

FIRE PRECAUTIONS: Very strict precautions in force.

GANGWAY/DECK WATCHMEN: Watchmen required if detainees are aboard.

OPENING/CLOSING HATCHES: Normally carried out by stevedores. In practice, however, the crew can perform this task while in transit.

CERTIFICATES:

Certificate of Registry.

Certificates for any previous U.S. tonnage tax payments within the past year.

International Load-line Certificate.

Safety Radio Certificate.

Deratisation Certificate.

Cargo Gear Inspection Certificate.

Certificate of Inspection (U.S. vessels).

CUSTOMS ALLOWANCE: Tobacco: Wine/Spirit: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.

IDENTIFICATION CARDS: Required.

REPAIRS: The largest repair yard in Tacoma can haul out vessels up to 1,000 tons for all kinds of repairs, including electronics, welding, painting and machining; shafts up to 30 ft. in length are machined here. Another plant does shipbuilding exclusively, but will perform topside repairs if needed. Wreckage and salvage facilities are available. Larger vessels go to Seattle for dry-docking. Minor repairs and services for small craft are available at marinas on the City Waterway and the N.E. shore of Commencement Bay.

AIRPORT: Seattle – Tacoma Inter Airport is 16 miles North from Port and Tacoma Industrial Airport 8 miles West.

TIME: Local time reference is GMT minus 8 hours. In Summertime it is GMT minus 7, or Pacific Daylight Saving Time, started the last week-end in April and finished the last week-end in October.

HOLIDAYS: New Year's Day (January 1st) no work; Lincoln's Birthday (February 12th); Washington's Birthday (February 22nd); Memorial Day (May 30th); Independence Day (July 4th) no work; Bloody Thursday (July 5th); no work; Labor Day (September 1st) no work; Columbus Day (Friday after Thanksgiving); Veterans' Day (November 11th); Thanksgiving Day (November 27th) no work; Christmas Day (December 25th) no work.

POLICE/AMBULANCE/FIRE: Emergency tel. numbers:

Police MA 7-6141; Fire MA 7-0151; Ambulance MA 7-4118 or FU 3-1555.

TELEPHONES: Pay telephones available at Piers 1, 2, 4, 7, Blair Terminal, Pierce County Terminal, Grain Docks 23 and 24. There is no charge for this service.

SHORE LEAVE: Allowed.

AUTHORITY: Manager, Terminal Division, Port of Tacoma.

TAMPA, Florida: 27.57 N. 82.28 W. (See Plan)

DOCUMENTS:

Passports and Seamen's Books.

Vaccination Certificate for each Seaman.

Certified Crew List: must be on American form and certified by American consular office at foreign country from which departed.

U.S. Customs requires Inward Foreign Manifest (original and 3 copies). This must describe cargo which is to be discharged this port and/or any other port in vessel's itinerary. It must show:

Vessel's name and flag.
Master's name.
Last foreign port of departure.
Net registered tons of vessel.
When and where vessel built.
Consigned to Agent.
Bill of Lading Number.
Marks and numbers (on cargo).
Complete description of merchandise.
Weight in kilos or pounds.
Port of loading.
Port of discharge.
Stores Lists (original and 3 copies).
Crew Curio List (original and 3 copies).
Narcotic List (original and 3 copies).
*Dangerous Cargo List (original and 3 copies).
*This should be filled out even if nothing dangerous aboard.

Health officials will board vessel first. Bills of Lading not needed for Customs purposes.

PILOTAGE: Vessel applies for Pilot through radio station WPD and through Agent. Telegraphic address for Pilot is: Tam-pilot. Advance notice is not necessary. However, U.S. Coast Guard requires a 24-hour notice of the vessel's ETA. VHF Channel in Tampa is Channel 12.

5 pilot boats – each are different. All 40-45 ft. motor launches flying "H" flag and carrying prescribed red and white pilot lights. No light or sound signals necessary by vessels requiring Pilots.

Normally pilot boat located between sea buoy and No. 2 Buoy in main channel. During bad weather they are located off lighthouse at Egmont Key. Anchorage within 1 mile area of sea-buoy.

ANCHORAGES: Vessels with good ground tackle can anchor anywhere outside Egmont Bar in depths of 35 to 50 ft. Inside anchorages Southward of Mullet Key in depths of 30 to 35 ft.; and S.W. of Gadsden Point in depths of 29 to 36 ft.

Explosives and quarantine anchorages East of Mullet Key and South of Interbay Peninsula.

(1) Explosives anchorage East of Mullet Key. A rectangular area in Tampa Bay, approximately 4,459 yd. long and 1,419 yd. wide, beginning at Lat. 27° 38′ 30″, Long. 82° 39′ 09″, and extending N.E. to Lat. 27° 39′ 48″, Long. 82° 37′ 15″; thence S.E. to Lat. 27° 39′ 17″, Long. 82° 36′ 46″; thence S.E. to Lat. 27° 37′ 52″, Long. 82° 38′ 38″; thence N.W. to point of beginning. Anchorage is used by vessels awaiting loading or unloading at Port Tampa where duration of anchorage will exceed 72 hours.

(2) Temporary explosives anchorage South of Interbay Peninsula. Beginning at a point bearing 107°, 1,750 yd. from Cut F Range Front Light; thence to a point bearing 125° 2,050 yd., from Cut F Range Front light; thence to a point bearing 180°, 1,725 yd., from Cut F Range Front Light; thence to a point bearing 222°, 2,180 yd., from Cut F Range Front Light; thence to a point bearing 251°, 1,540 yd., from Cut F Range Front Light; and thence to the point of beginning. Anchorage is used for vessels engaged in loading explosives when duration of the anchorage is less than 72 hours.

(3) Temporary explosives anchorage off Port Tampa. A circular area with a radius of 200 yd. with the point at Lat. 27° 50′ 22″, Long. 82° 34′ 15″.

(4) Quarantine anchorage. S.E. of the temporary explosives anchorage, beginning at a point bearing 97° true, 4,370 yd., from Cut F Range Front Light; thence to a point bearing 113° 30′, 5,370 yd., from Cut F Range Front Light; thence to a point bearing 161° 30′, 3,770 yd., from Cut F Range Front Light; thence to a point bearing 163° 30′ 2,070 yd., from Cut F Range Front Light; thence to the point of beginning.

RESTRICTIONS: Draft recommendation is 33 ft. 6 in. No tidal restrictions with exception of loaded vessels into Port Tampa.

MAX. SIZE: Max. draft 34 ft. MLW. No limit on length and breadth.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Radio station "WPD" should be used by vessel to route ETA cables to Agents, receivers, etc. Station KUZ 383 on Channel 25 VHF, available for public messages.

TUGS: Positions are:

Main port area – right past Beacon No. 35
Port Sutton & East Bay – Beacon No. 29
Port Tampa – Cut "K"
East Tampa – Beacon No. 16

Tug's lines only.

BERTHING: Port Sutton: Max. length 800 ft., draft 33 ft. 6 in., waterline to hatchcoaming 43 ft.

Rockport Berth: Max. length 900 ft., draft 33 ft. 6 in., waterline to hatchcoaming 50 ft.

Eastern Associated Terminal: Max. length 850 ft. draft 33 ft. 6 in. waterline to hatchcoaming 50 ft.

All berths can accommodate large vessels by shifting.

STEVEDORES: Stevedoring gangs must be ordered approximately

24 hours in advance (before 1700 hrs on day before needed).

MEDICAL: Advance notice for medical attention not required, but is preferable. All U.S. ports require valid certificate of vaccination (renewable every 3 years) for smallpox.

TANKERS:

Company	*Pipe lines*	*Berthing space*	*Depth*
American Oil Co.	(1) 12″ (2) 10″	275 ft.	30 ft.
American Petrofina	(2) 10″ (5) 8″	600 ft.	31 ft.
Brimstone Terminals	(1) 14″	700 ft.	34 ft.
Chevron Asphalt	(3) 8″	320 ft.	18 ft.
Cities Service	(3) 10″	550 ft.	30 ft.
Florida Portland Cement	(3) 8″ (2) 6″	700 ft.	30 ft.
WR Grace (ammonia)	(1) 10″	200 ft.	34 ft.
Gulf Oil Co.	(3) 14″ (2) 10″ (1) 8″		
	(2) 6″		
	(2) 6″	650 ft.	32 ft.
Humble Oil & Ref. Co.	(1) 10″	300 ft.	18 ft.
Marathon Oil Co.	(2) 12″ (3) 8″	800 ft.	32 ft.
Murphy Oil Co.	(1) 12″ (1) 8″ (1) 6″	500 ft.	34 ft.
Petroleum Packers	(1) 6″	600 ft.	34 ft.
Phillips Petroleum	(2) 12″	300 ft.	34 ft.
Union Oil Co.	(5) 10″	880 ft.	22-30 ft.
Shell Oil Co.	(1) 12″ (2) 10″	850 ft.	34 ft.
		250 ft.	34 ft.
Sulphur Terminal Co.	(2) 10″	700 ft.	34 ft.
South State Terminals	(3) 6″ (3) 10″	800 ft.	33 ft.
Standard Oil Co.	(3) 12″ (5) 8″ (6) 6″	884 ft.	34 ft.
Sun Oil Co.	(2) 6″	200 ft.	26 ft.
Tampa Electric Co.	(1) 10″	550 ft.	28 ft.
Detsco Terminals Inc.	(1) 10″	380 ft.	32-34 ft.
Pasco Terminals Inc.	(1) 10″	600 ft.	30 ft.
Texaco Inc.	(1) 12″ (2) 8″ (4) 6″	250 ft.	33 ft.
Gardinier Inc.	(1) 12″	448 ft.	32 ft.
Warren Petroleum Co.	(1) 4″	325 ft.	14-12 ft.

Note that part of above terminals use same piers. Most terminals have residue discharge facilities.

DENSITY: Density is affected by local rains due to Hillsborough River. Seasonal variances too great to allow advance prediction.

FRESH WATER: Available all over port and delivered through hoses and meters. Rates of delivery various.

FUEL: All grades and types available, including all types of blended fuel and Bunker "C". 24 hour notice required. All types of lube-oil available with delivery in bulk or drums – 24 hours notice is required. Major oil companies (i.e. Shell, American Oil, Texaco, Gulf, Standard, etc.) represented in Tampa. Delivery ex pipe-line, barge or truck.

PRECAUTIONS: No specific precautions other than usual.

DEVELOPMENTS: The Tampa Port Authority has completed 3 new general cargo berths, a total of 1,800 ft., on the East Bay Channel and Turning Basin at the Port of Tampa. A fourth general cargo berth is under construction.

The berths were designed with container capability in mind. Heavy lift cranes for containers are available.

Plans are also underway for the construction of a possible 3 additional 600-ft. general cargo berths to meet the requirements of the port as indicated by port operators.

The U.S. Corps of Engineers plans to begin dredging operations for deepening the harbour channels from their present 34 ft. to 43 ft. Commencement of this project is scheduled for 1976 with work continuing until completed, a total of about 5 years.

GANGWAY/DECK WATCHMEN: Watchmen not necessary, but available when required.

OPENING/CLOSING HATCHES: Longshoremen open and close hatches.

CERTIFICATES:

Documentation Papers.
Load-line Certificate.
Certificate of Safety at Sea (when carrying passengers).
Certificate of Safety Equipment.

CUSTOMS ALLOWANCE: Tobacco, 2 packs of cigarettes per day per man, wine and/or Spirit, no set amount. Each boarding officer has different views (i.e. German and Scandinavian vessels allowed 2 bottles of beer per day per man). Allowances made within reasonable bounds at Master's discretion subject to boarding officer's approval.

CARGO GEAR: No local special safety requirements. Longshoremen and U.S. Department of Labor requirements are uniform over the U.S.

IDENTIFICATION CARDS: Passports required.

CONSULS: The following countries are represented in Tampa:

Belgium
Colombia
Denmark
Ecuador
El Salvador
Finland
France
Guatemala
Honduras
Italy
Korea
Mexico
Nicaragua
Norway
Peru
Sweden
Turkey

REPAIRS: All types are possible.

DRY DOCKS: Graving dock: 525 ft. long on bottom × 80 ft. wide, and depth over keel blocks 16-18 ft. at MHW; Dry dock: 200 ft. long × 65 ft. wide there are 2 other dry docks besides those listed above.

REPATRIATION: No foreign crew pools in Tampa (located in New Orleans, San Francisco and New York). But crew changes can be made when Master radios requirements to Agent who arranges with local consul or through crew pool in nearest city named above for applicable country (if no consul is available in Tampa). American crew pools for all unions in Tampa.

Repatriation available at Tampa International Airport and is handled by consul or Master.

AIRPORT: Tampa International Airport served by regular airlines and located approximately 5 miles from main port area; 5 miles from Port Tampa and 16 miles from East Tampa.

TIME: Tampa normally on Eastern Standard time with Daylight Saving Time in effect from last Sunday in April to last Sunday in October.

HOLIDAYS: New Year's Day (January 1); Jan. 15th (Martin Luther King's Birthday); Gasparilla Day (2nd Monday in February, local holiday); Lincoln's Birthday (February 12); Memorial Day; Independence Day (July 4); Labor Day (1st Monday in September); Columbus Day; Veterans Day; Thanksgiving Day (last Thursday in November); Christmas (December 25).

When any of these holidays fall on a Sunday, they will be observed on Monday following. Work on these holidays by special arrangement only.

POLICE/AMBULANCE/FIRE: Police 223-8521; Ambulance 223-1551; Fire 223-4211.

TELEPHONES: Installation of telephone aboard can be arranged.

SERVICES: Compass adjustments available; radio direction finder; radar repairs; tank cleaning.

SHORE LEAVE: Immigration authorities grant clearance after examination of passport or bona fide seaman's papers.

DELAYS: Delay can be expected in loading phosphate rock (1 or 2 days), and same delay applicable for berthing at elevators. No delays in general cargo loading or berthing and bunkering.

AUTHORITY: Tampa Port Authority.

TEXAS CITY, Texas: 29.22 N. 94.53 W. (See Plan)

DOCUMENTS, PILOTAGE, etc., refer to "Galveston".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Houston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RESTRICTIONS: Controlling depth in entrance channel 40 ft. Otherwise restricted by depth available at berth. Vessels enter day and night.

TUGS: Available if required.

BERTHING:

American Oil Tanker Docks	depth	36 ft.
Monsanto Tanker Dock	,,	36 ft.
Texas City Oil Docks	,,	36 ft.
Union Carbide Terminal	,,	34 ft.

MEDICAL: All medical assistance available.

DENSITY: Brackish.

FRESH WATER: Available at all wharves except Union Carbide Terminal.

FUEL: Bunker C available to tankers loading/discharging. All grades available by barge from Houston.

GANGWAY/DECK WATCHMEN: Required only if crewmen detained by Immigration.

CUSTOMS ALLOWANCE: Each man 300 cigarettes or 100 cigars or 1 lb. tobacco. 1 qt. wine/spirits.

CONSULS: See "Houston".

TIME: Central Standard Time. Daylight saving time effective from April to October.

SHORE LEAVE: No restrictions unless detained by Immigration.

AUTHORITY: Texas City Terminal Railway Co.

TOLEDO, Ohio: 41.42 N. 83.28 W. (See Plan)

Refer to "St Lawrence Seaway" for important general information.

PILOTAGE: By Seaway Pilots.

RESTRICTIONS: Navigation season from mid-March to end-December, approx. The port is connected to Lake Erie by an entrance channel, depth 27 ft. Vessels size restricted by Seaway locks.

MAX. SIZE: 730 ft. length; 26 ft. draft. Height restriction of 108 ft. above water-line which applies to grain berths only.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Master must give at least 24 hours notice to Commander 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also, at least 24 hours notice of ETA at first U.S. discharge port is required. Toledo Port can be contacted through Lorain, Ohio or Port Colborne, Ontario.

TUGS: Available. Not compulsory, but sometimes necessary in bad weather.

BERTHING:

C & O Railway Dock: 2,000 ft. long, 26 ft. depth alongside.
Lake Front Dock: 1,200 ft. long, 26 ft. depth alongside.
Interlake Steel Corporation: 23 ft. depth alongside.
Mid States Terminals: 27 ft. depth alongside.
East Side Iron Elevator: 27 ft. depth alongside.
Port Authority Facility: 4,100 ft. long, 27 ft. depth alongside.
Anderson Elevator: 27 ft. depth alongside.

CARGO HANDLING FACILTIES: 3 grain elevators at Toledo load vessels at 50,000 b.p.h. There are 6 coal-loading machines, each of which can dump 1×100-ton car per minute, also 1 machine which dumps 2 cars simultaneously, for a max. of 6,000 t.p.h. There are 7 Hulett ore machines; unload lake vessels at a rate of 4,000 t.p.h. Bulk liquids handled include petroleum products, industrial

molasses, palm kernel oil, liquid sugar, trichlorethylene and perchlorethylene.
TANKERS:
Hocking Valley Pier: 22 ft. depth alongside.
Ashland Oil Company: 22 ft. depth alongside.
Standard Oil Company: 23 ft. depth alongside.
Gulf Refining Co.: 21 ft. depth alongside.
DENSITY: Fresh water.
MEDICAL: All facilities available.
FRESH WATER: Obtainable by pipe-line at all general cargo docks.
FUEL: All grades available at oil piers, and by harbour fuel barge.
REPAIRS: Major repair facilities available.
DRY DOCKS: No. 1: 510 ft.×72 ft. 6 in.; No. 2: 641 ft.×78 ft.
AUTHORITY: Toledo – Lucas County Port Authority.

VALDEZ, Alaska: 61.07 N. 146.21 W.

Located at head of Valdez Arm in Prince William Sound.
APPROACHES: Via Prince William Sound to the Valdez pilot station.
DOCUMENTS: See "Anchorage, Alaska".
PILOTAGE: Pilots board approx. 2 miles North of Busby Light.
MAX. SIZE: Harbour depth over 300 ft. Tides: diurnal range 12 ft. Also see "Berthing".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
ANCHORAGE: Excellent, close by dock. Bay is too deep.
CUSTOMS: Quarantine, local, Immigration and Customs from Anchorage.
BERTHING: 1. Valdez City Dock: 36 ft. MLLW. 600 ft. long by 40 ft. wide. 2 warehouses, 1 heated, 1 unheated. Stevedore provides equipment which includes fork-lifts and 2×100-ton mobile cranes and 1×150-ton mobile crane. Dock operated by North Star Stevedoring Co.
TUGS: Limited availability.
STEVEDORES: 3 gangs.
REPAIRS: Minor repairs only.
FRESH WATER: Available in temperate seasons.
FUEL: Not available.
MEDICAL: 150-bed mental patient hospital; 15 beds for local use; 1 doctor, 1 dentist regularly from Anchorage.
TRANSPORTATION: Air; highway to Fairbanks and Anchorage.
DEVELOPMENTS: Valdez is the projected terminus of the Trans-Alaska Pipe-line and construction of tanks and oil dock facilities is anticipated across Valdez Arm from City Dock.

VANCOUVER, Washington: 45.36 N. 122.40 W.

DOCUMENTS: 3 copies of following:
Cargo Manifest.
Store List.
Crew Cargo List.
Crew List.
One copy of following:
Clearance from last Port.
Tonnage Tax Certificate.
Copy of Vessel register and itinerary of vessel port by port.
PILOTAGE: When entering from sea (without service of a bar pilot) vessel or Agent must give notice between hours of 0800 and 1700 and at least 12 hours prior to ETA Astoria. Calls may be placed with Astoria office (325-4532) or at Portland office (228-9325) or by radio to "Colrip Astoriaore". River Pilots board at Astoria in channel in vicinity of Astoria Crossing Lighted Buoy No. 37. Signal for river Pilot is 1 long and 3 short whistles. When ordering bar Pilots, request radio via KLB, Seattle, Wash., about 12 hours before arrival. Address "Bar Pilots, Astoria, Ore.", giving date and time of arrival at lightship. When "Peacock" is on station Pilot boards from small power boat; when "Columbia" is on station, Pilot boards directly from "Columbia". When pilot is boarding from small boat keep engines at about 4 knots speed. Do not change course or speed until signalled by Pilot vessel. Vessels having radio telephone contact pilot vessel for instructions on following frequencies: radio phone watch on Channel 16 VHF (156.8 mgc/s) also 2182 and 2738 kc/s. Pilot boat "Peacock" call WS 7217; pilot boat "Columbia" WJ 8200; Astoria bar Pilots' office (Channel 16) KOK 360.
ANCHORAGES: Only designated anchorages on U.S. Coast and Geodetic Charts are at Tongue Point (Astoria), Oreg. 2 in number and designated on Chart 6151 Columbia River, Pacific Ocean to Harrington Point, as 1 Lower Tongue Point and 2 Upper Tongue Point. Additional locations on Columbia and Willamette Rivers where safe anchorages can be made upon advice of Columbia River pilots. Anchorage in Vancouver harbour by permission of Harbour Master.
RESTRICTIONS: No restrictions on night entry. State of tide and draft restrictions not applicable to vessels drawing less than 40 ft.
MAX. SIZE: No restrictions length and breadth. Depth at Columbia River entry 48 ft. River channel to Vancouver maintained at 45 ft. by 600 ft. Seasonal tidal effect up to 3 ft. at Vancouver.
HEALTH: See "Health; All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: "Agriculture" before first U.S.A. port (Albany).
RADIO: Route ETA cables through KBLITT Seattle, Wash.
TUGS: Normally join vessel at designated berth. Tug lines used at no charge.
BERTHING: No special requirements for berthing and no special arrival times required except under particular circumstances.
STEVEDORES: Allocation for gangs Mondays through Saturday must be confirmed at 1100 hrs. to the longshore hiring hall. Allocation for gangs Sunday and Monday are made at 1100 hrs. Saturday for both day and night gangs. Same procedure applies to allocation of night gangs, but night gangs may be cancelled by 1400 hrs. afternoon of night gangs are to work.
MEDICAL: Any type of medical treatment can be provided and hospital facilities available. Only inoculation requirement for entry to U.S. is smallpox, except when vessels have called at an area infected by another disease.
DENSITY: Fresh water at all times.
FRESH WATER: Available at all berths delivered through pier-side connections.
FUEL: Viscosity grades of B and lower. No advance notice required. Barging essential.
FIRE PRECAUTIONS: Port fire precautions respecting tankers are administered by U.S. Coast Guard, which enforces shipboard regulations under Code of Federal Regulations, Part 46, Sub-part D, Sections 20 to 40; Police Harbour Patrol, which controls port movements, boards vessels to warn Master regarding harbour regulations, including spilling of oil, etc.; and Fire Marshal, who exercises jurisdiction regarding fire regulations at shoreside facilities serving tankers.
DEVELOPMENTS: Will continue building new cargo warehouses, additions to dock facilities, 3×50-ton gantry cranes available, berths for 4 cargo vessels, container yard and lumber yard.
GANGWAY/DECK WATCHMEN: Services at option of vessel Owner/Agent and available through private firms.
OPENING/CLOSING HATCHES: While ship is at dock, opening and closing hatches is work of longshoremen. Ship may open or close own hatches while under way.
CERTIFICATES: Registered tonnage certificate.
CUSTOMS ALLOWANCE: Tobacco, reasonable quantity. Wine and/or Spirit, reasonable quantity.
CARGO GEAR: Valid cargo gear certificate required, acceptable to U.S. Bureau of Labor Standards.
IDENTIFICATION CARDS: Immigration Dept. requires forms No. 595 and No. 31 (Repatriation). Changes can be effected at any U.S. Consulate and are honoured here.
CONSULS:
Austria
Belgium
Costa Rica
Denmark
Dominican Republic
El Salvador
Finland
France
Federal Republic of Germany
Great Britain
Iceland
Italy
Japan
Lebanon
Mexico
The Netherlands
Norway
Republic of Panama
Peru
Sweden
Venezuela
REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: See "Portland, Oregon".
REPATRIATION: Any arrangements possible for crew changes or other repatriation.
AIRPORT: Airport 10 miles from town, served by 7 regularly scheduled airlines with direct service and/or connections domestically and world-wide.
TIME: GMT minus 8 hours. Daylight saving time becomes effective annually on last Sunday in April through last Saturday in October.
HOLIDAYS: Following holidays are recognised: *New Year's Day; Lincoln's Birthday (Feb. 12); Washington's Birthday (Feb. 22); Memorial Day (May 30); *Independence Day (July 4); *Labor Day (1st Monday in September); Columbus Day (Oct. 12); Veteran's Day (Nov. 11); Thanksgiving Day; *Christmas Day (Dec. 25); Statewide Election Days. Other legal holidays may be proclaimed by State or national authority. When holiday falls on Sunday, following Monday observed as holiday. Longshore work performed on any of above-listed days is at overtime, which is one-and-a-half time rate. Days marked(*) are stop-work days, viz., no ships will be worked. This also applies to July 5, which observed locally on unilateral basis.
POLICE/AMBULANCE/FIRE: Police 693-2555; Fire 693-1441; Ambulance provided by several private firms, but can be obtained through police or fire number.
TELEPHONES: Available by order from terminal superintendents at $5.00 connection charge.
SERVICES: All services available such as compass adjusting, major or minor repairs either with work barges or at ship repair berths; lay berths available; charts available from private companies; all chandlery supplies available.
SHORE LEAVE: Crew members permitted ashore except where vessel has made first arrival from Communist-controlled port.
AUTHORITY: Port of Vancouver.

WILMINGTON, Delaware: 39.44 N. 75.32 W.

DOCUMENTS/PILOTAGE: See "Philadelphia."
ANCHORAGE: At Cherry Island.
MAX. SIZE: Length unlimited, breadth unlimited, draft 40 ft. MLW tide rise and fall 5.5 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Baltimore Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: U.S. Coast Guard, Gloucester, N.J.
TUGS: Normally, tugs not required. A docking Pilot is available.
BERTHING: 3,000 ft. marginal berth, 25 to 140 ton crane capacity. 600 t.p.h. bulk unloader. Covered bulk storage of 472,000 sq.ft. Dockside freezer capability of 200,000 cu.ft.
DENSITY: Fresh water port. Normal 12 hour tide.
FRESH WATER: Hose connection from dock.
FUEL: Available.
GANGWAY/DECK WATCHMEN: Required.
OPENING/CLOSING HATCHES: Optional.
IDENTIFICATION CARDS: See "New York".
CONSULS: All Consuls are located in Philadelphia, Pa.
REPAIRS: Possible.
DRY DOCKS: Major repairs and dry dock facilities – Sun Ship Yard, Chester, Pa.
REPATRIATION: Facilities are available and arranged by Agent.
AIRPORT: Philadelphia International Airport, regular service.
TIME: U.S. Eastern Standard and Daylight Time.
POLICE/AMBULANCE/FIRE: Police, Ambulance, Fire, tel. 302-654-5151.
TELEPHONES: Dock-side pay phones.
SERVICES: All services available.
SHORE LEAVE: Allowed unless restricted by Immigration.
AUTHORITY: Port of Wilmington.

WILMINGTON, N. Carolina: 34.14 N. 77.57 W.

(See Plan)

PORT LIMITS: A ship is considered an "arrived vessel" upon arrival at Buoy 2CF.
DOCUMENTS:

- 3 copies Cargo Manifest (Forms 7527-A or 7527-B), the original showing all cargo on board, and 2 copies showing only cargo for this port.
- 3 copies Crew Manifest (curio list) (Customs Form 1304).
- 3 copies Stores List (Customs Form 1303).
- 3 copies Passenger List (Form I.418).
- 3 copies Crew List (Form. I.418).

Customs boarding Officer will also examine ship's Register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:

- Master's oath (Customs Form 1300).
- All foreign clearances.
- U.S. Certificates of payment of tonnage tax (Customs Form 1002).
- Certified Crew List.
- Oil Pollution Cert.
- General Declaration (Customs Form 1301).
- Load Line Certificate.
- Safety Equipment Certificate.

PILOTAGE: Pilots board vessels at Buoy 2CF off the mouth of the Cape Fear River. Masters should notify local Agents by radio of their ETA's at Buoy 2CF in order that the Pilots may be on station in advance of arrival. Additionally, Masters may communicate with Pilots by radio telephone on 2738 frequency and by VHF Channel 18A. Pilots remain on board until harbour limits of Wilmington, where docking masters normally board vessels for purposes of docking.
APPROACHES: The port terminal at Wilmington is located on the East bank of Cape Fear River, approximately 26 miles from the sea buoy at the mouth of the river. Wilmington is 150 miles S.W. of Cape Hattaras and 26 miles North of Cape Fear.
RESTRICTIONS: The approach channel and basins adjacent to the port are maintained at a depth of 38 ft. MLW.
ANCHORAGE: Vessels awaiting Pilots normally anchor in area off Buoy 2CF. There is no safe anchorage in the port of Wilmington for large vessels to be accommodated. Small vessels can be accommodated for brief periods in anchorage basin, although it is necessary to swing with the tide in order to avoid blocking channel.
MAX. SIZE: No limits on length, breadth, and draft limit is present channel project depth of 38 ft. Master should communicate with local Agent regarding stage of tide for passage of vessels drawing 34 ft. or above.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Fort Monroe Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: 2 towing companies operate at Wilmington.
BERTHING: A continuous marginal wharf, 6,680 ft. long. Docking at any hour, day and night.
SPECIALISED CARGO HANDLING FACILITIES. State Port Terminal: fully equipped to serve cellular type container ships, for bulk handling; equipped with 6 yard rehandler buckets, receiving hoppers, and paved open storage areas, 2×45-ton, 1×115-ton and 1×225-ton gantry crane; 1 berth with tank farm for handling liquid chemicals.

Almont Shipping Company: 3 berths, open and covered bulk storage, 2×25-ton cranes and 1×85-ton derrick. No facilities for LPG carriers.

TANKERS: 10 tanker berths with drafts from 30 to 40 ft. MLW. Night berthing at all berths. Fresh water available.
FRESH WATER: Available from shore connections at rates up to 50 t.p.h.
FUEL: Bunker "C" and diesel fuels available locally.
FIRE PRECAUTIONS: Normal precautions observed.
DEVELOPMENTS: 1×225-ton gantry crane, 9 additional acres paved open storage and dockside sewage facilities to receive waste from ships available.
REPAIRS: Minor ship repairs available.
DRY DOCKS: 1×1,000-ton lift floating dry dock.
AIRPORT: New Hanover Country Airport, 7 miles from N.C. State Port Terminal. Served by Piedmont Airlines.
IDENTIFICATION CARDS: Standard U.S. Immigration Forms I.95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form. I.95, issued for the same vessel.
TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours from April to October.
AUTHORITY: North Carolina State Port Authority.

WRANGELL, Alaska: 56.28 N. 132.22 W.

Located on Wrangell Island. Open all year.
DOCUMENTS: See "Anchorage, Alaska"
PILOTAGE: (From sea via Dixon Entrance up Clarence Strait to Guard Island.) Under pilotage from Guard Island.
MAX. SIZE: Harbour depth 32 ft. MLLW. Tides: mean range 13.7 ft., diurnal range 16.1 ft. Also see "Berthing".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
ANCHORAGE: Good anchorage N.E. of Woronofski Island in 22 fathoms of water.
CUSTOMS: Immigration, Guard Island or local Customs office. Quarantine and Customs, local.
BERTHING: 3 wharves. 1. Wrangell Wharf Co. Berthing length 220 ft., East end depth 24 ft., West end depth 38 ft. 2 lift-trucks; 4,800 sq.ft. covered shed space.

2. Wrangell Lumber Co. Dock; Berthing length 320 ft., 150 ft. wide, depth South end 32 ft. North end 40 ft. LW. Height of pier from 0 tide 23.5 ft. Crane – 1 mobile, 8 ton, 6 lift-trucks. No shed space. 3 acres open storage.

3. Alaska Wood Products: Berthing length 300 ft., 50 ft. wide. Depth at LW 32 ft. Height of pier from 0 tide 23 ft. No shed space.

TUGS: 3 available, 500 h.p. each.
DEVELOPMENTS: Possible mineral potential for future development from Iskut River and Stikine River lodes.
STEVEDORES: 4 gangs available.
REPAIRS: None.
WATER: Available.
FUEL: None.
MEDICAL: Small but new hospital.
TRANSPORTATION: Air and ferry.

Uruguay

REGULATIONS: Increased fines became effective in June 1973 in respect of infringements of the Uruguayan Marine Code. There are approximately 119 Articles to the Marine Code, and Owners and Masters of vessels proceeding to Uruguayan ports are recommended to obtain a copy of the Code (which lists port regulations and amounts of fines for infringements) prior to arrival. We understand that copies of the Code, entitled "Reglamento Preventivo y Represivo de Infracciones Maritimas, Fluviales y Portuarias", may be obtained from Centro Navegacion Transatlantica, Colon 1486 p. 3, Montevideo.

Freely translated, we give below some extracts of Port Regulations as specifically applicable to Montevideo, but also to all Uruguayan ports in general:

Articles 1 to 8 cover respectively the reasons for setting up this preventive set of regulations; the definition of what a vessel is in terms of the legislation; the establishment and amount of fines (they may be tripled in the event of repeated offences); the fact that very small vessels may only have imposed 10 per cent of the full fine; the jurisdiction for the regulations covering the whole of the Uruguayan coast and river frontage; the stipulation whereby the General Marine Prefecture must send to the Captain of the vessel a statement of the offence immediately it is observed and this in triplicate and to the local Agent for the vessel.

The actual information which the form must contain is delineated. Notification of offences can be made after a vessel has sailed, this being to the local ship's Agent by phone and confirmed within 24 hours in writing. All Captains must give written consent to their local Agent, and the Agent must accept this in writing, empowering the Agent to act in the Captain's name in all cases of fine payment. The Authorities may delay the sailing of a vessel if they see fit in connection with any offence. Finally, article 8 deals with the right to appeal to the General Marine Prefecture against any fine imposed, this having to be done within 10 days dating from the day following personal notification of the offence.

Articles 9 to 119 cover the specific offences subject to fine and indicate individually the full fine imposable in local pesos.

An abridged summary of each of the articles is as follows: No anchoring within 900 metres of the illuminated buoy in the port access channel.

Vessels carrying hazardous cargo must hoist flags according to the Int. Code of Signals.

Vessels with anyone on board with contagious diseases must hoist appropriate flag (letters QL).

Flag Q must be hoisted and maintained in position until health authority has given free pratique.

All vessels anchoring in the roads, bay or ante-port must take due precautions not to harm or cause damage to other vessels; the fine will be imposed notwithstanding claims for damages from third parties.

Agents of vessels which may wish to anchor in the roads must obtain prior permission from the Marine Authority, specifying vessel's measurements and the reason. If authorised, the anchorage to be used will be notified.

No anchoring at the docks unless justified, and anchors must be raised immediately the reason for dropping them has gone. There must be no delay on the part of vessels in complying with the Marine Authorities instructions to change berth or anchorage.

No tying up to other vessels without Marine Authority permission; no attachment to berths which have not been allocated and no changing of berth without authorisation.

No anchoring in places not authorised by the Marine Authority, the maximum fine being applied should this have caused damage to third parties.

No small craft to be tied up obstructing gangway or quays. Where this is necessary for embarking crew members, passengers, provisions, etc., the small craft must be removed immediately the operation has been completed.

Small craft must not be tied up to buoys or beacons. Vessels must not tie up at buoys or beacons.

Maximum speed of vessels in docks is 4 knots.

Navigation in channels of access to ports is governed as follows:

Maximum speed 8 knots.

Vessels must always keep to starboard.

Vessels must not overtake each other, but where this is necessary they must conform to the International Signal Code.

No anchorage in channels.

No fishing in channels.

Vessels navigating in channels must keep a distance of 1,000 metres from each other.

Vessels must not cross in front of each other in the fore-ports.

All vessels entering or leaving the ante-port or docks, changing berths or anchorages must be assisted by a Pilot and tug, unless specifically given exception to this rule by the Marine Authority.

No vessel must enter port with damage to hull, machinery or rudder unless prior inspected by the Technical Commission of the Mercantile Marine Directorate.

Any vessel springing a leak whilst navigating in the access channel, and which the bilge pumps cannot overcome, must go aground as quickly as possible off the channel so as to leave the channel open.

In case of fire on board whilst navigating in the access channel, Captains must observe usual procedure and give signals accordingly.

The strict use of semaphore signals within port must be observed.

When vessels enter the docks or remain in them, Captains, owners or Agents must request permission from the Marine Traffic Office, and report to the Office of Pilotage, and proceed in whatever form they may instruct. On leaving the same procedure must be followed.

Captains and owners of vessels must see that their vessels do not obstruct or cause harm to port works, beacons, buoys, or semaphores and once tied up they must not slacken ropes without permission of the Marine Authority except under conditions covered by items 1, 2 and 3 of article 64 of the Port of Montevideo Marine Regulations.

No vessel to have badly stowed cargo, excess weight, or evidence of lists due to bad trim of cargo.

Only those lines necessary for tying up to be used. When two or more vessels tie up alongside to load or discharge they are all obligated to ensure that the handling of their respective cargoes does not prejudice the working of the others.

Vessels must take proper precautions when loading or discharging raw material, i.e. sand, bones, ash, coal, etc., by placing suitable planks of wood close together to prevent any such material falling into the water.

No vessel to enter docks with the gangway already rigged.

During unloading operations, no goods to be thrown on to the quay. This must be done manually or mechanically.

During discharge operations, cargo must be so positioned on the quay as to leave adequate passage for vehicular traffic, i.e. police, fire-brigade, health authorities, customs and port officials.

Planks of wood — when planks are used for any operation, they must not be placed in contact with mooring bitts or cables. When work ceases all pieces of wood, ladders, small trucks, etc, must be removed from quay, and those belonging to the ship must be taken on board, this so as not to obstruct the public path along the quay.

When cleaning or washing ships tied up at quays, no rubbish, water or cleaning material must be allowed to fall on the quay.

A very serious offence is the throwing into the water of any rubbish, sewage or other material susceptible to dirtying the water.

Very serious offences are the lightening of ships carrying petrol, crude oil, or the like, likewise the washing-out of tanks, except in authorised zones. The fine is based on the area spoiled by the wrongful discharge.

All ships should have local Agents, otherwise in the case of offences the Captain is held responsible and vessels may be detained.

Vessels are responsible to ensure that no damage is made to quay installations by the cargo they load or discharge, and must always leave berths in a tidy and clean state.

Vessels' auxiliary small craft, launches and the like must not hang over the side of the vessel in port, except during operations of launching and reshipping on board, where such operations are conducted at points indicated by the Marine Authority. Such small craft may only be used for the purpose and at the times authorised by the Marine Authority.

Usual regulations concerning carriage of passengers in vessels and heavy fines are imposable for the carriage of passengers or crew members not listed.

Vessels exceeding their navigation limits shown in their Certificate of Navigability are subject to fine.

All vessels must be cleared to sail by the Marine Authority.

Vessels must use their proper name and this must be painted on in letters of minimum of 15 centimetres height and 8 centimetres wide. Letters must be white on black or black on light colour.

Captains, Owners and Agents must report any crew offence or irregularity on board to the Marine Authority.

Vessels in port must hoist the Uruguayan flag. *N.B. It is recommended that Masters correctly establish the proscribed times for raising and lowering the Uruguayan flag, in order to avoid fines.*

Vessels must have their gangway equipped with handrails, and the gangway must be clearly lit at night.

All lines to shore must have rat-guards fitted.

When there are hazardous goods on board or when such goods are being worked, the vessel must hoist the International Signal Code letter B, and at night show a red light on the bow masthead, must always have engines in a state of readiness in case of danger, keep two-thirds of the crew on board, keep watchmen and firemen available (the number of whom will be determined by the number of holds containing the hazardous material), must only work with incandescent lights, and keep a port pilot on board if the Marine Authority so directs.

Vessels moored at quays must not move propellors, except under the direction of the Marine Authority.

Vessels must not moor in the port access channel. There must be no improper use of the International Signal Code. Signal flags must not be interspersed with flags of nationality.

If a vessel wishes to dress flags over all, or fly a flag at halfmast due to a bereavement on board, the Marine Authority's permission must be first obtained.

The use of whistles, sirens or any other audible signal within the area of the roads, bay, ante-port or docks, for any reason other than justifiable for navigation is prohibited.

Any vessel anchored, tied up to other vessels or to the shore or quays, must show a white light from sunset to sunrise which can be seen at a distance of 500 metres.

In the access channel to Montevideo, no more than 4 vessels may navigate at one time — 2 entering, 2 leaving.

Maximum speed in the Montevideo ante-port is 6 knots. There must be no anchoring in the Free Zone, reserved for the manoeuvring of vessels entering and leaving.

At Montevideo there must be no anchoring along the route leading from the Free Zone to channel "A", between the quay and the pier of the same letter. Also on the route leading from pier "A" along a line to 100 metres to the North of the end of the West Jetty.

No anchoring in any area less than 200 metres from pier "A" in a semi-circular coverage, taking as middle point a position half way between quay "A" and pier "A".

All vessels must keep to the right or to the middle when there are no other vessels in the vicinity.

International Regulations for the Prevention of Collisions apply, plus the following:

Vessels navigating along the routes established in the anteport or which have to pass directly through the passage between jetties "A" and "B", must keep to the right when another vessel is coming in the opposite direction.

Vessels which have to cross the North, the South route or directly between jetties "A" and "B", must ensure that they pass any other vessel at a distance not less than 50 metres.

Any vessel navigating under her own power must give way to a vessel under tow by a tug.

Vessels with tugs following routes which cross one another, thereby creating a collision risk, the one passing to the starboard of the other is the vessel which must take the precautionary measures to avoid collision. If, however, the risk persists, the vessel passing to port of the other must also take measures to increase the distance between the two vessels.

No vessels to pass in pairs or in opposite direction between jetties "A" and "B"; the semaphore signals transmitted by quay "A" must be observed. If the signal is "vessel entering from the anteport to the docks", the vessel in the docks, ready to sail, must wait until the incoming vessel has entered.

If the signal is "vessel leaving the docks for the ante-port" the vessel in the foreport, moving towards jetty "A" to enter the docks, must wait in the free zone, stop engines, keeping to the right, and drop anchor if necessary, until the outgoing vessel is outside and well clear of jetty "A".

The same regulation applies to vessels leaving the River Dock. In this case, the vessel leaving to jetty "A" has priority, coming from docks I and II the first will wait for the second before starting engines.

All vessels navigating in the same direction in the ante-port must keep a distance of not less than 300 metres from each other stern to bow. They must not pass each other or navigate in pairs.

In the event of offences being incurred whilst an Uruguayan pilot is on board, at the request of the local ship's Agent, the Marine Authority will determine whether the Pilot is responsible for the offence having occurred, and take measures accordingly.

Vessels which load beyond the appropriate load line will be subject to a fine of 1,000,000 pesos.

DOCUMENTS:

1. Required by Vessel

For Customs:

Visaed Manifest and Bills of Lading – see below.

1 Visaed copy of ballast certificate from each port of origin.

1 Visaed negative cargo certificate from each port of call; if there is no Uruguayan Consulate at any of the ports the negative cargo certificate must be visaed at the next port of call where there is a Uruguayan Consul.

2 Copies of Store List covering Deck, Engine and Cabin Stores.

2 Lists of Personal crew effects.

2 Lists detailing total available stocks on board of cigars, cigarettes, tobacco and all spirits.

Note: All these lists must be made out in triplicate, original and duplicate to be handed to Customs and triplicate to be kept on board for reference purposes. Store List covering Engine Room stores must include total quantity of bunkers on arrival – *this is most important.*

1 Copy of list of passengers finally disembarking at Montevideo (or negative). Passengers' Baggage declaration forms, signed by each passenger.

For Port Health Officer

1 International Health Declaration, signed by Master and Doctor, if aboard. This is the first document requested by the Receiving Commission, and must be ready for delivery immediately the authorities come on board.

1 Copy of list of passengers finally disembarking at Montevideo.

1 Copy of crew list.

Consular clearances – see note.

Deratting Certificate to be at hand if required.

Vaccination Certificates to be laid out in order of Crew List.

For Immigration Officials:

2 Copies of list of passengers finally disembarking at Montevideo (or negative list).

1 Copy of crew list.

2 Copies of transit list of passengers.

For Police Authorities:

2 Copies of list of passengers finally disembarking at Montevideo

1 Copy of crew list.

2 Copies of transit list of passengers.

For Port Captaincy (Prefectura):

2 Copies of list of passengers finally disembarking at Montevideo

1 Copy of crew list.

2 Copies of transit list of passengers.

1 Visaed copy of passenger list from port of origin and 2 copies (not visaed).

1 Visaed copy of crew list from port of origin and 1 copy (not visaed).

1 Visaed passenger list or negative list from all ports of call.

1 Visaed crew list from every port of call in which there have been changes in crew.

For Agents:

2 Copies of list of passengers finally disembarking at the port.

2 Copies of transit list of passengers.

2 Copies of crew list.

2 Copies of all Stores Lists.

2 Copies of all Manifests and Bills of Lading, including, Manifests of all inflammables or dangerous cargoes in transit.

2 Copies of Stowage Plans and/or Hatch Lists.

Other Documents

Masters must also have at hand all the usual certificates, such as Freeboard, Classification, Measurement, Safety Equipment, Radio, Fumigation, or certificate of exemption (valid for six months only).

All persons on board must have their smallpox vaccination certificates, while vessels proceeding from recognised endemic or epidemic Cholera or Yellow Fever zones must also have the necessary certificates, or Inoculation or Vaccination. All these certificates will be examined by the Boarding Commission before pratique is confirmed.

In resume, the following number of various documents are needed, plus extra copies where possible:

Crew List: 6 plus 1 visaed form from each port where changes are made.

Passenger List for the port: 10, plus 1 visaed list from port of origin and from each port of call with new passengers.

Store Lists: 5. Separately for Deck Engine and Cabin Stores. Engine List to include Declaration of Bunkers and Luboils.

Health Declaration: 1.

Baggage Declaration: 1 for each passenger.

Manifest and Bill of Lading: 1 visaed, alternatively Ballast certificate or Negative plus sufficient copies for Agents as per individual needs.

Consular Clearances and Manifest etc. – Great importance is attached to these documents. Consular clearances must cover all ports declared in the Health form by the Master, irrespective of whether the ship has cargo or passengers for Uruguay from those ports. These documents must be carefully checked prior to arrival to make sure that the Health form only shows those ports with clearances and/or cargo or passengers for the Country.

A vessel receiving orders en route to call at Montevideo, if not previously contemplated, must take out Consular Clearances at that port and take care with the declarations.

Vessels arriving from Buenos Aires, with no cargo or passengers from previous ports of call for Uruguay, can declare Buenos Aires only on this form.

At first port of sailing, the crew list is legalised by the Consul, and any subsequent changes must be legalised at the port where the change takes place, or if not at the next port of call where there is a Consul.

The Consuls at first and subsequent ports will send, care of the Master, envelopes addressed to the Direccion General de Aduanas (Custom House) and to the Prefecto del Puerto de Montevideo. The former will contain the legalised manifest and stamped Bill of Lading, or a negative manifest, and the latter a Consular Passenger List or a legalised Negative passenger declaration. Such envelopes must be produced for each port as declared by the Master.

A vessel arriving direct from a port or series of ports where there is no Uruguayan Consul will pay the dues on arrival, but without fine.

The fine for non compliance with these regulations is heavy.

2. Required by Passengers

Valid Passport – With or without visa, see below.

Vaccination Certificate – International form against smallpox.

Tourists – Citizens of the following countries can enter as Tourists for 90 days without visa:

Austria
Belgium
Bolivia
Canada
Colombia
Costa Rica
Chile'Hong Kong
Denmark
Rep. Dominica
Greece

Great Britain
W. Germany
Guatemala
Haiti
Holland
Honduras
Sweden
Ireland
Italy
Mexico

Nicaragua
Norway
Panama
Peru
E. Salvador
Spain
Switzerland
United States

while citizens of these countries require visas:

Australia
Dutch West Indies
Egypt (ARE)
Hungary
India

Japan
Lebanon
Portugal
Syria

South African Republic
Thailand
Turkey
Yugoslavia

Citizens of Argentina, Brazil and Paraguay can enter with their own police identity cards.

Tourists in transit, without a visa, are permitted from all countries, provided they have a confirmed outbound passage, and with the exception of European Communist countries.

Consular Visas are valid for 1 year.

Passengers intending to reside in Uruguay must complete all formalities in the respective Consulate before embarking.

3. Store Lists

Separate list for Deck, Engine and Cabin stores must be prepared before arrival, and be ready in triplicate for the authorities with extra copies for the Agents, whose intervention is later needed in any ordering of further stores or in case of difficulties.

The same forms as in use in Buenos Aires are accepted, and the same regulations as to weights in kilos or measures in litres, etc., rule. There are some points of difference, however.

Full quantity of bunkers must be declared. A separate list must also be made, detailing ship's store of cigarettes, cigars, tobacco and liqueurs.

This refers to the maximum quantities which it is permitted to purchase in Montevideo for ship's stores of these particular items, as the final permit for such shipments will be subject to the list of cigarettes, spirits and liqueurs on board on arrival.

According to the latest decree, vessels of over 1,000 tons gross will have the right to purchase, ex bond, 1 litre bottle per person on board for each 6 days of voyage, with a maximum of 40 cases of 12 litre bottles. In cigarettes, the allotment is 1 packet of 20 per person per day of voyage, with a maximum of 20,000 such packets.

Agents must be informed of any orders placed for Bonded stores since their signature is required on the documents.

Bonded lockers are sealed by Customs on arrival, and any bonded stores purchased in Uruguay must not be opened or used whilst in port.

PILOTAGE: Also see "Montevideo" Pilotage section for Port Control in the River Plate. Pilotage is compulsory in all river and port zones, except for vessels coming from the East to ports between La Paloma and Montevideo Roads, or entering Montevideo Roads for no commercial reason. All coastal vessels either Uruguayan or foreign are also exempt.

Pilotage Zones.

(1) RIVER PLATE – Comprises zone between imaginary Lines in the East from Punta del Este (Uruguay) and Punta Rasa, on Cape San Antonio (Argentina) and on the West between Colonia and San Isidro (Argentina).

(2) RIVER URUGUAY – From 56.5 km. of Farallon Channel to Uruguayan ports on the River Uruguay.

(3) PORTS – Pilotage zones, comprises limits of each port including its Roads.

In the River Plate, Pilots presently board to the South of the wreck of the *Calpean Star,* approximately 4.5 km. South and lying 70 m. West of the dredged access channel.

Several of the pairs of buoys are missing, and only the mid channel buoy indicating the entrance to the access channel, 5 miles South from the port, and the 2 pairs nearest to the breakwaters are operating.

When taking tankers, the port Pilot usually goes out to the 5-mile mark.

There is no more than 30 ft. in the access channel at the moment; dredging is being carried on, but there are only 2 dredgers operating between the channel and the port of Montevideo itself.

The current is across the channel, running at about 1 knot, and changes direction more with the wind than the tide.

Vessels awaiting Pilot should anchor on the West of the channel and South of the *Calpean Star;* there is 24 ft. up to 500 m. West of the channel. The zone to the East of the access channel has submarine cables and must therefore be avoided.

Pilots are ordered through the Agent, and have an up to date communications system installed in their office on the 21st floor of a modern skyscraper, whence they dominate a large area of the estuary.

Permanent watch is kept on Channel 16 VHF, and operator speaks English. It is possible to call "Practicos Montevideo" and ask to be connected by phone to the vessel's Agent's office for last minute instructions, etc.

Channel	Frequency	Channel	Frequency
9	15450	11	15550
16	15800		

The port is closed when wind force exceeds 43 knots or, at night, 37 knots, or if visibility is less than 1 kilometre, but otherwise vessels can enter or sail at any time.

There is also a Telex machine with 24 hour watch, over which messages can be transmitted to Agents out of office hours, over a weekend, for example. Call sign is DGT 843 Pilot CX. This is particularly useful for vessels sailing late from Buenos Aires, and the Office will pass on the message to the corresponding Agency by phone.

All Pilots carry a "walkie-talkie" and can communicate either with their office, the Port Authority or the Semaphore station, using Channel 9 for the port offices and 11 for the Pilot's office, 16 being kept for use with vessels.

Ordering of River Pilots for sailings from Uruguayan River Ports – Although Masters can apply directly for Pilots such applications must be made by telegram addressed to the Practico Mayor Montevideo, it is preferable for them to keep their Montevideo Agent fully informed and leave the latter to order the Pilot.

The opportunity of ordering Pilots at any hour having been discontinued makes it more essential than ever that Montevideo Agents are kept accurately informed regarding expected readiness to sail. Failure to do so will result in unnecessary demurrage being paid to Pilots or delay to the ship concerned.

Pilots for vessels proceeding from sea to a Uruguayan Port on the River Uruguay – A Uruguayan Pilot must be employed to conduct ships from sea to a Uruguayan Port on the River Uruguay.

Vessels must call at Montevideo Roads to embark Pilot and pay the cost of tug to take out Pilot. They can also, alternatively, take an Argentine Pilot at Recalada who will take the vessel to Intersection, where in either case an Argentine river pilot will board to take the vessel to the Roads of port of destination, where a Uruguayan Port pilot will come aboard, this being a simpler procedure and all handled by Agents in Buenos Aires (one radio advice).

Vessels from an Argentine Port bound for Uruguayan River Port – Such vessels are normally taken to immediately off port of destination by an Argentine Pilot, but they must be berthed by a Uruguayan Pilot who has to be sent from Montevideo, thus Montevideo Agents must be kept promptly informed of vessel's position to enable them to order a Pilot to berth ship without delay.

Vessels leaving Uruguayan Port for Argentine Ports on the River Parana – Uruguayan River Pilot supplied from Montevideo must be employed for unberthing, and this Pilot takes vessel to the Bravo Channel off Nueva Palmira, where the Argentine River Parana Pilot, who is normally already aboard, takes over.

The Uruguayan Pilot is paid in accordance with tariff to Nueva Palmira plus an unberthing fee and travelling expenses.

HEALTH: In order to be able to enter port and berth without delay, the Authorities accept a radio, cable or telex request, couched in the following terms (messages must be sent in Spanish).

Vessels arriving from elsewhere

Capitan .... solicita libre platica

here the name of the vessel

informando proceder de Buenos Aires, siendo su escala anterior

....

here a port in another previous country which could be Santos, Valparaiso, Capetown, etc.

condicion sanitaria buena..Capitan

here the name of the Master

Vessels arriving from Buenos Aires

Capitan .... solicita libres platica

here the name of the vessel

informando proceder de...

here a port of origin, say London – Liverpool – San Francisco – Rijeka – Kotka – Tokyo – Oslo, etc.

siendo su ultimo puerto...

here say Santos – Valparaiso – Capetown, etc.

condicion sanitaria buena..Capitan

here the name of the Master

There have been cases of delay in delivery of radio messages, even though passed on by phone, but the original message must accompany Agent's request for free pratique, hence it is advisable to use cable or telex services if possible. Messages must be sent at least 24 hours ahead, and changes in ETA advised.

Although it is possible to take pratique in Uruguayan River ports, there is frequently delay there, and since vessels must enter Montevideo to pick up the river port pilot also, it is advisable in these cases to ask for pratique at Montevideo as above, and the order from Sanitary Authorities granting Free Pratique will be handed to the Pilot to take on board with him.

In no case, however, does the granting of pratique by radio modify the inspection in port, where the usual commission must be the first to go on board.

Illness on board – Any private doctor attending a patient on board must immediately inform the Sanitary Inspector should the disease be contagious.

No patient can be landed without the consent of the doctor of the Health Department with the exception of accident cases that require immediate medical attention, and even in those cases the Health department Doctor must be informed in order to issue a Sanitary Pass for the Hospital where the man was taken to.

If a Captain does not report the existence of illness on board he is liable to fines which are double if patients land without the consent of the Sanitary Authorities.

RADIO: *Notice to Mariners*

Official Uruguayan Notices to Mariners are transmitted in Spanish only preceded by the signal TTT, the number of the Notice, letter R, then contents and are repeated for 15 days. Should there be no Notices to transmit, the wording "no hay avisos para navegantes" will be radioed.

Punta Carreta CWF 2768.5 kc/s. A 3 0.4 kW. at 00.03, 14.03 and 19.03 hrs. (after the weather forecast).

Cerrito CWA on 4346, 8602, 12750, 17208.8 A1, 1.5 kW., also on 421.5 kc/s. A1 and A2 5 kW. at 00.00, 14.00 and 19.00 hrs. (after the weather forecast).

Montevideo CX 16 850 kc/s. A3 10 kW. at 13.02 and 16.02 hrs. on working days, at 17.00 hrs. on Sundays.

Montevideo	CX 6	659 kc/s.	A3 2.5 kW.
	CX 26	1050	A3 all transmit Notices to Mariners at 16.00.
	CX 38	1290	A3 5 kW.
	CXA 4	6125	A3 10 kW.
	CXA 6	9620	A3 20 kW.
	CXA 10	11900	A3 20 kW.

Weather Forecast

A weather forecast is transmitted in Spanish to cover 3 zones.

Reference AAA 830 is the Coastal area from 30′ S. 50 W. out to 30′ S. 46 W. and down to 33° 30′ S. 53° W. and 35° S. 49° W.

AAA 860, River Plate zone from 33° 30″ S. 57° W. to 35° S. 49° W. and down to 35° 30″ S. 57° W. to 39° S. 53° W.

AAA 870 Coast of Argentina from 35° 30″ S. 57° W. to 39° S. 53° W. and down to 41° S. 62° W.

Details of all 3 zones are transmitted as follows, valid for 24 hours.

CWA on 421.5 A1 5 kW. at 00.00, 14.00 and 19.00 hrs.

CWF on 2768.5 A3 0.4 kW. at 00.05, 14.05 and 19.05 hrs. and in A1 over 4346 kcW. 8602 kc/s., 12750 kc/s. and 17208 kc/s.

Time Signals

Are transmitted from 2 stations in Montevideo at 15.00 and 20.00 hrs. The hour is indicated by 6 dots preceded by a ten second dash and a 5 second silence. The last dot indicates the hour.

CX 6 on	650 kc/s.	A3 25 kW.
CXA 6	9620 kc/s.	A3 20 kW.

Standard time is GMT less 3 hours.

Direction Finding

There are 2 radio beacons specially for maritime navigation. Both operating on circular sweep from the lighthouses at Cape Polonio and Isla de Lobos.

Cape Polonio at 34° 24′ 00″ S. and 53° 47′ 45″ W. frequency 295 kc/s. A2 range 380 miles, and 500 kc/s. A1 A2.

The signal is P repeated 3 times in 10 seconds followed by 18 dashes in 30 seconds, repeat P 3 times and 10 seconds silence total period 1 minute. This is repeated 4 times after 5 minutes silence, total 10 minutes.

In good weather transmission must be requested from CWM 21 on 500 kc/s. A1 A2. In fog, there is continuous transmission from the hour.

Isla de Lobos 35° 01′ 33″ S. 54° 53′ 17″ W. frequency 300 kc/s. A2 range 380 miles. The signal L is repeated 3 times in 10 seconds, followed by 18 dashes in 30 seconds, repeat L three times, silence 10 seconds. Total period 1 minute, repeated 4 times, then 5 minutes silence total period 10 minutes.

In good weather this transmission must be requested from CWM 26 on 500 kc/s. A1 and A2.

In fog transmission is continuous from 05 minutes in each hour.

There are also the following airbeacons which can be used.

		S.	W.	kc/s.	
Colonia	COL	34° 27′ 33″	57° 45′ 49″	203	A 2 0.075 kW. cont.
Montevideo	CAR	34° 46′ 15″	56° 01′ 28″	380	A 2 0.05 kW. cont.
	CRO	34° 48′ 55″	56° 01′ 45″	305	A 2 0.05 kW. cont.
	CRR	34° 49′ 50″	56° 00′ 15″	280	A 2 0.05 kW. cont.
Gral. Artigas	GA	34° 45′ 00°	55° 58′ 00″	260	A 2 0.05 kW. cont.
Punta del Este	CB	34° 55′ 00″	54° 55′ 00″	325	A 2 occasional only.

GENERAL INFORMATION:

River Uruguay

Rises in Brazil, and later separates Argentina and Uruguay. Its right bank is generally low, wooded and swampy, the left bank high and hilly. Preparatory work has commenced on a large hydroelectric dam to be built at 332 km., above Concordia, which will take some years but will contribute to a regularisation of the river, which at present rises and falls twice every year, with the varying rainfall seasons in its basin, so that approximately half the year the water is low, usually from January to April and again in August. However, the wind also affects the depth of the water as in the River Plate, so that any seasonal forecast is impossible. A safe year round draft to Concepcion del Uruguay can be taken at 20 ft. 6 in., though vessels from time to time load to 22 ft. 6 in.

The Ministry of Marine publishes fortnightly a bulletin with all information on depths of water in the channels, as well as of changes in buoys, lights, etc.

Two new bridges communicating with Argentina now span the Uruguay river at Fray Bentos and Paysandu. The bridge at Fray Bentos has a clearance of 36 m. over zero, and a main span of 220 m.

CARGO

Movement of Cargo

Once stevedores have come aboard, no cargo, either for the port or in transit, may be handled by the crew, as otherwise the vessel will be called on for high extra wages to stevedores. This also affects the lashing of transit cargo on deck.

Stevedores will not work in the rain, except when loading meat, earning double wages while doing so. They can also be persuaded to handle baggage or mail.

When handling dusty cargo in general, or which gives off ammoniacal, nicotine, or organic emanations, masks must be provided for stevedores' use.

Overcarried Cargo

Cargo for Montevideo is often overcarried to Buenos Aires with the consequent delays in delivery and expenses for the vessel. Holds should be carefully inspected as soon as discharge is said to have been finished to avoid possible overcarrying.

Clean Receipt

Agents will advise if they wish to receive any cargo for which a clean receipt cannot clearly be given, otherwise the cargo should be rejected. Mate's receipts cannot be claused to cover any damage from rain, wetting or other causes which might be sustained after the cargo is received on ship's tackle.

Bulk cargoes falling or drifting into water or on dock

When handling bulk cargoes vessels must place between the vessel and the dock side a wooden scaffolding, with lateral boards, or strong canvas to collect all material which is liable to fall into the water or on to the Dock during handling. There is a heavy fine for non-compliance.

This should be remembered when writing charter parties, especially under FIO conditions, as this should be for account of shippers or receivers.

Delivery of cargo from vessels

The cargo is discharged direct to Fiscal Warehouses, to lorries, lighters or wagons. When the cargo is delivered to Fiscal Warehouses, receipt for this is given to the vessel's agents by the Custom House official in charge of the Warehouse. If discharged to lighters the lighterman obtains receipt from the Custom House official once the cargo is received in warehouse. When the cargo is delivered direct to Consignees' lorries, the receipt is given by special Custom House officials called "Cargo Receivers".

The goods are delivered by the Custom House officials to the Consignees against the presentation of the "transferencia" (transfer ticket) signed by the Agents of the vessel. The Agents sign the "transferencia", extended on stamped paper, against the Original Bill of Lading, which must be legalised by the Uruguayan Consul at the port of loading.

The steamship Agents must keep a special register of all "transferencias", and are responsible to the Authorities for keeping this register. Agents must retain Original Bill of Lading for cargo discharged, as it must be shown to the Customs Authorities immediately if demanded.

When the Consignees have not received the original documents and they wish to take delivery of the goods from the Custom House they must present a Bank guarantee, drawn up in accordance with the form approved by the Shipagents Association.

Cargo manifested to this country in transit to other countries without documents for Uruguay may not be re-shipped to other countries without government permission.

Marks on goods imported to Uruguay

By a Decree dated 30th January 1939, the Uruguayan Government decided that:

"Packages entering Bonded Warehouse, excepting those containing provisions or beverages, and excepting also 'Barraca' articles, shall be marked with the gross weight, the nett weight and corresponding measurement, in a clear and legible manner. These marks may be either 'fire-branded or printed'.

"The 9th August 1939, the Customs Authorities requested that marks and numbers of cases entering Montevideo warehouses should be placed on the extreme ends".

The Customs Authorities have also made known that it is necessary for the packages entering the warehouse to show their weight and measurement in the decimal-metric system.

The inspection of potato cargoes can be effected on board the carrying vessel, and if found in good sanitary condition, can be discharged direct to shore.

Opening and Closing of Hatches

This can be carried out by either crew or stevedores, and hatches must be kept closed when not in use.

Shipments of Meat

These are controlled by the Ministry of Agriculture, whose inspectors check ships' holds before shipment can commence. Holds must be clean and disinfected and temperature controlled to minus 1° to a maximum of plus 1° Celsius for chilled meat, or minus 10° for frozen meat.

Chilled is to be hung on hooks adjustable for height and space and stow of frozen must give a uniform distribution of weight. Alternatively, special cuts are packed and shipped in cartons.

Containers

Use of containers is very limited, since these must be opened up and emptied on the dock alongside, or even on board the vessel. The container itself is considered as part of the vessel's gear, and must be reshipped without delay.

On rare occasions the Armed Forces have had containers moved out to their barracks.

The Port Authority is buying a crane to handle containers of 8 ft. × 8 ft. × 20 ft. and a maximum loaded weight of 44,800 pounds.

Consular Dues

All ships arriving at Montevideo must pay Consular dues, with the following exceptions:

Ships that due to a change en route, or by special call of their Agents in Uruguay, during passage, arrive at Montevideo with the sole purpose of receiving orders, as long as no commercial operations are effected.

Ships arriving in distress and which leave port without effecting operations.

Ships arriving for the sole purpose of landing or embarking pilot.

The Ministry of Foreign Affairs consider bunkering as an operation, therefore ships calling at Montevideo for bunkers must pay Consular dues.

Consular value of the Uruguayan Peso – For the payment of fees abroad, the Executive Power will fix periodically the respective values of the peso, in accordance with exchange fluctuations.

Hours of Attendance at the Uruguayan Consulates – The Office hours of the Consulates will be those fixed by the Government in agreement with the Consuls in each country, endeavouring in each case to have the same working hours as those of the Custom House and other Public Offices of each City. Outside these hours, overtime is charged.

Consular dues on Bills of Lading – When vessels load cargo for Uruguay at ports where there is no Uruguayan Consulate, these dues are collected when the vessel arrives at Montevideo or at any other Uruguayan port. The Agent then recovers these charges from the Consignees.

CREW:

Deserters – Captains and/or Agents must report any deserters when the vessel sails. The Maritime Authorities give intervention to the Police Department, and if the men are located, the Agents must hand them over to the respective Consuls. However, the Agents continue to be responsible before the Authorities for the ultimate repatriation of the men, which must be done at first opportunity.

Vessels are subject to a fine per man. The Agents have also to pay repatriation expenses, in cases where the respective Consuls will not do so.

They must also deposit a guarantee which can be used for repatriation expenses in case the deserter stays in the country for more than 15 days.

Time limit for getting crew members left behind out of the country – According to law, Agents must arrange that such crew members leave the country within fifteen days. This period of grace commences as from the date of vessel's departure in respect of deserters and for those disembarked for medical treatment as from date on which they are medically certified as fit for travel.

Upkeep of men left in hospital or temporarily disembarked and traced deserters – The Agents are responsible for the maintenance of men disembarked for medical treatment, or temporarily with a special Immigration permit, and for deserters, until they leave the Country.

Stowaways – Captains of vessels having stowaways on board must report them to the Authorities, stating their name and port of embarkation. The stowaways must be kept on board. If they escape and are found after the vessel sails, Agents will be responsible for their repatriation and upkeep charges until they leave the Country. As with deserters, vessels with stowaways on board are liable to a fine per man if this regulation is not complied with.

Agents must also deposit a guarantee per man, amount to be used for repatriating the stowaway or for conveyance to the port of embarkation.

Landing members of crew – Paying off men for other than medical assistance is not permitted, but exceptions are granted in special cases. An application must be presented by the Agents to the Immigration Department, and if the permit is granted, a formal declaration is signed by the Captain of the vessel, the Agents, the Immigration Inspector and the person wishing to disembark, setting forth length of time he is going to remain in the Country and conditions of departure. The personal documents of the person allowed to land, remain in charge of the Immigration Board.

If any member of the crew is landed for medical treatment or paid off without the corresponding permit, the vessel will be fined.

Gangways and Rat-Guards

A gangway must be placed and ready after a vessel comes alongside the quay, but this must not be presented before coming in to the quay. Authorities will only come aboard by the gangways.

Gangways must also have a lifebuoy with suitable line attached and handy, and a safety net must be placed under the gangway, otherwise shore labour will not board vessels, with consequent delay.

The gangway must also be brightly illuminated at night; an oil lamp is not sufficient.

As soon as vessel is securely moored, regulation size (not less than 80 cms.) rat-guards must be placed on all ropes, wires, fenders, lines and hoses.

Heavy fines are imposed for non-compliance with any of these or other regulations.

Overside Discharges

All overside discharges from latrines, bathrooms, gallery, scuppers, engine room, etc. must be screened or covered when vessel is alongside the quay, as vessels will be fined if the discharge falls on the dock or gangway.

Adjustment of Compasses

Vessels proceeding through Magellan Straits – The disposition issued by the Chilean Shipping Authorities on 13th April 1953, states:

"When a foreign ship arrives at the Magellan Straits and applies for a pilot, official or private, for navigating the Channels, the Pilot must first check the compass for deviations of more than 5 degrees, and if such deviation has been determined more than 6 months ago, especially in a place with great difference of latitude or different hemisphere, compensation of compass is obligatory when not in true order, and a written declaration to this effect will be made in the pilotage agreement. The Authorities will also send an officer to verify that the compass is in satisfactory condition before entering the Straits".

To avoid probable delays, ships heading for the Straits can make the necessary compensation in the Port of Montevideo or in the ante port whilst waiting for orders for departure. This port is most convenient for this class of compensation because at the present moment there is no magnetic variation and also because it is a quiet harbour with sufficient depth for turning. A compass adjuster may be obtained at any time.

200 Mile Limit and Fishing

Uruguay has declared sovereignty over 200 miles off shore, reserving all fishing and undersea exploitation rights. A number of foreign flag vessels fishing without permits have been seized and heavily fined, their catch and gear being confiscated.

Permits are obtainable, but in no case for vessels over 500 tons gross, to operate within sixty miles from shore, while all activity in territorial waters (200 miles) is forbidden in the months of May and June.

Garbage

Garbage is collected every morning by truck. There is a strict prohibition of dumping anything into the port, and oil tanks must not be cleaned within 30 miles of the coast, and on a falling tide.

Old dunnage should not be dumped or sold, without permission from the Authorities, through Agents.

Ships' Boats

Use of ship's boats is forbidden within the port, unless they are being lowered, with prior permission, for maintenance or exercises.

Fenders

All vessels must have at least 2 large fenders, to keep them 5 feet or more off the quay. If the vessel has no fenders, or due to deck cargo cannot use them Agents should be warned in advance to rent the necessary equipment and have it ready on arrival.

Dropping Anchor when Berthing

If an anchor is dropped when approaching a dock to berth, to control the vessel as she moves in, it is essential that the anchor should be hove in again once the ship is moored. Port regulations require this and any damage to other craft, real or imaginary, through fouling anchor or chain, would cause considerable trouble.

COLONIA: 34.28 S. 57.51 W.

On the right bank of the River Plate from seaward exactly 27 miles in a straight line E.N.E. of Buenos Aires, to which it is connected by ferry and hydrofoil services.

DOCUMENTS/PILOTAGE/HEALTH/RADIO: See beginning of Uruguay section.

DESCRIPTION: There are 3 accesses to the port, of which only 2 are of use to ocean-going vessels. Canal del Medio, for those coming down river, with 18 ft. and Canal Gabriel from S.W.

The port consists of an angled breakwater, and a basin with 3 quays. One of these, with 15 ft. is used for ocean-going vessels and has 4 × 3-ton cranes and 2 × 5-ton cranes.

The West quay is for coastal vessels, with only 13 ft. of water.

FUEL: Not available.

FRESH WATER: Available.

MEDICAL: Attention available.

CONSULS: Argentine, all others at Montevideo.

FRAY BENTOS: 33.06 S. 58.18 W.

Km 95 River Uruguay. On the right bank of the River Uruguay from seaward 213 miles by river from Montevideo or 145 miles from Buenos Aires.

DOCUMENTS/PILOTAGE/HEALTH/RADIO: See beginning of Uruguay section.

RESTRICTIONS: Vessels loading should pay particular attention to the daily river and draft forecast issued by local authorities. Draft depends on depth at the Marques and Punta Caballo passes.

MAX. SIZE: For berthing maximum draft 26 ft. fresh water, depending on river conditions.

BERTHING: Official Pier: 325 m. long, depth in deepest berths 26 ft. Grain and general cargo handling. Railway Pier: 1 berth, depth 26 ft., used principally for discharging coal. Anglo Pier: Depth alongside 26 ft., used for loading frozen meat and products.

STEVEDORES: Working hours: 0700 – 1100 and 1300 – 1700. Saturdays: 0700 – 1100 hrs.

MEDICAL: Doctors and hospital facilities available.

FRESH WATER: Obtainable from berth at Official and Anglo Piers.

FUEL: Not available.

REPAIRS: Only minor repairs can be effected.

CONSULS: Argentina is represented locally. All others at Montevideo.

MONTEVIDEO: 34.55 S. 56.13 W. (See Plan)

DOCUMENTS/PILOTAGE/HEALTH/RADIO: See beginning of Uruguay section.

APPROACHES: The Roads of Montevideo consist of the Outer Roads situated to the South of the bay and Inner Roads situated outside the Western breakwater.

Both anchorages are very exposed and vessels are recommended to enter the anteport.

The entrance channel has 30 ft.; the channel to Ancap's wharf (La Teja) 30 ft. 6 in. Basins 1 and 2 have a depth of 28 ft. to 31 ft., and the River Traffic Basin, 15 ft. These depths depend on dredging being maintained, but even so vessels often "drag" when on the higher marks; the bottom is fine soft silt.

PILOTAGE: A system of ship control has been set up for Montevideo and its approaches.

The system of control and information comprises:

1. *Zona "Alfa"*. Zone of the River Plate, situated between Long. 55° 30′ W. and 56° 15′ W., the coast and the limit of the River Plate with the Argentine Republic.

2. *Zona "Bravo"*. Zone between the meridians which encompass Punta Yeguas and Punta Brava, the coast, and parallel Lat. 35° 01′ S. It also comprises the Access Channel of the Port of Montevideo, Anteport, Basins, the channel to the Inflammables Basin, and the Inflammable Basin (ANCAP).

Control and Information Centre:

1. The system is controlled from the Prefectura Nacional Naval, Pilot Office, situated on floors 11, 12 and 13 of the Edificio Aduana, Lat. 34° 54′ 07″ S., Long. 56° 12′ 07″ W. (Custom House Building).

2. The call-sign of the Control and Information Centre is CWC104, henceforth to be known as Control Montevideo Prefectura.

A — *Channels and Frequencies.*

The Channels for transmission and reception to be used are the following: (it is intended to utilize Channels which will not interfere with 12 and 14, used by the control and security system of the River Plate of the Argentine Prefectura Nacional Maritima).

Channel	*Frequency*		*Employment*
16	156.800 mHz		Call-sign and Security
11	156.550 mHz	(3)	Broadcast by the Centre Calls to the Centre by vessel navigating in Zone A; eventually Zone B.
13	156.650 mHz	(4)	Broadcast by the Centre Calls to the Centre from vessels navigating in Zone A, eventually Zone B.
9	156.450 mHz	(5)	Port Operations
10	156.500 mHz	(9)	Port Operations and eventually Channel 11
15	156.750 mHz	(14)	Emergency (to be installed)
6	156.300 mHz		Inter-ship calls
8	156.400 mHz		Inter-ship calls

B — *Listening-out by Vessels.*

1. Vessels will maintain a listening-out watch on Channel 16 from the moment they enter the Zones of the system until they are tied up alongside, in the Port of Montevideo, or until they leave the Zones of the system.
2. Whenever a vessel may not, for some reason, listen-out on Channel 16, it will pass to Channel 11 or 10, informing the Control and Information Centre of this.
3. In Zones A and B, vessels will communicate with the Centre on Channel 11 (eventually 10).

C — *Language.*

The personnel operating the Centre use Spanish. Any vessel which cannot use the Spanish language may do so in English, and if any further difficulties are encountered, may make use of the international code, the international word/letter system or the 'Q' code.

D — *Communications from Ships (Messages).*

Ships navigating in Zone:

1. ALFA: Must inform the Centre of the following details:
   a) Entering the Zone: Flag; Name of the ship; Destination; Position (Lat., Long., and time); Course and Speed; ETA Channel Entrance Buoy; Max. Draft.
   b) During navigation her position: Abreast of Flores Island; Abreast of the Channel Entrance Buoy; If comes to anchor in any position in the Zone.
   c) Leaving the Zone.
2. BRAVO:
   a) Dropping or weighing anchors in the Roads.
   b) Will inform the Centre, while navigating in the channel or within the port: Passing the Calpean Star; Passing the breakwaters; Anchoring in the Anteport; Docking or Undocking in Basins; Dropping or weighing anchor in the Zone.
3. IN ALL ZONES: Must give the following information to the Centre:
   a) Any accident, damage, or fire on board the vessel.
   b) Any assistance rendered to any other vessel in distress or in difficulties.
   c) The sighting of any object hazardous to navigation which is not buoyed.
   d) Any marked reduction in visibility.

E — *Further communications to the Centre.*

1. Regarding Pilots:
   a) That which is specified by the General Pilot Regulations.
   b) Time of boarding or disembarking.
   c) Request from the Master to change anchorage or berth.
   d) Any possibe difficulties in pilotage.

F — *Other requirements*

a) Any vessel taking up a mooring, unmooring or anchorage, must request to carry out the manoeuvre required. It is to be understood that the Master will have complied with all the necessary formalities required by the Authorities for entry or departure of the vessel.

b) This permission expires automatically after 15 minutes of its being given further permission must be applied for in order to carry out the manoeuvre.

G — *Information Service*

The Centre will issue:

1. Notices to Mariners at 0900 hrs. and at 1500 hrs. local time. Urgent information will be broadcast immediately it is received.
2. Meteorological reports every 4 hours commencing at 0001 hrs. local time.

The Centre will provide to any vessel information with regard to Maritime Traffic, weather, security in navigation, and any port information which may be used to speed up or aid the vessel's future operation.

BREAKWATER: The Eastern breakwater projecting from Punta Sarandi is 940 m. long and the breakwater lying to the West at right angles with the Eastern one is 1,300 m. long. The passage between the 2 breakwaters is 300 m. wide.

ANTEPORT: The Anteport is to the North of the entrance, between the breakwaters, and has 27 ft., but requires dredging, there not being safe room for more than 5 vessels at present.

PORT: The port is formed by the North side of the Montevideo Peninsula and the "Dique de Cintura", a breakwater running parallel to the coast, about 840 m. distant.

It consists of 3 basins, 2 of which are for ocean-going vessels and 1 for river traffic.

Basins 1 and 2 have a depth of 30 ft., and the basin for river traffic 15 ft.

ANCHORAGE: In Montevideo outer or inner roads. Vessels must not anchor within 0.5 mile of the entrance channel to the anteport, nor in the area bounded by Lat. 35° S. and 35° 15′ S. and Long. 55° 56′ 30″ W. and 56° W. where there are submarine cables. Outer roads and inner roads are separated by the Western breakwater. Both anchorages are exposed in bad weather.

Captains of vessels anchoring in the roads should bear in mind that as the bottom consists of soft clay, it does not afford a good hold for the anchors, which are liable to drag during a severe storm. In consequence, precautions should be taken to anchor at a safe distance from other vessels already riding at anchor, and to use a stout anchor and chain, while having another ready for emergency.

A vessel that anchors in the Outer or Inner Roads and does not effect commercial operations is not considered an arrived vessel in Uruguayan waters, and is not boarded by the Authorities.

Semaphores: There are 2 Semaphores, 1 on the corner of Depot 1, on Pier A, which controls traffic in the port and which is in constant touch with Pilots on board through the "walkie-talkie". At night the following emergency code signals are used.

Red light	meaning stop
Green light	meaning proceed
White light	meaning anchor

These are beamed with an aldis lamp to the bridge of the vessel and must be obeyed.

The other semaphore is situated 47 m. above sea level, on the S.W. post of the anemometric tower of the Central office, and indicates wind forecast as follows:

Red Red	strong wind starting to blow from the N.W.
White White	strong wind starting to blow from the S.W.
Red White	strong wind starting to blow from the N.E.
White Red	strong wind starting to blow from the S.E.
Red	strong wind from indeterminate quarter.
Green	winds over 100 km/hour are expected.

MAX. SIZE: Up to 30 ft. fresh-water draft. Also see "Tankers".

TIDE: Rise and fall is nominal, rarely exceeding 1 ft.

TUGS: Compulsory for vessels berthing in the harbour basins. 2 tugs normally used, join vessel in the anteport.

Booms – Masters are reminded that the Port Authorities require a special boom to be placed on the side of the vessel where the nose of the tug will push, to avoid damages and subsequent claims.

BERTHING: Anteport: 7 anchorage berths in 28 ft. depth. However in practice there is rarely room for more than 5 vessels to anchor. Basin No. 1: 7 berths, 28 to 33 ft. depth alongside. Basin No. 2: 4 berths, 28 to 33 ft. depth alongside. La Teja: Ancap basin with berths for 2 tankers 30 ft. depth in basin and entrance channel.

Berths are allotted by the Port Authorities in the order of arrival of the vessels and according to their category, as follows:

1. Mail vessels.
2. Regular Line vessels carrying immigrants.
3. Cargo vessels.
4. Sailing vessels.

The Authorities allocate the deposit at which vessel must discharge or load.

Port Authorities give preference at Deposit No. 10 to ships operating with refrigerated cargo from this Deposit; and at Deposit No. 11 (Florida Wharf) to tankers discharging to the pipe-line situated there. Conditional that they vacate the berth within 2 hours notice, to permit berthing a preference vessel, other ships may operate at either berth.

Muelle de Escala – On the pier head, formed by the Southern side of the River Traffic Basin, and running Westwards, a quay has been built, known as "Muelle de Escala", 288 m. long, originally constructed for berthing passenger liners and war vessels, but now only used by cargo vessels, loading and discharging, when there is port congestion. There are no shore cranes and work is very slow, nor are there shore deposits. A fixed heavy lift boom capacity 200 tons is placed at the East end.

The berth is very exposed to wind and swell, and Masters are recommended to take every precaution to ensure their vessels are strongly moored and a lookout kept for changes of weather which, locally, are very sudden.

The depth of water alongside depends on dredging, but generally is over 28 ft.

River Traffic Basin – This basin is situated on the Western side of Pier "A". It is 400 m. long and has a passenger landing station on one side. The opposite side of the basin is used for coastal vessels, but mainly by the Navy.

2 warehouses, called Warehouse "A" and Warehouse "B", have been built on the East side of this basin and are serviced by 3 electric cranes. In addition, there are on the quay a 1.5 and 6-ton steam crane, which are employed when necessary.

These berths can only be used by light-drafted vessels, as depth of water is around 16 ft.

Basin No. 1 – This basin is situated between piers "A" and "B". Its entrance between the "Dique de Cintura" and the pier head "A" is about 150 m. wide. It encircles a total mooring space of 1,093 linear metres and 7 vessels can comfortably berth along the quay walls.

Pier "A" is 501 m. long on the West side; 306 m. on the East side, and 50 m. wide at the Northern pier-head.

On this pier 2 brick and concrete warehouses, Nos. 1 and 2, have been constructed, consisting of a ground floor, 3 storeys and a basement.

On the City side of Basin 1, there are 3 brick warehouses, numbered 3, 4 and 5, consisting of a ground floor of between 17,800 and 19,600 cu. m. capacity.

On the Western side of Pier "B" facing Basin No. 1, there are 2 brick and concrete warehouses, Nos. 6 and 7, with a ground floor and 1 storey having a capacity of 30,174 and 33,140 cu. m. respectively.

In Basin No. 1, berths Nos. 1, 2, 3, 4 and 5 are generally used for the discharge and/or loading of liners running to timetable.

Depths alongside vary, as it depends upon dredging, but generally are 26 ft. to 30 ft.

Basin No. 2 – This basin is situated between Pier "B" and the foot of Florida Street. The entrance to this basin is also about 150 m. wide. It has a total mooring space of 722 m. and it can accommodate 4 vessels.

Pier "B" is 294 m. long on the Western side, 328 m. long on the Eastern side, 148 m. at the Northern pier-head and 13 m. wide on the bend at the Western corner of the pier-head.

At the Northern end of pier-head "B", livestock is embarked. This berth is also used for general cargo operations in times of congestion. Moorings must be strong and carefully watched as the berth is very exposed to wash of passing vessels.

There are 2 warehouses on this pier, numbered 8 and 9, facing Basin No. 2, built of brick and concrete, with a ground floor and 1 storey and with a capacity of 33,320 cu. m. each. On the city side, there are 2 warehouses, built of brick, numbered 10 and 11, consisting of a ground floor with a capacity of 15,362 cu. m. each. Warehouse No. 10 carriers an additional storey, and is being used for refrigerated cargo. Vegetable oils can also be loaded at Warehouse 11 berth ex pipe-line from 4 storage tanks each of a capacity around 1,250 tons, in the vicinity.

Depths of water alongside vary, depending upon intensity of dredging but are generally 28 to 30 ft.

Coasting Quay Wall – From Florida Street to Mole F, which is the end of the Port, and over a distance of 1,900 m., there is a quay used for coastal craft, and on part of which a fish-receiving and industrialising plant is being opened; depth in this zone is 15 ft.

A floating dock is also anchored in the N.E. part of this section.

Basin For Inflammables "La Teja". (Also see "Tankers".)

On the North side of the Bay, the National Administration of Alcohol, Cement and Fuels, known as A.N.C.A.P., has a basin with concrete walls for the discharge of tankers arriving with oil to their consignment. This basin is known as the "Darsena de Inflamables", and has 1 berth for tankers on the North side in 30 ft. 6 in. and for liquid gas discharge on the Southern side, max. draft 22 ft., while on the West or land side there is a berth for coastal vessels. Width of the basin here is 147 m., which is the same as the entrance, while the South berth is 248.75 m. long. On the North berth the jetty protrudes 34 m., and is 96 m. long.

Vessels berth bows to shore, and on leaving turn immediately outside the basin, if draft is less than 22 ft., otherwise they must reverse back down the narrow access channel.

The North berth has separate lines for Crude, 10 in. and 12 in. maximum pressure 105 lbs. Fuel Oil, 8 in. and 10 in. with a pumping rate of 300 t.p.h. at temperatures between 40° and 70°C. Diesel/Gas Oil/Kerosene 6 in. connections and pumping rate of 300 t.p.h. Naptha 8 in. Lube oils 6 in. lines, 150 t.p.h. and a line for Alcohol 6 in. There is no line for Gas. There are 3 × 5-ton electric cranes and 1 × 12-ton diesel crane. Coal and Cement are also discharged at this berth, the coal to Decauville cars and the Cement to trucks, handling 750 tons per 8 hour day, with 5 gangs.

At the South berth the oil lines are identical, and there is also a 6 in. connection for loading or discharging Super Gas, at 200 t.p.h. There are no cranes at this berth.

The Western berth has the same installations except for Super Gas and Alcohol.

There are 3 in. water lines at each berth, and use of 2 tugs is essential for berthing or unberthing. At the North berth, vessels fully loaded often lie up to 15 m. out from the quay, owing to accumulation of mud, and will gradually close in as the vessel lightens. Access gangways are placed by the Port.

Railway Connections – Basins 1 and 2, River Traffic Basin and also Deposits "A" and "B" have railway lines on all sides, belonging to the Port Administration, which are connected with the main lines of the Uruguayan State Railways.

The Port Administration has 2 electric locomotives used exclusively in the port.

Cranes – The Port Administration has 1 heavy-lift floating crane of 80,000 kilos, a mobile crane of 20,000 kilos, also 46 movable electric cranes of 5,000 kilos each; 5 movable electric cranes of 1,500 kilos each; 1 fixed electric crane of 4,000 kilos; 33 of the aforementioned 5,000 kilos cranes, are placed alongside the quay walls for vessel's operations.

There are also 24 electric trolleys of 1,500 kilos, and one of 1,000 kilos. There is a fixed crane for 200 tons on Muelle Escala.

Fiscal Lorries – The Port Administration has purchased special lorries and 12 auto cranes for receiving cargo, as the railway wagons available are not sufficient to carry all the cargo that is at present being handled at this port.

Loading Operations – Loading is effected from carts, lorries and/or wagons and the cargo is hoisted on board with the cranes. Cargo is also loaded from lighters.

Grain Loading – There are 2 Mobile grain vacuvators, each of which can load bulk grain at around 35/50 t.p.h, also 10 smaller machines that can each load around 20 t.p.h.

Fumigation – Montevideo is the only port in Uruguay at which vessels can fumigate, using the Cyanide method. The tariff is per cubic metre fumigated over a basic charge which varies according to nrt. There are surcharges for overtime.

Disinfection of Mail Bags – To avoid delay through disinfection mail bags can be fumigated on board in a 10% formalin solution and kept in a closed space for 4 hours before vessel gets into port. The closed space will be opened in the presence of a Health officer who will verify the use of formalin. When in doubt, fumigation will be carried out again and exposed for 2 hours.

Height of Quay above water – Tide being very small, the height of quay above water only varies from 8 to 10 ft. at low water to 10 to 12 ft. at high water. Wind influence is felt even in the bay, as a South wind will raise water as much as 5 ft., or a Northerly wind reduce it 2 or 3 ft.

New Equipment – In process of supply:

Fork-lift trucks – 3 of 5 tons and 1 of 6 tons, to lift to 3 m.

Container lifter – 1 to lift to 22.4 short tons, size 8 ft. × 8 ft. × 20 ft.

Fork extensions for fork-lift trucks in use – 25 pairs.

Mobile cranes (diesel) – 2 capacity 7.5 tons with telescopic arm up to 10 m., turning through 360°; 8, capacity 7.5 tons, fixed arm; 1 capacity 10 tons with telescopic arm up to 12 m., 360°; 1 truck-mounted crane no less than 60 tons, with arm not less than 21.5 m.

Pallets – material for making 15,000 pallets, in 2 sizes.

Slings for these pallets, also for heavy-lift cargo for use with the mobile cranes.

Lighters – 7 new lighters, ranging from 100 to 400 tons.

STEVEDORES: Working hours: 1st shift, 0700 to 1300 hrs.; 2nd shift, 1300 to 1900 hrs.; 3rd shift, 1900 to 0100 hrs.; 4th shift, 0100 to 0700 hrs.

Normal capacity per gang per hour: *(a)* Rice – about 80/90 tons per gang/hour. *(b)* Meat – about 60/100 tons per gang/hour.

Overtime is compulsory if port is congested.

Lavatory Conveniences for Shore Labour – Each vessel must furnish conveniences for all shore labour employed on board. Work has been stopped until such conveniences are installed. It is advisable, therefore, for vessels calling at Montevideo to be equipped with 2 spare lavatories, 1 for talley clerks and 1 for stevedores, etc.

FRESH WATER: Fresh water is supplied by the Port Authorities at all quay berths. Request must be made through the Agents, vessels supplying their own hoses where possible. It is important that the water meter should be read together with the Port official both at connecting and disconnecting to verify the exact quantity. The cost of water is high.

FUEL: All grades available by barges during loading/discharging. Vessels calling for bunkers only are refuelled in the anteport. There are 2 barges, capacities respectively 311 tons and 598 tons.

TANKERS: Apart from La Teja Basin, mentioned above, tankers discharge in Basin No. 2 at Muelle Florida. Distance to oil tanks is considerable and discharge rate is about 80/100 t.p.h. Heavy grades of cargo require high heating to facilitate discharge.

At La Teja, vessel's max. dimensions LOA 230m., Draft at HW. 31 ft. Max. d.w.t. 35,000. Max. loading rate 300 cu.m./hour. Max. discharge rate 850 t.p.h.

REPAIRS: All repairs possible.

DRY DOCKS: 2 dry docks available: Nacional, length 463 ft., width 61 ft. Maua, length 260 ft., width 28 ft. Also a floating dock, lifting capacity 12,000 tons, 545 ft. long and 93 ft. wide.

Entrance is by turn, counting from presentation of the application, but this may vary.

(a) when the vessel has damage to repair.
(b) when there is a fixed sailing date.
(c) when a vessel requires a dock for no more than 4 days, and is preceded by 1 requesting 15 days or more.
(d) when by reason of size a vessel cannot enter with another which is on turn.
(e) national Naval vessels.

GANGWAY/DECK WATCHMEN: Shore watchmen compulsory. Arranged by Agents. 1 required on deck and 1 for each gangway. Vessels carrying dangerous cargo must also employ a guard of the Prefectura.

Vessels calling for supplies only, for orders, in distress or to land sick crew members or to enter dry dock, need not employ Watchmen. Repairs afloat require a watchman, if they do not carry out commercial operations.

Shifts are of 8 hours, commencing at 0700 hrs. Vessels under repair, and those at Ancap moles may fix 12-hour shifts, paying a shift and a half.

If special watchmen are required for goods or working equipment, application must also be made to the Union.

If watchmen are needed in the holds, same applies.

Regulations also require a watchmen in the holds wherever the ship has a crew member, cadet or officer permanently on watch to prevent pilferage. However, where ship's personnel are in the hold to watch the stowage of the cargo, no extra watchman is required. Masters should therefore, advise Agents if they intend to place crew members permanently in the holds during discharge, so that Agents can advise the Association before they make their claims.

Care must also be taken on arrival, since the watchman is on duty from 0700 hrs. on, whereas it may be necessary to place the gangway safety net, etc., before that time, so that Pilot may disembark.

Only those involved in this operation should go ashore. The Receiving Commission may ask for the gangway to be opened before 0700 hrs., which is in order, but no one else should use the gangway to avoid claims from the Union.

Vessels lying in the anteport must provide launches for the transport of watchmen employed.

DENSITY: This varies according to wind and tide. The degree of salinity is broadcast daily in the weather reports by radio, and varies from fresh to brackish to sea water. Steady South winds give the highest degree of salinity.

CONSULS:

Arab Republic of Egypt	A. D. Cosa 3469	789904
Argentina	Rio Branco	Tel. 80897
Austria	Sarandi 693	914000
Belgium	Leyenda Patria 2880	701265/70
Bolivia	Rio Branco 1320	912394
Brazil	18 de Julio 984	911145/46
Czechoslovakia	L.B. Cavia 2996	787808

Chile	Canelones 1165	910695
China (Nationalist)	Fco. Soca 1128	790312,790577
Colombia	Soriano 791	82606
Denmark	Rio Branco 1389	915238
Ecuador	21 Setiembre 2816	70727
El Salvador	Piedras 434	80852
Finland	Solis 1533	914386
France	Uruguay 853	912791
Germany (W)	La Cumparsita	84958, 88041
Germany (E)	Echevarria 3452	788010
Great Britain	Cerrito 420	912501
Greece	Misiones 1481	912148
Guatemala	Dr. Francisco Soca 1397	782104
Holland	L. Patria 2880	701631
Honduras	Misiones	80894
Hungary	Prudencio de Pena 2469	786173
Iceland	J. B. Blanco 715	702565
Israel	B. Artigas	404164/66
Italy	J. B. Lamas 2859	785316
Japan	Rincon 487	913936
Korea	Av. Brazil 2385	787679
Lebanon	Fco. Solani Antunia 1882	701834
Mexico	Juncal 1305	916890
Norway	Colon 1580	987121
Panama	J. B. Blanco 715	703620
Paraguay	Rio Negro 1370	984775
Peru	Juan Gomez 1492	984743
Portugal	Prudencio de Pena 2486	781915
South African Rep.	Rincon 487	986956
Spain	Libertad 2750	780048
Sweden	Av. Brazil 3079	780088
United States of America	H. A. Santos 808	409051, 409126
Venezuela	Av. Artigas 1253	493005
Yugoslavia	Av. Espana 2697	788129

LAYING UP MONTEVIDEO: Montevideo Ante-Port is considered the most convenient and cheapest place for vessels arriving in the Plate in ballast, unfixed, to anchor, lay up or await orders.

Vessels could subsequently load at any of the Argentine or Uruguayan River Ports and would also be in a handy position to load at an Argentina South Atlantic coast port. She could also be ordered away again from the Plate in ballast having incurred no heavy pilotage bills or other expenses, as would be the case had vessel proceeded up to, and anchored in Buenos Aires Roads, or entered an Argentine port.

The expenses at Montevideo, including inward and outward pilotage, light dues and clearance, are not high, and no written permit is necessary for a vessel to lie in the anteport, but the permission of the Captain of the Port must be obtained in each case.

This permission will not be refused unless there is congestion in the anteport.

No vessel can be laid up at Uruguayan ports, unless a responsible shipping Agent is nominated to attend.

HOLIDAYS: 1st and 6th January, Carnival Monday, Shrove Tuesday, Easter (6 days), 19th April, 1st and 18th May, 19th June, 18th July, 25th August, 12th October, 2nd November, 8th and 25th December.

AIRPORT: International airport with world-wide connections.

TIME: April to October: GMT minus 4 hours; October to April: GMT minus 3 hours.

SHORE LEAVE: Allowed.

TELEPHONES: Can be connected on board vessels berthed at the quays.

AUTHORITY: Administracion Nacional de Puertos.

NUEVA PALMIRA: 33.53 S. 58.25 W.

Situated on East bank of Uruguay River, 155 miles above Montevideo. Km. 0 on River Uruguay.

DOCUMENTS/PILOTAGE/HEALTH/RADIO: See beginning of Uruguay section.

RESTRICTIONS: Vessels loading should pay particular attention to the daily river draft forecast, issued by local authorities. Draft controlled by depth of San Pedro Channel.

ANCHORAGE: Off Montevideo.

MAX. SIZE: Up to 25 ft. draft fresh water depending on river conditions.

TUGS: Not required. Mooring launches available.

BERTHING: Manganese Pier: Depth alongside 24 ft. Loading rate: 600 t.p.h. Pier Head Berth: Depth alongside 24 ft. Grain loading.

STEVEDORES: Working hours: 0700–1100 and 1300–1700 hours. Saturdays: 0700–1100 hrs.

MEDICAL: Doctor and hospital facilities available.

FRESH WATER: Obtainable from berths.

FUEL: Not available.

REPAIRS: Only minor repairs can be effected.

GENERAL: Refer to "Montevideo" for all general information.

PAYSANDU: 32.18 S. 58.06 W.

Situated on the East bank of Uruguay River, 380 kms. above Montevideo.

Km. 204 on River Uruguay.

DOCUMENTS/PILOTAGE/HEALTH/RADIO: See beginning of Uruguay section.

RESTRICTIONS: River navigation controlled by depth in the passes at Almiron, Vera and Urquiza. Since river conditions vary from season to season, Agents should be consulted beforehand regarding available draft at any particular time.

ANCHORAGE: Off Montevideo.

MAX. SIZE: Up to 20 ft. draft fresh water, depending on river conditions.

TUGS: Available.

BERTHING: Grain Elevator Berth; 30 ft. depth alongside. General Cargo pier has been demolished. Coastal Berth: Length 300 m. Depth 4.5 m. Ancap Pier: 1 berth for tankers, 22 ft. depth.

There is 1×5-ton crane on the grain quay, and 3×3-ton cranes on the coastal berth. Loading on the Ancap berth is by lorry.

STEVEDORES: Working hours: 0700–1100 and 1300–1700 hrs. Saturdays: 0700–1100 hrs.

MEDICAL: All assistance available.

FRESH WATER: Available at all berths.

FUEL: Not available.

REPAIRS: Minor repairs can be effected.

CONSULS: Local representation for Argentina, Brazil, Italy and France. All other Consuls at Montevideo.

GENERAL: Refer to "Montevideo" for all general information.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Venezuela

AMUAY BAY: 11.46 N. 70.15 W. (See Plan)

OPERATORS: Lagoven, S.A.

ESSENTIAL REQUIREMENTS:

1. Incoming vessels must send ETA at least 3 days before arrival at Amuay Bay. During hours of darkness vessels must identify themselves on arrival either by radio-telephone or aldis, preferably the former.
2. If a ship originally cleared for another port (including some other Venezuelan port) is diverted at sea to Amuay Bay, certain information must be radioed prior to arrival to avoid heavy fine and/or delays. See "Radio".
3. No dirty ballast may be pumped overside in port or in Venezuelan coastal waters. Ballast disposal facilities are available at Amuay Terminal.
4. The use of Venezuelan Government Pilots is compulsory for docking and for movements inside the bay.
5. The Venezuelan flag should be displayed at the mast-head during daylight hours by ships anchored and berthed in Venezuelan waters.
6. In addition to other clearance documents, 2 copies of an itemised list of articles in the ship's chest must be presented to Authorities on arrival.
7. Emergency fire signal is 5 long blasts on ship's whistle or siren. No other signal is to be given in the case of emergency.
8. Ratguards must be in place on all mooring lines.

LOCATION: The port of Amuay Bay is located on the Gulf of Venezuela, on the West Coast of the Paraguana Peninsula, Venezuela. The seabuoy marking the entrance to the bay is located in Lat. 11° 44′ 25″ N., Long. 70° 14′ 50″ W.

DOCUMENTS: Inward clearance is effected on board immediately after docking by Government Port Officials and a representative of the Marine Department. It is necessary that the following documents be ready on arrival:

Clearance from last port (Consul Mail) 1 visaed.
Ballast Certificate from last port (1 copy, visaed according to paragraph *(a)* if there is no Venezuelan Consul).
Crew Lists (5 copies).
Passenger and Baggage Lists (5 copies visaed, 2 copies not visaed).
Lists of Passenger in Transit, if any (4 copies not visaed).
Lists of Personnel Effects (3 copies not visaed).
Store Lists (3 copies, see note below).
Lists of Slop Chest (3 copies not visaed).
Sailing permit (issued by Maritime Authority of last port).

Vessels arriving with cargo to discharge, will also require:

Manifest (Sobordo) (1 original visaed and 2 copies not visaed from each loading port).
Consular Mail (1 sealed envelope from each loading port).
Bills of Lading, 1 original and 1 copy visaed, and 4 copies not visaed from each loading port.
Tally Books (6 from each loading port).
Consular Invoice (3 originals visaed and 3 copies not visaed from each loading port).
Commercial Invoices (3 from each loading port).
Store Lists prepared should indicate separately all deck, engine and cabin stores.

The store lists may be prepared on board prior to arrival unless the ship is coming from the Islands of Aruba, Curacao, Barbados, Jamaica, Trinidad and the Guianas, in which case 2 copies must be visaed by the Venezuelan Consul at the port of departure.

(a) Cargo and clearance documents should be visaed by the Venezuelan Consul at the last port of call. In the absence of a Venezuelan Consul, they may be visaed by the Consul of a friendly nation, by the Chamber of Commerce, or by 2 reputable merchants, the latter's signatures to be notarised. In the absence of a Venezuelan Consul the following notation should be written on each document, in Spanish, and signed by the alternates designated above:

"Por no existir en la localidad Agente Consular Venezolano y a peticion de los embarcadores, certifico el presente documento."

(Signature) ....

Although vessels proceed directly to Amuay Bay, clearance documents should be prepared showing the port as Las Piedras, Paraguana (Amuay Bay). Failure to observe this requirement may result in penalties up to a maximum of Bs.2,000.

All ships calling at a Venezuelan port for the first time must be measured for tonnage by the Captain of the Port. It is the usual practice to take ashore the ship's Panama Canal or Suez Canal Certificate, which is used as a basis for recalculating tonnage under the Venezuelan Regulations, and is returned before sailing. The Venezuelan Admeasurement Certificate, when later issued, is forwarded to the owners. A fee is charged for this certificate, which is payable only on the ship's first call. Vessels registered in the following countries are excluded from the above regulations: Netherlands, Germany, France, Portugal, United Kingdom, Denmark, Sweden, U.S.A, Ireland and Norway.

Outward clearance and cargo documents are delivered on board by the Marine Dispatcher. However, in order to obtain the sailing permit, a special form, delivered on board on arrival, must be completed, not later than 2 hours before sailing time. This form gives cargo and freeboard information by the Captain of the Port.

In the event the berth is required by another vessel, a vessel having completed loading may be required to vacate the berth promptly and proceed to anchorage to await cargo documents.

PILOTAGE: Pilots are employees of the Venezuelan Government and pilotage is compulsory for vessels entering or leaving the harbour. The Marine Department will arrange for Pilots to board all vessels as necessary.

The Pilot acts in an advisory capacity; the Master retains responsibility for the ship at all times. In the event it becomes necessary to disregard the Pilot's instructions in order to ensure the safety of the ship, the Master must forward through the Marine Department a full written report of the circumstances, for delivery to the Captain of the Port.

ANCHORAGE: For vessels awaiting berth, there is a good anchorage about 1 mile N.W. of the seabuoy in 8 to 12 fathoms with a sand and mud bottom. Ship Masters are requested not to anchor at a distance greater than 3 miles from the seabuoy.

RESTRICTED AREA: A restricted fishing area has been established by the Venezuelan Government which is prohibited for mechanically propelled vessels drawing more than 5 ft. This zone lies within the area off the Paraguana Peninsula from Punta Macolla, Lat. 12° 5′ 32″ N., Long. 70° 12′ 55″ W., to Punta Estanques (Los Taques), Lat. 11° 48′ 45″ N., Long. 70° 16′ 45″ W., and a line connecting the positions below indicated: Lat. 12° 07′ 40″ N., Long. 70° 14′ 25″ W.; Lat. 12° 03′ 15″ N. Long. 70° 19′ 23″ W.; Lat. 11° 49′ 25″ N., Long. 70° 21′ 50″ W.

HEALTH: A close control of VD has been put into effect. All persons will be inspected and any person found with an infection will be sent to the government Clinic for treatment.

MAX. SIZE: Length 1,000 ft.; draft 43 ft.

RADIO: The cable and telegraphic address for the Lagoven S.A. at Amuay is "Largomar Judibana". Radio messages to and from ships at sea are routed through "shipward 2 New York" for retransmittal through aircon system to Judibana (Amuay Bay).

Vessels that were originally cleared for another foreign port, or another Venezuelan port, and were subsequently diverted at sea, should radio the following information to "Lagomar-Judibana" prior to arrival:

Vessel's name
Master's name
Vessel's flag
Number of crew
Estimated time of arrival.
Last port of call
Port for which originally cleared
Grade and quantity of cargo to be lifted.

This information is required in order to make in advance special arrangements for inward clearance, to avoid payment of fine.

Radio notice of arrival should be sent 72 hours prior to arrival at Amuay.

Ship-to-shore telephone: Radio-telephone listening watches are maintained on a 24-hour basis in the Marine Office on the following frequencies: 2182 kc/s.; 156.8 Mc.

International telephone: International telephone calls are routed through Caracas, Venezuela. Telephone number is Punto Fijo area 069-51557. (It is usually difficult if not impossible to complete a call.)

TUGS: Tug-boat assistance is considered essential and is afforded all vessels entering, leaving or shifting in the harbour by 2 × 1,600-h.p. tugs. Disposition and manoeuvres of tug-boat are directed by the Pilot, who uses a "walkie-talkie" to convey orders to the tugs.

BERTHING: 4 finger piers provide 8 berths, numbered 1 to 8, from South to North.

Berth	1	2	3	4	5	6	7	8
TJ-102 Crude	x	x			x	x		
All other crudes	x	x	x	x	x	x	x	x
Fuels Oils	x	x	x	x	x	x	x	x
Gas Oil	x	x	x	x	x	x	x	x
Lube Stocks			x	x				
Penetration Asphalt			x	x				
Cut back Asphalt			x	x				
All other Products					x	x	x	x
General Cargo			x	x				
Safe Draft	43′	43′	40′	40′	40′	40′	41′6″	43′
Max. Length Ship	1000′	1000′	650′	700′	700′	700′	856′	856′
Max. Beam	Unl.	Unl.	Unl.	*	*	*	*	Unl.
Bow to manifold distance	495′	495′	300′	320′	330′	330′	340′	340′

Ballast line, fresh water and all grades bunkers at all berths.

*Max. beam permissible varies dependent upon the beam of vessel berthed on other side of the slip.

The use of an anchor when docking is permitted at all berths. It is considered prudent to have the outboard anchor hove-out prior to entering the harbour in order to facilitate speedy release if necessary while docking. The Pilot will advise whether the ship is to be berthed port or starboard side to the dock.

LOADING: Loading rates particulary for low-flash products loaded during the hours of darkness or when topping-off cargo tanks, will be reduced by the terminal to meet existing conditions.

All loading and discharging will be stopped during the passage of an electric storm, and ullage covers must be closed and dogged down. During periods of calm, loading of gasoline or other similar low-flash products may be loaded at reduced rates or loading stopped if the heavy vapours are not being dispersed quickly enough to prevent hazards from accumulated gas pockets. Ship's officers are cautioned to be on their guard during such conditions.

Loading rates will be reduced when topping-off, if requested by the ship's officer.

Some of the fuel cargoes are loaded from fuel reservoirs through certified positive displacement meters, and shipping documents are prepared on the metered figures. All reconstituted crudes are line blended with conditions recording of component rates and quantities. Actual loading rates of both this crude and metered fuel cargoes are available at any time upon request of the standby.

Instructions as to grade or grades of cargo, and the approximate loading rate anticipated, will be given to the Master on completion of inward clearance. Supplementary information including number and size of lines and hoses will be furnished to the Chief Officer before loading commences.

If vessel's loading orders from owners or charterers do not agree with the terminal's orders, either as to grades or quantity, the marine representative should be advised immediately. The terminal is authorised to load 10% more or less than the quantity nominated; if the cargo to be lifted will be more or less than this 10% limitation it is necessary to cable New York for confirmation.

A terminal employee is stationed at each pier during the entire time the ship is discharging ballast, bunkering, or loading cargo. Fifteen minutes "stand-by" notice should be given to this man prior to completion of ballast, bunkers, or cargo.

Vessels loading liquid and flaked sulphur: *For vessels loading liquid sulphur, the following applies:*

Location: Pier 2, berth 3 at Amuay Bay.

Draft - 40 ft., length overall - 700 ft., beam - no limitation.

Loading will be at the rate of 400 long tons per hour through a 6 in. line and rubber hose.

Maximum cargo size - 25,000 long tons.

Normal loading temperature is 275° F. Minimum - 265° F. Maximum - 295° F. Density at normal loading temperature is 112 pounds per cu. ft. Viscosity at same temperature is 8.5 centipoises.

Safety precautions/provisions: Molten sulphur classified as "Grade E Liquid" by U.S. Coast Guard. No naked light, open flames or sparks should be permitted near any tank openings. Molten sulphur is combustible but is handled at temperatures below its flash point (325-370° F) and ignition temperatures (476-502° F).

For vessels loading flaked sulphur, the following applies: Physical characteristics of the loading facilities:

(a) Location: Lat. 11° 44′ N., Long. 70° 14′ W. Anchorage approximately 2,000 ft. South Punta Adaro with a depth of 33 ft. 400 yards offshore and dropping off to 50 ft. 1,000 yards offshore. In the rare event that the wind is Westerly the vessel would anchor further offshore.

(b) No draft, length or beam limitation. (Vessels loading up to 24 ft. draft may be anchored inside the bay).

(c) Loaded barges whose overall dimensions are 200 x 42 x 17 ft. will be brought alongside with the aid of tugs and removed when required, barges will be equipped with fenders. The hoppers are 160 × 37 × 14 ft. Loading from barges to ship will be done using ships gear and clam shells of 1.25 ton capacity. Clam shells will be furnished by Lagoven free of charge. Personnel (stevedores) to carry out the loading operation will be supplied by Lagoven or the ships crew can be used if this is set forth in the charter party. Loading rate 1,000 long tons per day.

(d) The anchorage is sheltered in the lee of the Adaro peninsula. Wave heights vary between 1 and 2 ft.

(e) Normal Maximum parcel size - 10,000 tons loaded at a rate of 1,000 tons per day, however, an additional 2,500 tons can be supplied at a loading rate of 500 tons per day.

(f) Flaked sulphur when stored in large quantities varies in density from 55 to 90 pounds per cu.ft. Average density is anticipated to be 70 lbs./cu. ft. Individual flakes are of irregular shape and are less than 0.5 sq.in. in area and less than 0.0625 in. thick. This size data is not a specification nor guarantee and is provided only to indicate the order of magnitude dimensions.

General:

Fee of Bs. 200 will be charged for trips between the Terminal and the anchorage by launch or tug for delivering personnel.

Method of cargo quantity determination: Barge drafts are marked to the nearest inch and capacity tables prepared by Charles Martin. The draft prior to commencement of and upon completion of discharging are noted. The amount transferred is obtained by consulting the tables. The quantity arrived at by totalling the amounts from the barges used is compared to the ships figures and reconciliation reasoned.

BALLAST: Vessels should arrive with sufficient ballast to permit safe handling. The Pilots require a draft of min. 8 ft. forward, 18 ft. aft, on a T-2 or similar size tanker, 11 ft. forward and 20 ft. aft on a 26,000 d.w.t. or larger vessel. Ballast should be carried in a minimum number of tanks, and all other tanks stripped, so as to minimise deballasting time.

A relatively small amount of salt water remaining in ship's tanks or lines can contaminate crude and cause operating problems for the refiners. It is important therefore to strip tanks and lines as dry as possible.

Vessels provided with completely segregated ballast system are permitted to discharge ballast and load cargo simultaneously.

Absolutely oil-free ballast may be discharged overside. All dirty ballast must be pumped ashore. A 30-in. ballast line, 2×60,000 and 1×120,000 barrel slop tanks and separator system are available.

A considerable number of vessels are now participating in the programme to eliminate pollution of the seas. Under this programme, vessels may arrive carrying quantities of oil/water emulsion. If it is desired to follow the "load-on-top" procedure in such instances, it is requested that the Marine Representative be informed on arrival.

MEDICAL: Medical treatment and hospitalisation, if required, is provided at a hospital located in the concession, operated by the Society of Catholic Medical Missionaries. Several dentists are located in the area.

Italian crew members covered by Casa Maritime insurance receive medical attention from the appointed medical representative in Punto Fijo.

Authorisation forms for medical and dental treatment are provided, which require Master's signature. Transportation is available at the Marine Office. Please note that if the patient does not speak Spanish or English, an interpreter should accompany him.

FUEL: Ship's requirements specifying grade and quantity desired are to be given to the Marine Representative boarding the vessel on arrival. All grades of bunker fuel, intermediate fuels and Diesels are available. Bunker delivery rates average 2,500/3,500 barrels per hour. Bunkers are loaded through meters which automatically register quantities on bunker receipts. It is the responsibility of ship's engineer to give "standby" notice to the terminal employee and advise him when to shut down.

FRESH WATER: Fresh water can be supplied if necessary; however, supplies are limited to essential requirements. All fresh water is piped from distant sources. Loading rate is about 10 t.p.h.

CUSTOMS: Venezuelan laws are strict in regard to contraband and Masters are requested to instruct their crews not to take cigarettes or other articles ashore. Cigarettes in carton lots, cigars, tobacco, souvenirs, gifts (particularly items of women's apparel) should be collected prior to arrival in port, listed with the items in the slop chest and placed in the custody of the Master for deposit in the slop chest or closet which will then be sealed for the duration of the vessel's stay in port.

Firearms on board any merchant vessel calling at Venezuelan ports must not exceed one per officer, nor can the ammunition exceed 18 cartridges per officer, All firearms and ammunition must be noted on the stores list. Officers must not carry firearms while the ship is in Venezuelan waters and these sidearms and ammunition should be collected and held in the Master's safe custody. Crew members should be warned against taking knives or other weapons ashore.

While the vessel is in port, Venezuelan National Guard Officials are assigned on board to ensure compliance with Customs regulations. The law requires that meals be supplied to these officials during regular meal hours. Masters are requested to give them the privilege of eating in the officers' mess-room, to avoid difficulties.

DENSITY: The usual specific gravity of sea water at the berth is 1025, temperature ranges from 78°F. to 85°F.

CONSULS: Brazil, Great Britain, Italy, the Netherlands, and Norway have consular representatives in the area.

TIME: GMT minus 4 hours.

SHORE LEAVE: Shore passes will be granted to all healthy persons. A representative of the Captain of the Port boards on arrival and issues the required number of passes. Shore passes are to be collected prior to sailing and given to the Pilot undocking the vessel. Vessels are not permitted to sail until all crew members are on board, unless hospitalised or prior arrangements made for disembarking. A letter to this effect is required from the Master.

REGULATIONS: (i) *Pollution:* The laws of Venezuela are very strict in regard to the pollution of harbour and coastal waters by oil, and heavy fines are imposed for violations. No dirty ballast, oil or bilge slops are to be pumped or allowed to escape overboard. All overboard discharge valves from cargo tanks and bilges are to be secured before loading or discharging commences. Loading is to be conducted with the greatest care and vigilance in order that errors or delays in handling cargo valves may not result in overflows. All deck scuppers should be plugged before loading to avoid harbour contamination should an overflow occur. The Authorities require that a written report be submitted by the ship involved in the event of an oil spill.

(ii) *Gangways:* All vessels using the port of Amuay must provide a safe gangway. The use of rung ladders, pilot ladders, etc., is contrary to Port Regulations, and Port Authorities will not board except by means of a safe gangway or accommodation ladder.

(ii) *Passengers:* Passengers will not be permitted to disembark unless in possession of the required visa and documents. To facilitate clearance, if passengers are carried, the Master should include advice to this effect in his radio ETA.

(iv) *Visitors:* All visitors to ships are prohibited except those company employees, petroleum inspectors, etc., whose duties require their presence aboard.

(v) *Rats:* Rat guards required at all times.

GENERAL: *(a) Weather Conditions:* There is little rainfall at Amuay Bay; annual precipitation averages 12 in. The so-called rainy season usually coincides with the Caribbean hurricane season, from August to November, although Amuay lies South of the usual hurricane track. During these months calms are often experienced and winds from a Westerly direction may be expected. Normal winds are steady from the N.E., average force 4, Beaufort Scale, with a max. of force 8. Temperatures average about 85°F., with little variation from day to night or season to season.

(b) Tides: The normal range of the tide is about 12 in.; however, a 28-in. range has been observed during spring tides.

(c) Lubricating oil: Supplies of lubricating oils are available. Requirements should be given in vessel's radio notice of arrival.

(d) Bonded Stores: Cigarettes or other stores in bond are not obtainable in Amuay Bay.

(e) Cash Advances: The local currency is the Venezuelan Bolivar and cash advances are made only in this currency. It is requested that any requirement for cash advances be included in the vessel's ETA radio, to permit delivery on board on arrival.

(f) Charts: No supplies of charts or sailing directions are available at Amuay Bay.

(g) Laundry: A 6 hour laundry service is available throughout each working day. Such service should be requested in the vessel's ETA message.

(h) Mail: Itemised lists are required for ship's mail, to be signed by the Master. Unless other instructions are given, ship's mail received after sailing, or for vessels on which no advice has been received, will be held for 30 days and then returned to Owners or Operators at ship's expense.

(i) Inspection – Petroleum Products: Chas. Martin & Co. and E. W. Saybolt, petroleum inspectors, are available if specified. Telephone numbers, Chas. Martin 44665, 44650 and 44211; Saybolt 44639, 44645 and 44227.

(j) Norwegian Government Seamen Service: A field representative of the above service is stationed at Amuay providing Norwegian and Swedish film exchange and other usual services. His telephone number is 51459.

(k) Personnel – Seamen Left Ashore: In the case of seamen left ashore for hospitalisation, repatriation or other reason, all documents and personal effects are to be delivered to the Marine Office before sailing. A letter is required from the Master advising the maximum advances to be made to the seamen, if any, and instructions concerning his repatriation. All expenses incurred by seamen left ashore, including cost of repatriation, are for ship's account. It is important that Masters bear in mind that the Venezuelan law will at all times hold the vessel, her Master, Agent or owner, responsible for any seamen left behind in Venezuela.

(l) Provisions and Stores: Provisions and stores in limited quantities are available, the prices and quality of some items, such as fresh fruit, fish, shrimps, vegetables, etc. are competitive; dry stores are considerably higher than in most ports. The Port Steward will assist in filling requisitions.

(m) Radar and Radio: Radar and radio repairs can be effected in Amuay. A service repair man is available, but spare parts are limited.

(n) Repairs: Shore facilities are available only for emergency repairs of a minor nature. The nearest dry docks are those at Puerto Cabello and Curacao, N.A. Several contractors in the area provide labour for hull painting and for tank cleaning. Contracts for these services are made by the ship's Master directly with the contractor.

(o) Surveyors: There are no appointed surveyors to American Bureau of Shipping or Lloyd's in the area. However, with sufficient advance notice, arrangements can be made to have their nearest representatives come to Amuay to attend surveys.

(p) Walport Film Exchange: Subscribers to the Walport Service may exchange films at the Marine Office.

ATTENDANCE: Representatives of the Marine Department board vessels immediately on arrival, and it is particularly requested that Masters indicate at that time all ship's requirements. The Marine Office Building is located at the Pierhead Trestle and personnel are available for assistance at all hours. Telephones are located on all docks and the Marine Shift Supervisor can be called on telephone No. 444475 or 444465.

CARIPITO: 10.09 N. 63.02 W.

OPERATORS: Lagoven, S.A.

LOCATION: Caripito is located on the West bank of the San Juan River in Lat. 10° 09′ 25″ N., Long. 63° 02′ 01″ W.

ESSENTIAL REQUIREMENTS:

1. Incoming vessels must send to Caripito their ETA Guiria at least 3 days in advance followed by confirmation 48 and 24 hours before arrival.

2. If a ship originally cleared for another port (including some other Venezuelan port) is diverted at sea to Caripito, certain information must be radioed to Caripito prior to arrival to avoid a heavy fine and/or delays. See "Radio".

3. No dirty ballast may be pumped overside in port or in Venezuelan coastal waters. Limited ballast facilities are available at Caripito Terminal.

4. Vessels calling at Caripito must obtain Government Pilots at Guiria.

5. The Venezuelan flag must be displayed during daylight hours while vessel is within port limits.

6. The emergency fire signal in Caripito dock area is 6 short blasts and 1 long blasts on ship's whistle or siren. No other signal is to be given in the case of emergency.

APPROACHES: The traffic in San Juan River is restricted to one-way from Marieta Point to Caripito. Therefore, instructions are issued at Guiria to incoming vessels relative to what action to take on arrival at Marieta Point. Outbound traffic is controlled so as not to conflict with these instructions.

1. Guiria. The town of Guiria is located on South coast of Paria Peninsula on N.W. shore of Gulf of Paria. When approaching from East a signal tower will be observed on a bluff slightly to North of town.

2. Maturin Bar. Buoy E-1, marks the entrance to Maturin Bar Channel. At Punta Gorda there is a light tower located in approximate Lat. 10° 09′ 50″ N., Long. 62° 37′ 52″ W. displays a flashing red light.

3. Channel. Maturin Bar Channel is 14 miles in length and 400 ft. in width. The tidal range over the bar varies from 4 ft. 6 in. to 4ft. 9 in. with currents up 3 knots. The average salinity of water is 1.009; however, this may vary considerably between wet and dry seasons and spring and neap tides. Maximum draft permitted by Venezuelan regulations is 34 ft. in fresh water. There is a restriction of 6 in. less for all motor tankers. On leaving Maturin Bar Channel the San Juan River narrows from approximately 1.25 miles in width to about 0.7 miles with slight variations in width up to Marieta Point where it narrows to about 1,200 ft. and varies between 800 and 2,000 ft. up to Caripito. Marieta Point marks intersection of Cano Frances and the San Juan River. It is also at this point that course of San Juan River changes approximately 100° to starboard and it is the beginning of one-way traffic. Frequently, incoming vessels are requested to anchor below this point to await outbound traffic. There are 32 lights marking strategic points in San Juan River between Maturin Bar and Caripito terminal. These light towers are painted aluminium and are easily visible during daylight hours.

DOCUMENTS: (also see under "Radio").

1. *Clearance (inward and outward).* Inward clearance is effected at Caripito. The sanitary inspector boards vessel at anchor or at berth depending on tidal conditions and/or the availability of a berth. The Customs and other Government officials usually board at the berth. However, should there be a delay awaiting berth or tide, the entry will be granted while vessel is at anchor, in which case accommodation ladder must be rigged.

It is necessary that the following documents be ready on arrival:
Ballast List (1 original, visaed).
Passenger List (5 copies, none of which visaed).
Baggage List (5 copies, none of which visaed).
Crew List (7 copies, none of which visaed).
Sailing Permit from Last Port (1 original, visaed).
Stores List (5 copies, see *Note*).
List of Personal Effects (3 copies, none of which visaed).
List of Contents of Slop Chest (3 copies, none of which visaed).
List of Passengers in Transit (5 copies, none of which visaed).

Note: The Stores Lists may be prepared on board prior to arrival unless ship is coming from Netherlands Antilles or the Guianas, in which case they must be visaed by Venezuelan Consul at port of departure.

2. *Cargo documents.* The Port of Caripito has in force a system of cargo documentation for expediting the sailing of vessel. It is as follows:

a. Certain documentation with approximate cargo figures of unofficial nature are placed on board and official cargo documents are airmailed to discharge port.

b. Blank signed documents are placed on board to vessel's departure from Caripito and thence correct figures are radioed to sub-agency at Guiria who delivers them in writing to Master, who acknowledges its receipt by signing carbon copies of transmittal sheet.

PILOTAGE: Pilots are employees of Venezuelan Government and act in an advisory capacity. The Master retains responsibility for ship at all times. In the event it becomes necessary to disregard the Pilot's instructions in order to ensure the safety of the ship, the Master must forward through the Marine Department a full written report of the circumstances, for delivery to the Captain of the Port.

Pilots are compulsory and are embarked and disembarked at port of Guiria through a sub-agent. Vessels should proceed to the Guiria sea buoy (position 10° 33′ 12″ N. 62° 15′ 00″ W.) and await instructions. If arriving during the hours of darkness, certain instructions are usually transmitted by light signals from the signal tower. Voice radio communications can be established at any time with Guiria or Lagoven Caripito on frequencies 2182 kc/s, 2638 kc/s and 2738 kc/s. The launch which embarks the Pilot will also deliver instructions to the Master relative to the movements of his vessel en route to Caripito, port regulations, facilities, etc. The regular pilotage fees cover the area from the entrance to Maturin channel to and from Caripito. The Pilot is to be provided sleeping quarters and food equal to that provided the officers aboard ship.

Note: Complaints or observations concerning the Pilot's handling of vessel should be noted on back of pilotage ticket.

TIDES: The normal range of tide in the dock area is about 12 ft. with currents up to 3 knots during the flood and 4 knots during the ebb in rainy season (May-December). The normal current is 2.5 knots during the flood and 3 knots during the ebb.

ANCHORAGE: For vessels awaiting berth, there is an anchorage about 1,000 m. up-stream from the Caripito terminal. Vessels awaiting clear channel may at times be requested to anchor at Punta Marieta. Vessels awaiting high tide anchor at Punta Marieta or off Punta Gorda.

MAX. SIZE: Vessels up to 780 ft. and 48,000 d.w.t. can be accommodated with a low water depth of 35 ft.

RADIO: The cable and telegraphic address for Lagoven at Caripito is "Lagomar – Caripito". Messages to and from ships at sea are routed through the Government Radio Station at Maiquetia (La Guaira), call letters "YVG". This station operates on a 24-hour continuous watch, on the following frequencies:

Listening Frequencies: low frequency, 500 kc/s; high frequency, 4178, 6267, 8356, 12534, 16712, 22225 kc/s. Transmitting Frequencies: low frequency, 500, 472, 464, 417 kc/s; high frequency, 4322, 4352, 6505.5, 6519.5, 8722, 8730, 12817.5, 17141.6 kc/s. Radio notice of arrival should be sent 72 hours prior to arrival at Guiria and corrected if weather or other conditions delay the vessel.

Radio telephone listening watches are maintained on a 24-hour basis at Guiria and at Caripito on 2182 kc. The following frequencies are available for communications after contact: 2638 kc and 2738 kc.

All vessels en route to Caripito may also communicate with Amuay or La Salina Marine offices and request that message dealing with corrected ETA's, Pilots and other business be relayed to the Caripito Marine Office.

Vessels that were originally cleared for another foreign port, or another Venezuelan port, and were subsequently diverted at sea, should radio the following information to Creole Caripito prior to arrival:

Vessel's name
Master's name
Vessel's flag
Number of crew
Estimated time of arrival at Caripito.
Last port of call
Port for which originally cleared.
Grade and quantity of cargo to be lifted.

This information is required in order to make in advance special arrangements for inward clearance, to avoid payment of a fine. It is necessary in such a case that the following documents be ready on arrival:

Crew List (original and 6 copies).
List of Personal Effects (original and 2 copies).
List of Contents of Slop Chest (3 copies).
Stores List (original and 1 copy).

Also required are the original and 2 copies of the radiogram instructing Master to proceed to Caripito. Outward clearance documents are placed on board the vessel prior to departure from the Caripito terminal.

Masters should bear in mind that while vessels are within Venezuelan territorial waters, Government authorities do not permit the use of ship's radio equipment. Cables and radiograms should be handed to the company representative for transmittal via shore radio communication system. Caripito has also radio telephone communication with North and South America and Europe. For further information contact Port Services Section in the terminal building, telephone C-335.

BALLAST: Ballast is not required when mooring. Any ballast carried should be in a minimum number of tanks, and all other tanks stripped, so as to minimise deballasting time.

A relatively small amount of salt water remaining in ship's tanks or lines can contaminate crude and cause operating problems for the refiners. It is important therefore to strip tanks and lines as dry as possible.

Vessels provided with completely segregated ballast system are permitted to discharge ballast and load cargo simultaneously. Absolutely oil-free ballast may be discharged overside. Contaminated residues may be pumped ashore, where facilities are available for receiving up to a max. of 20,000 barrels.

A considerable number of vessels are now participating in the programme to eliminate pollution of the seas. Under this programme, vessels may arrive carrying quantities of oil/water emulsion. If it is desired to follow the "load-on-top" procedure in such instances, it is requested that the Marine Representative be informed on arrival.

BERTHING: The Marine Office Building is located on the West bank of the San Juan River upstream from the berths. Representatives of the Marine Department board vessel immediately upon arrival and it is particularly requested that Masters indicate at that time all ship's requirements. Personnel are available for assistance at all hours.

Lagoven maintains a deep water terminal, consisting of 2 ocean tanker berths, Nos. 2 and 3. These are T-type piers with breasting dolphins located approximately 10 ft. off the face of each pier.

All terminal facilities are under the control of Lagoven, S.A. The port is open for navigation during day and night. All ocean tankers are moored at berths No. 2 and 3 on the flood tide only. Vessels may sail from berth No. 3 at any stage of the tide. Sailings from berth No. 2 are restricted to flood tide only when berth No. 3 is occupied.

A vessel entering or leaving port must be assisted by a Docking Master in the general employ of and furnished by Lagoven. The Docking Master will board an inbound vessel at San Juan River Light Beacon No. 29 and relieve the Government Pilot of his duties. A Custom guard will board at the same time and remain with the vessel. The Docking Master will deliver to the Master his loading and docking instructions together with any other information pertinent to the vessel's call. He will also sign the Notice of Readiness if requested. The vessel will proceed to anchor to await flood tide to dock, to await berth, or will swing to the flood tide in the turning basin and proceed directly to the berth depending on circumstances.

LOADING: Loading rates, particularly for low-flash products loaded during the hours of darkness or when topping off cargo tanks, will be reduced by terminal to meet existing conditions.

All loading and discharging will be stopped during passage of an electric storm, and ullage covers must be closed and dogged down. During periods of calms, loading of gasoline or other similar low-flash products may be loaded at reduced rates or loading stopped if the heavy vapours are not being dispersed quickly enough to prevent hazard from accumulated gas pockets. Ship's officers are cautioned to be on their guard during such conditions.

Loading rates will be reduced when topping off, if requested by the ship's officer.

Instructions as to grade or grades of cargo, and the approximate loading rate anticipated, will be given to the Master. Supplementary information including number and size of lines and hoses will be furnished to the Chief Officer before loading commences.

If vessel's loading orders from Owners or charterers do not agree with terminal's orders, either as to grades or quantity, the marine representative should be advised immediately. The terminal is authorised to load 10% more or less than the quantity nominated; if the cargo to be lifted will be more or less than 10% limitation consultation is necessary.

A terminal employee is stationed at each pier during the entire time the ship is discharging ballast, bunkering, or loading cargo. Fifteen minutes "standby" notice should be given to this man prior to completion of ballast, bunkers, or cargo.

MEDICAL: Medical treatment and hospitalisation, if required, is provided at a hospital located in the concession. Several dentists are located in the town of Caripito. Authorisation forms for medical and dental treatment are provided, which require Master's signature. Transportation is available at the Marine Office. Please note that if the patient does not speak Spanish or English, an interpreter should accompany him.

FRESH WATER: Fresh water is available in any quantity. Delivery is made through 2.5 in. national standard fire hose thread hydrants. Ship's personnel must provide hoses and connect up.

FUEL: Bunker "C" fuel oil, marine diesel and intermediate fuels are available. It is the responsibility of ship's engineer to give "standby" notice to the terminal employee and advise him when to shut down.

CONSULS: There are no consular representatives in the area. Vessels bound for U.S.A. or British Caribbean ports will be provided with a letter stating this fact.

CERTIFICATES: All ships calling at a Venezuelan port for the first time must be measured for tonnage by Captain of the Port. It is the usual practice to take ashore the ship's Panama Canal or Suez Canal Certificate, which is used as a basis for recalculating tonnage under the Venezuelan regulations, and is returned before sailing. The Venezuelan Admeasurement Certificate, when later issued is forwarded to the Owners. A fee is charged for this certificate, which is payable only on ship's first call. Vessels registered in following countries are excluded from above regulations: Netherlands, Germany, France, Portugal, United Kingdom, Denmark, Sweden, U.S.A., Ireland and Norway.

CUSTOMS: While the vessel is in port, Venezuelan National Guard officials are assigned on board to ensure compliance with Customs regulations. The law requires that meals be supplied to these officals during regular meal hours. Masters are requested to give them the privilege of eating in the officers' messroom, to avoid difficulties.

Venezuelan laws are strict in regard to contraband and Masters are requested to instruct their crews not to take cigarettes or other articles ashore. Cigarettes in carton lots, cigars, tobacco, souvenirs, gifts (particularly items of women's apparel) should be collected prior to arrival in port, listed with the items in the slop chest and placed in the custody of the Master for deposit in the slop chest or closet which will then be sealed for the duration of the vessel's stay in port.

Firearms on board any merchant vessel calling at Venezuelan ports must not exceed 1 per officer, nor can ammunition exceed 18 cartridges per officer. All firearms and ammunition must be noted on the stores list. Officers must not carry firearms while ship is in Venezuelan waters and these side-arms and ammunition should be collected and held in the Master's safe custody. Crew members should be warned against taking knives or other weapons ashore.

REPAIRS: Only minor repairs of an emergency nature can be made. There are no electronic repair services available in the area.

SHORE LEAVE: Shore leave is permitted and a representative of the Captain of the Port boards on arrival and issues the required number of passes. Shore passes are to be collected prior to sailing, and given to the Docking Master undocking the vessel. Vessels are not permitted to sail until all crew members are on board, unless hospitalised or prior arrangements made for disembarking.

TIME: Local time is GMT minus 4 hours.

GENERAL:

Gangways: Gangways at berths No. 2 and 3 are provided by the terminal.

Plimsoll Marks: The Captain of the Port requires that the Plimsoll Marks of all vessels using the port be clearly visible. Vessels will be checked on completion of loading, and if the Plimsoll Marks are not readily legible, permission to sail may be withheld.

Surveyors: There are no appointed surveyors to the American Bureau of Shipping or Lloyd's in the area. With 48 hours notice, non-exclusive surveyors can be obtained from Caracas, or at times from Puerto La Cruz, or qualified Masters or chief engineers may be available for appointment as surveyors when required.

Bonded Stores: Cigarettes or other stores in bond are not obtainable at Caripito.

Cash Advances: The local currency is the Venezuelan Bolivar and cash advances are made only in this currency. It is requested that any requirement for cash advances be included in the vessel's ETA radio, to permit delivery on board on arrival. Cash returns can be accepted only during the normal working day – 0700 to 1600 hrs. Sundays and holidays excluded.

Provisions and Stores: Provisions and stores in extremely limited varieties and quantities are available at prices considerably higher than in most other ports.

Charts: No supplies of charts or sailing directions are available at Caripito.

Personnel – Seamen Left Ashore: In the case of seamen left ashore for hospitalisation, repatriation or other reason all documents and personal effects are to be delivered to the Marine Office before sailing. A letter is required from the Master advising the maximum advances to be made to the seaman, if any, and instructions concerning his repatriation. All expenses incurred by seamen left ashore, including cost of repatriation, are for ship's account. It is important that Masters bear in mind that the Venezuelan law will at all times hold the vessel, her Master, Agent or owner, responsible for any seamen left behind in Venezuela.

Laundry; Laundry service is available.

Lubricating Oil: Supplies of marine lubricating oils are available from Puerto La Cruz. Quantities required should be included in the ETA cable.

Mail: Any pending ship's mail will be delivered on board by the marine dispatcher on arrival at Caripito. At the same time he will receive any ship's mail to be dispatched. The marine dispatcher will accept personal mail only if it carries the proper amount of Venezuelan postage, or if Master authorises postage by signing 7 copies of the Company Post Transmittal form. Masters interested in knowing the individual postage amounts to be paid by each crew member, should provide a list, in duplicate, of the senders, and number of letters sent by each one identified by a number written on each letter. Copy of this will be returned aboard vessel when leaving this port outward bound. If not ready on time, it will be air-mailed to the vessel's next port of call.

Inspection – Petroleum Products and Crude Oil: Charles Martin & Co. and E. W. Saybolt, petroleum inspectors, are available from Puerto La Cruz if specified.

Visitors: All visitors to ships are prohibited except those company employees, petroleum inspectors, etc., whose duties require their presence aboard.

Passengers: Passengers will not be permitted to disembark unless in possession of the required visa and documents. To facilitate clearance, if passengers are carried, the Master should include advice to this effect in his radio ETA.

Pollution of Harbour and Coastal Waters: The laws of Venezuela are strict in regard to pollution of harbour and coastal waters by oil, and heavy fines are imposed for violations. No dirty ballast, oil or bilge slops are to be pumped or allowed to escape overboard. All overboard discharge valves from cargo tanks and bilges are to be secured before loading or discharging commences. Loading is to be conducted with greatest care and vigilance in order that errors or delays in handling cargo valves may not result in overflows. All deck scuppers should be plugged before loading to avoid harbour contamination should an overflow occur. The authorities require that a written report be submitted by the ship involved in the event of an oil spill.

EL PALITO: 10.29 N. 68.07 W. (See Plan)

OPERATORS: Llanoven, S.A.

LOCATION (of El Palito Terminal): The terminal facilities operated by Llanoven S.A. at the port of Puerto Cabello (Punta Chavez), are situated on the Venezuelan coast, 7 miles West of Puerto Cabello. The terminal has a 2,475 ft. pier, part causeway and part trestle, extending out from Punta Chavez along a shallow reef then angling into water 48 ft. deep. 2 tankers can tie up simultaneously at the berths.

WEATHER: Winds are normally from the N.E. with an average Beaufort scale force of 2-3. Average temperature about 85°. The months of January, February and March have the roughest sea and swell, and vessels may not be able to dock due to the weather.

TIDE: The normal range of the tide is 1 ft.

ESSENTIAL REQUIREMENTS:

1. Incoming vessels must send ETA 72 hours before arrival at El Palito Terminal and another 24 hours before arrival advising any change of ETA.

2 If a vessel originally cleared for another port (including some other Venezuelan port) is diverted at sea to El Palito, certain information must be received prior to arrival, to avoid heavy fine and/or delays.

3 *No Ballast* may be pumped overside in port. Ballast disposal facilities are available at the El Palito Terminal.

4. The use of Venezuelan Government Pilots is compulsory for docking and undocking.

5. The Venezuelan flag should be displayed at the mast-head during daylight hours by vessels anchored and berthed in Venezuelan waters.

6. In addition to other clearance documents, 2 copies of an itemised list of articles in the ship's slop chest must be presented to the authorities on arrival.

7. The emergency fire signal is 5 long blasts on the vessel's whistle or siren. No other signal is to be given in case of emergency.

8. Rat guards must be in place on all mooring lines.

APPROACHES: The terminal pier is marked by the following lights: One occulting red light at the top of No. 1 (N.W.) Hose Rack, 80 ft. above sea level. Latitude 10° 29′ 51″ N., Longitude 68° 07′ 13″ W., and one green light, flashing every 3 seconds at the top of No. 2 (S.E.) Hose Rack, 80 ft. above sea level, located 275 ft. S.E. of No. 1 Hose Rack. A group of 5 crude storage tanks, painted aluminium, visible 20 miles on a clear day, are located 1.25 miles 200° from the head of the pier.

DOCUMENTS:

A. Admeasurement Certificates. All vessels calling at Venezuelan ports for the first time must be measured for tonnage by the Captain of the Port. It is the usual practice to take the Ship's Panama Canal or Suez Canal Certificate, which is used as a basis of recalculating the tonnage under the Venezuelan regulations and is returned before sailing. The Venezuelan Admeasurement Certificate is forwarded to the owners at a later date. A fee is charged for the certificate which is payable only on the vessel's first call. Vessels registered in the following countries are excluded from the above regulations: Denmark, France, Germany, Ireland, Netherlands, Norway, Portugal, Sweden, United Kingdom and U.S.A.

B. Inward clearance is effected on board immediately after docking by Government Port Officials and a representative of the Marine Department. It is necessary that the following documents be ready on arrival:

Clearance from last port (1 copy).
Ballast Manifest from last port (1 copy, visaed according to paragraph *(d)* if there is no Venezuelan Consul).
Crew List (9 copies).
Passenger and Baggage Lists (5 copies, visaed; 2 copies not visaed).
List of Personal Effects (5 copies not visaed).
Store List (3 copies, see paragraph (c)).
List of Slop Chest (3 copies not visaed).
Sailing Permit (issued by maritime authority of last port).

Vessels arriving with cargo to discharge, will also require:

Consular Mail (one sealed envelope from each loading port).
Manifest (Sobordo), 1 original visaed and 2 copies not visaed from each loading port.
Bills of Lading, 1 original and 1 copy visaed, and 4 copies not visaed from each loading port.
Tally books; 6 from each loading port.
Consular invoice: 3 originals visaed and 3 copies not visaed, from each loading port.
Commercial invoices: 3 from each loading port.

C. Store list prepared should indicate separately all deck, engine and cabin stores. The store lists may be prepared on board prior to arrival unless the vessel is coming from the Netherlands Antilles or the Guianas, in which case they must be visaed by the Venezuelan Consul at the port of departure.

D. Cargo and clearance documents should be visaed by the Venezuelan Consul at the last port of call. In the absence of a Venezuelan Consul, they may be visaed by the Consul of a friendly nation, by the Chamber of Commerce or by two reputable merchants, the latters' signature to be notarised. In the absence of a Venezuelan Consul, the following notation should be written on each document in Spanish, and signed by the alternates designated above: "Por no existir en la localidad Agente Consular Venezolano y a peticion de los embarcadores, certifico el presente documento".

(Signature)

Vessels originally cleared for another port, and diverted at sea to El Palito, should radio Llanoven Puerto Cabello the following information as soon as the change of sailing orders are received:

1. Advise diverted.
2. Name and class of vessel.
3. Number of crew.
4. Flag of vessel.
5. Last port of call.
6. Port from which originally cleared.
7. Estimated time of arrival at Pilot station.
8. Type and amount of cargo vessel will load.
9. Time required to discharge ballast.
10. Master's name in full as signature (John Jones, Master).

This information is required in order to make in advance special arrangements for inward clearance to avoid payment of fines.

Outward clearance and cargo documents are delivered on board by the Marine Dispatcher. However, in order to obtain the sailing permit, a special form which is delivered on board on arrival must be completed, not later than 2 hours before sailing time. This form gives cargo and freeboard information required by the Captain of the Port. In addition, one of the 9 copies of the crew list specified above, corrected to show any changes made while in port, should be attached to the form.

PILOTAGE: The Pilot's working hours are from 0600 to 1800 hrs. There are no special charges for their assistance during those hours on workdays. On Sundays and holidays they charge overtime. There is also a charge when ship has anchored in the bay as according to the pilotage law each movement (and entering the bay is one movement) requires a Pilot. By special agreement only Pilot's overtime will be charged for anchorage, as anchorage and docking is considered as one movement with respect to Government Pilotage Fee.

Pilotage is compulsory government service. The government charges the Pilot's assistance according to ship's net tonnage. Vessels under flags of Panama and Liberia are required to have their Venezuelan Tonnage Certificate. The government charges for docking and sailing.

Pilots are employees of the Venezuelan Government and pilotage is compulsory for vessels entering or leaving the harbour. The terminal will arrange for Pilots to board all vessels as necessary. Pilots meet the vessel via launch provided by the terminal. The Pilot may decline to moor the vessel if it is not equipped with satisfactory mooring equipment, lines, gear, etc., or if it is not sufficiently ballasted. It is the responsibility of the Master to notify the Pilot of any special conditions or peculiarities, such as defective navigation equipment, mooring lines, tackle, gear or lack of necessary equipment, which might impose hazards in connection with the handling, mooring, discharging or loading of vessels.

At the berths, vessels must be moored to the entire satisfaction of the Pilot and the terminal operators' Mooring Master.

The Pilot acts in an advisory capacity. The Master retains responsibility for the vessel at all times. In the event it becomes necessary to disregard the Pilot's advice in order to ensure the safety of the vessel, the Master must forward a full written report of the circumstances through the terminal for delivery to the Captain of the Port.

ANCHORAGE: Notice of Readiness can be tendered at anchorage. The suggested anchorage for El Palito Terminal is located 0.5 to 1 mile North or West of the seaward end of the pier. The area to the East of the pier is not recommended as an anchorage.

RESTRICTIONS: None. Vessels enter day or night and at any state of tide.

MAX. SIZE: East berth draft 38 ft. 6 in. West berth draft 40 ft. Length 800 ft.

BALLAST: Due to the exposed location of the oil piers, vessels are required to be ballasted to the following minimum drafts for safe manoeuvring to and from the berths:

Overall Length of Vessel	*Minimum Draft Required*
400–480 ft.	forward 9 ft., aft 17 ft.
481–700 ft.	forward 12 ft., aft 20 ft.
701–800 ft.	forward 14 ft., aft 23 ft.

A total capacity of 220,000 barrel slop pits and a 20 in. ballast line are available to receive all ballast.

Vessels with separate ballast tanks, lines and pumps may discharge ballast overside. Ballast for entering the harbour should be carried in the minimum number of tanks, and all other tanks stripped dry so as to minimise the time required for discharging ballast alonside berths.

All ships in ballast from abroad are charged for Consular Ballast Certificate.

HEALTH: No radio pratique. Health officers board vessel at berth.

RADIO: Puerto Cabello, Venezuela, Coastal Station call sign YVL, makes radio contact with all vessels "CQ" on 8722 kc. at the following hours: 1130, 1330, 1530, 1830, 2130, 0030, 0200 GMT. Also "CQ" on 17.141 kc. at 1630 GMT and "CQ"on 4.322 kc. at 0430 and 0630 GMT.

Vessels originally cleared for another port, and diverted at sea to El Palito, should radio Llanoven Puerto Cabello the following information as soon as the change of sailing orders are received:

Advise diverted.
Name and class of vessel.
Number of crew.
Flag of vessel.
Last port of call.
Port from which originally cleared.
Estimated time of arrival at pilot station.
Type and amount of cargo vessel will load.
Time required to discharge ballast.
Master's name in full as signature (John Jones, Master).

This information is required in order to make in advance special arrangements for inward clearance to avoid payment of fines.

TUGS: Tugs are not available at El Palito.

BERTHING:

1. The use of both anchors is required for docking at both berths. It is considered prudent to have both anchors hove-out prior to entering the harbour in order to facilitate speedy release while mooring. The Pilot will advise whether the vessel is to be moored port or starboard side to the dock.

2. In the event the berth is required by another vessel, a vessel having completed loading may be required to vacate the berth promptly and proceed to anchorage to await cargo documents.

3. East Berth. Approach at very dead slow speed along a line parallel to a line formed by the East and the West berth at a distance from it equal to the distance of the North buoy. Drop the starboard anchor at the point of intersection of the ship's fore with a line formed by the two East shore range markers. Continue along same path at very dead slow speed until reaching with the ship's fore the East berth. Drop the port anchor. Allow the ship to drift into position alongside berth. This will be done by tying mooring lines as required by Pilot and with the help of the ship's engines.

4. West Berth. Approach at very dead slow speed along a line parallel to a line formed by the East and West berths and at a distance from it equal to the distance of the North buoy. Drop the port anchor at the point of intersection of the ship's fore with a line formed by the two West shore range markers. Continue along same path at very dead slow speed until reaching with the ship's fore the West berth. Drop the starboard anchor. Allow the ship to drift into position alongside berth. This will be done by tying mooring lines as required by the Pilot and with the help of the ship's engines.

5. General. Available hose connections, all 8 in., are as follows: 3 for Fuel oil, 1 for diesel products and 1 for leaded or unleaded gasolines. All dirty ballast to be pumped ashore through the fuel oil loading hoses.

LOADING:

1. *Cargo:* On completion of inward clearance, information regarding the number of hoses and loading rate will be given to the Master and Chief Officer. During ballast discharge supplementary information will be gien to the Chief Offier. A 15 minute standby is required prior to finishing any grade.

2. *Contamination of Crude:* It has been established that one of the major causes of contamination of crude oil is the small amount of salt water remaining in the ship's tanks, pumps and ballast lines after discharging ballast. This small amount of salt water frequently results in costly damage and downtime to refining equipment and also presents many other problems. Therefore all tanks and lines must be pumped as dry as possible.

3. *Draining of Hoses:* Hoses are drained by gravity on all products and crude. Ship personnel must co-operate with terminal personnel in this operation to ensure complete draining of hoses into ship tanks and adequate drip cans must be placed to catch the remaining oil in line. Sawdust or equivalent must be on standby to clean up any oil leaks.

4. *Loading Rates:*

Commodity	*Available at berths*	*Size of line (in.)*	*Estimated max. barrels per hour*	*Hoses Pier 1 (in.)*	*Hoses Pier 2 (in.)*
Crude oil	1–2	30	27,000	3–8	2–8
Bunker C	1–2	24	17,500	3–8	2–8
Diesel	1–2	16	9,000	1–8	1–8
Unleaded gasoline	1–2	16	8,000	1–8	1–8
Leaded gasoline	1–2	16	8,000	1–8	1–8
Ship's bunkers	1–2	24/16/8	6,000	1–8	1–4
Lube	2	8		1–8	1–4

Loading rates will be reduced by the terminal when topping off tanks at the vessel's request.

5. *Scuppers:* Loading will not be started till all deck scuppers are properly sealed to the satisfaction of the terminal.

6. *Simultaneous Deballasting and Loading:* Vessels equipped with separate and completely segregated ballast tanks, and lines and pumps never used for oil may be permitted to discharge ballast and load simultaneously providing approval has been obtained from the terminal.

MEDICAL: Medical treatment and hospitalisation, if required, are available at the Seguros Sociales in Puerto Cabello. Several dentists are located in Puerto Cabello. Authorisation for any medical and/or dental treatment must be made by the Master. Transportation is available at the Terminal Office. If the patient does not speak Spanish an interpreter should accompany him.

FRESH WATER: Available.

FUEL: Bunkers are available only for vessels loading cargo. Disputes as to quantity should be registered by signing the bunker receipt under protest and noting the ship's quantities thereon.

CUSTOMS: While the vessel is in port, Venezuelan National Guard officials are assigned on board to ensure compliance with Customs regulations. The law requires that meals be supplied to these officials during regular meal hours.

Venezuelan laws are strict in regard to contraband and Masters are requested to instruct their crews not to take cigarettes or other articles ashore.

Cigarettes in cartons, cigars, tobacco, souvenirs, gifts (particularly items of women's apparel), should be collected prior to arrival in port, listed with the items in the slop chest and placed in the custody of the Master for deposit in the slop chest which will be sealed for the duration of the vessel's stay in port.

CONSULS: French, Norwegian, Danish, Italian and Panama Consulates are represented in Puerto Cabello. There is no American Consulate. It is necessary for Masters of anaanian flag essels to isit the Panamanian Consulate at Puerto Cabello to present documents and receive dispatch as required by law. Regular office hours are from 0800 to 1200 hrs. and from 1400 to 1700 hrs. Mondays through Fridays; any dispatch issued outside of regular office hours is billed at double fees. Terminal Office will arrange transportation to Puerto Cabello upon request.

REPAIRS: Only emergency repairs of a minor nature can be made. Prices are very high.

REPATRIATION: The documents and personal effects of seamen left ashore for hospitalisatin, repatriation or other reason, must be delivered to the Terminal Office before sailing. A letter from the Master is required advising the maximum amount of advances to the seaman and any other instructions concerning his repatriation. All expenses incurred by the seaman, including the cost of repatriation, are for the vessel's account. Venezuelan law at all times holds the Master, Agent or Owner responsible for any seaman left behind in Venezuela.

AIRPORT: Distant about 4 miles.

TIME: Local time is about GMT minus 4 hours.

SHORE LEAVE: Shore leave is permitted and a representative of the Captain of the Port boards on arrival and issues the required number of passes. Shore passes are to be collected prior to sailing and given to the National Guard watchmen on board.

Vessels are not permitted to sail until all crew members are on board, or special permission has been obtained to sail without a crew member.

REGULATIONS:

1. *Engines:* No engine repairs will be made while the ship is in dock. Engines are to be kept at standby at all times while the ship is in port.

2. *Rat-guards:* Vessels must use rat-guards on all mooring lines.

3. *Visitors:* All visitors to vessels are prohibited, without written permission in each case by the Port Captain or his assistant. Mooring Master, petroleum inspectors, dispatchers, and terminal employees handling hoses may board ship in performance of their duties.

4. *Pollution:* The laws of Venezuela are very strict in regard to the pollution of harbour and coastal waters by oil, and heavy fines are imposed for violations. No dirty ballast or oil is to be pumped or allowed to escape over the side. No engine-room or pump-room bilges may be pumped overboard. All pump-room sea suctions and overboard discharge valves must be secured prior to loading or discharging cargo. Loading must be conducted with the utmost care and vigilance so that errors or delays may not result in spills. All deck scuppers must be plugged tight before loading so that in the event of a spill pollution of the harbour may not result.

5. *Garbage;* No garbage is to be thrown over the side while the vessel is in port.

6. *Passengers:* Passengers will not be permitted to disembark unless in possession of the required visa and documents. To

facilitate clearance, if passengers are carried, the Master should include this information in his ETA.

7. *Firearms:* Firearms on board any merchant vessel calling at Venezuelan ports must not exceed one per officer, nor can the ammunition exceed 18 cartridges per officer. All firearms and ammunition must be noted on the store list. Officers must not carry firearms while the vessel is in Venezuelan waters and these sidearms and ammunition should be collected and held in the Master's safe custody.

GENERAL:

1. *Bonded Stores:* No cigarettes or bonded stores are available at El Palito.

2. *Cash Advances:* Cash advances are available in Venezuelan Bolivares only and should be included in the vessel's ETA radio, to permit delivery on board at arrival.

3. *Charts:* No charts or sailing directions are available at El Palito.

4. *U.S.S. Club:* There is no U.S.S. Club available at El Palito nor movie film exchange service.

5. *Inspection Petroleum Products:* Chas. Martin and Company and E. W. Saybolt, petroleum inspectors, are not available at El Palito. However, if specified in sufficient time, they may be obtained from Puerto La Cruz.

6. *Laundry:* Laundry facilities are available at El Palito.

7. *Lubricating Oil:* Certain types of Mobil lube-oils only are available in small quantities. Requirements should be sent by radio with ETA.

8. *Mail:* Mail service posted from El Palito has been found to be fair.

9. *Provisions:* Provisions are available at El Palito.

10. *Radio and Radar:* No repairs made at El Palito.

11. *Gangways:* Gangways are provided by El Palito Terminal.

AGENT: See "Puerto Cabello".

LA GUAIRA: 10.36 N. 66.56 W. (See Plan)

DOCUMENTS:

Sealed envelopes for Customs.
Visaed B/L and Sobordos not in envelopes.
Consular Despatch for all Venezuelan ports.
Despatch from last Venezuelan port, if any, or
Zarpe from last foreign port, if arriving directly from abroad.
Fumigation Certificate.
Vaccination Certificates of Crew.
Landing Cards for Crew and Passengers.
6 Store Lists (with arms and narcotics).
6 Lists of Personal Effects.
10 Crew Lists.
10 Lists of Passengers for La Guaira, or negative Passenger List.
10 Lists of Passengers in Transit.
2 Sets of B/L not visaed.
4 Sobordos not visaed.
14 Tally Books.

PILOTAGE: Compulsory and vessels have to wait for Pilot in the pilotage zone N.W. of the port entrance.

MAX. SIZE:

Berth	*Length* (m.)	*Depth* (ft.)	*Remarks*
1	116	30	
2	158	30	
3	158	30	Grain Berth
3A	158	30	Grain Berth
4	150	13	
5	168	27	
6	168	30	
7	148	30	
8	148	27	
9	130	11	
10	168	27	
11	144	30	
12	144	30	
13	144	30	
14	144	30	
15	168	28	
16	168	28	Passenger Berth
17	144	30	Passenger Berth
18	168	30	Passenger Berth
19	168	28	Passenger Berth
20	160	12	Fishing Berth
21	290	30	Warship Berth

RADIO: In order to enable Agents arrange for quick entry and berthing, Masters should give their ETA message at following intervals, via Curacao Radio (ITT): 72, 48 and 24 hours prior to arrival, indicating in the 48-hour message, the quantity of parcels (or tonnage if bulk cargo) per hatch. This is imperative for applying for the necessary personnel of the National Port Services. Also, draft, passengers, requirements for bunkers, fresh water, provisions, repairs, medical assistance, etc. This telegram the Master to sign with his full name.

TUGS: The use of tugboats within the port is compulsory, both for entering and leaving port, as well as for manoeuvres in the port basin. Ships longer than 139 m. must be assisted by 2 tugboats.

BERTHING: Normally a minimum of 19 ocean-going vessels can berth at a time. Berths No. 1, 2 and 3 are along the breakwater pier East-West, parallel to the coast.

Within the port is a finger pier, parallel to the breakwater pier, with 2 Customs warehouses alongside, with berths North and South, 2 each. The main pier is parallel to the coastline, East-West, with berths Nos. 10, 11, 12, 13, 14 and 15,, along which piers there is ample Customs warehouse space, including outdoor space on the roofs as well as ample uncovered storage area.

The Passenger Terminal is on a finger pier, in direction North-East with its land end in the corner of berth No. 15. There are 2 berths each side, namely Nos. 16 and 17 in the inner basin and Nos. 18 and 19 in the outer basin.

Passenger vessels have priority for berthing and they have to leave port within 24 hours.

LOADING/DISCHARGING: Cargo is discharged into railcars alongside the piers, or directly into the transport means of the Importer and vice versa when loading. The latter, however, applies only for bulk cargo or considerable one-type commodity.

If electric shore cranes are used, the same procedure applies unless the cargo is to be stored outdoors on the roof of the warehouses. Piers Nos. 4 and 9 have no rails alongside, so the cargo is discharged on the pier, wherefrom it is immediately taken away by two-boys, fork-lifts and/or other mechanical equipment supplied by the National Port Services as per kind of cargo. The use of such equipment is included in the handling fee per weight. There are 2 grain towers on berths 3 and 3A leading via conveyor belts to storage silos of 12,000 ton capacity. Average daily discharge rate 2,000 tons approximately.

STEVEDORES: Supplied exclusively by the governmental National Port Services at costs per weight of cargo in accordance with governmental decrees.

The Port Agent applies for the necessary number of gangs per ship. Each gang consists of 11 stevedoremen (estiba) and 11 longshoremen (caleta).

Switching of gangs from one hatch to another is not permitted.

There are no longshoremen costs for cargo handled during straight time, but only for that handled during overtime.

(a) *Straight time*

Monday–Friday	0700–1100 hrs.
	1230–1630 hrs.
Saturday	0700–1200 hrs.

(b) *Overtime*

Monday–Friday 1800–2300 hrs.

(c) *Saturday afternoon* work is not permitted, but if a vessel could terminate operation and sail within a maximum of 3 additional working hours, a special permit would be granted by Customs and Port Authorities. In such a case, the additional working hours are considered as overtime.

(d) *Work on Sunday* is not permitted except for passenger vessels (officially those carrying 60 passengers, but exceptionally vessels with less passengers might occasionally obtain same consideration by authorities).

EQUIPMENT:

(a) *Electric Shore Cranes:* Berths 10 to 15 have 14 electric shore cranes on rails, of 6 tons capacity each. The National Port Services allow 2×6-ton cranes to lift pieces up to 9 tons weight. The arms of the cranes reach the roofing of the warehouses. Use of shore cranes is not compulsory, unless the Technical Board of the National Port Services rules to use them. There are also 13×8-ton mobile cranes. Other piers have no shore cranes.

(b) *Diesel – Driving Rolling Cranes:* There is a considerable number of these cranes which can lift heavy pieces of about 17 tons.

(c) *Floating Cranes:* Not available.

(d) Special lumber carriers of about 20 tons capacity.

(e) Tow trucks, fork-lifts, trucks and trailers up to 10 tons capacity.

OPENING/CLOSING HATCHES: Not performed by the National Port Services but by either the ship's crew, or the assistance labour of the Agent.

FRESH WATER: Available through pipe-line on the pier, day or night, by water trucks of up to 10 tons capacity in day time only.

OFFICIALS: Once the vessel is anchored at La Guaira, Representatives of Customs, Port Captain, National Guard, Health Service, Immigration and Agency board the vessel.

AGENTS: Head Office (Direction and Control), Victor H. Selinger S.A., PO Box 1632, Caracas 101. Cables "Selvic" or "Seltank" Tel. (02) 81.84.89, 81.87.31, 81.85.82, 81.25.28, 81.28.78, 81.86.38. Local Office: PO Box 28, La Guaira. Tel. (031) 23735 or (031) 27042. Cables: "Selvic La Guaira" or "Seltank La Guaira".

MARACAIBO LAKE (See Plan)

Including,	Section A	– BAJO GRANDE
	Section B	– LA ESTACADA
	Section C	– LA SALINA
	Section D	– MARACAIBO
	Section E	– EL TABLAZO AND PUERTO MIRANDA
	Section F	– PUNTA DE PALMAS
	Section G	– SAN LORENZO

(N.B. Certain information common to all Vessels entering Maracaibo Lake is given below. For specific details of ports/terminals within the Lake, see relative Section as indicated above).

FLAG: Local authorities require that the Venezuelan ensign be flown at vessel's masthead, from the time of entering the outer channel until clear of the outer channel outbound.

DOCUMENTS: *(a) Inward Clearance for Scheduled Vessels:* Vessels arriving in ballast or with cargo in transit require following documents:

1 copy Sailing Permit from Last Port.
2 copies – 1 visaed Ballast Certificate.
1 or more letters Consular Mail (in sealed envelope).
4 copies – 2 visaed Passenger Lists.
4 copies – 2 visaed Baggage Lists.
4 copies – 2 visaed List of Passengers in Transit.
4 copies List of Slop Chest.
4 copies List of Personal Effects.
4 copies – 2 visaed Store Lists.
5 copies Crew Lists.

Vessels arriving with cargo should have, in addition to the foregoing:

4 copies – 2 visaed Sobordos (Venezuelan Inward Manifests).
6 copies – 2 visaed Bill of Lading.
2 copies visaed Inward Manifests.

In absence of a Venezuelan Consul at the last port, clearance documents should be signed by consul of a friendly nation, one of the Port Authorities, Notary Public, the Chamber of Commerce or by two well-known firms.

(b) Inward Clearance for Diverted Vessels: Vessels diverted to Maracaibo Lake Ports to load cargo, should submit all documents indicated in 1 through 10 above, except consular mail, which they will not have.

Vessels diverted at sea to Maracaibo Lake Ports which do not have a Venezuelan clearance on board, must advise loading port via radio to arrival, the name of vessel, Master's name, vessel's flag, Venezuelan net tonnage (if available, if not, the registered net tonnage), last port of call, destination port for which originally cleared, ETA San Carlos Pilot station and grade and quantity of cargo to be lifted. This information is required in order that Inward Clearance may be arranged with government officials in ample time prior to vessel's arrival. Also 3 copies of the diversion telegram received by vessel and signed by Master, together with copies of those documents listed under *(a)* should be presented to the Port Authorities upon arrival at Maracaibo. In the absence of this information, or of presentation of each of these documents to the Port Authorities the vessel will be subject to a fine. Please note, that the documents covered under *(a)* have to be presented upon arrival, regardless, if the vessel is not arriving with consular clearance or arriving after being diverted at sea.

(c) In Maracaibo 2 clearances from Custom's authorities are needed: One for proceeding from Maracaibo to loading berth, and another after loading for proceeding from Maracaibo to destination. For this reason Custom Dispatch charges may be incurred twice.

(d) American Crew List. All non-American vessels loading for a U.S.A. port should have the American Crew List ready on arrival in Maracaibo to be visaed by the American Consulate in Maracaibo and placed aboard ship before departure. The crew list should be prepared on Immigration and Naturalization Service form No. I.–418 (Crew List Manifest) and should contain 2 sections:

Section 1 should list those crew members who are American or who possess individual visa documentation to the United States.

Section 2 should list, in the alphabetical order of their last names, those alien crew men who lack United States visa documentation and therefore require inclusion in the visa of the crew list.

Only one name may be placed on each line of the crew list. Two names should not be placed in the space of one line, nor should a full line between two names be left vacant. All copies of the crew list presented must be legible. Occasionally the names of the crew men included on the carbon copies of some crew lists presented at the consulate are blurred beyond recognition.

The information requested under columns 1, 2 and 3 should be filled in completely. Column 1 should always contain the complete first name and middle initial of the crew man. Column 2 should show the nationality of each crew member and the number of his travel Document. Column 3 should always include the name of the port where the crew man was shipped, not simply the country.

At the time of vessel's first application for a crew list, the crew list must be presented in four copies: Original and 1 copy should contain only information requested under Columns 1, 2 and 3. 2 copies must include following information of those crew men to be included on crew list visa. Column 4 should list date, city and country of each crew man's birth. Column 5 should show place of issuance of seaman's travel document and name of Government which issued travel document. (It is not necessary to list date of issuance of travel document).

Below is a sample line correctly entered on the Master crew list.

(1)	(2)	(3)	(4)	(5)
Bello, Tomas E.	Z.23455 Venezuelan	Maracaibo Venezuela	December 8, 33 Caracas, Venez.	Cabimas, Venez

Upon subsequent crew list applications by same vessel within same year, the crew list need be presented in duplicate only, and the information in Columns 4 and 5 need be provided only concerning any new crew members who require visa documentation. When twelve months have elapsed since presentation of Original crew list, a crew list should again be prepared in 4 copies and should contain all the information required in columns 1–5. Such a master crew list is required after each 12 months period.

APPROACHES: The Channels leading to the Lake of Maracaibo are called the Outer channel, the Inner Channel and the Lake Channel. The controlling depths of the Outer Channel, Inner Channel and the channel Southward to buoys M1 and M2 are normally 45 ft. At certain times the controlling depth may be less. At such times suitable notices are published advising mariners of these temporary reductions of controlling depth.

Outer Channel. The Outer Channel starts at the E.M. Buoy in position 11° 13′ 47″ North and 71° 33′ 31″ West. The light characteristics of E.M. Buoy are: flashing white every 5 seconds, visibility approximately 5 miles. The distance from E.M. buoy to the Southern end of the outer Channel, marked by buoys B–27 and B–28, is approximately 15.75 miles. The channel is 1,000 ft. wide and has a normal controlling depth of 42 ft. minimum monthly observed lowest water (MMOLW) with tidal range varying about 2 ft. 3 in. This depth is maintained by periodical dredging. Tankers are required to have a keel clearance of at least 2 ft. and dry-cargo vessels a keel clearance of at least 3 ft. Vessels navigating the channel at the maximum allowable draft are confined from 2 hours before to 2 hours after high water. There are no turns in the channel and the course is 189°.

There is a breakwater 0.5 mile East of, and parallel to, the Outer Channel and extending 1.6 miles Northward from the North side of Zapara Island. The end of this breakwater is marked with a skeleton steel tower with a light 27 ft. above sea-level. Light characteristics – flashing white light every 8 seconds; visibility about 3 miles.

On Zapara Island there is a skeleton iron tower with a height of 136 ft. above sea-level.

Cross currents are sometimes encountered near Zapara, San Carlos and Pescadero Islands, especially at low water when the cross currents are strong. Overtaking at these points should be avoided.

There is one anchorage zone in the Outer Channel which is a trapezoid on the port side when navigating inbound near the Buoys B–14, B–15, B–16 and B–18. All buoys in the Outer Channel are equipped with radar reflectors.

Caution: Masters are warned to keep adequate speed in the Outer Channel even when embarking the Pilot as strong cross currents are encountered near San Carlos and Zapara Island. Pilot boats are fast and fitted with a flying bridge.

Inner Channel. The Inner Channel continues on the same course as the Outer Channel for about 10 miles, whereafter the direction changes to 150°. Entire length of the Inner Channel is about 12 miles.

The beginning of the Inner Dredged Channel is marked by buoys B–29 and B–30. Channel is marked by beacons, and terminates at beacons T–55 and T–56. The channel is 800 ft. wide and the normal controlling depth is 43 ft. MMOLW with tidal range varying from 1.5 ft. to 2.5 ft.

The channel from beacons T–56 to Maracaibo Harbour is a dredged channel, the end of which is marked by buoys Nos. B–73 and B–74.

About 0.2 mile South of buoys B–29 and B–30, there are located 2 towers – 1 on each side of the channel, and about 1 mile further South are 2 more towers. These 4 towers are marked E–31 and E–32 (North) and E–33 and E–34 (South). Towers No. E–31 and E–32 are of single steel pipe construction on a concrete pile base. Towers No. E–33 and E–34 are of skeleton steel construction (former oil-well derricks) each mounted on 4 concrete piles. The characteristics of these towers are:

	Height above water (LWS)	
Tower No.	*Light*	*Light*
E–31	43′	Green – Fl.
E–32	43′	Red – Fl.
E–33	123′	Green – Fl.
E–34	128′	Red – Fl.

Vessels are not allowed to overtake each other in the Inner Channel between buoys B–29 and B–30 and light beacons T–25 and T–26. Vessels may overtake each other in the Inner Channel between light beacons T–39 and T–40 after having exchanged prescribed signals with the vessels to be passed. This manoeuvre is, of course, allowed only if conditions are favourable and no vessel navigating in the opposite direction is in sight.

Lake Channel. The channel starting at light beacons T–39 and T–40 and leading to Maracaibo Roads is called the Lake Channel. This is a natural channel 3,000 ft. wide and 11 miles long.

The Main Channel through Maracaibo Lake is approximately 83 miles long, not less than 244 m. wide and with a greater depth than the outer channels.

The access channels to the various ports and terminals branch off from the main channel as described under Section for each port.

CHANNEL NAVIGATION:

(a) Inbound vessels leave to starboard side the buoys and beacons marked with even numbers and to port side the buoys and beacons marked with odd numbers.

(b) Outbound vessels shall leave to port side the buoys and beacons marked with even numbers and to starboard side the buoys and beacons marked with odd numbers.

(c) Vessels should pass as close as possible to the channel's edge on starboard side. Loaded vessels have preference.

(d) Approaching vessels are to reduce speed in order to minimise the suction force of the displacing waters.

(e) Vessels must maintain a distance of 5 ship's lengths by day and 8 ship's lengths by night from other vessels navigating in the same direction.

(f) No vessel should start to manoeuvre to overtake another vessel before having received clearly the affirmative signal from the ship to be passed.

(g) A grounded vessel is not allowed to start any manoeuvre when another vessel is passing.

(h) Dredgers are frequently at work in the channels and caution should be exercised in passing them. Signals used by the dredgers are as follows:

Daytime

Black cylinder hoisted on side of yardarm: You can overtake me on the side on which the cylinder is shown.

Two black balls over the bridge: The channel is blocked.

Night

Green light on side of yardarm (a white light on mast-head helps to show on which side the green light is placed): You can overtake me on the side on which the green light is shown.

2 red lights over the bridge: The channel is blocked.

The tidal range is 4 ft. at neaps.

(i) Maximum speed for vessels navigating in lake channels has been limited to 10 knots. Masters should exercise the utmost care in complying with this regulation as heavy fines may be imposed to offending vessels.

PILOTAGE: (N.B. Maracaibo Pilotage Regulations require that inbound tankers, in ballast, while crossing the Bar, shall not have greater than 8 ft. difference between fore and aft draft. The Government Pilot will not take the vessel if this requirement is not met, unless he is satisfied that the actual draft of the vessel will permit safe navigation through the Outer and Inner Channels.

Every Master of a vessel navigating in Lake Maracaibo who desires to enter the main ship channel in Pilotage Zones No. 1 or No. 2 must first ensure that said Channel is free of traffic.

The limits of the Main Ship Channel in Pilotage Zone No. 1 are from buoys B1/B2 located at the entrance to the Outer Bar Channel and buoys B73/B74, of the city of Maracaibo. Pilotage Zone No. 2 begins approximately 1 mile below Maracaibo and extends Southward to lightfloats M36/M37. All other channels are considered as access channels to their respective port zones and subject to special local rules. Every vessel navigating to or from any port in Lake Maracaibo must follow the prescribed routes through the main and access channels leading to or from such ports, (unless special permission has been granted to do otherwise).

(a) Pilots are employees of the Venezuelan Government and act in an advisory capacity; the Master retains responsibility for the ship at all times. In the event it becomes necessary to disregard the Pilot's instructions in order to ensure the safety of the ship, the Master must prepare a full written report of the circumstances, for delivery to the Captain of the port.

(b) Inbound vessels have the option at present to embark government Pilot at the following areas:

(i) In the channel off San Carlos Pilot Station between buoys B-24 and B-26.

(ii) Anchorage area approximately 5.5 miles N.E. of Pilot station, San Carlos Island. Position N. 11° 04′ 22″, W. 71° 33′ 48″ East of buoy B-17. This area is demarcated with green light buoy equipment with radar reflector.

(iii) At the E.M. Buoy.

(c) The Port Captaincy of Maracaibo is unable to guarantee embarking or disembarking Pilots at the E.M. buoy or at anchorage area position. For this reason Masters should communicate with San Carlos Pilot station for necessary instructions as to where to pick up Pilot, who usually embarks between buoys B-24 and B-26. The communication system between San Carlos Pilot station and vessels will be by Morse lamp and radio-telephone. The stand-by frequency at San Carlos is 2182 kc/s. Other existing frequencies are 2120 and 2080 kc/s.; 156.6 and 156.8 mc/s. Each Pilot launch has a radio-telephone with 2182 kc/s. frequency. The launch that leaves San Carlos Pilot station with Pilot for ship, takes approximately 20 to 30 minutes to cover distance, and distance between Buoys and San Carlos is approximately 6 miles or 10 kms.

(d) Pilot Permit to navigate the Outer Channel without aid of a government Pilot will be granted to those Masters who desire to obtain same. In order to fill the application required, a blank sealed paper and 3 copies should be signed by Master on arrival. Copy of this solicitude duly endorsed by port Captain of Maracaibo, will serve the Master as temporary permit until the official one has been received. Masters in possession of permits to cross the Outer Channel without a Pilot, have the option to enter channel either at the E.M. buoy or between any other buoy, taking into consideration the heavy traffic of the channel. Government pilotage through the inner channel is compulsory at all times.

(e) Outbound vessels will receive Pilot in Maracaibo, who will Pilot vessel up to San Carlos area approximately between Towers E-31 and E-33, where he will disembark. The Port Captain of Maracaibo has instructed that all Captains should always in ample time identify themselves with the San Carlos Pilot station by radio-telephone regardless of time of day. While inbound – between buoys B-17 and B-19 and sailing outbound – between markers T-42 and T-40. These instructions are obligatory and are required in order for the Pilot service to be aware, at any moment, of any emergencies which may arise, and also to avoid, especially during the night, the launch departing with an official Pilot aboard believing that the ship in sight needs his services, in which case, even though the launch or Pilot services are not rendered, the same will be charged to the company owning the ship, or its representative.

TONNAGE: Venezuelan Port Authorities base part of their pilotage charges on the size of the vessel, i.e.:

(a) On Registered Net Tonnage. Venezuela will accept the tonnage of ships registered in countries with which they have a reciprocal tonnage agreement. As of this date, such countries are:

Norway
England
France
Sweden
Ireland
Germany
U.S.A.
Denmark
Holland
Portugal

(b) On Venezuelan Nett Tonnage. Ships not registered in countries listed above, when calling at Venezuelan ports for the first time, must be measured for Venezuelan tonnage by the Captain of the Port. It is the usual practice to take ashore the ship's Panama Canal or Suez Canal Certificate, which is used as a basis for recalculating tonnage under the Venezuelan regulations, and return it before sailing. The Venezuelan admeasurement certificate, when later issued, is forwarded to the Owners. A fee is charged for this certificate, which is payable only on the ship's first call.

(c) In practice, the procedure for stating the tonnage of all ships entering the Lake of Maracaibo is as follows: The inward Pilot boarding the ship presents Master a form on which among others the Master should fill in the tonnage of ship. Pilotage charges are based on this tonnage given by the Master. Master's attention is drawn to the fact that the Venezuelan nett tonnage is usually higher than the International nett tonnage. Care should be taken if an old Venezuelan nett tonnage certificate is on board, because the country in which the ship is registered might later have signed the reciprocal tonnage agreement with Venezuela. If the pilotage charges are made on basis of a higher tonnage than the one that should be applied, it is later very difficult, if not impossible, to get a refund.

CUSTOMS: *(a) Customs Watch.* While vessel is in port, Venezuelan National Guard Officials are assigned on board to ensure compliance with customs regulations. The Law requires meals be supplied to these officials during regular meal hours. Masters are requested to give them the privilege of eating in officers' messroom, to avoid difficulties.

(b) Firearms and Ammunition. Firearms must not exceed one per officer nor may the ammunition exceed 18 cartridges per officer. All firearms and ammunition must be carefully declared on Store List and should be collected and held in Master's safe custody while vessel is in Venezuelan waters.

(c) Contraband. Strict compliance with the customs law of the country is enforced by the authorities, and Masters are strongly advised to caution crew members against attempting to smuggle cigarettes. 1 open package per person is allowed to be carried ashore, but greater quantity will result in fine and imprisonment of the offender as well as lost ship's time. Due to very strict enforcement of the customs regulations, it is recommended that no goods be carried which are not shown on Store List. Any new articles (clothes, shoes, etc.) should be included in Store List and marked as personal belongings. If during a check-up by Customs, articles considered as contraband are found, this will not only mean confiscation of these articles, but also hours or days of lost ship's time, while the case is handled at court.

CONSULS: The following nations maintain consular representative in Maracaibo:

Belgium
Chile
Colombia
Costa Rica
Denmark
Ecuador
El Salvador
France
Germany (West)
Great Britain
Guatemala
Italy
Netherlands
Norway
Nicaragua
Panama
Peru
Portugal
Spain
Sweden
Switzerland
United States of America

TIME: Local time is GMT minus 4 hours.

VISITORS: All visitors to ships are prohibited except those company employees, petroleum inspectors, etc., whose duties require their presence aboard.

PASSENGERS: Passengers will not be permitted to disembark unless in possession of the required visa and documents. To facilitate clearance, if passengers are carried, the Master should include advice to this effect in his radio ETA.

POLLUTION: The Laws of Venezuela are very strict in regard to the pollution of harbour and coastal waters by oil, and heavy fines are imposed for violations. No dirty ballast, oil or bilge slops are to be pumped or allowed to escape overboard. All overboard discharge valves from cargo tanks and bilges are to be secured before loading or discharging commences. Loading is to be conducted with greatest care and vigilance in order that errors or delays in handling cargo valves may not result in overflows. All deck scuppers should be plugged before loading to avoid harbour contamination should an overflow occur. The Authorities require a written report to be submitted by the ship involved in the event of an oil spill.

SEAMAN LEFT BEHIND: Sailing may be withheld until all crew members are aboard with exception of those ashore for justified reasons. It is important that Masters bear in mind that the Venezuelan Law will at all times hold the vessel's Master, Agent, or Owner responsible for any seamen left behind in Venezuela.

BAJO GRANDE: 10.29 N. 71.38 W. (See Plan)

(1) OPERATOR: Boscanven, S.A. Oil Terminal. 10.29 N. 71.38 W.

(2) OPERATOR: Palmaven, S.A. Natural gas liquids processing facilities. 10.30 N. 71.36 W.

(N.B. For important details of Documentation, Pilotage, etc., see "Maracaibo Lake").

(1) **OPERATORS:** Boscanven, S.A.

CHANNEL: Entrance and leaving this terminal is made between buoys B.85 and B.86.

DOCUMENTS: Cargo Documents and Outward Clearance.

Captain's copy of Bill of Lading – Bill of Lading form used is usual Warshipoilvoy form. Masters wishing to use another form should furnish twenty blanks on arrival in Maracaibo.

A pencil copy of the Certificate of Quantity and Quality.

Customs Clearance – Duplicate of "Conocimiento de Embarque".

Duplicate of "Manifiesto de Carga".

(Both stamped and signed by Customs).

Communication – A letter from Maracaibo Customs Authorities to Customs Authorities in Port of Destination.

Zarpe – Permission to sail signed by Maracaibo Port Captain. This is brought on board in Maracaibo by outbound Pilot.

PILOTAGE: Mooring Master will assist in docking. It should be borne in mind that Docking Master acts as adviser only. The Master retains full responsibility at all times. Any damage incurred to vessel or loading platform which may be deemed to have been caused by Mooring Master or Docking Master's fault or negligence, may be held against the ship.

MAX. SIZE: *No. 1 berth.* Vessels up to 55,000 d.w.t. tons acceptable, with max. draft of 40 ft.

No. 2 berth. Tankers at this berth should not exceed 36,000 tons d.w.t. or displacement on berthing of 20,000 tons, max. draft 34 ft. 6 in.

Min. drafts for berthing: 12 ft. forward and 18 ft. aft. Vessels over 18,000 d.w.t. should have deeper drafts.

RADIO: Information to be cabled to Boscanven 3 days prior arrival.

(a) Cable Address is: Boscanven Maracaibo. Please send through PJC (Curacaoradio) and AAC (All America Cables). Boscanven offices in Bajo Grande have direct teletype communication with the offices of All America Cables in Maracaibo, and Boscanven also receive cables over the telephone from AAC until 2100 hrs.

(b) Flag. If vessel has loaded in Bajo Grande before the nationality of the vessel need not be cabled.

(c) Sailing port, and at which other port vessel will call in this area. For clearing vessel in and out in Maracaibo, Boscanven must know beforehand from where ship comes and which other port it will call in this area. Therefore, it is of importance to inform Boscanven whether vessel will load part cargo or bunker, at which terminal, and whether inbound or outbound.

(d) Port for which vessel is cleared. In case vessel was diverted en route and consequently is not cleared for Maracaibo or one of the terminals in Lake of Maracaibo, Boscanven must obtain from authorities special permit for vessel to enter Lake of Maracaibo.

(e) Ballast Certificate. If vessel arrives in ballast a Ballast Certificate is mandatory. A fine against vessel will be issued by Port Authorities if vessel does not have this certificate.

(f) Estimated Time of Arrival. Cable ETA San Carlos pilot station Buoys 25–27, 72 and 48 hours prior to arrival there, or, if vessel is taking part cargo or bunkering inbound, cable ETA bunker or first loading port. Please use local time if possible (four hours slow of GMT).

(g) Net Tonnage. If vessel has not loaded in Bajo Grande before, also cable net tonnage. To determine whether international or Venezuelan net tonnage should be mentioned, see "Maracaibo Lake".

(h) Master's full name. Please sign first message with Master's first name and surname.

(i) Changed ETA. An additional cable should be sent about 48 hours and 24 hours prior to arrival at pilot station buoys 25–27 if ETA is changed.

TUGS: The Venezuelan Government has ruled mandatory the use of 2 tugs for docking and undocking and also to have stand-by tugs during loading operations.

BERTHING: Loading Pier in position 10° 50″ N. and 71° 36′ 8″ W. or about 8 miles or 12.8 kms. South of Maracaibo on Western shore of lake and about 9,000 ft. offshore with its centreline North–South. 2 vessels can berth simultaneously, 1 outside at berth No. 1 and inside at berth No. 2. Bajo Grande Pier heads are 700 ft. apart. However, longer ships have been tied up. Design of fenders permits berthing of vessels with a displacement of 42,000 tons.

NOTICE OF READINESS: Masters are free to tender their ships as being ready to load at any place and time which, in their opinion, conforms with the terms of the charter party. Boscanven's personnel authorised to countersign notice of readiness have been instructed to indicate the time vessel was all fast or, if vessel anchored to wait for berth, the time vessel anchored. This does not imperil in any way the rights of the shipowner in his negotiations with the charterer and it limits Boscanven's liability to the consignee.

BALLAST: Shore deballasting facilities are available at Bajo Grande. Deballasting facilities at Bajo Grande are subject to no special regulations and procedures. Tanker ballast water is pumped through 2×8-in. hose connections into a 24-in. line of about 9,000 ft. in length to a 120,000 bbls. receiving basin situated on shore. Contamination of Lake Maracaibo waters with only material of any nature is strictly prohibited by Venezuelan Laws. Boscanven is required to report to the authorities any such contamination by vessels docked at Bajo Grande. Heavy fines are then assessed against the ships. Co-operation is requested to prevent contamination from tank overflows, bilge oil, line leaks or any other source.

TANK CLEANING: (Before Loading). Precautions as are common for any heavy oil should be taken to insure that no ballast was left in any tank. If the cargo is contaminated with water, the water will not separate from the oil. The salt content of the oil will be raised approximately ten pounds per one thousand barrels for every 0.10% contamination by sea water. All cargo compartments must be stripped extemely dry. Cargo pipe-lines should be drained and/or purged of water. On standard T–2 type vessels, this can be done by draining the fore and aft main cargo lines, both suction and discharge sides, into the pump room bilges followed by opening of main suction valves on each individual compartment, thereby releasing water retained in dead and transverse lines. After this procedure is completed, each compartment should be restripped with stripping pumps and lines, followed by draining the stripping line to pump-room bilges. On other ships equipped with looped systems, it is possible to blow the system with air and drain water into the bilges. In other situations, fresh water might be used to flush cargo systems of salt water and in turn strip salt water and fresh water as outlined for T–2 vessels. All deck scuppers should be securely plugged and all precautions should be taken to avoid pollution of lake waters.

LOADING:

Product	*API Gravity*	*Loading Temperature °F*	*Loading Lines used*	*Loading Rate B/H*
Boscan Crude	10.3–10.4	160	2×18″	12,000
Boscan Crude Blends	18.2–31.0	120	"	"
Topped Boscan Crude	10.0	160	"	"
Topped Boscan Crude Asph Grade	8.0–11.0	160	"	"
Cutback Asphalt	11.0–15.0	170	2×12″	4,000
Asphalt Cement	5.0–8.0	300	1×14″	"
Gas-oil	35.0–42.5	90	1×12″	5,000/7,000
Fuel Oil No. 6 (Bunker "C")	16.0–17.0	140	1×12″ 1×18″	3,000 14,000
Heavy Naphtha (HSR)	52.5–53.5	80	1×12″	5,000/7,000
Light Naphtha (LSR)	70.0–73.0	"	1×12″	5,000/7,000
JP–4	45.0–52.0	"	1×12″	5,000/7,000

(a) Inspection of Tanks. Before loading can commence, tanks and loading system must be inspected and passed. This is usually done by Boscanven's own cargo inspector, but, if consignee so requests, third party inspection can be arranged. Both Chas. Martin and E. W. Saybolt & Company are represented in Maracaibo.

(b) Line Displacement. When a vessel is loading crude and products, it is usually necessary to displace lines once or twice during loading. Masters will be advised of necessary line displacements before loading starts and are requested to take note because notice has to be given by vessel when pumping should be stopped and tank changed. Once shore tanks have been changed it will not be possible to change the quantity of the product already in the ship, as shore lines will then contain a product different from the one already loaded. Ship's gauges and/or draft should be carefully checked when calculating required quantities.

(c) Spillage. In case spillage occurs, the port supervisor must be advised immediately, as any spillage must be reported to the Authorities without delay.

(d) After Loading. All butterworth plates, tank tops and ullage plugs should be inspected to insure against entry of salt water. Inspection of ullage plugs should follow on completion of temperature readings because of the necessity of taking temperatures en route. Sea suction valves should be secured by positive means until all cargo has been discharged. This may be accomplished by numbered seals, chains and padlocks. The method of securing should be noted on the inspection documents. Regardless of which method is used, appropriate log entries should be made indicating the date, time and method used and under whose supervision, both vessel officer and/or cargo inspector, such method was applied. About 1 hour is required for preparation of documents.

BUNKERING:

(a) In order to serve customers without inconvenience or delay nominations should be placed as much in advance of the delivery date as possible.

(b) Bunker Facilities. Bunkers available ex pipe-line for vessels loading and unloading cargo at berths No. 1 and No. 2. Bunkering rate up to 10,000 barrels per hour for Bunker Fuel and Intermediate Bunker Fuel, up to 6,200 barrels per hour for Marine Diesel.

(c) Marine Fuels and Lubricants available: Bunker Fuel, Intermediate bunker fuels, Marine diesel, Lubricants – Full line of Marine Lubricants subject to 7 days' advance notice.

(d) Lighterage. Bunker fuel, Intermediate bunker fuels and Marine diesel available for ships in the Maracaibo area. 72 hours advance notice is required for barge deliveries of all products.

FRESH WATER: Delivery of boiler and potable water is made by barge. Min. quantity 80 tons. The barge holds about 160 tons and the pumping rate is about 25 t.p.h. Requirements should be cabled in advance.

REPAIRS: No major repair facilities are available in Maracaibo but small jobs can be taken care of by local machine and electric shops. Shore labour can be furnished if required. Technicians are available for minor radio repairs. Nearest dry docks are at Curacao for vessels up to 18,000 d.w.t. and at Puerto Cabello for vessels up to 30,000 d.w.t. There is a submarine 2400 volt power line to the pier. Electric power can be supplied.

SHORE LEAVE: Shore Leave is permitted at the discretion of the port authorities: required number of shore passes will be brought on board on arrival in Maracaibo and have to be returned to the customs guard again before the vessel leaves Bajo Grande. Shorts may not be worn ashore.

GENERAL: *(a) Visitors:* According to port regulations concerning access to ships and loading terminals and in the interest of industrial safety, only persons directly concerned with loading operations will be permitted to board vessel or visit the loading platform at Bajo Grande.

(b) Guards. 2 customs guards are stationed on the platform at Bajo Grande. They must be provided with sleeping quarters on the ship and seated in the officers' mess for their meals. Non-compliance may cause cargo stoppage and fines. The customs guard will request Master to countersign his time on board the vessel. This is counted from time first hose was connected until all hoses were disconnected, regardless of whether vessel was receiving cargo or not.

(c) Plimsoll Marks. Port Captain requires that Plimsoll marks be readily visible. If they are not clearly legible, permission to sail may be withheld.

(d) Marine Stores/Charts. Marine stores are available in limited supply. Marine charts are not available.

(e) Compass Adjusters. There are no compass adjusters in Maracaibo.

(f) Classification. American Bureau of Shipping and Lloyd's Register have Agents in Maracaibo.

(g) Cash Advance. Cash advances are made only in local currency (Bolivares). In order that money be available on arrival, Masters are requested to include the amount required in the arrival message.

(h) Launch Service. The launch is primarily for the use of the port staff, but will transport crew when convenient.

(i) Taxi. Taxi service is generally available at Bajo Grande. It is recommended that the price be fixed in advance.

(j) Crew in Transit. In case a crew member is left ashore for a justified cause, as hospitalisation, repatriation, etc., his documents and personal effects are to be delivered to the port supervisor at Bajo Grande before sailing. A letter is required from the Master with detailed instructions as to maximum cash advance etc. All expenses incurred by such members are for vessel's account.

(k) Gangways. The ship is to supply a safe gangway, which allows easy access to the vessel. Boscanven has a gangway which may be used on request with the understanding that any damage to the gangway or ship or shore personnel through its use may be held against the ship.

SAFETY: Vessel must be in readiness to move at all times. The attention of Masters of turbine steamers is called to this regulation.

Ship's fire-fighting equipment must be ready for instant use while vessel is alongside. Shore personnel will render assistance in an emergency but, since no fire-boats are stationed in the immediate area, vessels should be prepared to combat fire without outside assistance. It is necessary to obtain docking Master's approval for repairs of propelling machinery. Normal safety precautions apply, no smoking is permitted on the pier. No hotwork is permitted on vessels alongside without a written permission from the Port Supervisor. Swimming alongside pier is dangerous and absolutely prohibited.

CARGO TEMPERATURE: On short voyages, as for instance to the U.S.A., it was proved most practical to maintain the loading temperature. On longer voyages, as for instance to Europe, the temperature may be dropped to 130°F, which does no harm as long as sufficient time is given to bring the temperature up again to that required for discharging. Masters should, however, not expect a temperature rise of more than 5°F per day, especially if the sea temperature is low. The heat transfer properties of Boscan Crude are very poor as are those of the heavy products made from this crude. Many ships have been delayed at the discharging port due to too low cargo temperature. Without exception, Boscan Crude, Topped Boscan and cutback asphalts should have at least 160°F on arrival in discharge port.

DISCHARGE: Boscan Crude has a flash point of 90–160°F and a max. viscosity of 1400 SSF at 140°F. The viscosity at other temperatures follows the pattern of other petroleum products. Boscan Crude has been successfully handled in ships fitted with both reciprocating and centrifugal type pumps with forward and after pump rooms respectively. It is generally found that this crude can best be handled at a temperature which brings its viscosity to about 600 SSF 160°F. Vessels with forward pumproom should control stern trim so that it does not exceed about 4 feet while stripping the after tanks. Also a 5° list is very helpful when stripping. Once the cargo gets below heating coils, tanks must be pumped empty as fast as possible. At times it has been found helpful to gather tanks strippings into a single tank for discharge ashore, as it is very difficult to strip against heavy back pressures. Watch reciprocating pumps for vapour-lock. Because of high viscosity, proper care should be taken that no oil is left in vessel discharge lines at low temperature.

TANK CLEANING: (After Discharge). Many Masters have expressed concern over tank cleaning after discharge. Assuming that ship proceeds to sea for this operation and has sufficient time for proper execution, vessel may be cleaned quite thoroughly using the butterworth system. However, it is of vital importance that the system be used at maximum pressure, and temperature not below 160 PSI and 170°F respectively. At these readings and with 2 machines, it has been found that about 4 hours are required for each tank. It is important to keep the tanks well stripped during the butterworthing.

Some Masters prefer to steam out the tanks before butterworthing. If this course is adopted care should be taken that the steaming does not last more than 1 hour as the heat will drive off the light ends of the oil and leave a rubbery residue that is very difficult to remove.

It has been found helpful to keep the machines in low position for about 1 hour and then high – middle and low in order, in the usual manner.

(2) **OPERATORS:** Palmaven, S.A. Location: S.W. of Channel buoys B–87 and B–88.

PILOTAGE: A government Pilot will assist each vessel from Maracaibo to Bajo Grande and on the outbound trip to Maracaibo. The government Pilot will also assist in the berthing and unberthing operations. The ship's Agent will inform the Master of each vessel, as well as the government Pilot, the schedule for berthing the vessel.

The Plant Mooring Master will board each vessel prior to approaching the dock. Mooring Master will assist in the mooring and unmooring operations. It should be understood that the Mooring Master acts only in an advisory capacity to the Master. The vessel's Master retains full responsibility at all times. The Plant assumes no responsibility in connection with any acts or advice given by the Mooring Master.

RESTRICTIONS: Bridge, clearance at MHHW 146 ft.

MAX. SIZE: The maximum permissible fresh water draft at the dock is 36 ft. and the maximum overall length vessel the dock will accept is 700 ft. Vessels with a berthing displacement up to 20,000 long tons will be accepted, providing the approach velocity can be controlled to 0.3 ft. per second or less.

RADIO: Palmaven's Export Department also has radio-telephones with the following frequencies: 2080, 2120, 2182 (stand-by), 2638 and 2738 kc/s. and 156.6 (stand-by) and 156.8 mc/s., operated in accordance with the following schedule:

Monday through Friday:	From 0730 until 1130
	From 1300 until 1700
Saturday, Sunday and Holidays:	From 0730 until 1030 approx.

Any tanker or vessel bound for Bajo Grande shall cable Palmaven, at least 5 days in advance of its scheduled arrival time in Maracaibo, giving notice of its estimated time of arrival, cargo capacity, amount and type of product to be lifted and condition of ship's tanks.

At least 48 hours in advance of arrival at the San Carlos Pilot Station, the vessel's estimated time of arrival, nationality, Venezuelan net tonnage (if available, otherwise the amount and type of cargo to be lifted), condition of ship's tanks, name of Agent, last port, Master's name and all requirements of the vessel while in port should be cabled to Palmaven and to the ship's Agent. As the cable office in Maracaibo is not able to communicate directly with vessels at sea, messages to Palmaven Maracaibo and to Agent should be routed via PJC Curacao, and should be prefixed "Via AAC" (All America Cables and Radio Inc.). Failure to give such proper notices shall absolve the Plant from any claim for delays or demurrage.

TUGS: 2 tugs, each 1,600 h.p.; will be used for mooring and unmooring operations.

BERTHING: The dock proper may be identified by the overwater pipe-line trestle that connects the dock with shore.

The dock is located approximately 10° 30′ N. 71° 36′ W., which is 2 miles off shore from the Bajo Grande Natural Gas Liquids Processing Plant and S.W. of channel buoys B–87 and B–88 on the Maracaibo channel. The dock is single sided and consists of 4 breasting pilings, 4 mooring dolphins and a loading platform.

The dock is equipped with a compressor and auxiliary equipment to assist the ship in compressing and re-condensing the ship's vapours. No liability will be assumed by the Plant Operator for unavailability of the Dock's vapour compressor. The dock is also equipped with a vent system to dispose of contaminated vapours.

A tie-up crew will handle all mooring or pick-up lines before and after loading. The Plant tie-up crew will assist the ship's crew in positioning and connecting the cargo loading arms and in removing same on completion of loading. The dock loading arms are equipped with 10 in. ASA 300 lb. RF flanges. It shall be the responsibility of the ship to furnish its own fittings to mate with the dock's 10 in. ASA 300 lb. FR flanges.

Mooring procedure. Any vessels calling at Bajo Grande must be equipped with mooring hawsers of sufficient length and strength to run a line to each of the 2 bow and 2 stern mooring dolphins and shall use such equipment while at the dock. Vessels equipped with tension winches and cables shall utilise these in addition to the mooring hawsers or alone if the vessel has sufficient cables to meet the minimum requirements of running a cable to each of the bow and each of the stern mooring dolphins. For added security of those vessels not equipped with tension and/or cables, 1 steel cable will be furnished for a bow and another for a stern mooring dolphin by the Plant. It should be recognised by all parties that while the use of these cables is strongly recommended, the Plant accepts no responsibilities for loss or damage to any vessel or to any facility or to any person that may result from the failure of this equipment.

For the convenience and safety of all personnel boarding or unboarding while at Bajo Grande it is recommended that the vessel's accommodation ladder be rigged on the port side, this being the side normally laying against the dock. The ladder should be suspended after the Mooring Master boards and during docking operations to avoid being fouled.

Notice of Readiness: Upon arrival at Bajo Grande and after clearance by Customs Authorities, and after obtaining any other governmental approval required prior to loading, the Master of a vessel shall notify Operator in writing that the vessel is ready to load cargo. Such notice shall include a report of the condition of vessel's tanks which shall accurately state the temperature, pressure, last cargo, amount of fuel, possibility of contaminants or any other conditions which might affect loading and except as hereinafter provided, laytime as hereinafter defined, shall commence upon the expiration of 6 hours after arrival in Bajo Grande. Laytime shall cease when last mooring line is cast off from the dock.

For purposes herein, actual exchange of the written notice referred to above may be made after the vessel is secured at the dock; however, arrival at Bajo Grande shall be defined as the point in time when the vessel passes between the buoys numbered B–87 and B–88 which are markers of the Maracaibo ship channel and are located approximately 1,000 m. in front of the Bajo Grande dock.

BALLAST: There are no disposal facilities for dirty ballast at Bajo Grande. Vessels calling on Bajo Grande must arrive at Bajo Grande with *clean* ballast. In the event, the Plant representative or the representative of the National Guard observes dirty ballast, bilge or other contaminants being discharged into the lake, such operations shall be suspended immediately. All consequences resulting therefrom shall be strictly for the vessel's account. It is strongly recommended that the Master instruct all ship's personnel to avoid any possible spillage or contamination of the lake.

LOADING: Loading arm position and connections must be to the satisfaction of ship's personnel in charge. Upon approval of ship's personnel in charge of loading, the cargo valves may be opened to test connections for leaks and to commence loading.

The responsibility for and custody of cargo passes to the ship when the cargo reaches the connection owned by the ship.

The minimum loading rate is 250 barrels per hour (b.p.h.) and then only when starting to load or when slowing down to trim vessel at completion of loading. The maximum loading rate to be expected under normal conditions is 8,000 b.p.h.

All loading and discharging will be stopped during the passage of an electric storm, and ullage covers must be closed and dogged down. During periods of calms, loading of gasoline or other similar low flash products may be loaded at reduced rates or loading stopped if the heavy vapours are not being dispersed quickly enough to prevent hazards from accumulated gas pockets. Ship's officers are cautioned to be on their guard during such conditions.

Under normal operating conditions it may be necessary to displace the loading line. This will require the ship's personnel in charge of loading to advise the Plant representative when the cargo is short by an amount equal to the content of the loading line.

Cargo documents: Vessel's clearance and cargo papers will be delivered to the Master by the ships' Agent on arrival in Maracaibo harbour outbound.

FUEL: Heavy and medium marine diesel, intermediate fuel, and bunker "C" fuel oil are available in the area. Lubricating oils in limited quantities are also available from local contractors. All bunker, lubricating oils, water and other requirements should be cabled to the ship's Agent. For reasons of safety, no bunkers may be taken on the vessel while berthed at Bajo Grande.

FRESH WATER: Available at Maracaibo Harbour.

MEDICAL: Complete medical services are available in Maracaibo.

REPAIRS: Maracaibo: No major repair facilities are available, minor repair jobs can be taken care of through local machine and electrical shops. Shore labour can be furnished if required. Radio, radar and gyro compass technicians are available upon request.

Bajo Grande: No repair facilities are available, but when required, personnel from shops in Maracaibo will travel to Bajo Grande to effect repairs.

SHORE LEAVE: Launch service for official business purposes and emergencies is readily available in Maracaibo. Launch service for shore leave can be arranged through contact marine service and will be the responsibility of ship's personnel. Arrangements for shore leave transportation can be made through the ship's Agent. No shore leave facilities are available at Bajo Grande.

CLASSIFICATION SOCIETIES: American Bureau of Shipping and Lloyd's Register of Shipping, U.S. Salvage Association, Salvage Association of London, Det Norske Veritas, Bureau Veritas, Registro Italiano Navale, and Germanisens Lloyd have Agents in Maracaibo. Surveyors are available by appointment from any of these Agents.

CURRENCY: The Venezuelan unit of currency is the Bolivare (Bs) and is the only currency recognised as legal tender within the country. Masters desiring a cash advance should make the request to their Agent when advising ETA.

MAIL: Outgoing mail for ship's account may be given to the Agent's representative who boards the vessel on arrival at Maracaibo inbound. Personal mail will be accepted only if carrying the correct amount of Venezuelan postage, or if postage is authorised by the Master for the vessel's account.

OPERATING RULES: (Some of which follow). Refrigerated LPG vessels will not be considered ready for loading at Bajo Grande unless all LPG tanks contain LPG vapours and are cooled down sufficiently to permit loading of product(s) nominated.

The dock is equipped with a vapour compressor and condensing facilities for liquifying vapours, however, no liability will be accepted for failure or unavailability of the equipment.

Vessel must be able to match the dock's unloading connections which are:

Propane	10 in.	flange	ASA 300 RF
Butane	10 ,,	,,	,,
Vapour return	10 ,,	,,	,,
Gasoline	10 ,,	,,	,,

No facilities are available for inerting. LPG vessels requiring chill down, purging or other assistance at Bajo Grande may be accepted for such purposes upon request by the Master of the vessel, however, a charge for such services shall be made to the Agent of the vessel.

The charge for assistance to effect purging and/or chill down is Bs 733 per hour for all time that such purging or chill down operations causes the vessel to exceed allowed laytime. Such charge shall include the use of the dock vapour compressor. The quantity of product involved in such purging or chill down shall be for the account of the owner(s) of the product to be lifted by the vessel concerned.

In the event that the dock vapour compressor is operated at the request of the Master of the vessel for purposes other than purging or chill down, a charge of Bs 500 per hour will be made to the Agent of the vessel. The plant also has the facilities to odorise vessels when required. The charge to the vessel for the odorant shall be the actual landed cost for such odorant.

If, in the event a vessel is berthed at the dock and after six running hours have expired after notification by operator to the Master of the vessel that the facilities are ready to deliver products and the vessel at the end of such time is unable to receive products, then at the discretion of operator, the vessel may be cast off from the dock to prevent flaring of products or curtailment of production.

A vessel may be cast off at any time for reasons of safety.

Maximum percentage by volume of air or oxygen allowable for safe loading of respective product when vessel's tanks are inerted with CO_2 or N_2.

L	*Air*		*Oxygen*	
Product	*(CO_2)*	*(N_2)**	*(CO_2)*	*(N_2)**
LPG	50	40	8	7
Gasoline	50	40	8	7

*Nitrogen percentages do not include nitrogen of the air in mixtures.

Example: If a vessel is to be loaded with LPG and is to be inerted with N_2, enough N_2 must be added to ensure that the mixture will contain no more than 40% by volume of air. The other 60% being N_2.

Section B

LA ESTACADA: 10.42 N. 71.32 W.

(N.B. For important details of Documentation, Pilotage, etc., see "Maracaibo Lake").

OPERATORS: Deltaven, S.A.

LOCATION: Loading Terminal in the Lake of Maracaibo at La Estacada, located at 10° 42′ 30″ N. and 71° 31′ 40″ W. Entrance to and leaving this terminal is made between buoys B.65 and B.66.

DOCUMENTS: As soon as vessel is safely moored marine dispatcher will board the ship together with the port authorities.

PILOTAGE: (See "Maracaibo Lake").

1. All vessels must call Deltaven on 2182 kc/s. when passing the E.M. Buoy and when embarking the Pilot at San Carlos.
2. Reduce speed approaching inner channel buoy B–63; rig accommodation ladder starboard side properly illuminated. Company Mooring Master will board between B–63 and B–65.
3. Listen during transit on 2182 kc/s.
4. In event of unforeseen circumstances requiring vessels to anchor, area West of Estacada Northern Buoy mooring outside of channel limits will be used.

Vessels proceeding to La Estacada Terminal must enter the Outer Channel and embark the Government Pilot between buoys B–25 and B–27. After vessel arrives in the vicinity of the E.M. buoy, Master must contact San Carlos Pilot Station by radio-telephone on frequency 2182 kc/s. requesting Pilot between buoys B–25 and B–27.

Once Pilot is on board, the vessel will proceed to Estacada, reducing speed in vicinity of Inner Channel buoys B–63 and B–65 where Mooring Master will board. Vessel should have a strong line ready to hoist Mooring Master's radio on board. The official Pilot will stay on board until vessel is moored.

MAX. SIZE: Water depth in both buoy moorings is 44 ft. mean monthly observed lowest water (MMOLW). Because of the depth of the surrounding approaches, 41 ft. (MMOLW), admissible mid ship's maximum draft in both moorings is 39 ft. freshwater. Under certain tidal conditions, however, with vessels over 60,000 d.w.t. and LOA exceeding 750 ft., it may be necessary to restrict loading to 38 ft. 6 in. Masters are requested to be guided by Mooring Masters in appropriate draft to be loaded.

Berth No. 2 will accommodate vessels up to 850 ft. LOA, and Berth No. 1 up to 720 ft. LOA. Beam in both berths is unlimited.

RADIO: Information to be cabled to Deltaven, Maracaibo.

Upon vessel's departure from the last port bound for La Estacada cable 72–48 and 24 hours ETA at San Carlos Pilot station, including in this message last port, Master's name, if a.c. current on board and any requirements. If diverted, cable original destination, also have 5 copies of diversion cable ready on arrival. If the vessel is nominated to load a part cargo only at La Estacada, indicate at which port cargo will be completed. All cables should be sent via PJA (Curacao Radio) and via ITT All American Cables.

BERTHING: *(a) Description:* Marine Oil Loading Terminal, is an offshore installation and consists of two permanent buoy moorings, No. 1 to the South, and No. 2 to the North.

Berths No. 1 and No. 2 consist of 4×14-ft. cylindrical steel buoys, each fitted with a pelican hook to which ship's mooring lines are attached by mooring launches. On each buoy there are 2×1.625-in. improved plow steel wirelines to supplement mooring lines in order to provide additional security during strong winds. In berth No. 1 the plow steel wires are 520 ft. long and in berth No. 2 585 ft.

Both berths are two directional; ships moored heading North or South according to prevailing current.

(b) Deballasting. No facilities at La Estacada to receive dirty ballast. Ballast must be clean, and is discharged into the Lake.

(c) Mooring. All ships should have an adequate supply of stoppers or other special, equipment necessary to handle wires attached on mooring buoys. Vessels mooring in berths must be equipped with 4 ropes forward and 4 ropes aft. Vessels are cautioned that good quality ropes are essential and that they will be held liable for any damage occurring through improper or poor mooring ropes or inability to properly handle same.

Vessels in buoy moorings must have deck winches in readiness for use at all times. Method of berthing will be at discretion of Company's Mooring Master, as weather and other conditions permit. During berthing and unberthing, ship's engines, tackle and all other gear must be in operative condition and in a state of readiness for use on immediate notice.

Weather permitting, and berths being available, vessels may be berthed at any hour of the day or night. Mooring buoys are properly lighted. Mooring Master will assist in mooring the vessel in berth No. 1 or 2. Loading hoses can be connected both port and starboard side, according to ship's position. The Mooring Master will remain on board ship to advise on connecting and disconnecting loading hoses, and loading of cargo. He will later unmoor vessel and hand over to government Pilot on departure.

Mooring Master acts as adviser only and the Master retains full responsibility at all times. When ship is in position and mooring wires tautened, mooring winches such as tension winches must have their manual brakes put on securely, and should not rely on automatic rendering devices.

During time vessel is at the berth, frequent and regular inspection of mooring essential to ensure that mooring lines are kept taut and that movement of ship is kept to a minimum. When tugs are alongside or assisting a tanker, all cargo openings, permanent ballast tanks, lids and pump-room doors must be closed no matter what grade oil is being or has been carried, unless these spaces are gas-free.

The mooring operations are carried out by 2 mooring launches and 2 tugs.

TUGS: Use of 2 tugs of at least 1,600 h.p. is compulsory for mooring and unmooring at La Estacada (Government Decree). Use of 2 mooring launches with crew including a diver, who inspects the submarine loading hoses, is compulsory at La Estacada. These mooring launches remain alongside ship during stay in berth order act in any emergency.

TANK INSPECTION: As soon as all ballast is discharged and hoses connected, production supervisor from La Estacada boards to inspect ship's tanks. If same are dry and clean he will sign corresponding certificate.

LOADING: Berth No. 1 has 2 loading lines (1×24-in. and 1×16-in.) with corresponding manifold, and Berth No. 2 also has 2 lines (1×24-in. and 1×18-in.). 12-in. - 150 lb. marine loading hoses are used. Each berth capable of a max. loading rate of 25,000 barrels per hour, with an appropriate reduction for topping-off.

However, maximum loading rate entirely at Company's option and will vary according to circumstances and type of tanker concerned. When completing loading, stoppage of cargo will be determined on board, and Masters are requested to inform Mooring Master at least 30 minutes in advance in order reduce pumping rate for topping-off. Mooring Master will be in continuous contact with pumping station by means of portable radio. Should this means of communication fail, the following signals on ship's whistle will apply:

One long blast	Stand by
Two long blasts	Commence pumping
Three long blasts	Stop pumping

Upon completion of loading, marine dispatcher, together with ship's officer, will gauge ship's tanks and later prepare cargo documentation.

FUEL: Bunkers and marine fuels supplied by barge before or after loading operation at anchorage.

FRESH WATER: Must be ordered with first ETA cable so that arrangement can be made with supplier. A water barge and a tug must be hired, the hire of tug and barge is very expensive. Recommended that Masters obtain adequate fresh water at other ports.

REPAIRS: Only smaller repairs can be effected locally; however, technicians available for radio and radar repairs.

SHORE LEAVE: Launch is primarily for use of authorities and company staff, but will effect trips for crew if required by Master. Contact Mooring Master who will make necessary arrangements.

GUARDS: One National Guard stationed on board. He must be provided sleeping quarters and seated in officers' mess for meals.

CLEARANCE: Immediately after termination of loading operations, hoses are disconnected and Mooring Master will proceed to unmoor vessel. In the meantime, cargo documents are prepared by Agency personnel, the Government Pilot is ordered, and as soon as vessel is cleared, she will proceed to her destination.

CURRENT/DENSITY/TIDE: Current velocity max. 4 knots. Nature of bottom, mud. Salinity of water, 997–1003. The tidal range in feet for the Estacada Terminal is springs 1.5, neaps 0.5.

GENERAL: *(a) Cash Advance.* Cash advance will be in local currency (Bolivares). Cable in advance any such requirements.

(b) Mail. Outgoing correspondence may be given to the marine dispatcher. For personal mail (crew) a list should be made, indicating name of crew member, quantity of letters and destinations.

(c) Ship Chandlers. 2 ship chandlers in Maracaibo who can supply vessels with fresh meat, fish, vegetables, fruits, etc. Requirements should be transmitted in first ETA cable.

Section C

LA SALINA: 10.22 N. 71.28 W.

(N.B. For important details of Documentation, Pilotage, etc., see "Maracaibo Lake").

OPERATORS: All terminal facilities are under the control of Lagoven, S.A.

APPROACH: Entrance and leaving this terminal is made between buoys B.97 and B.98.

LOCATION: La Salina located on Eastern shore of Lake Maracaibo, in Latitude 10° 22′ 18″ N., Long. 71° 27′ 49″ W.

CARGO DOCUMENTS: These are generally placed on board prior to departure. Vessels whose Master accepts the early departure procedure may sail with documents in blank. Figures are then radioed for inclusion in blank documents. Outward clearance documents are placed on board the vessel prior to departure.

PILOTAGE: In the event that no contact can be made with San Carlos pilotage station, or if there is a language problem, contact should be made with Lagoven Marine at La Salina by voice radio on 2182 kc/s. or 156.6 mc/s.

A vessel entering or leaving the harbour must be assisted by a Docking Master in the general employ of area furnished by Lagoven, an inbound vessel being boarded by him at the anchorage area approximately 3 miles off shore.

ANCHORAGE: For vessels awaiting berth there is an anchorage area located West of a line between rig L–175 to buoy S3 and the light buoys M1, M1A and S1 (chart No. MO–G–4–C) about 3 miles West of the loading terminal in 6 to 7 fathoms of water with a mud bottom.

RESTRICTIONS: None. The port is open for navigation during the day and night, allowing ships to enter and sail at any hour.

MAX. SIZE: Up to 110,000 d.w.t. The access channel to La Salina has a least depth of 41 ft.

RADIO: The cable and telegraphic address for the Lagoven, at La Salina is "Lagoven La Salina". Radio messages to and from ships at sea are routed through the Government radio station at Maiquetia (La Guaira) call letters YVG. This station operates on a 24 hour continuous watch, on the following frequencies: Listening frequencies: long wave: 500 kc/s.; short wave: 4178–6267–8356–12534–16712–22225 kc/s.

Transmitting frequencies: long wave: 500–472–464–417 kc/s.; short wave: 17141.6–12817.5–8730–8722–6519.5–6505.5–4352–4322 kc/s.

Radio notice of arrival should be sent 72 hours prior to arrival at La Salina and corrected if weather or other conditions delay the vessel.

La Salina Port Services section maintains radio-telephone listening watches on a 24 hour basis on following frequencies: 2182 kc/s., 156.8 mc/s.

Frequencies 2638 kc/s., 2738 kc/s., 2120 kc/s. and 156.6 mc/s. are available for use after initial contact on one of the above listening frequencies.

All vessels en route to La Salina may also communicate with Lagoven Amuay or Caripito Marine offices and request that messages dealing with corrected ETA's, Pilots and other business be relayed to the La Salina Marine Office.

TUGS: Creole maintains one 3,000 h.p. diesel tug and one 1,600 h.p. diesel tug. Tug-boat assistance is considered essential and is afforded all vessels entering, leaving or shifting in the harbour.

BERTHING: At La Salina, Lagoven maintains a deep-water terminal (Lacustre) consisting of an island where are located 2 finger piers, each 1,100 ft. in length and 500 ft. between piers, providing 4 berths to accommodate tankers up to 110,000 d.w.t. Berths are numbered 6N, 6S, 7N and 7S, from North to South. At these berths various crudes can be loaded simultaneously. In addition there is an offshore platform (Pier No. 3) where liquefied petroleum gases (Butane and Propane) can be loaded and refined products can be loaded or discharged.

Instructions concerning berthing are given by Port Services Section by means of radio-telephone.

The use of an anchor when docking is permitted at all berths. It is considered prudent to have the outboard anchor hove-out prior to entering the harbour in order to facilitate speedy release if necessary while docking. The Pilot will advise whether the ship is to be berthed port or starboard side to the dock.

BALLAST: Vessel should arrive at La Salina with sufficient ballast to permit safe handling. Docking Master requirements in this connection under normal weather conditions are interpreted as drawing approximately 8 ft. forward, 18 ft. aft, on a T–2 or similar type tanker, and 11 ft. forward, 20 ft. aft on a 26,000 d.w.t., or larger type vessel.

Ballast should be carried in a minimum number of tanks, and all other tanks stripped, so as to minimize deballasting time.

It has been established that one of the major causes of contamination of crude oil is the relatively small amount of salt water remaining in the ship's tanks, pumps, and ballast lines after ballast discharge. This very small amount of salt, nevertheless, frequently results in costly damage and downtime to refining equipment, besides presenting many other processing problems.

It is therefore requested that the full co-operation of the Master and Officers of ships loading for Aruba, be given to ensure that all ballast tanks and lines are flushed with lake water and stripped as dry as possible.

Vessels equipped with a separate and completely segregated system of ballast tanks, lines and pumps, will be permitted to discharge ballast and load cargo simultaneously, providing approval of both the pier foreman and Petroleum Inspector is secured.

A pier supervisor who is in direct communication with the loading pumphouse is stationed at each pier during the entire time the vessel is discharging ballast or cargo or receiving cargo.

Absolutely oil-free ballast may be discharged overside. All dirty ballast must be pumped ashore. A 34 in. ballast line, with dirty ballast treating facilities are available.

If it is desired to follow the "load-on-top" procedure it is requested that the marine representative be informed on arrival.

LOADING: Instructions as to grade or grades of cargo, and the approximate loading rate anticipated, will be given to the Master on arrival. Supplementary information including number and size of lines and Chiksan arms will be furnished to the Chief Officer before loading commences. Loading rates will be reduced as required when topping off.

If vessel's loading orders from owners or charterers do not agree with the terminal's orders, either as to grades or quantity, the marine representative should be advised immediately. The terminal is authorised to load 10% more or less than the quantity nominated.

A terminal employee is stationed at each pier during the entire time the ship is discharging ballast, bunkering, or loading cargo. Fifteen minutes "standby" notice should be given to this man prior to completion of ballast, bunkers, or cargo.

Shut-down controls for all crude oil pumps are available at each loading berth at ship's rail of loading vessels for use in case of emergency only.

LOADING RATES: Loading operations at La Salina Terminal are normally carried out at relatively high pumping rates; up to an average of 40,000 b.p.h. Ship's officer will be advised by the pier supervisor at what rate the cargo will be loaded. LPG is loaded up to an average max. rate of 7,500 b.p.h. at Platform No. 3.

The loading and discharging of all crude petroleum and its products will be stopped during the passage of an electric storm, and ullage covers must be closed and dogged down. During periods of calms, loading of gasoline or other similar low flash products may be at lower rates or loading stopped if the heavy vapours are not being dispersed quickly enough to prevent hazards from accumulated gas pockets. Ships' officers are cautioned to be on their guard during such conditions.

Loading rates will be reduced when topping off, if requested by the ship's officer.

MEDICAL: Complete medical, dental and hospitalisation facilities are available at La Salina. Medical treatment is provided at a Lagoven operated clinic.

Authorisation forms for medical treatment are provided which require the Master's signature. Transportation will be supplied by Port Services Section.

If the patient does not speak Spanish or English, an interpreter should accompany him.

FRESH WATER: A limited supply of fresh and boiler water is available at La Salina Lacustre Terminal. Delivery is made through 2.5 in. National Standard Fire Hose Thread hydrants. Ship's personnel must provide hoses and connect up.

FUEL: Bunker C fuel oil, marine diesel and intermediate fuels are available at La Salina Terminal Lacustre. Delivery is made alongside Piers 6 or 7 by 8 in. diameter Chiksan hose, located about midship's.

It is the responsibility of the ship's engineer to give "stand-by" notice to the terminal employee and advise him when to shut down.

Supplies of lubricating oils are available. Delivery will be effected while loading and requirements should be incorporated in the ETA radio.

DENSITY: The average density at the berth is 1002 but varies dependent upon amount of rainfall. The temperature ranges from 82° to 86°F.

REPAIRS: The Marine Port Staff will assist with emergency repairs as may be required in each case depending upon availability of competent personnel and equipment. The company's shop facilities while not equipped for extensive ship repairs, may be made available to fabricate or repair items that are urgently required.

The nearest dry docks are those at Puerto Cabello and Curacao, N.A. Several contractors in the area provide labour for hull painting and for tank cleaning. Contracts for these services are made by the ship's Master directly with the contractor.

Radio technicians are available for minor repairs. With sufficient advance notice a radar specialist can be arranged to board the ship at La Salina.

CONSULATES: The following countries have consular representatives in the area:

Belgium
Chile
Columbia
Costa Rica
Denmark
Dominican Rep.
Ecuador
El Salvador
France
Germany (West)
Great Britain
Guatemala
Italy
Netherlands
Norway
Nicaragua
Panama
Peru
Spain
Sweden
Switzerland
U.S.A.

SHORE LEAVE: Shore leave is permitted and a representative of the Captain of the Port boards on arrival and issues the required number of passes. Shore passes are to be collected prior to sailing, and given to Pilot undocking the vessel. Vessels are not permitted to sail until all crew members are on board, unless hospitalised or prior arrangements made for disembarking. No launch service for liberty parties is available while vessel is anchored off La Salina awaiting berth.

GENERAL: Representatives of the Marine Department board vessels immediately on arrival, and it is particularly requested that Masters indicate at that time all ships requirements. The Marine Office Building is located at the Pierhead Trestle and personnel are available for assistance at all hours.

(a) Bonded Stores. Cigarettes or other stores in bond are not obtainable in La Salina.

(b) Cash Advances. Cash advances are made in local currency, the Venezuelan Bolivare. Cash requirements should be included in the ETA radio.

(c) Charts. On first arrival of each tanker, the Marine Dispatcher will furnish a set of local charts if required. No supplies of U.S. Hydrographic or British Admiralty charts, or sailing directions, are available.

(d) Classification Societies. American Bureau and Lloyd's Register have non-exclusive Agents in Maracaibo, and qualified Masters and Chief Engineers are available for appointment as Surveyors when required.

(e) Gangways. All vessels using the port of La Salina must provide a safe gangway. The use of rung ladders, Pilot ladders, etc., is contrary to port regulations and port authorities will not board except by means of a safe gangway or accommodation ladder.

(f) Plimsoll Marks. the Captain of the Port requires that the Plimsoll Marks of all vessels using the port be clearly visible. Vessels may be checked on completion of loading, and if the Plimsoll Marks are not readily legible, permission to sail may be withheld.

(g) Port services. On arrival at La Salina terminal, a company representative boards vessels, so it is particularly requested that Masters make known to him all ship's requirements. Master should bear in mind that while vessels are within Venezuelan territorial waters, Government authorities do not permit the use of ship's radio equipment. Cables and radiograms should be handed to the company representative for transmittal via shore radio communication system. La Salina also has radio telephone communication with North and South America and Europe. For further information contact Port Services Section in the terminal building, tel. 88694 and 88695.

(h) Rat-guards. By order of the Port Authorities, vessels are required to use ratguards on all mooring lines.

(i) Personnel – Seamen left ashore. In the case of seaman left ashore for hospitalisation, repatriation or other reason, his documents and personal effects are to be delivered to the Marine Office in La Salina before sailing. A letter is required from the Master advising maximum advances to be made to seaman if any, and instructions concerning his repatriation. All expenses incurred by seamen left ashore, including cost of repatriation, are for ship's account.

It is important that Masters bear in mind that the Venezuelan law will at all times hold the vessel, her Master, Agent or Owner, responsible for any seamen left behind in Venezuela.

(j) Provisions and stores. Fresh and dry provisions are supplied by various shipchandlers in Maracaibo and Cabimas (La Salina). Master should deliver his signed requisition to the Marine Department representative who boards on arrival. Provisions would then be delivered to the vessel while loading. The prices and quality of some items, such as fresh fruit, fish, shrimps, vegetables, etc., are competitive; dry stores are considerably higher than in most ports. The Fleet Steward will assist in filling requisitions. It is important that the Master sign the ship-chandlers invoice as authorisation for the Marine Department to make settlement.

(k) Mail. Any pending ship's mail will be delivered on board by the Marine Dispatcher on arrival at La Salina. At same time he will receive ship's mail to be dispatched. The Marine Dispatcher will accept personal mail only if it carries the proper amount of Venezuelan postage, or if Master authorises the postage by signing 7 copies of the Company Postal Transmittal form. Masters interested in knowing the individual postage amounts to be paid by each crew member, should provide a list, in duplicate, of the senders, and number of letters sent by each one identified by a number written on each letter.

Copy of this list will be returned aboard the vessel when leaving this port outward bound. If not ready on time, it will be airmailed to the vessel's next port of call.

(l) Inspection of Petroleum Products and Crude Oil. Chas. Martin & Company and E. W. Saybolt petroleum inspectors are available if specified.

(m) Laundry. Laundry service is available between 0700 and 1700 hrs. on week-days. No guarantee can be given on time of delivery.

Section D

MARACAIBO: 10.42 N. 71.39 W.

On the N.W. shore of the Lake Maracaibo.

Maracaibo is the capital of the State of Zulia and seat of all Government and Consular Offices, as well as the port of entry for all vessels loading at one of the Terminals in the Lake of Maracaibo. (N.B. For information details of Documentation, Pilotage etc., see "Maracaibo Lake").

ANCHORAGE: The Pilot will not con the ship into the anchorage, but will indicate the proper location to anchor. Care should be taken because of small boats and ferry traffic.

ACCOMMODATION LADDER: Vessels must provide an accommodation ladder. The use of trunk ladders, pilot ladders, etc., is contrary to port regulations. Port authorities will board only by means of an accommodation ladder. It is recommended to rig this in advance to avoid unnecessary delays.

BOARDING PARTY: The boarding party usually consists of the following persons: One Quarantine Official, Two Customs Officials, One Port Captain's Representative, Two representatives (Agent and Mooring Master).

RADIO: "Radio Marina" transmits information of interest to navigation every day from Monday to Friday from 1000 to 1015 hrs. and from 1600 to 1615 hrs. on frequency of 4,420.7 kHz in the 60 metre band, output 1 kilowatt. All bunker, lubricating oils, water and other requirements should be included in the cable giving ETA of the vessel.

TUGS: Service not compulsory, assistance is rendered if required by the Harbour Master.

BERTHING: The manoeuvring area within Maracaibo harbour has a depth of 26 ft.

	Length	Depth alongside
Wharf No. 1	106 m.	15 ft.
,, ,, 2	106 m.	15 ft.
,, ,, 3	159 m.	15 ft.
,, ,, 4	159 m.	22 ft.
,, ,, 5	135 m.	25 ft.
,, ,, 6	135 m.	26 ft.
,, ,, 7	135 m.	26 ft.
,, ,, 8	135 m.	26 ft.
,, ,, 9	120 m.	25 ft.
,, ,, 10	120 m.	22 ft.
,, ,, 11	120 m.	22 ft.
National Brewery Wharf	125 m.	19 ft.
Regional ,, ,,	120 m.	21 ft.

FUEL: Heavy and medium marine diesel, intermediate fuel, and bunker C fuel oil are available at Maracaibo from local contractors with barges. Supplied only by barge at the wharves or anchorage. Lubricating oils are also available.

FRESH WATER: All wharves supplied with fresh water by 2 in. hoses. Rate 15/20 t.p.h. Fresh water also available from local contractors with barges.

MEDICAL: Complete medical services are available.

CONSULS:

	Telephone		Telephone
Germany	76061	Netherlands	4621
Belgium	3235	Great Britain	6169
Colombia	72232	Italy	
Costa Rica	6511	Mexico	6781
Denmark	6531	Nicaragua	76703
Ecuador	74055	Norway	78911
El Salvador	74241	Panama	78110
Spain	71118	Peru	4545
United States	2123	Portugal	80870
France	5297	Dominican Rep.	6511
Guatemala	71193	Sweden	6511

STEVEDORES: Normal working hours 0700–1100; 1300–1700 and 1800–2300 hrs.

TELEPHONES: There is no service for connecting telephones on board vessels. Public telephones are situated in the warehouses adjacent to all wharves.

HOLIDAYS: All Sundays; 1st January; Good Thursday and Friday; 19th April; 1st May; 24th June; 5th July; 24th July; 12th October; 24th October; 18th November; 17th December; 25th December.

POLICE/FIRE/AMBULANCE: Police tel. 3821; Fire, tel. 6585; Ambulance, tel. 2209.

REPAIRS: No major repairs facilities are available; however, repair jobs can be done through local machine and electrical shops, and shore labour can be furnished if required. Radio and radar technicians are also available.

SHORE LEAVE: Launch service in the Maracaibo harbour is readily available for official ship business. For shore leave personnel, depends on launch availabilities on arrival.

AIRPORT: Modern International Airport "Granode Oro" situated N.W. of Maracaibo City served by many national and international airlines. A second airport with cargo and passenger services is situated at Santa Barbara del Zulia, on the banks of the Escalante river.

PROVISIONS: Fresh and dry provisions are procurable through ship chandlers in Maracaibo for delivery at Maracaibo Harbour or at the terminal.

AGENT: Head Office, (Direction and Control), Brokers, chartering and tramp agents, Victor H. Selinger S.A., PO Box 1632, Caracas 101 Venezuela. Cables "Selvic" or "Seltank". Tel. (02) 81.25.28 – 81.86.38 – 81.28.78 – 81.84.89 – 81.87.31 – 81.85.82. Telex: 21402, 21631 and 22859. New Boe Code.

Local Office: PO Box 496, Maracaibo. Tel. (061) 24960. (061) 24962. Cables: "Seltank", or "Selvic".

Section E

EL TABLAZO: 10.45 N. 71.32 W. (See Plan)

OPERATORS: Instituto Venezolano de Petroquimica.

LOCATION: S.E. part of Puerto Miranda. Entrance by buoys 63 and 64.

BERTHING: There are 2 jetties, 1 for liquids and 1 for solid cargoes:

Liquid Berths. (Length 869 ft.):

Place No. 3	Max. OAL	650 ft.
	Max. Depth	39 ft.
	Max. Draft	34 ft.
	Loading Arm	1
	Loading Line	12 in.
	Vapour Line	10 in.
Place No. 4	Max. OAL	650 ft.
	Max. Depth	37 ft.
	Max. Draft	34 ft.
	Loading Arm	1
	Loading Line	12 in.
	Vapour Line	10 in.
Manoeuvring	Area Depth	37 ft.

Products to be handled:

Natural Gasoline at	687	t.p.h.	
Estirene	160	,,	
Methanol	687	,,	
Isobutane	687	,,	
Ammonia	525	,,	temp. −33.3°C
Propylene	40	,,	40°/6°C
Butane	160	,,	37.8°C
Monovinyl Chloride	420	,,	37.8°C
Ethylene	80	,,	−104°/−70°C

Solids Berth. (Length 797 ft.):

Place No. 1	Max. OAL	650 ft.
	Max. Depth	37 ft.
	Max. Draft	34 ft.
Manoeuvring	Area Depth	37 ft.
Place No. 2	Max. OAL	650 ft.
	Max. Depth	37 ft.
	Max. Draft	34 ft.
Manoeuvring	Area Depth	37 ft.

Cargo Equipment:

Place No. 1	One urea in bulk loader Cargo capacity 650/700 t.p.h.
Place No. 2	Three urea in sacks conveyors. Cargo capacity 2,400 sacks of 50 kgs each per hour.

FRESH WATER: Available, 8 t.p.h., but expensive.

AGENTS: Agencia Maritima de Representaciones C.A.

PUERTO MIRANDA: 10.46 N. 71.34 W. (See Plan)

(N.B. For important details of documentation, Pilotage, etc., see "Maracaibo Lake").

LOCATION: Situated at Eastern shore of entrance to lake of Maracaibo, in position Lat. 10° 46′ N., Long. 71° 34′ W.

OPERATORS: Maraven, S.A.

CLEARANCE: Pratique and Custom's clearance will be granted on arrival either at the anchorage or after the vessel has been berthed. Masters therefore requested to have the accommodation ladder ready on arrival to avoid delays, since the Government Officials do not board the vessels by pilot ladder.

On arrival when pratique is requested, all vessels should fly International flag signal "Q", or show a yellow light during hours of darkness.

PILOTAGE: On arrival Puerto Miranda under Government Pilot's advice the vessel will be boarded by Government Berthing Master, who will assist Master in docking vessel. He will also assist in undocking.

CHANNEL: Channel has a leading mark formed by the towers "P" and "M" and is marked by buoys.

(1) Incoming traffic bound for Puerto Miranda must leave the main channel between the buoys B-57 and B59 towards the anchorage.

(2) Vessels coming from the Lake in ballast or to complete cargo at Puerto Miranda must leave the main channel when passing the buoy B–65 on their starboard side and proceed in the direction of Jetty 3 towards the anchorage.

(3) All vessels on leaving Puerto Miranda should enter the main channel by the buoyed exit channel marked by the buoys numbered AP3, AP2, AP1 and B59.

Once the ship is unmoored, the Berthing Master on duty at Puerto Miranda will emphasise to the official Pilots the route to be followed in each case.

MAX. SIZE: The max. permissible draft is 40 ft. even keel, including the ship's sagging when taking advantage of high water. Otherwise, draft must be in accordance with depth available at time of departure, which under no circumstances can be higher than 43 ft.

RADIO: Port Services Office equipped with radio-telephone installation operating on 24 hours basis, transmitting on following frequencies (simplex press to talk system).

		Int. Channel
Approach calling and safety	156.8 mc/s	No. 16
CSV and other tankers port operations	156.6 ,,	No. 12
Emergency calling	2.182 kc/s	

ARRIVAL ADVICE: Vessels equipped with radio-telephone installation operating on above frequencies are requested call Puerto Miranda about 3 hours before arrival at port. Calls made in Spanish language will be answered promptly, since there is always a Spanish-speaking clerk on duty. Calls in English will be answered by Berthing Master on duty, except when he is occupied, in which case the call should be repeated later on, as an alternative, the Master could ask Government Pilot to report in Spanish his vessel to Puerto Miranda. During hours of darkness all vessels must identify themselves on arrival, either by radio-telephone or Aldis lamp.

TUGS: 2 motor tugs of 2,800 h.p. assist all vessels in docking and undocking. Also one or two mooring launches will be standing by to take ropes.

BALLAST: Discharge of oil or water polluted by oil into lake waters is prohibited and will incur heavy fines and compensation to beach owners and fishermen for cleaning nets.

All dirty ballast must be discharged ashore. Clean ballast in cargo tanks may only be pumped overboard after prior consultation with Port Services Dept. Deballasting line pressure must not exceed 100 lb. p.s.i. Vessels equipped with a special separate and clean ballast system are to discharge their ballast into lake.

Ocean vessels should be ballasted on arrival E.M. Buoy for inward passage with minimum ballast necessary for safe handling, taking into consideration Article 31 of Maracaibo Pilotage Zone Regulations, which states all vessels entering lake Maracaibo shall have a trim of no more than 8ft., to permit safe navigation through channels.

One of the major causes of contamination of crude oil is relatively small amount of salt water remaining in ships tanks, pumps and ballast lines after ballast discharge. This very small amount of salt, nevertheless, frequently results in costly damage and down-time to refining equipment, besides presenting many other processing problems. It is therefore requested that full co-operation of Master and officers be given to ensure that all ballast tanks and lines are stripped as dry as possible.

BERTHING:

Jetties/Berths	*Depth M.M.O.L.W. ft.*	*Maximum Permissible Draft ft.*	*Length ft.*	*Displacement tons*
Jetty No. 2				
1 (North Outer)	41	39	720	90,000
2 (South Outer)	41	39	720	90,000
3 (North Inner)	35	34	†575	62,000
4 (South Inner)	35	34	‡575	62,000
Jetty No. 3				
5 Inshore (North Seaward)	42	40	910	90,000
	42	40	910	90,000
	42	40	910	90,000
6 Inshore (South Seaward)	42	40	910	90,000
	42	40	910	90,000
	42	40	910	90,000

Maximum size acceptable based on particulars above.

Jetties/Berth	*Type of vessel S. dwt*	*Governing Factor Draft*	*Length*	*Displ.*	*mooring lines to be used Forward*	*Aft.*
Jetty No. 2						
1 (North Outer)	44,000	x	x		9 (7)*	7 (5)*
2 (South Outer)	44,000	x	x		9 (7)*	7 (5)*
3 (North Inner)	22,000		x		7	7
4 (South Inner)	22,000		x		7	7
Jetty No. 3						
5 Inshore (North Seaward)	115,000	x	x	x	7 (5)*	7 (5)*
	90,000	x		x	7 (5)*	7 (5)*
	70,000	x			7 (5)*	7 (5)*
6 Inshore (South Seaward)	115,000	x	x	x	7 (5)*	7 (5)*
	90,000	x		x	7 (5)*	7 (5)*
	70,000	x			7 (5)*	7 (5)*

Remarks: Alongside UKC for ships up to 700 ft. O.A.L. = 1 ft. Alongside UKC for ships over 700 ft. O.A.L. = 2 ft.

(*) When vessels are fitted with tension winches-Forward and Aft.

(†) O.A.L. in Berth No. 3: This can be increased up to 620 ft. whenever vessels of Berth No. 1 have O.A.L. up to 665 ft.

(‡) O.A.L. in Berth No. 4: This can be increased only for LPG vessels up to 610 ft. if Berth No. 2 or 5 are empty when vessel arrives, then Berth No. 2 has to be temporarily restricted to vessels up to 665 ft. O.A.L.

General: Nature of bottom soft mud, but near buoys B-59 and AP-1 is partly hard.

Density of Water at Berths 997-1003.

Density of Water outer channel 1015-1025.

These alongside drafts are subject to reduction owing to depth in inner and outer channels.

Recommended under keel clearance (UKC) in Exit Channel 2 ft.

Vessels drawing 37 ft. and over will according to monthly sailing draft table issued by Maraven, S.A.

MOORING: Vessels are to be moored to satisfaction of Pier Master A suitable gangway will be provided by shore installation. When it is out of order vessel's gangway has to be used, which will be notified on VHF telephone before arrival at E.M. buoy.

Vessels of any deadweight must secure with at least: *Forward:* 4 headlines; 4 breasting fibre ropes in berths 1 and 2; 1 spring. *Aft:* 2 sternlines; 4 breasting fibre ropes and one spring in berths, 1 and 2. In berths 3, 4 and 5, *Forward:* 2 headlines; 4 breasting lines; 1 spring– *Aft:* 2 sternlines; 4 breasting lines; 1 spring.

When vessel is fitted with tension winches (forward and aft) the following ropes are required:

Forward: 2 headlines; 2 wires from tension winches as breasting lines in berths numbered 1, 2, 5 or 6; 1 spring. *Aft:* 2 sternlines; 2 wires from tension winches as breasting lines in berths numbered 1, 2, 5 or 6; 1 spring.

When vessels are nominated to load at berth 1 or 2 of Jetty 2 one extra headline and a second spring is required. Vessel's best ropes or wires should be used as breasting lines.

LOADING: Vessels should load in accordance with International Loadlines Regulations taking into account maximum permissible draft at this Terminal and also at Maracaibo bar channel.

The Captain of the Port requires that the load-line marks of all vessels using the port be clearly visible. If Harbour Authorities should refuse to pilot an out-going vessel due to being overloaded, Master will be held responsible for all delays and expenses, in connection with discharging any overloaded cargo and all further losses.

Vessels' maximum permitted loading rate should always be required. Maximum shore loading rate is 7,000 M.T. per hour, using 2 shore lines and 4 hoses.

Following ship's whistle signals should be used for loading: 2 blasts=Stand by (15 minutes prior to completion of cargo and or part cargo). 1 blast=Stop (2 minutes prior to complete cargo and or part cargo).

EMERGENCIES: In order to deal quickly and efficiently with any emergency during loading/deballasting operations, the following equipment is available:

(a) Control for quick closing of shore manifold valves. This is a red-painted hydraulic valve situated on the ship/shore gangway. In the event of a spillage aboard, this valve must be opened. Within ninety seconds the shore manifold valves will close against the loading pumps.

(b) Direct ship/shore telephone. This is a red telephone and in order to obtain instant communication with the loading supervisor in the Control Room it is only necessary to lift the receiver. An Alarm Bell will alert the supervisor and a light will advise him from which berth the call originated.

FUEL: Available ex wharf: Bunker "C", thin fuels from 200 to 3,500 seconds Redwood 1 at 100 deg. F., and marine diesel. Delivery rate 400 and 80 tons respectively. Gas oil, F. oil and thin fuels may be supplied by barge ex Maracaibo delivered at anchor, at a max. rate of 110 and 140 tons.

FRESH WATER: Available on all jetties with a loading rate between 20 and 30 t.p.h. This depends on number of vessels at the same time.

MEDICAL: Ship's personnel may visit local doctor on week-days between 0700 and 1130 hrs., or 1400 and 1700 hrs. Outside these hours, or in cases which require special treatment, patients receive attention in Maracaibo. Written request for medical attendance, as well as a shore pass, is always required.

CUSTOMS: 1 opened packet of cigarettes allowed to be taken from vessel by each crew member when going ashore. Masters advised to strongly caution crew against attempted smuggling.

SHORE LEAVE: Not granted until shore passes are stamped and signed by Authorities. Passes must be shown to guards at gangway and gates. Crew members must be properly dressed (long trousers and shirt) before proceeding ashore. Master must collect all passes and return them to Agent before vessel's departure.

GENERAL: *(a) Tides:* In view of the available depth in the channels which allow navigation to vessels up to about 70,000 d.w.t. fully laden at high water, permanent predictions of sailing draft tables have been prepared by Maraven S.A., and they will send these on board ships of over 47,000 d.w.t.

(b) Currents: The tidal current (Lunar tide) at this port can at times be very strong and subject to changes. Usually outgoing tide runs for 7 to 8 hours against 4 to 5 hours for incoming tide. Direction approx. at right angles to jetty.

(c) Movement of Passengers: Embarkation or disembarkation of passengers through this port is not allowed by Venezuelan law, as this Terminal is only authorised by the Treasury Ministry (Ministerio de Hacienda) exclusively for exporting crude oil.

(d) Short Dispatch Procedure: This procedure is available for ships loading cargoes consigned to Shell Companies.

(e) Failure to rejoin vessel: If any member of crew is not aboard at sailing time, Authorities will not clear vessel although permission may be given to proceed to anchorage if the berth is required. If sailing permission is granted, Master is required to sign letter accepting all costs in connection with missing crew member to be for Owner's account.

(f) Launch Service: A charge will be made for a round trip to Maracaibo, but launches are only available on written request by Master. Masters who have to go on business to Maracaibo (Agency or Consulates) can make use of public service launches.

(g) Proceeding to Cardon: Vessels proceeding to Cardon to load or to take bunkers, are required to have ready on arrival at Cardon:

4 Lists of Deck and Engine Stores and Spares.

4 Lists of Stewards Stores.

6 Lists of Personal Effects.
6 Crew Lists.

In order to prevent delays it is imperative that these documents are presented to the port officials when they board to clear the vessel.

(h) Loading for Curacao: Unless Master requests otherwise, arrangements will be made for Goverment Pilot to board ship 1 hour after vessel has signalled "Stand-by".

(i) Guards: Custom Guards (Guardia Nacional) will be posted on all vessels and Masters are reminded that these guards must be accommodated and treated in the same manner as ships' officers. Non-compliance entails not only a fine but will result in delays in clearance and cargo operations.

(j) Visitors: Only persons on business allowed on piers. Visitors, as guest of Master, allowed board vessels provided a written and signed request presented by Master to Port Services Department. Further particulars covering procedure for obtaining permits for visitors can be obtained from Port Services Office.

(k) Cables and mail: Crew mail list forms put on board all vessels when entering Puerto Miranda. Crew's private mail accepted for posting provided all letters bear the sender's name and a list in duplicate is prepared showing addresses and sender. 1 copy of list will be forwarded to Master showing individual charges. Cables can be dispatched at all times.

(l) Norwegian Government Seamen Service: A field representative of the above service is stationed at Puerto Miranda providing Norwegian and Swedish film exchange and other usual services.

(m) Charts – Nautical publications: On arrival of each tanker the Agency Representative will furnish a set of lake charts if required. No supplies of U.S. Hydrographic or British Admiralty charts or Sailing Directions, Nautical Almanac, etc., are available at this port.

(n) American Crew List: Vessels sailing for U.S. ports requested have American Crew List ready on arrival, so it can be forwarded to U.S. Consulate without delay.

(o) Films Exchange: Films may be exchanged at this Terminal.

(p) Fire Alarm: Each Friday morning at 1000 hrs. there will be a test of fire alarms including sirens at the wharves. Before the test will be a warning message in English and Spanish.

(q) Cash Advances: Local currency is Venezuelan Bolivare and cash advances are made only in this currency. It is requested that any requirement for cash advances be included in vessel's ETA radio, to permit delivery on board on arrival.

REGULATIONS: Following regulations should be strictly observed by Master of vessels alongside jetties. Non-compliance with these instructions entails not only a fine but delays in cargo operations.

Use of rafts for painting the ship's sides is strictly prohibited.

Lifeboats should not be lowered without the special permission of the Government Port Captaincy (obtainable on request).

Swimming in the harbour is strictly prohibited.

Waste water, sanitary or other must not be discharged on jetty.

It is strictly prohibited to paint ship's name or others on jetties. When this occurs the vessel will be charged for the cleaning.

Painting in ships alongside is strictly prohibited.

Before commencing loading, all dock scuppers should be securely plugged.

It is necessary to keep a close and constant watch on moorings and to adjust when necessary. When adjusting, call for assistance of harbour tugs before slackening off any mooring lines.

TELEPHONES:

Head Port Services Operations Office 228 during day.
Head PRDP Operations Office 222/310/323 during day.
Operation Supervisor (PRDP) Office 353/343/350 during day and night.
Berthing Master Office 238 during day and night.
Ship's Services Office 338/275 during day and night.
Dispatch Clerk Office 274 during day and night.
Wharf Supervisor (SP-2) Office 244 during day and night.

	Berth	Tankers	Wharf Master
Jetty No. 2	1	213	214
	2	223	224
	3	233	234
	4	243	244
Jetty No. 3	5	253	254
	6	263	264

Jetties Gate 374 National Guard 276
Main Gate 364 Customs Officer 268
Policlinic 348 Port Captaincy 271

AUTHORITY: Maraven, S.A. Port Services Department, Estado Zulia – Venezuela.

Section F

PUNTA DE PALMAS: 10.26 N. 71.38 W.

(N.B. For important details of Documentation, Pilotage etc., see "Maricaibo Lake").

OPERATORS: Palmaven, S.A.

LOCATION: The terminal is located at Punta de Palmas del Sur, approximately 13 miles South of the port of Maracaibo on the West shore of Lake Maracaibo. The terminal proper may be identified by a 300 ft. radio tower, having 2 small red lights 200 ft. from the base, and 1 large red light on top of tower. The top light flashes every 2 seconds.

CARGO DOCUMENTS: Vessel's clearance and cargo papers will be delivered to the Master on arrival in Maracaibo Harbour outbound. Palmaven will accept no responsibility for delay in clearing a vessel due to unavailability of personnel from offices of the Port Authorities.

CHANNEL: The channel between Punta Palmas and Maracaibo is 10 miles long with a minimum width of 244 m. and a maximum width of 305 m. Depth 45 ft.

LAKE PILOT: A government Pilot will assist each vessel from Maracaibo to Punta de Palmas, and on the outbound trip to Maracaibo. The government Pilot will also assist in the mooring and unmooring operations. The ship's Agent will inform the Master of each vessel, as well as the government Pilot, the mooring scheduled for berthing.

MAX. SIZE: The maximum permissible fresh water draft in Mooring No. 2 is 38 ft. and the maximum length vessel this mooring will accommodate, is 835 ft. in length. Vessels exceeding 785 ft. in length must be equipped with 2 bow and 2 stern tension deck winches with sufficient wire rope to run a line to each of the bow and stern buoys.

The maximum permissible fresh water draft in Mooring No. 1 is 38 ft. and the maximum length vessel this mooring will accommodate is also 835 ft. in length. Deeper water exists to N.W. of both moorings.

RADIO: When vessel departs from its last port bound for Punta de Palmas Terminal, the date of departure and best ETA Maracaibo should be cabled to Palmaven Maracaibo. At least 48 hours before arrival at Pilot station the ETA should be sent by cable to Palmaven. Vessel's nationality, Venezuelan net tonnage (if available, otherwise registered tonnage), last port, Master's name and all requirements (fuel, water, etc.) should be included in cable. The cable address for the company is "Palmaven Maracaibo". As the cable office in Maracaibo is not able to communicate directly with vessels at sea, messages to Palmaven Maracaibo, should be routed via PJC Curacao, and prefix the message "Via AAC" (All American Cables and Radio).

MEDICAL: Emergency cases only will be transported to Maracaibo for medical treatment.

BALLAST: Since there are no disposal facilities for dirty ballast at Punta de Palmas Terminal, it is imperative that vessels arrive with clean ballast as Venezuelan laws are very strict regarding contamination of lake water.

TUGS: Tug service consisting of 2 tugs of not less than 1,600 h.p. each is provided by the terminal operator for all vessels. Both tugs will assist all vessels in mooring and unmooring operations. Should it be deemed necessary by the terminal operator to require a tug in addition to the 2 terminal tugs for mooring or unmooring vessels exceeding 750 ft. in length, charges for this additional service will be for the account of vessel.

MOORING: Moorings are designed as No. 1 and No. 2 and are located approximately 5.5 miles off shore from the Terminal and approximately 1.25 miles due West of channel buoy B–95 and B–96 on the Maracaibo ship channel.

Mooring No. 2 is located N.E. of Mooring No. 1 and is further off shore. Mooring No. 2 is equipped with 2 bow buoys, 2 stern buoys, and a starboard stern breasting piling with cable.

All vessels planning to moor in either Mooring No. 1 or Mooring No. 2 shall be equipped with mooring hawsers of sufficient length and strength to run 2 lines to each of the bow and stern buoys and shall use such equipment while in moorings. Vessels equipped with tension winches and cables shall utilise these in addition to mooring hawsers or alone if vessel has sufficient cables to meet minimum requirements of running 2 cables to each bow and stern buoy. For added security of those vessels not equipped with tension winches and/or cables, 1 steel cable will be furnished on each of the bow and stern buoys by Palmaven. It should be recognised by all parties, that while use of these cables is strongly recommended, Palmaven accepts no responsibilities for loss or damage to any vessel or to any facility or to any person that may result from failure of this equipment. 2 carpenter stoppers are available with each mooring for handling the steel safety cables and their use is also recommended.

Vessels in excess of 750 ft. length are required to moor in Mooring No. 2 and must use their starboard bow anchor for mooring and starboard stern breasting cable furnished in this mooring.

For convenience and safety of all personnel boarding or unboarding while at Punta de Palmas, it is recommended that vessel's accommodation ladder be rigged on port side, this being lee side under prevailing weather conditions in this area. The ladder should be suspended after Mooring Master boards and during mooring operations to avoid being fouled by mooring tugs or launches.

Mooring Master will board each vessel prior to entering mooring to establish radio contact between ship and tie-up launch as well as with terminal office. The Mooring Master will assist in mooring and unmooring operations. It should be understood that Mooring Master acts only in an advisory capacity to the Master. The vessel's Master retains full responsibility at all times.

The tie-up launch will handle all mooring or pick-up lines before and after loading. Tug service is on call 24 hours per day from the main terminal harbour. The tie-up crew will assist the ship's crew in lifting and connecting the cargo hoses and in removing same on completion of loading. The approximate lift required to haul cargo hoses into connecting position is 4 tons. The tie-up launch will carry connections and other equipment to facilitate hose connecting, which will be at the disposal of ship's crew, if required.

LOADING: Cargo hose position, supports, and connections must be to satisfaction of ship's personnel in charge. Upon approval from ship's personnel in charge of loading, cargo hose valves may be opened to test cargo hose connections for leaks and to commence loading.

The responsibility for and custody of cargo passes to ship's personnel when cargo reaches the connection owned by ship.

The minimum loading rate is 4,000 b.p.h. and then only when starting to load or when slowing down to trim vessel at completion of loading. The maximum loading rate to be expected under normal conditions is 15,000 b.p.h.

Under normal operating conditions it may be necessary to displace terminal sea line as cargo loading is completed. This will require ship's personnel in charge of loading to advise terminal representative when cargo is short by an amount equal to the sea-line displacement.

The sea-line displacement is a *set* amount and should *not* be cut short or exceeded. Therefore, when displacements are to be made, the cargo should be carefully planned by ship and terminal personnel to eliminate the possibility of either cutting the displacement short or short loadings of cargoes.

The Mooring Master will be equipped with charts and drawings of both sea moorings and will make these, as well as advice, available to Captain, if so requested. The Mooring Master will also be available to inspect ship's tanks as required, and will act as a liaison between the ship's Captain and the Agent or Punta de Palmas Terminal to transmit any information pertinent to the ship. This person should be furnished with food and accommodation fitting a ship's officer.

FUEL: Heavy and medium marine diesel, intermediate fuel, and bunker "C" fuel oil available. Lubricating oils also available.

FRESH WATER: Available from local contractors with barges.

STORES: Fresh and dry provisions procurable through ship chandlers in Maracaibo for delivery at the terminal.

REPAIRS: No repair facilities are available, but when required, personnel from shops in Maracaibo, will travel to Punta de Palmas to effect repairs.

SHORE LEAVE: Launch service for business purposes and emergencies is readily available. Launch service for shore leave can be arranged through contract marine service and will be responsibility of ship's personnel. Arrangements for shore leave transportation can be made through Loading Master on board.

CUSTOMS: All vessels entering from foreign ports and bound for Punta de Palmas Terminal are required to anchor in Maracaibo Harbour for formal customs clearance and visit of government port authorities prior to proceeding to destination.

The vessel's accommodation ladder should be rigged prior to the vessel's arrival at Maracaibo. A member of the National Guard will board each vessel at Punta de Palmas to observe all activities connected with loading or unloading operations. This official is authorised as the customs representative, and is referred to as Customs Watch. Food and accommodation similar to officers should be made available to him by vessel in order to avoid difficulties.

CONSULS: See "Maracaibo".

GENERAL:

(a) Oil spillages: There has been considerable discussion in Venezuela concerning oil spillages resulting in contamination of Lake Maracaibo, to the extent that a special commission has been formed by the oil companies in order to collaborate with government officials in combating and eliminating oil spillages. In addition, considerable pressure has been exerted by governmental agencies and commercial organisations to eliminate oil spillages in lake water. Palmaven is making every effort to prevent contamination of Lake Maracaibo because, if this is not done, stronger measures will be taken by government officials.

Because of the above, it is strongly recommended that Masters emphasise to the officers on deck to endeavour avoid all possible spillages and to make certain that the scupper plugs are installed prior commencement of loading operations in order to withhold on deck any spillage that might occur.

(b) Mail: Outgoing mail for ship's account may be given to the Agent's representative who boards vessel on arrival at Maracaibo inbound. Personal mail will be accepted only if carrying the correct amount of Venezuelan postage, or if postage is authorised by Master for the vessel's account.

(c) Classification Societies: American Bureau and Lloyd's Register have Agents in Maracaibo. Surveyors are available by appointment from any of these agents.

(d) Currency: The Venezuelan unit of currency is the Bolivare (Bs) and is the only currency recognised as legal tender within the country. Masters desiring a cash advance should make the request when advising ETA. Payment of all invoices for disbursements shall be made in Bolivares to the Palmaven's Maracaibo office, unless other instructions are given.

AUTHORITY: Palmaven, S.A.

AGENT: Head Office. (Direction and Control), Brokers, chartering and tramp agents, Victor H. Selinger S.A., PO Box 1632, Caracas 101. Venezuela. Cables: "Selvic" or "Seltank". Tel. (02) 81.25.28 – 81.86.38 – 81.28.78 – 81.84.89 – 81.87.31 – 81.85.82. Telex: 22859, 21402 or 21631. New Boe Code.

Local Office: PO Box 496, Maracaibo. Tel. (061) 24960, (061) 24962. Cables: "Seltank" or "Selvic".

Section G

SAN LORENZO: 09.47 N. 71.05 W.

OPERATORS: Maroven, S.A.

LOCATION: S.E. side of Lake Maracaibo.

APPROACHES: Vessels have to arrive at Maracaibo Roads through a dredged channel with controlling depths of 45 ft. in outer bar, inner channel and Punta Palmas area. In vicinity of terminal the controlling depth is 36 ft.

PILOTAGE: It is compulsory from San Carlos to Maracaibo. Pilot normally boards vessel at buoy B–26 (Posn. 11.01 N. 71.35 W.). It is also compulsory for all vessels which have to load at any terminal located South of the bridge Rafael General Urdaneta. This bridge has a horizontal clearance of 656 ft. and a vertical one of 148 ft. at 45 ft. MMOLW level. Pilots have to embark and disembark at Maracaibo.

When Masters have no Pilot exemption Certificate for crossing outer bar, permission has to be requested by VHF or 2182 kc/s. prior arrival, which is being granted on request.

ANCHORAGES: Masters may use the following:

(a) Near E.M. Buoy, (not recommended because of the distance from San Carlos. The pilot launch never reaches this point).

(b) At Maracaibo Roads.

(c) At terminal approaches, in accordance with depths available in the area, and ship's draft.

LIGHTENING POSITION: In the Southern lake Area, arrangements have to be made in advance. Also at Maracaibo.

HEALTH: Quarantine officials board vessels at Maracaibo Roads. Pratique cannot be granted by radio.

RADIO: San Carlos Pilot Station has VHF Channels 12 & 16. Emergency call 2182 kc/s. Terminal has VHF Channel 12.

BERTHING: Continuous wharf 2,340 ft. in length with dolphins. This terminal is only for handling crude and its products. Maximum berthing displacement: 20,000 tons.

	Berth No. 1	*Berth No. 2*	*Berth No. 4*
Max. OAL	560 ft. 00 in.	665 ft. 00 in.	
Max. Depth	24 ft. 06 in.	35 ft. 06 in.	Out of
Max. Draft	23 ft. 06 in.	34 ft. 06 in.	Service
Loading Rate	1,450 t.p.h.	2,000 t.p.h.	

These depths are referred to the minimum monthly observed lowest water level (MMOLW).

FRESH WATER: Available ex-barge at Maracaibo Roads.

DENSITY: At berths 0998 and at outer bar between 1020 and 1025.

FUEL: Any grade. In case vessels require grade not available at berth it may be supplied ex-barge at Maracaibo, which has mixing equipment able to supply the grade involved. Rate 20–140 t.p.h.

TUGS: Compulsory. When vessel is over 25,000 d.w.t. a second tug is required, which is available in the area, 1,200 h.p. each. There is also a launch to assist the vessel during manoeuvring.

MOORING-UNMOORING: Carried out by Official Pilots. Mooring is Head-out to facilitate departure.

DEBALLASTING: Installations have ballast pit with capacity 650 cu. m. Max. discharge rate 600 t.p.h.

TANK CLEANING FACILITIES: Carried out by outside contractor.

REPAIRS: Minor ones only, including electronics.

AGENT: Agencia Maritima de Representaciones C.A.

ORINOCO RIVER: 08.36 N. 60.25 W.

General information, followed by:

Section A – MATANZAS
Section B – PALUA
Section C – PUERTO ORDAZ
(CVG Ferrominera Orinoco)
Section D – PUNTA CUCHILLO
(Roqueven S.A.)

1. As early as possible, advise Puerto Ordaz Radio Station, call letters YVM, giving ETA at Buoy EO of North (natural) channel, or at Buoy 01 of South (dredged) channel.
2. 24 hours prior to arrival, send another ETA to YVM.
3. Upon arrival, depending on whether Master intends to enter Orinoco waterway through North or South channel, adhere to following procedure:
   - *(a)* *North Channel.* Notify Port Captain, Ciudad Bolivar, via YVM, of time of arrival at Buoy EO and give ETA at Beacon G7 (mile 27.7).
   - *(b)* *South Channel.* Request permission to enter from Port Captain, Ciudad Bolivar, via YVM. *Do not enter* until notified by YVM that Port Captain has granted permission; while awaiting, lay to or anchor at least 1 mile outside of Buoy 0.1.
   - *(c)* All vessels must also communicate with the Point Barima pilot station, call sign YV5QE on 2182 kc/s. HF or 43.18 VHF to be informed of traffic.
4. While navigating waterway, inbound or outbound, report position to YVM hourly on the hour.
5. No Pilot required nor available for navigation along North or South channel at the Boca Grande of the Orinoco River.
6. The International Rules for Preventing Collisions at Sea apply outside of Beacon G7, mile 27.7.
7. Given the case of 2 vessels navigating North and South channels respectively the one navigating South channel is the privileged vessel.

8. Anchoring either in North or South channels is forbidden.
9. Throughout Orinoco waterway, the down-bound loaded vessel is the privileged vessel.
10. It is compulsory to fly Venezuelan ensign inside of Buoy EO or Buoy 0.1.
11. Vessels can only carry clean ballast within Orinoco Waterway.
12. Pilotage compulsory within Pilotage Zone No. 1 of the Orinoco. Pilots board at outer boundary of said pilotage zone in upstreamward vicinities of Beacon G7.
13. Regulations for the Pilotage Zone No. 1 of the Orinoco apply inside of Beacon G7.

APPROACHES: (Also see "Radio" - paragraphs *(b)* and *(c)*).

1. *The Waterway*

A Radio Direction Finder, located at Lat. 8° 31′ 45″ N., Long. 60° 28′ 28″ W., transmits following signal continuously: YV - AYV. The transmitter has an output of 500 watts with a range of about 200 miles and operates on a frequency of 305 kc/s. While navigating the waterway, ships should favour the shore on their starboard side to the extent possible, giving preference of manoeuvre to loaded vessels in all cases. Ships navigating upstreamward (inbound), upon approaching narrow channels should await the passing and give way to downbound vessels. It follows, therefore, that downbound loaded vessels are the privileged vessels.

2. *The Boca Grande (Barima Bar) Channels*

There are 2 navigable channels across the Boca Grande (Barima Bar), identified as follows: North channel (or natural channel), and South channel (or dredged channel). The 2 channels have converging courses and meet at mile 27.7 in the vicinity of Beacon G7. Vessels navigating the South channel are privileged, regardless of the direction in which they travel.

(a) The North (Natural) Channel

This channel has a min. depth of 12 ft., referred to Mean Low Water. The approach from the sea is marked by a battery-operated electric flashing black buoy, identified with the letters EO. This buoy is located in 46 ft. of water at Lat. 9° 00′ 10″ N., Long. 60° 18′ 20″ W. Its characteristics are: colour of light, white; flash, 1.0 seconds; eclipse. 6.0 seconds; height above water, 10.7 ft., visibility, 7 miles. From seabuoy EO, the channel develops for 7.3 miles to Buoy EOA on a course of 213° 40′ true, then for 2.8 miles to Buoy EOB on a course of 198° 57′ true. From this point the channel follows an approximate straight course of about 205° true for a distance of 17 miles to Beacon G7. Starting from EOB distances between successive navigation aids are as follows: G1 at 1.9 miles; G1A at 1.5 miles; G3 at 2.1 miles; G3A at 2.3 miles; G5 at 3 miles; EL 24 at 2.6 miles; G7 at 3.7 miles. All navigation aids are black buoys fitted with white lights, except Beacon G7 and EL 24 which is a range structure indicating the West side limit alignment of the South (dredged) channel. This structure has been fitted with a white flashing light to mark the North (natural) channel.

(b) The South (Dredged) Channel

The South channel is a 400 ft. wide dredged channel. Depths therein accommodate the maximum draft authorised by the Port Captain. The approach from the sea is marked by a battery-operated electric flashing black buoy, identified with the number 0.1. This buoy is located in 45 ft. of water at Lat. 8° 55′ 52″ N., Long. 60° 11′ 17″ W. Its characteristics are: colour of light, white; flash, 0.5 seconds; eclipse, 11.5 seconds; height above water, 25 ft.; visibility, 11 miles. From seabuoy 0.1, the channel develops along 4 different courses over a total distance of 27.7 miles to Beacon G7. The course reduces by about 7° true at each of 3 turning points, located at miles 9, 15 and 21 respectively. The initial course of 234° 18′ true continues to mile 9 where it changes to 227° 07′ true. Upon reaching mile 15, the course again changes to 219° 51′ true to mile 21. At mile 21, the course changes to 212° 45′ true to Beacon G7 at mile 27.7. The centreline of the channel on all courses is visually marked by range structures fitted with green flashing, directionally beamed lights. The West (right ascending) side limit of the channel through mile 21 is also visually marked by range structures fitted with amber flashing, directionally beamed lights; the alignment given by the side ranges develops 200 ft. to the West and parallel to the centreline of the channel. Battery operated electric flashing navigation aids are located along both sides of the channel. All navigation aids along the East (left ascending side of the channel are located 325 ft. from centreline or 125 ft. outside of the channel lateral limit. White flashing navigation aids are located at 1 mile intervals through mile 25.1; all aids along this side are black buoys, except beacons 8.1, 9.1, 14.1, 15.1, 20.1, 21.1, 22.1, 23.1, 24.1, 25.1, 27.1 and 27.7 (G7). All navigation aids along the West (right ascending) side of the channel are located 200 ft. from centreline or on the exact lateral limit of the channel. Red flashing buoys painted red are located at 1 mile intervals from mile 1.6 to mile 11.6. From mile 11.6 to mile 27.7, there are only 2 aids; red buoys 13.6 and 26.0.

3. *The River Channel*

From mile 27.7, the navigable channel develops upstream. The river channel is generally deep and wide, except for the following 12 reaches which require periodic dredging: miles 27.7 to 36.5; miles 37.3 to 38.6; miles 53.1 to 54.2; miles 99.0 to 106.5; miles 109.1 to 111.0; miles 131.7 to 131.9; miles 136.6 to 139.0; miles 141.2 to 145.8; miles 146.2 to 149.4; miles 167.6 to 170.8; miles 178.4 to 182.4; miles 183.5 to 184.1. Dredged channels are normally 300 ft. in width, but occasionally can be restricted to a min. of 250 ft. The depth maintained therein can accommodate the maximum draft authorised by the Port Captain. By notice to Mariners, the Port Captain has instructed all Masters and Pilots to reduce speed and to proceed with caution while navigating the aforesaid reaches, especially during the low water season.

4. *River Stages*

In response to the cycle of wet and dry seasons, the flow of the Orinoco River follows a relatively regular pattern of rise and fall each year. The river normally begins rising in late March or early April and continues to rise until it peaks at crest in late August. In September, the river begins a fairly steady recession until the extreme low-water stage is reached, generally in March. The amplitude of stage variation above the low water plane of reference (0.0 ft.) at Palua (Mile 181.7) averages about 35 ft. with min. variations of 31 ft. and max. variations of 39 ft. The effects of the flood rise decrease progressively below Palua and practically vanish in the upstreamward vicinities of the Boca Grande.

5. *Tides and Currents*

(a) The indicated mean tidal range is 5.4 ft. Tidal influence is not experienced above mile 60 during high river stages. At low river stages, a tidal effect can be observed throughout the waterway, although it progressively diminishes, moving upstreamward. However, the tidal effect is still significant at Puerto Ordaz, mile 184, where a max. semidiurnal change of 1.7 ft. has been recorded.

(b) The strength of river currents is generally commensurate with flow, the strongest currents occurring at high river stages. The velocity of currents at any one time generally decreases moving downstreamward. However, in certain locations, this pattern is affected by particular characteristics of river width and shape as well as by bottom gradient. Max. velocities of about 6 knots have been recorded.

6. *Navigation Aids*

(a) The navigation aids installed along the waterway consist of buoys, beacon and ranges. All aids are lighted. Identification is provided by means of numbers representing the approximate mileage of each aid, to the nearest one-tenth of a mile. The last digit of numbers identifying white lighted aids is odd, while the last digit of numbers identifying red lighted aids is even. White lighted aids mark the left ascending limit of the navigable channel, while red lighted aids mark the right ascending limit. Aids are placed as to be intervisible, to the extent that — when abreast of any one aid — the preceding and following ones can be sighted. Consecutive aids always carry different light characteristics. Buoys are normally placed on the exact lateral limit of the channel (except for black buoys along the South channel at the Boca Grande); beacons, instead, are located at variable distances outside of the channel.

(b) During the execution of dredging along any of the reaches which require periodic maintenance, buoys are generally moved 100 ft. outside of the channel lateral limits. This information is made available to ships by YVM.

(c) The Ministerio de Comunicaciones, Direccion de Marina Mercante, publishes semi-annually a complete list of navigation aids. Monthly lists of changes are also published so that the complete current list can be maintained up to date.

(d) Upon encountering damaged, inoperative, or misplaced navigation aids, vessels should immediately notify YVM.

(e) Vessels are forbidden to make fast to any navigation aid.

7. *Dredging Aids*

Range structures, generally located close to shore or over the bank, are normally used to mark the lateral alignments of the channel along the reaches which require periodic dredging. These ranges are generally fitted with amber flashing, directionally beamed lights. The lights are extinguished except during execution of dredging. Dredging ranges *are not* to be used for navigation.

8. *Navigation Charts*

Navigation charts of the Orinoco Waterway should be aboard vessels for use by the Master. These charts are sold by the Instituto Nacional de Canalizaciones and are also available for purchase from the Orinoco Mining Company. If requested, CVG will, if possible, arrange to make the charts and latest revisions available through the Pilot who boards at Punta Barima, provided such request is received by radio (YVM) at least 48 hours in advance of the Pilot's boarding. A set of navigation charts, corrected to latest revisions, is maintained in the office of the Traffic and Ships' Agency of CVG in Puerto Ordaz. Masters may use this facility to keep their charts up to date.

DOCUMENTS: (Clearance, documentation and other requirements).

1. *Consignment of Inbound Vessels*

The official documents of all vessels proceeding to Puerto Ordaz should show the following consignment: to: CVG Ferrominera Orinoco, Ciudad Bolivar, Zona de Puerto Ordaz. The proper consignment of vessels proceeding to Palua, on official documents, is as follows: Iron Mines Company of Venezuela, Ciudad Bolivar, Zona de San Felix.

2. *Customs Requirements*

Vessels bound for Venezuela in ballast, without passengers, from foreign ports outside the West Indies or Guianas, require the following documentation:

(a) Vessels must have a ballast despatch statement (Certificado de Lastre) which must consist of a note from the Venezuelan Consul, if such Consul is present at the port of departure; otherwise, in descending order of desirability, from the Consul of another friendly nation, the local Chamber of Commerce or 2 reputable merchants of the port of departure. The note should include the name and nationality of the vessel, name of the Captain, registration number of the vessel and tonnage, sailing date and assertion that the vessel is en route in ballast, cargo, or with passengers. The note should be given to the Captain of the vessel or his Agent in an open envelope, which the Captain

can exhibit in intermediate Venezuelan ports of call and can turn over to Customs authorities in the Venezuelan ports of destination. Under no circumstances may the ballast despatch statement be signed by an Agency of the government of the country from which the vessel is departing.

(b) The vessel must have a clearance certificate (Certificade de Zarpe) or sailing authorisation issued by the Customs Authorities of the port of departure, representing the government of the country the vessel is departing from. No consular certification need be placed upon this document.

(c) Stores List (Lista de Rancho) signed by Master unless vessel is dispatched from the West Indies or Guianas, then the stores list must be visaed by the Venezuelan Consul at port of departure. Stores list must indicate separately all deck, engine and cabin stores. These lists may be prepared on board prior to arrival.

(d) Spare Parts List (Lista de Repuestos). It must contain a note of all the spare parts and objects for the service of the vessel, including fuel. No consular certification required. To be signed by the Master and to be current as of the day of entering the Venezuelan port.

(e) List of Effects for use of Captain and Crewmen (Lista de efectos personales de la dotacion). No consular certification required. To be signed by the Master and to be current as of the day of entering the Venezuelan port. The Customs are very strict and will confiscate any article that appears new.

3. *Health, Immigration, and Police Requirements*

Vessels bound for Venezuela in ballast, without passengers, from foreign ports outside the West Indies or Guianas, require following documentation.

(a) Current individual International Vaccination Certificates for each member of the crew.

(b) Rat Eradication Exemption Certificate. No consular certification required.

(c) Crew Lists (original and seven copies). No consular certification required.

(d) Panama or Suez Canal or any comparable type measurement certificate.

Contraband: The Venezuelan law is very strict on this subject. It cannot be emphasised too strongly that all new articles, clothing, cigarettes, liquor, etc., must be declared and sealed-up upon arrival.

Meals for Pilots and government officials. It is requested these men be granted the privilege of eating in the officers' dining salon.

N.B. Masters of vessels calling at Trinidad for bunkers before proceeding to Venezuela must also have the documents stamped by the Venezuelan Consulate at Port of Spain.

PILOTAGE: In order to expedite the movement of shipping in the waterways, Masters are requested to establish contact with YVM station as soon as possible, giving ETA pilot station at Barima (Orinoco River entrance). At the same time a radio-telegraph message must be sent to Agents giving ETA Barima and cargo required. When vessels is 24 hours from pilot station, send another ETA via YVM.

After reporting the ETA in advance of arrival, try to contact directly, by radio, the Estacion de Pilotos when the ship approaches the sea-buoy of the bar entrance (about 2 hours before arrival at the pilot station).

After taking the Pilots aboard, report to Radio Marina and continue giving the ship's position according to the mile, up-river, at exactly every hour on the hour, and receive from Radio Marina the pertinent information concerning the traffic in the river waterway. If no communication can be established by voice radio aboard, comply by radio-telegraph by way of the YVM station.

Pilots are employees of the Venezuelan Government and act in an advisory capacity. The Master retains responsibility for the ship at all times.

(1) Pilotage is not required and Pilots are not available for navigation outside the pilotage zone. Masters will take charge of inbound and outbound navigation on the North or South channel outside Beacon G7 at the Boca Grande, without Pilot's assistance.

(2) Pilotage is mandatory within the Pilotage Zone No. 1 of the Orinoco. Inbound vessels will embark the government River Pilot in the upstreamward vicinities of Beacon G7. It is important that vessels pass Beacon G7 and be in sight of the pilot station at Barima in order to avoid any delay, as Pilots may not proceed until vessel is sighted. The government River Pilot will pilot the vessel while navigating the waterway; a special government Docking Pilot will generally take the vessel into and out of the Puerto Ordaz harbour.

Signals

(1) All signals used outside of the pilotage zone (that is to say. seaward of Beacon G7 – mile 27.7) shall conform to the International Rules for Prevention of Collisions at Sea.

(2) Within the pilotage zone (that is to say, inside of Beacon G7 – mile 27.7) the signals used shall be in accordance with the "Regulations for the Pilotage Zone No.1 of the Orinoco". It should be noted that these signals are peculiar to the Orinoco Waterway, and are not necessarily in conformance with the International Rules.

(3) Within the pilotage zone, special signals are used for passing dredgers at work along the waterway.

Speed

The Captain of the Port has the authority to impose speed restrictions. By means of "Notices to Mariners", the Port Captain has ordered that all vessels reduce speed while navigating by the following locations: San Felix Dock, mile 179.8; El Toro, miles 95.4 to 96.6. It is recommended that speed be also reduced while navigating by the Palua Dock (mile 181.8), Barrancas (mile 143.2), and Curiapo (mile 60.4). At the inception of the low water season each year (generally in early January), the Port Captain has in the past issued a "Notice to Mariners" instructing all vessels to reduce speed and proceed with caution while navigating the following river reaches: (1) miles 184 to 178, (2) miles 171 to 167, (3) miles 150 to 141, (4) miles 140 to 137, (5) miles 133 to 131, (6) miles 112 to 109, (7) miles 106 to 98, (8) miles 55 to 53, (9) miles 39 to 36

ANCHORAGES:

(1) No ships are permitted to anchor either in the North or South channel at the Boca Grande. Vessels are to anchor at least 1 mile outside of Buoy EO or Buoy 0.1.

(2) Within the pilotage zone, no vessel is allowed to anchor in narrow channels, nor close to a turn.

(3) Between Beacon G7 — mile 27.7 and mile 137, vessels which need anchoring may do so by coming as close as possible to shore on the ship's starboard side.

(4) Between mile 137 and mile 184, the Pilotage Regulations provide for 3 permanent anchorages and 1 seasonal anchorage, as follows: Area No. 5 (permanent); miles 139.3 to 140.4. Area No. 6 (permanent): miles 150.1 to 151.7. Area No. 7 (permanent): miles 178.0 to 179.0. Area No. 8 (seasonal): at the junction of the Caroni and the Orinoco. It should be observed that Area No. 7, as determined in the Pilotage Regulations, partially encroaches on the narrow (dredged) channel and on shore. Vessels are to anchor in the naturally deep and wide part of the area.

(5) The low-water anchorage (for 1 ship only) previously established by the Port Captain between miles 182 and 183 is no longer in use. This area is currently used as the turning basin for vessels exiting the Palua channel, upon sailing from the new Palua dock at mile 181.8.

(6) If due to emergency a ship is required to anchor in places other than the designated areas, it should do so in such a way as not to obstruct the channel and by taking the necessary precautions to avoid swinging around.

(7) Upon anchoring vessels should notify YVM.

MAX. SIZE:

(1) *Max. permissible draft.* The Port Captain of Ciudad Bolivar can establish the permissible draft for the Orinoco waterway to a max. of about 43 ft.

(2) *Controlling Depths and Authorised Draft*

The draft authorised by the Port Captain for the Orinoco Waterway is made public by means of a "Daily Bulletin of Depths and Draft" (Boletin Diario de Profundidades y Calado). Each daily bulletin issued by the Port Captain carries the following information, in Spanish and English:

(a) Controlling (minimum) depth between miles 184 and 133, and corresponding location.

(b) Controlling (minimum) depth between miles 133 and 42, and corresponding location.

(c) Controlling (minimum) depth between miles 42 and 0, and corresponding location.

(d) Predicted high tides (height and times) at mile 13.5.

(e) River stage (height of river level above low water plane) at Puerto Ordaz and Palua.

(f) Authorised draft, in feet and inches.

The controlling depths given for locations comprised between miles 184 and 42 are actual depths, and reflect depth conditions as of the date of the bulletin. The controlling depth given for locations comprised between miles 42 and 0 is referred to mean low water springs and does not include the height of tide at high water.

The authorised draft may be predicted either on the controlling depth existent between miles 184 and 42 or between miles 42 and 0, dependent upon whichever is the least.

When the controlling depth between miles 184 and 42 is the significant factor, the permitted draft authorised is at least 2 ft. less than the controlling depth in this sector.

When the controlling depth between miles 42 and 0 is the significant factor, the permitted draft authorised is generally less than the mean low water springs controlling depth but occasionally can be equal to the mean low springs controlling depth.

Whenever the MLWS controlling depth existing between miles 42 and 0 does not provide sufficient clearance under the keel of the vessel at low water, the Master is expected to navigate by the site where the controlling depth is located only at times when the height of tide will assure a safe passage.

(3) *Variations in authorised draft:*

(a) The authorised draft is generally increased or decreased by multiples of 6 inches.

(b) Throughout the year the authorised draft is susceptible to variations, according to the conditions of the depth and width existing in the channel at any one time. On the basis of average river stages it is estimated that the authorised draft should be about 33 ft. in the dry season from December to May.

During the rainy season, from June to November, the max. permissible draft may be as high as 43 ft.

HEALTH: Radio pratique may be obtained by sending a message, after picking up Pilot, to the Port Health Officer, advising that there is no sickness on board, name of last port, ETA, number of crew and nationality of vessel and name and nationality of Master.

RADIO:

(a) Communications: Communications are generally handled through the radio-telegraph station at Puerto Ordaz, call letter YVM. This station is operated on a 24 hour basis. The operating frequencies are: 440 kc/s; 472 kc/s; 4322 kc/s; 6505.5 kc/s. The

GMT — CQ times and frequencies are: 0900 hours, 4322 kc/s; 1200 hours 6505.5 kc/s; 1430 hours 8722 kc/s; 2000 hours 8722 kc/s; 0030 hours 8722 kc/s; 0300 hours 4322 kc/s.

There is no charge for messages from ship to shore or from shore to ship handled directly through YVM. A VHF frequency modulated radio system provides voice communications along the Orinoco Waterway. Master sets for the system are installed in the Puerto Ordaz radio-telegraph station (voice call: "Master Radio"); Marine Radio handles shipping matters exclusively, The system consists of a high-band VHF frequency modulated voice radio net. To ensure a more efficient and satisfactory coverage, this system operates on dual frequencies alternating according to location, so that ships can either transmit on 161.700 mc/s receiving on 159.000 mc/s, or transmit on 161.150 mc/s receiving on 159.850 mc/s. For best results, ships should select frequencies according to the following: From sea to mile 50: transmit on 161.700 mc., receiving on 159.000 mc.; From mile 50 to mile 112: transmit on 161.150 mc., receiving on 159,850 mc.; From mile 112 to mile 159: transmit on 161.700 mc., receiving on 159.000 mc.; From mile 159 to mile 184: transmit on 161.150 mc., receiving on 159.850 mc.

Pilot station at Barima Bar, Palua and Matanzas are equipped with this system. For the Puerto Ordaz area, ships will transmit to Marine Radio on a frequency of 43.02 megacycles and to others on a frequency of 43.18 megacycles, receiving in both cases on a frequency of 43.18 megacycles.

(b) Control of Navigation:

(i) Navigation on the North (natural) channel at Boca Grande is free. However, vessels are requested to notify the Port Captain, Ciudad Bolivar, via YVM, upon arrival at Buoy EO, giving ETA at Beacon G7, mile 27.7.

(ii) Simultaneous navigation in opposite directions by 2 or more vessels is not permitted on the South (dredged) channel at the Boca Grande. The restriction is placed on inbound traffic, to the extent that any vessel wishing to enter the South channel requires prior authorisation from the Port Captaincy of Ciudad Bolivar. The request for permission to enter the South channel is to be addressed to the Port Captain, Ciudad Bolivar, via YVM, and is to be transmitted before the vessel reaches Buoy 0.1. Upon receipt of the request, the Port Captain will notify the vessel via YVM whether permission is or is not granted, indicating, in the latter case, the approximate waiting time. Until permitted to enter, vessels are to anchor at least 1 mile outside of Buoy 0.1. Once that authorisation has been granted, vessels are to enter the South channel at the earliest opportunity. Any vessel which has been notified to wait may elect to proceed and enter through the North (natural) channel; in this case, the vessel will have to satisfy the requirements outlined in paragraph (1) above.

(iii) While navigating the Orinoco Waterway inbound or outbound vessels are to report their position to YVM hourly on the hour.

(c) *Accident, Stranding, etc.*

(i) Should a collision, stranding or other accident occur in the waterway, or should it be found necessary to take control of the vessel away from the pilot for any reason, the Venezuelan law requires that a written report be made to the Captain of the Port by the Master of the vessel involved within 24 hours. The report is to be addressed to the Captain of the Port and may be handed to the Pilot or the ship's Agent for delivery. The Master need not appear in person before the Captain of the Port unless specifically ordered to do so.

(ii) Slight groundings or touching of banks and bottom may simply be noted on the reverse side of the receipt for pilotage signed by the Master.

(iii) In case of collision, stranding, slight grounding, touching of banks and bottom, or other accidents, vessels should immediately notify YVM.

Section A

MATANZAS: 08.17 N. 62.50 W. (See Plan)

N.B. See "Orinoco River" for all important entry requirements.

OPERATORS: CVG Siderurgica del Orinoco CA.

ANCHORAGES: Between miles Nos. 195 and 197, Orinoco River.

MAX. SIZE: Length 600 ft., breadth 74 ft., distance between rail and hatch combing 23 ft., max. draft 30 ft. in rainy season May to November, and 26 ft. in dry seaon.

RADIO: See "Orinoco River". Cables address of Matanzas terminal operators is "Sidor Matanzas – Telex 22709" and cables may be routed through Caracas, Curacao or Trinidad Radios.

TUGS: Every vessel over 2,000 registered tons is required to use a tug when berthing. Tug is 1,600 h.p.

BERTHING: Undertaken day or night. Length of quay 300 m. Depth alongside 28 ft. (Summer), 60 ft. (Winter).

There are 2 gantry cranes for bulk cargo, capacity 20 tons, can also be fitted with electro-magnets. 3 gantry cranes with fixed jibs for general cargo, capacity 5 tons, can also be fitted with electro-magnets.

MEDICAL: Private hospital and several doctors available.

TIDE: 6 inches rise and fall at the berth. Current, in Winter 6 knots; in Summer 1.5 knots.

FRESH WATER: Available at rate of 12 metric t.p.h.

FUEL: Available in emergency.

CUSTOMS ALLOWANCE: 200 cigarettes and 1 bottle spirits allowed per crew member for personal consumption.

IDENTIFICATION CARDS: Provided by authorities, and necessary if crew going ashore.

REPAIRS: Local workshops undertake minor repairs.

AIRPORT: Distant 10 miles. 6 flights a week to Caracas.

HOLIDAYS: No work on 1st January, Maundy Thursday, Good Friday, 1st May and 24th December. Work can be arranged on other holidays.

DEVELOPMENTS: The existing quay is being extended by 430 m. Depth will exceed 42 ft. in Summer. Water and fuel services will be available. New equipment includes 6 semi-gantry cranes with capacity of 30 tons and a fixed heavy lift crane with 400 tons capacity.

Section B

PALUA: 08.21 N. 62.41 W.

N.B. See "Orinoco River" for all important entry requirements. Specific details, relevant to Palua only, are as follows:

SUPPLIER: The ore supplier is Iron Mines company of Venezuela, cable address El Pao San Felix (Venezuela). Their Palua office is fitted with VHF radio-telephone on 161.150/159,850 megacycles and 2182 (call) kilocycles.

CLEARANCE: Agent will secure the Clearance dispatch.

Note: The Palua dock and facilities are the private property of Iron Mines Company of Venezuela. All Company regulations must be obeyed by vessels and vessels personnel.

The Bill of lading will be prepared by Iron Mines Company of Venezuela, also the Commercial Invoice on the Consular Invoice form 138. The Inward Foreign Manifest, U.S. Customs form 7527–B, should be prepared by Master after sailing from Palua.

MAX. SIZE: Max. Draft 43 ft. Max. d.w.t. 70,000 tons.

BALLAST: To provide the best manoeuvring trim on docking, it will be at the discretion of the Master to properly ballast the vessel. But in order to lose no time on loading operations, as well as to prevent short loading, the ballast should be pumped out as soon as possible, using utmost caution not to pump oil or sludge overboard in the port area.

APPROACH AND DOCKING IN PALUA: After passing the village of San Felix, and before reaching the turn off from the main channel, a tug and a Docking Pilot will meet the vessel and will assist in the docking manoeuvre. Although the Master will always be responsible for the vessel's movements either in the case of docking or undocking, the Docking Pilot will actually pilot the vessel to, and dock the ship at Palua.

At mile 180.5 the ship should leave the main channel, turning to the left to follow the new dredged entrance channel of approach which is marked by 2 flashing buoys: white on the port and red on the starboard side. Diamond-shape range marks of 6 ft. side, painted white with black diagonal cross, indicate the centre line of the approach channel. The front range, fastened on the ore loading pier, shows flashing green light, and the rear range, set on a tower shows flashing green light, and the rear range, set on a tower approximately 2,000 ft. away, has fixed green light.

The docking shall be port side to in all events; and please stow all hatch boards, or pontoons, or steel battens, etc., on the starboard side of the hatch as this will keep the gear cleaner and lessen the work of the ore handling gang.

The dock will provide a gangway for access to the ship. Nothing should overhang the port side of the vessel on docking.

If the loading berth is not available the arriving vessel would be instructed to anchor at an anchorage just below the entrance to Palua approach channel at mile 179.

LOADING DOCK: The ore loading port is located at mile 181.5 of the Orinoco waterway, along the left bank going up-river. The new steel dock here is aligned up and down stream in the general direction of the current. It is 907 ft. long between its pointed heads, with 791 ft. of boarding side along, the deck fixed at about 6 ft. over the maximum rise of the river in the flood season. It has a strong fender system of steel structure covered with timber overhanging the side, down to near the lower river stage; and is fitted with 14 bollards plus 2 more, one on each head, for proper docking and securing the vessel.

Once the vessel is moored alongside the new ore loading dock, there shall be no further shifting necessary to load, as the loading tower moves along the dock on rails to facilitate the loading through the various hatches.

LOADING: The ore handling and loading equipment for Palua has a capacity to load 3,000 metric tons of ore per hour, for the time being. With this capacity, the vessel's mooring lines should be tended during the operation.

The boom of the loading tower is so designed as to allow free movement in any direction, fore and aft. The gantry and boom travel along the dock for a distance of 518 ft., and can place the ore at a distance horizontally out from the dock fenderline of 23 ft. min. and 62 ft. max. at the highest water stage, and from min. 29 ft. to max. 67 ft. horizontally out at the lowest stage.

Care must be taken during the course of loading to avoid piling the ore too high in the holds, as this necessitates hand trimming before the hatch covers can be properly secured, and incurs unnecessary trouble.

UNDOCKING: The Master, assisted by a Docking Pilot, if required, will handle the vessel on leaving the dock, going upstream from the dock not less than 0.75 miles distance to the turning basin in the same heading as when the ship moored alongside. 1 tug (or 2 tugs if required), will go alongside the ship prior to undocking and will assist the vessel until it is headed downstream in the main Orinoco channel. The amber lights at the heads of the dock form a range to mark the shoreside boundary of the local dredged channel. A red light high up on the loading gantry will come in the same range as the 2 amber lights. In the turning basin a tug-boat will assist the vessel swinging downstream.

When the ship is in the main channel, properly headed downstream, the Docking Pilot will leave on the tug, and the River Pilots (2 of them) will assume the navigational direction. Report to Radio Marina by voice radio and give ETA at mile 31.

Report again to Radio Marina giving position every hour, and try to contact Barima Pilot station sometime before arrival at mile 31, where the Pilots will disembark.

If voice radio communication is not possible, comply by radio-telegraph by way of the YVM station.

HEALTH: The vessel will be boarded by the Public Health Doctor after docking at Palua; unless instructions to the contrary.

In the event that the Authorities have to board the vessel anchored out in the stream, an accommodation ladder should be rigged, preferably on the starboard side, to keep the port side clear for docking. Venezuelan authorities and workmen will not use Pilot ladders.

REGULATIONS: The Master, members of the crew and passengers if any, are required to have in their possession individual smallpox vaccination certificates. Serious delays may result in the dispatch of the vessel if this requirement is not complied with.

The Venezuelan law is very strict on the subject of contraband. It cannot be stressed strongly enough that all *new* articles, clothing, cigarettes, liquor, etc., must be declared and sealed up on arrival.

Concerning passes, the regulation states that "members of the crew who are not officers of the vessel, in order to go ashore and return aboard, have to be supplied with an identification card to be issued by the Purser of the vessel or his substitute, which card will contain the name of the vessel, the name of the crew member and the date of issue. This card will have to be signed by the person issuing same and has to be authorised by the respective officer of the Port Captain's office for the district".

GAS-FREE CERTIFICATE: Vessels reporting to Palua to load ore should have the holds and cargo compartments swept clean and ready to receive cargo. Also, any combination ore/tanker vessel tendering to load iron ore at Palua shall present, along with the notice of readiness, a Gas-free Certificate if said vessel has in the past been employed in the carriage of petroleum products. Such certificate shall be dated subsequent to the discharge of the vessel's last petroleum cargo. But they are advised that around Palua in Venezuela there is no chemist available for granting such a Gas-free Certificate. It may be secured before arriving at Venezuela by calling at Trinidad, reporting to cable address: Harriman, Port of Spain.

In case of necessity, or for convenience, it could be arranged for the chemist to travel to Venezuela to meet the ship in Palua, advising Harriman (Port of Spain) at least 3 days before arrival at Palua.

If the vessel is equipped with a gas-indicating meter (explosimeter), Iron Mines Company of Venezuela will accept the Master's certification in writing that the vessel is gas-free. However, they reserve the right to check the vessel with their own equipment prior to acceptance.

RADIO: Should a vessel receive radio advice at sea to proceed to Palua, and the clearance is to another port, the Master must radio to Agents and advise the name of the vessel, flag, port of embarkation, original port of destination, Captain's name and the number of members in the ship's crew including the Master. This is necessary in order to comply with the Venezuelan Custom Law.

CONSULS: At the present time there are no Consular Agents located around Palua, the nearest being in Ciudad Bolivar or Caracas.

FLOOD SEASON: The port experiences a yearly flood season from the middle of June to the middle of November, to a max. of about 38 ft. at the last days of August, above the lowest stage (during the first days of April) in the dry season that occurs from the middle of November to the middle of June.

TIDE: The wind in the locality blows generally upstream, and on exceptional occasions during the dry or low-river season, when the current is weak, does overcome the current and cause the anchored ships to tend with stern upstream.

REPAIRS: Minor emergency repairs of mechanical, electrical and electronical types may be carried out in the shops by the personnel of the Iron Mines Company of Venezuela. The American Bureau of Shipping has a surveyor at Puerto Ordaz, near Palua.

MEDICAL: There is a medical dispensary at Palua, and a hospital of the Company at El Pao, where seamen may be admitted when requiring hospitalisation in emergency cases.

FUEL: All grades of bunker fuel are available at Palua, delivered by barge.

FRESH WATER: Drinking water is available at the dockside in limited quantity of about 100 tons every 24 hours. Small amounts of fresh provisions may be obtained in the locality.

PUERTO ORDAZ: 08.21 N. 62.43 W.

OPERATORS: CVG Ferrominera Orinoco.

LOCATION: The operations of the CVG Ferrominera Orinoco are centred in the State of Bolivar in Eastern Venezuela and iron ore is loaded into ocean-going vessels at Puerto Ordaz 8° 21′ N., 62° 43′ W., at the junction of the Caroni and Orinoco Rivers, approximately 184 nautical miles from the open sea.

GAS-FREE CERTIFICATE: Any combination ore-tanker vessel tendering to load iron ore at Puerto Ordaz shall present, along with the notice of readiness, a gas-free certificate if said vessel has in the past been employed in the transportation of petroleum products. Such certificate shall be dated subsequent to the discharge of the vessel's last petroleum cargo. Gas-free certificates can be obtained through an approved surveyor in Puerto Ordaz.

HEALTH: Vessels will be boarded by the Public Health Doctor in the stream off Puerto Ordaz. He will not come up a Pilot ladder and will insist on an accommodation ladder which should be rigged and ready when he approaches. In order not to delay docking, this accommodation ladder should be rigged on the port side during low river stage, and starboard side during high river stage.

RADIO: Should a vessel receive radio advice at sea to proceed to Puerto Ordaz, and the clearance is to another port, the Master must radio station YVM Puerto Ordaz, and advise the name of the vessel, flag, port of embarkation, original port of destination, Master's name and number of members in the ship's crew. This is necessary in order to comply with article 17 of the Venezuelan Customs Law.

TUGS: All vessels touching at Puerto Ordaz will be assisted by a tug in docking and undocking manoeuvres. Line-handlers are available on the dock to secure mooring lines on vessel's arrival, and to release them on vessel's departure.

BERTHING:

1. **The Harbour:** The Puerto Ordaz Harbour extends from mile 183.5 to mile 184.1 of the waterway. The harbour consists of a natural basin formed by the mouth of the Caroni as it flows into the Orinoco. The width of the turning area within the basin varies from a min. of about 1,600 ft. at low water to a max. of about 2,000 ft. at high water. The lighted buoys marking the navigable limits on either side of the harbour are moved to different positions according to river stages in order to achieve full utilisation of navigable waters. The bottom of the harbour is generally rock, with scattered layers of sand overburden deposited as sediment by the river. This sand is regularly removed by dredging in order to maintain depths which will accommodate the maximum draft authorised by the Port Captain. The bottom configuration across the harbour consists of a rocky shelf extending about 900 ft. from the face of the dock. Beyond this shelf the bottom slopes steeply into a deep gorge, then rises to form a sandy beach along the opposite shore. The velocity of river currents at this site varies according to stage levels. A slower current is generally experienced over the rocky shelf adjacent to the dock, with velocities averaging about 1.5 knots at flood stages and about 0.5 knots or less at reduced river stages. The velocity of the current over and along the deep gorge averages about 3.5 knots at flood stages and 1.5 knots or less at reduced river stages. During extreme low water, the basin is subject to tidal influence and the velocity of currents is minimal, although there is no reversal of flow. The direction of the current is aimed slightly toward the face of the dock at its S.E. end but deflects away from the pier about 500 ft. downstreamward. Access to the harbour is by way of a naturally deep and wide fairway which is the continuation of the gorge as it enters the Orinoco River.

2. **The Dock:** The Puerto Ordaz dock is located along the right ascending side of the harbour and extends outward from shore on a S.E. by East alignment. The all-steel fixed-height dock is 1,885 ft. long; its elevation is 41 ft. above low water plane (0.0 ft. stage). This dock is fitted with a strong fender system and with a sufficient number of accessible bollards for proper docking and securing.

3. **Arrival:**

(a) Notice of Readiness: When completely ready to receive cargo, vessels will submit "Notice of Readiness" to CVG Ferrominera Orinoco. Vessels will be loaded in the order in which Notices of Readiness are accepted by CVG Ferrominera Orinoco. The Company will advise when the vessel may proceed alongside the dock.

(b) Docking: Special Docking Pilots are provided for the docking and undocking of vessels at Puerto Ordaz. These Pilots are qualified River Pilots, thoroughly familiar with local conditions. All vessels will dock starboard side to. During the low water stage, which is from the middle of November to the middle of June, no gangway should be rigged and nothing should overhang the starboard side of the vessel. When the river is sufficiently high which is from the middle of June to the middle of November vessels are requested to have starboard gangway or accommodation ladder rigged and ready to lower immediately after docking in order to expedite the commencement of loading. Venezuelan authorities and workmen will not use Pilot ladders. Vessels reporting to Puerto Ordaz to load ore should have holds and cargo compartments broom clean and ready to receive cargo. Considerable time will be gained if this requirement is met prior to reporting.

(c) Hatches: On arrival at Puerto Ordaz all hatch boards or pontoons, beams, tarpaulins, steel battens, wedges, etc., should be stowed on the port side of the hatch. This will keep the hatch gear cleaner and lessen the work of the ore handling clean-up gang.

(d) Ballast: In order to lose no time with the loading operations, as well as preventing short-lifting, all ballast should be pumped out

before arrival at the dock. Use utmost caution not to pump oil or sludge overboard in the port area. CVG Ferrominera Orinoco Ships' Agency Representative will contact vessel on arrival and will assist in every way possible.

4. **Departure:** All vessels which have completed loading at Puerto Ordaz and have received the latest river information from the port officials, and are ready for their river transit in every respect, will proceed outward via the Orinoco Waterway, disembarking the pilot at mile 31. Once the Pilot has disembarked, vessels shall proceed over the South (dredged) channel to mile 0, and exit the waterway.

TANKERS: See "Punta Cuchillo".

MEDICAL: There is a hospital at Puerto Ordaz which will admit seamen requiring hospitalisation.

FRESH WATER: Drinking water is available alongside the dock.

FUEL: Bunker "C" and diesel oil is available.

CONSULS: An Italian consulate Agent at Puerto Ordaz, nearest consuls for other countries at Cuidad Bolivar or Caracas.

REPAIRS: Minor emergency repairs may be carried out in the shops of CVG Ferrominera Orinoco.

TIME: The legal time of Venezuela, which is 4 hours behind G.M.T., shall be used in Pilotage Zone No. 1 of the Orinoco river.

SHORE LEAVE: Permitted, but it is mandatory that all crew members should report back to their respective ships before sailing time.

GENERAL: 1. *Ore Loading Equipment:* The ore handling and loading equipment installed on the pier has a speed ratio of 6,000 long tons of ore loaded per hour. Due to this great loading capacity the vessel's mooring lines must be tended at all times.

2. *Handling Facilities:* A movable 110-ton, rail mounted stiff-leg derrick is installed on the dock for the handling of general cargo.

3. *Provisions:* Small amounts of fresh provisions are available.

4. *Surveyor:* The American Bureau of Shipping has a non-exclusive surveyor in Puerto Ordaz. Lloyds has an Agency in Ciudad Bolivar with a branch office in Puerto Ordaz, and will appoint surveyors upon request.

AGENTS: Mailing Address: CVG Ferrominera Orinoco C.A., Agencia de Barques, Puerto Ordaz. Telex No. 86249 (ORINADM).

CVG Ferrominera Orinoco acts as ship's Agent for all vessels consigned to load iron ore at Puerto Ordaz. This function is performed by the Superintendent, Traffic & Ship's Agency and his staff, whose offices are located adjacent to the loading dock at Puerto Ordaz.

Section D

PUNTA CUCHILLO, (Puerto Ordaz Terminal): 08.20 N. 62.47 W. **(See Plan)**

N.B. See "Orinoco River" for all important entry requirements. Specific details relevant to Punta Cuchillo only are as follows:

OPERATORS: Roqueven S.A.

LOCATION: The terminal and dock is located near Mile Post 192 on the South side of the river.

PILOTAGE: Government Pilot will pilot vessel to Puerto Ordaz. In some cases this same Pilot will act as Mooring Pilot and dock vessel at the terminal. If River Pilot does not also act as Docking Pilot, the River Pilot will disembark at mile 178 during low water, and mile 183, in high water, and a Docking Pilot will embark and take the vessel to mooring.

Pilots are obtained at the G7 buoy of the old channel, which is the same as Buoy 27.7 of the new channel and is located 5 miles West of the old lighthouse at Punta Barima at Lat. 08° 36′ 00″ N., Long. 60° 30′ 40″ W. It is important that vessels pass this buoy and be in sight of the Pilot Station (1 mile E.S.E. of Punta Barima Lighthouse), as pilots will not proceed to the vessel until it has been sighted.

RADIO: Vessels diverted at sea to Punta Cuchillo which do not have a Venezuelan clearance on board, must advise Roqueven by radio as soon as they receive their orders to change destination. The following information must be given: Master's name, vessels flag, net tonnage, last port of call, port to which originally cleared and ETA. This information is required in order that inward clearance may be arranged with government officials in ample time prior to vessel's arrival. In absence of this information, vessel will be subject to a fine.

MAX. SIZE:

Gauge Reading	*Maximum Draft*	*Tide Required at Bar*
12–14 ft.	33 ft.	None
14–17 ft.	34 ft.	None
17–20 ft.	35 ft.	None
20–23 ft.	36 ft.	None
23–26 ft.	37 ft.	None
26–29 ft.	38 ft.	None
29–32 ft.	39 ft.	None
32–35 ft.	40 ft.	None
35–38 ft.	41 ft.	half of high tide
38–41 ft.	43 ft.	half of high tide

HEALTH: Vessel will be boarded by the Public Health Doctor in the stream off San Felix or Puerto Ordaz or occasionally at the Terminal. If he boards before docking, an accommodation ladder should be rigged and ready when he approaches, as he will not come up a pilot ladder.

All Masters, members of the ship's crew, and passengers, if any, are required to have in their possession individual smallpox vaccination certificates. If this requirement is not complied with, a serious delay may result in the dispatch of the vessel.

BERTHING: The dock at the terminal consists of a docking platform, 2 breasting dolphins and 2 mooring dolphins. The docking platform is connected to shore by a 10 ft. causeway capable of carrying a light truck.

At mean low river stage, water depth at the face of breasting structures is 40 ft. The bank rises sharply from face of dolphins toward shore. The 40 ft. depth contour extends parallel to shore for a considerable distance upstream and down stream from the dock, allowing a flat approach angle.

Current is negligible during low river stage and is approximately 6 knots at midstream at high river stage. Current runs generally parallel to the face of the dock at the dock site.

Top of dock elevation is 45 ft. above low water stage. Buffering system extends from a point below low water stage to a point immediately below top of dock. Nothing should overhang the shoreward side of the vessel when docking during the lower stages of the river. The buffering system is designed to accommodate forces exerted by a vessel of 47,000 tons displacement, approaching the dock with a velocity component perpendicular to the dockface, of 0.5 ft. per second.

Bollards for vessel's lines are provided at the mooring dolphins and at the breasting structures. Mooring dolphins will safely withstand 200,000 lbs. of mooring line tension.

The facilities include a 24 in. diameter submarine pipe-line which crosses the river a short distance down-stream of the dock. The crossing is marked by triangular-shaped signs on both banks of the river. Masters are cautioned against use of vessel anchors in this area.

The terminal pumps are capable of loading oil aboard ship at the rate of approximately 14,000 barrels per hour.

INWARD CLEARANCE FOR DIVERTED VESSELS: Vessels diverted to Puerto Ordaz to load cargo should submit all documents, except consular mail, which they will not have. In lieu of this, they should submit 4 copies of the cable to divert, leaving enough space for the translation in Spanish. Vessels diverted at sea to Puerto Ordaz (Roqueven Terminal) which do not have a Venezuelan clearance on board must advise Roqueven at Puerto Ordaz, by radio as soon as they receive their orders to change destination. The following information must be given: Masters name, vessels flag, net tonnage, last port of call, port to which originally cleared and ETA. This information is required in order that inward clearance may be arranged with government officials in ample time prior to vessels arrival. In absence of this information, vessels will be subject to a fine.

SAFETY: The following is a condensation of the safety precautions that should be observed when the vessel is alongside the dock:

(i) All passageway doors leading to the cargo deck areas are to be kept closed during cargo-loading operations.

(ii) Ship's firefighting equipment must be kept ready at all times while berthed at Roqueven dock.

(iii) Smoking or carrying lighted or unlighted pipes, cigars or cigarettes on the weather decks of the vessel, or on the dock, is strictly prohibited under all circumstances. Masters are requested to instruct their crew not to throw lighted cigars or cigarettes over the side or out of the portholes.

(iv) An efficient watch must be maintained on deck and in the engine-room on the vessel, and a sufficient number of men must be on board at all times to move the vessel any time, in case such is required.

(v) If the galley is located near oil-handling operations of any nature, the skylight lids should be kept down and secured to prevent the galley being sprayed with oil in the event of a burst hose.

(vi) Ventilators in the vicinity should be turned away from the scene of operation.

TUGS: The use of tugs is necessary in docking and undocking manoeuvres of boats at this Marine Terminal. Alcoa has a 2,100 h.p. tug available for this service. A tie-up launch will be provided to assist in the mooring of the vessel, and will handle all the mooring lines before and after loading.

LOADING: Monagas crude is the only cargo available at the Puerto Ordaz Terminal. This crude has an API gravity of 11.9° to 12.5° F. (6.490–6.517) U.S. barrels per long ton. This cargo must be heated to approximately 140° F. in order to attain normal discharge rates.

Loading is accomplished through 3×10-in. hoses provided with 10-in., 150 lb. ASA flanges. Hoisting gear is provided for handling the hoses. A dock crew will connect the cargo hoses and disconnect them on completion of loading. Some adapters and other tools are available on dock. The oil will be loaded at an elevated temperature.

Precautions, as are common for any heavy oil, should be taken to ensure that no ballast water is left in any tank to be filled with this oil. If the cargo is contaminated with water, the water will not separate from the oil. The salt content of the oil will be raised approximately 10 lb. per 1,000 barrels for every 0.10% contamination by sea water.

All cargo compartments must be stripped dry. Cargo pipe-lines should be drained and/or purged of water.

There is no provision at the Puerto Ordaz Terminal for disposal of dirty ballast or tank washings. Tankers bound for Puerto Ordaz for loading must dispose of all dirty ballast and tank washings before entering the Orinoco River.

Prior to proceeding to sea, all butterworth plates, cargo tank hatch covers and ullage plugs should be inspected to ensure against entry of salt water.

FRESH WATER: Fresh water is available ex-barge; cable advice of 24 hours is required. Dry provisions may be obtained in very limited quantities.

FUEL: Bunker fuels are available at all hours from Astilleros Orinoco C.A., who operate a floating storage and blending facility in the Orinoco River. Bunker fuels may be received at Roqueven dry dock while loading crude. Fill cargoes can be made available.

TIME: GMT minus 4 hours.

MEDICAL: Medical assistance can usually be arranged, particularly in the case of an emergency.

REPAIRS: No major repair facilities are available. However, small repair jobs can be taken care of through local machine and electrical shops, and shore labour can be obtained if required.

AGENCY: Roqueven handles all papers and documentation connected with the ship's business. Roqueven will also help the ship's Master in providing required land transportation, limited provisions, or any other assistance that may be required for the operation of the ship's normal business. Alcoa will also assure that the ship's requirements are met in regard to Sanitary Inspection, Customs Inspection and Guardia Nacional.

PERTIGALETE: 10.15 N. 64.34 W.

LOCATION: Situated in a sheltered bay about 2 miles East of the port of Guanta, or about 4 miles from the pilotage zone situated in the North.

PILOTAGE: The pilotage zone in Pozuelos Bay is the same as for Guanta, i.e. an area situated between the islands of Borracha and Chimana, in the Bay of Pozuelos (formerly called Bergantin Bay).

From the pilotage zone for the port of Guanta/Puerto La Cruz, the private pier Pertigalete is to be approached by sailing between the Isla de Plata and the island of Cachicamo. Pilotage is compulsory in and out and is performed by well-trained government Pilots. The navigation is considered very safe.

MAX. SIZE: The depth of water for ocean-going vessels alongside the Pier is 20 ft. (shore side) to 40 ft. (sea side).

TUGS: Available from inward clearance port at Guanta/Puerto la Cruz.

BERTHING: The private pier in Pertigalete for berthing ocean-going vessels is up to 150 m. (492 ft.) long. The apron is ample and allows easy manoeuvre of trucks with cement. On the same pier the cement factory is regularly receiving raw material and machinery, but the berthing is along the West side of the pier for coastwise trade, so does not interfere with operations for ocean-going vessels. There are chutes, conveyor belts from the nearby silos, and a heavy crane.

TANKERS: Berth at private wharf at Pamatacualito, operated by Baroid de Venezuela SA.

Length of berth 113.60 m., depth alongside 10 m.

LOADING: The cement factory is able to deliver to the pier 2,000 to 2,300 bags per hour, to be loaded simultaneously into arrived vessels. According to experience load rate is about 300 bags per hour and gang by steam winches, and about 400 bags per hour and gang by electric or hydraulic winches.

STEVEDORES: Loading operations are performed exclusively by the personnel of the cement factory. Winchmen are also supplied by the cement factory. All costs, including overtime, are for account of the cement factory, inclusive of stowing and trimming the vessel.

Under normal conditions on Saturday afternoon there is no work, but almost without exception the cement factory works overtime on Saturdays if by doing so the vessel can be despatched that day. On holidays, if circumstances call for urgent operation, the cement factory has the option to work overtime. Work on Sunday is prohibited.

AUTHORITY: Private pier of C. A. Venezolana de Cementos and is under the jurisdiction of Customs and Harbour Master of Guanta/Puerto la Cruz, Eastern Venezuela. All charter business and general administration is covered by Caracas Headquarters of C. A. Venezolana de Cementos.

AGENTS: Head Office (Direction and Control), Brokers Chartering and Tramp Agents, Victor H. Selinger, S.A., PO Box 1632, Caracas. 101, Venezuela. Cables: "Selvic" or "Seltank". Tel. (02) 81.25.28, 81.86.38, 81.28.78, 81.84.89, 81.87.31, 81.85.82. Telex: 22859, 21402, 21631.

PUERTO CABELLO: 10.29 N. 68.07 W. (inc. Barburata)

PILOTAGE: Pilotage is compulsory and vessels have to wait for Pilot in the pilotage zone, West and N.W. of the port entrance (S.W. of Punta Brava).

MAX. SIZE: Bulk Cargo Pier: up to 32 ft. draft. Inner Port: up to 28 ft. draft. Also see "Tankers".

TUGS: The use of tug-boats within the port is compulsory both for entering and leaving port, as well as for manoeuvres in the port basin, for foreign flag ships over 300 tons.

BERTHING: The port entrance is 100 m. wide in direction West to East. Berth No. 1 and half of Berth No. 2 are along the same entrance channel, where ships are berthed only as an exception or when the port is rather congested. The total length of the North (main) Pier for the berthing of ocean-going vessels is 1,025 m., room enough for 6 to 8 vessels. For administrative reasons the pier is divided into 8 berths of about 128 m. each. Between Berths No. 2 and 3, the pier is bent Southwards. Along the pier there are warehouses which under normal circumstances provide sufficient indoor space.

Along the East Pier, of 350 m. length, there are no warehouses. This pier gives berthing facilities to 3 or 4 middle-sized vessels.

Along the South Pier, of 500 m. length, there are 2 warehouses. This pier is exclusively used for coastwise shipping, fishery and small craft in general.

The dredged channel along the East Pier is only 80 m. wide. This is the only channel which connects the main basin of the port with the South basin of the port, the latter served through the South Pier.

BULK-HANDLING FACILITIES: 400 m. long new pier, designed exclusively for the handling of bulk cargoes.

This bulk cargo pier has an apron of about 25 m. and allows ships with a draft of 10 m. at any time.

Ships moored along this new pier are not able to take water there, but have to be shifted to the general cargo piers in the port of Puerto Cabello.

There is no telephone installation on the new pier.

Tug-boat service and assistance of Pilots is compulsory to negotiate the distance to and from the bulk cargo pier.

General cargo is not allowed to be handled at this pier. There are no cargo handling facilities whatsoever and no kind of rolling equipment either. All the vessels, unless they have up-to-date discharging equipment of their own, have to provide derricks of minimum 5 tons capacity to support the SKT discharging equipment of receivers. The cargo is discharged in bulk cargo trucks, fully closed and with only rather narrow manholes for the SKT arm.

The new grain terminal has been opened. The wharf is 400 m. long and allows 2 vessels to berth. Max. depth 30 ft. Average discharge rate 1500 tons per day.

TANKERS: *Borburata:* The Maroven Terminal lies about 2 miles East of the port entrance.

Berth No.	*Max. length*	*Max. beam*	*Max. draft*
1	400 ft.	—	20 ft.
2	575 ft.	72 ft.	31 ft.

No. 1 berth is used for bunkering only.

No. 2 berth is used for the discharge of refined products and bulk chemicals. It is fitted with 4×8-in. chiksans and a range of hoses form 4 to 8 in.

A Pilot is compulsory, and boards at Puerto Cabello. If the vessel is cleared outwards at Borburata, the Pilot may return to the pilot station by road.

Berthing and unberthing in daylight only.

Lagoven Terminal: The buoy mooring is used for the discharge of petroleum products. Max. length 198 m. Max. beam 28 m. Max. draft 36 ft. Max. Tonnage 36,000 d.w.t. Vessels berth using 5 shackles on the port anchor, and 6 stern lines to 3 mooring buoys.

Terminal Marino Holanda: Consists of 3 buoys situated in a depth of 45 ft. near Guaguaza Lighthouse. Used for loading/discharge of Chemicals.

STEVEDORES: *Straight time:* Monday to Friday: 0700–1100 hrs. and 1300 to 1700 hrs.

Overtime: Monday to Friday: 1800 to 2300 hrs. Normally overtime beyond 2300 hours is not permitted.

Relief Gangs: Obtainable, if there are not too many ships working in the port at a time, for the hours from 1100 to 1300 and 1700 to 1800.

Work on Sunday: Not permitted except for passenger vessels, and considered as such are those carrying more than 60 passengers, and with a medical doctor on board.

Saturday afternoon work: Not permitted. But if a vessel can terminate operation and sail with a maximum of 3 additional hours' work, a special permit can be obtained from Customs and Port Authorities. In such case, the additional working hours are considered straight time work.

FRESH WATER: Water is supplied through pipe-line on the pier, day or night.

For night work, a special gratuity to watermen is customary.

The drinking water in Puerto Cabello is tropical treated, well-filtered and wholesome.

Every vessel of over 600 tons net calling at Puerto Cabello, and other ports in Venezuela, should arrange to take water only at Puerto Cabello in order to avoid double water dues.

OPENING/CLOSING HATCHES: Is not performed by the National Port Services, but instead either the ship's crew or hired assistance labour must be used. Recommended that ship's crew open and close hatches.

REPAIRS: The adjacent Naval Yard, the entrance to which is within the main ports, opposite the North Pier, is equipped for minor repairs both on engine and hull. For emergency purposes, the dry dock could be used. Its capacity is for ships up to 30,000 to 35,000 tons. All repairs on the hull are effected by a special crew transferred from the Naval Yard.

At the dry dock there is 1 crane of 15 tons capacity. Within the Naval Yard there are 2 slipways for ships of 125 ft. max. and 210 ft. length max. respectively.

Venezuelan Navy ships always have priority.

AGENTS: Head Office (Direction and Control). Brokers, Chartering and Tramp Agents, Victor H. Selinger, S.A., PO Box 1632, Caracas, 101 Venezuela. Cables: "Selvic" or "Seltank". Tel. (02) 81.25.28, 81.86–38, 81–28–78, 81–84–89, 81–87–31, 81–85–82. Telex: 21402, 22859, 21631. New Boe Code. Local Office, PO Box 108, Puerto Cabello T31. Tel. (042) 2866, (042) 3088. Cables: "Selvic" or "Seltank".

PUERTO DE HIERRO: 10.38 N. 62.05 W.

DOCUMENTS:

Last Port Venezuelan Consulate Clearance.
6 Crew Lists.
6 Passenger Lists.
6 Stores Lists.
6 Narcotic Drugs Lists.
2 Health Declarations (forms provided and filled by doctor on arrival).
Smallpox Vaccination Certificates of Crew.
Derat Certificate.

PILOTAGE: Pilot boards at sea buoy 10° 37′ N., 62° 06′ W. If no pilot boat meets vessel on arrival, ship must anchor to wait orders. Send 72, 48 and 24 hour ETAs to cable address "Transterm Guiria". Vessels should anchor in the vicinity of sea buoy. No radio-telephone available.

ANCHORAGE: Vicinity of sea buoy. Good holding ground.

RESTRICTIONS: Vessels may have to wait at anchorage until slack water for docking when tide/current is strong.

MAX. SIZE: Dock, East berth: 30 ft. at low water 33 ft. at high water 690 ft. length, 90 ft. beam. Dock, West berth: 19 ft. at low water, 32 ft. at low water. 600 ft. length, 60 ft. beam. Also see "Berthing".

HEALTH: Doctor boards at berth and grants pratique. Any suspected disease or fever to be reported at that time. Vessels arriving from a Venezuelan port do not require pratique.

RADIO: La Guaira, Venezuela.

TUGS: None available.

BERTHING: Berthing at times limited to slack water period depending on strength of tides. Pilot will advise.

Bauxite Terminal: Max. draft 37 ft. Depth alongside 40 ft. Max. d.w.t. 40,000 tons. Loading rate 3,000 t.p.h.

STEVEDORES: Bulk cargoes: discharging rate 700/800 t.p.h., loading rate 800/1,000 t.p.h. No facilities available for handling general cargo.

MEDICAL: No notice required. Venezuelan Navy Hospital with limited medical assistance.

TANKERS: No oil carriers.

DENSITY: Low water – 1020. High water– 1023.

FRESH WATER: Available in limited quantities at berth. Rate of delivery 30 t.p.h.

FUEL: In an emergency. Diesel fuel medium, specific gravity at 60° F. 0.85, API gravity at 60° F. 35, viscosity SSU at 100° F. 37, viscosity engler at 20° C. 1.40.

DEVELOPMENTS: Possibility of increasing draft to 42 ft. at loading berth, and to 30 ft. at discharging berth.

CUSTOMS ALLOWANCES: 2 cartons of 200 cigarettes each or equivalent in tobacco. Two 0.75 litre bottles.

IDENTIFICATION CARDS: Issued locally by Navy on arrival.

REPAIRS: None. Small company workshop.

CONSULS: None.

AIRPORT: Nearest airport (1 hour voyage on launch) is Guiria with 2 weekly flights to Caracas and the same number to Port of Spain, Trinidad. Next nearest (1 hour launch plus 2 hours car) is Carupano with 4 daily flights to Caracas.

TIME: GMT minus 4 hours. Permanent.

HOLIDAYS: Cargo worked 24 hours a day, 365 days a year.

GENERAL: The whole of Puerto de Hierro is a Venezuelan Navy Supply Base. The dock and cargo installations are operated by Puerto de Hierro, S.A., a subsidiary of Caribbean Steamship Company, S.A. Only bulk cargoes transhipped by Caribbean Steamship are handled.

AUTHORITY: Puerto de Hierro, S.A., c/o Agencia Miguel Petrolsini, Campo Creole, Guiria, Estado Sucre. Cable: "Transterm Guiria" Tel. 109 of Guiria.

PUERTO LA CRUZ, (Puerto La Cruz Terminal): 10.13 N. 64.38 W. (See Plan)

OPERATORS: S. A. Meneven. Postal Address, Apartado 4064, Puerto La Cruz, Venezuela. Radio Address, Meneven, Puerto La Cruz. (Venezuela).

FLAG: Venezuelan flag must be displayed from the foremast when entering zone as well as in docking operations regardless of the hour. At all other times the Venezuelan flag must be displayed between sunrise and sunset.

LOCATION: Puerto La Cruz located on Pozuelos Bay on the N.E. coast of Venezuela. Its harbour is well protected by numerous islands against sea currents. The hurricane path is several hundred miles to the North and has never affected the flow of navigation in the Puerto La Cruz area.

The lighthouse marking the entrance to Pozuelos Bay is located: Lat. 10° 18′ 18″ N., Long. 64° 41′ 7″ W. Visibility is 20 miles.

DOCUMENTS: Arrival clearance is effected on board vessel shortly after docking by Government Officials and a representative of the Company. The following documents are required:

1. Ship's Register.
2. Dispatch issued by Venezuelan Consul at last port (1 copy).
3. Ballast Manifest (1 copy).
4. Crew List (6 copies).
5. Passenger and Baggage List, if any (5 copies).
6. List of Passengers in Transit, if any (5 copies).
7. List of Personal Effects (4 copies).
8. Store List (5 copies).
9. List of Slop Chests (4 copies).
10. Sailing Permit issued by Marine Authority at last port of call.

*Store List should indicate separately all deck, engine and cabin stores.

PILOTAGE: The use of Government Pilots is compulsory for all vessels entering or leaving territorial waters. The Company will arrange for this service at all times. If it becomes necessary for the Master of the vessel to disregard Pilot's orders in order to ensure safety of the ship a written report from the Master shall be submitted promptly to the Government Port Captain in Spanish. Meneven will assist in translation, when necessary.

The zone for Pilot to board or to anchor awaiting Pilot is delineated by the following 3 lines: South by parallel 10° 15′ N., East by meridian 64° 40′ W., and West by an imaginary line from Punta Puinare on Isla Chimana del Oeste to the North point of Morro de Barcelona.

When ready to dock, a Pilot will be despatched by launch to ship.

MAX. SIZE: No limitation is placed on width of tankers. Ships up to 1,000 ft. in length can be turned around in the inner harbour area. Max. safe draft alongside (berth No. 5) is 55 ft. (Also see "Berthing".)

HEALTH: In theory the Government Port Doctor is to board each incoming vessel and board only outgoing vessels which carry passengers. In practice, however, the doctor boards at his discretion.

Ships cleared between the hours of 1700–0800. Mondays through Fridays and all day Saturday, Sundays and holidays are charged by Immigration Service for the issuance of shore leave passes. There is no charge for this service from 0800–1700 hrs. Mondays through Fridays. Transportation and immigration clearance fees on movement of seamen are billed at cost.

RADIO: Masters are requested to advise Meneven Puerto La Cruz by radio 48 hours in advance of estimated arrival giving vessel's name, date and hour of arrival, bunkers, name of Master, port of departure, draft (arrival), Venezuelan gross tonnage, flag of ship. Vessels may contact the terminal by radio-telephone on 2182 kc/s. and VHF Channel 16. There is standby attention 24 hours a day. The terminal also has the frequencies 2080, 2120, 2638, 2738 and VHF Channel 13.

Notice of diversion at sea, not received prior to arrival of vessel, subjects ship to incontestable fine from the government.

Ship-to-shore radios are installed on the oil dock and on both tugs. A 350-watt AM transmitter-receiver is monitored 24 hours a day.

TUGS: Two-tug service is compulsory by law in this port. The Company has available a first-class diesel-electric tug of 1,600 h.p. and a contract tug of 2,100 h.p.

Tug assistance is charged from the moment the tugs leave their mooring, after having been requested, until they have returned and made fast. In other words, time is charged during the entire period the tugs are at the service of the requesting vessel, whether or not the latter is under actual manoeuvres. Generally, the Pilot will not commence movement of the vessel until he is assured that the tugs are standing by.

BERTHING: The loading facilities consist of 5 berths. Products available and safe draft are as follows:

	Berth 1	*2*	*3*	*4*	*5*
Crudes	×	×	×	×	×
Heavy fuel oil					×
Refined products			×	×	
LPG		×	×		
Bunker "C" fuel	×	×	×	×	×
Diesel fuel	×	×	×	×	×
Intermediate fuels	×	×	×	×	×
Fresh water	×	×	×	×	×
Max. safe draft	38′	38′	38′	38′	55′
Max. dwt (thous.)	45	45	45	45	110

Upon arrival at dock the following rules must be observed:

(a) Masters must ensure that mooring lines are properly tended during the discharge of ballast and loading of cargo, and that sufficient personnel is on board at all times to handle same. Discharging or loading will be temporarily suspended upon infringement of this regulation.

(b) Masters are requested to remove the blank flanges from their vessel's loading manifold before docking, so as to expedite the connecting of the shore hoses by company personnel. Vessels using berth No. 5 are also requested to have their derrick and gangway ready for use.

Note: Vessels normally dock with starboard side to dock, unless otherwise advised.

(c) While docked, discharge of sea water, hot water or steam on dockside of ship is prohibited. Hot water or steam may activate the automatic sprinkler system as well as damage piping located under the dock surface.

(d) Rat-guards must be placed on all ropes connected with the shore.

(e) Heavy exhaust smoke from vessel's funnel is not permitted. Any infringement of this rule will result in Government fine and/or removal of ship from dock.

(f) Meals must be provided in officers' mess-room for Venezuelan National Guard personnel who may be assigned to the vessel during stay in port.

LOADING: After the vessel has been cleared, the Company Dock Supervisor on watch will give the Master of the vessel written instructions as to grade or grades of cargo, loading rates, information on size of hoses and lines, and other information pertinent to the loading of the vessel.

During loading operations, company employees are on watch to administer to the needs of each vessel.

Upon termination of loading cargo, hoses are normally displaced with air at controlled rates prior to disconnecting. If the ship's officers request that the alternate procedure of draining hoses be effected, shore personnel will be happy to comply provided the following steps are observed by ship's officers:

1. Advice be received prior to termination of loading cargo.
2. Ship's receptacles be situated to receive oil drained on board. It should be noted that heavy fines are imposed for spills or overflows which contaminate the bay.

Shortly after completion of loading company personnel will take ship's ullages and, later, deliver cargo and sailing papers to an officer of the vessel.

Ships must vacate berth upon completion of loading and await papers at anchorage if the berth is needed for another vessel. The Dock Supervisor on duty will advise ship's officer of this matter.

MEDICAL: All requests for medical or dental treatment must be accompanied by a written request from the Master to the vessel's Agent. The Company makes available to ship's personnel the same clinic which has been designated for its employees. Seamen requiring medical attention should first contact the Company's Dock Supervisor who will provide them with a medical order and also provide transportation to and from the hospital.

In the event of hospitalisation, and after a seaman has been discharged, he must rejoin his vessel if it is still in port. Otherwise, he will be lodged in a hotel pending instructions as to his disposition.

Company doctors do not visit ships. If medical attention is required aboard ships, the Government Port Doctor will board and attend the patient.

BALLAST: Although climatic conditions in Puerto La Cruz are relatively mild, vessels should arrive with sufficient ballast to permit safe handling. Venezuelan regulations strictly prohibit the pumping overboard of dirty ballast in territorial waters. All ballast must be pumped ashore with the exception of vessels especially equipped with clean segregated systems which are reserved for ballast only. Vessels so equipped will be permitted to pump overboard after first being inspected and approved by shore personnel. Heavy fines are imposed for pollution of waters and industrial fishermen are quick to report any infringement. Max. discharge pressure to shore installations is 90 p.s.i. through the 16 in. line which dumps into ballast lakes approximately 300 m. South of dock.

No vessel will be allowed to discharge ballast if last previous cargo was sower crude and/or could result in unpleasantness to area inhabitants.

FRESH WATER: Fresh chlorinated water is available at an average rate of approximately 10 t.p.h. Total volume of water that can be supplied during the normal period alongside averages about 150 tons. As water is not held in special reserve for vessels requirements but supplied from terminal water system, availability may be limited dependent on time of year and other conditions.

FUEL: The terminal is not a general bunker station. Only ships loading petroleum may take bunkers.

Bunker "C", heavy diesel fuel and complete range of intermediate fuels are available in quantity. Delivery rates to the ships are approximately as follows: Bunker "C", 200 t.p.h.; heavy diesel, 150 t.p.h.; intermediate fuels, 150 t.p.h.

Bunkers are delivered concurrent with the cargo and should be taken as soon as clearance is granted.

Meters are installed on all bunker systems and are calibrated in net barrels.

The dock valves on the bunker lines will only be opened and closed upon advice from the ship's personnel.

Lubricants and gasoil are available through the vessel's Agent.

CUSTOMS: Crew members should be warned against taking knives or other lethal weapons ashore, as this is strictly prohibited. All firearms and ammunition must be noted on stores list. They cannot exceed 1 per officer nor 18 cartridges per gun. No arms may be carried while ship is in Venezuelan waters or tied up at dock. Contraband of any description will be confiscated. Each man is allowed 1 package of cigarettes on his person and this package must be opened. No liquor is to be taken ashore. It is prohibited to carry liquor from shore to ship without authorisation from captain of vessel. It is further strictly prohibited to consume liquor in dock area.

It is normally forbidden to take photographic cameras ashore. However, upon written request to the National Guard contingent on the oil dock, special permission may be obtained. This is subject to 2 limitations: (1) that the camera is returned to the ship; (2) that no photographs are taken of the petroleum installations.

IDENTITY CARDS: Passes for shore leave are issued by the officials of the "Capitania de Puerto", who board with the Customs authorities upon the vessel's arrival at dock. These passes are valid for the duration of the vessel's stay in port and must be returned before sailing to the guard assigned to the vessel.

In order to comply with Immigration Regulations, crews should be carefully checked before sailing, and any missing seamen reported to the vessel's Agent. Crew members left behind when the vessel sails will be held in custody until deported at the vessel's expense.

CONSULS: The following foreign countries have consular offices in the vicinity of Puerto La Cruz:

Belgium
Brazil
Colombia
Denmark
France
Great Britain
Italy
Norway
Sweden
The Netherlands
Dominican Rep.

Vessel's Agent should be appraised of vessel's consular requirements promptly upon docking.

REPAIRS: Request for repair work by local contractors must be accompanied by a written request from the Master of the vessel.

REPATRIATION: Seamen discharged from hospital for transfer to another port, seamen arriving from another port or those being repatriated are handled by the vessel's Agent, who must comply with all Venezuelan Regulations.

In the case of seamen left ashore for any reason, Masters are requested to furnish a letter accepting responsibility for all expenses incurred, advances if any, and instructions for repatriation. Venezuelan regulations, at all times hold the vessel responsible for a seaman during his stay in the country. Close contact is maintained by radio with ship owners regarding disposition of their seamen.

TIME: GMT minus 4 hours. Permanent.

REGULATIONS:

Excessive Smoke. It is absolutely prohibited to exhaust heavy smoke through a ship's funnel while tied up at the Company's docks. It is also prohibited to blow boiler tubes. Failure to comply with this regulation will result in any or all of the following actions:

1. Vessel's discharge of ballast or loading of crude or products will be immediately shut down.
2. Vessel will be subject to fine from authorities.
3. Vessel may be removed from dock.
4. Owners will be advised of infractions of this regulation.
5. Fines, time lost, and other related expenses will be charged against the vessel.

Pollution. Venezuelan laws are very strict on this subject and local authorities quickly enforce existing statutes. For this reason each Master is handed a circular that emphasises the necessity of complying with federal and local laws and customs.

The spilling or discharge of dirty ballast, crude oil or petroleum products into coastal waters is defined as pollution, as is also the throwing overboard of garbage, trash or other unwanted objects while the vessel is at anchor or dockside. Prior to the start of loading operations all discharge valves, bilges and scuppers must be closed and strict vigilance exercised during deballasting and loading operations.

When a spill does occur, the Master, Government officials and a company representative evaluate the quantity and submit a report to the Government Petroleum Inspector. This report becomes the basis for a federal fine that is practically incontestable. An additional expense occurs when local authorities require assistance in cleaning beaches and shorelines after a major spill and can pinpoint the responsible vessel or source.

TONNAGE CERTIFICATE: Due to reciprocal agreements between Venezuela and the following countries, ships flying the flag of any of the below-named countries exempted from Arqueo compliance and payment of fees: Denmark, England, France, Germany, Holland, Ireland, Norway, Portugal, Sweden, United States.

Ships bearing the flag of any other nation shall require a Venezuelan Arqueo Certificate. The cost of measuring is contingent on the size and tonnage of vessel. The certificate is usually issued after the ship sails from port. It is then sent to the marine department of the Owners of the vessel by airmail.

GENERAL:

Cash. Masters are requested to consider their cash requirements carefully, as return cannot be accepted. The local currency is the Venezuelan "Bolivar". No other currency is available from the Company. Foreign exchange may be secured from local banks by interested parties. Local banks are open Monday through Friday from 0900–1200 hrs. and from 1430–1630 hrs., excepting holidays.

Charts. No charts or sailing documents are available in the terminal. Same should be forwarded by airmail to the vessel's Agent for delivery to the ship.

All ship requirements such as chandlery supplies, mail, cash advances, medical, dental, consular requirements, repair work, laundry service, bonded stores, transportation etc. should be obtained through the vessel's Agent.

PETROLEUM INSPECTORS: E. W. Saybolt Company, Chas. Martin & Company and Redwood have resident representatives in Puerto La Cruz for independent petroleum or product inspections. Their offices are located in the dock office building located between berths Nos. 1 and 2 (second floor).

TELEPHONES: There is a telephone booth on each dock. The supervisor on duty may be contacted by calling number 308 or 906.

AGENCY:

Meneven as operator, charges a fixed fee for General Services. The Company does not act as Agent for a vessel, but it does render all of the services required for a prompt and efficient tanker turnaround.

Offices of Meneven loading and marine personnel are located on the first floor of the building between berths Nos. 1 and 2. Any matter concerning loading, bunkering, is handled through this office, which is open 24 hours of every day. On the ground floor of this same building is located the Documentation Section.

PUNTA CARDON: 11.36 N. 70.15 W.

PORT LIMITS: The area enclosed by the parallels of 11° 38′ 00″ N. and 11° 36′ 38″ N. and the meridian of 70° 14′ 25″ W.

OPERATORS: Maroven, S.A.

FLAG: It is compulsory to display a Venezuelan flag at the foremast starboard yardarm during daylight hours for ships anchored or berthed in Venezuelan waters. The ships Services will provide a Venezuelan flag at any time for ship's account.

LOCATION: The port of Punta Cardon is located on the Gulf of Venezuela, on S.W. coast of Paraguana a Peninsula, Venezuela. Punta Cardon is an open sea port with practically no swell, due to the Easterly winds prevailing almost all year from the shore side.

ESSENTIAL REQUIREMENTS:

1. Incoming vessels must send ETA at least 3 days before arrival at Punta Cardon.
2. If a ship, originally cleared for another port (including any other Venezuelan port) is diverted at sea to Punta Cardon, certain information must be radioed prior to arrival in order to avoid heavy fine(s) and/or delays.
3. No dirty ballast may be pumped overside in port in Venezuelan coastal waters. Ballast disposal facilities are available at Punta Cardon Terminal.
4. The use of Venezuelan Government Pilots is compulsory for berthing and unberthing.
5. In addition to other clearance documents, 5 copies of an itemised list of articles in the ship's slop chest must be presented to the authorities on arrival.
6. The emergency fire signal is 5 long blasts on the ship's whistle or siren. No other signal is to be given in cases of emergency.
7. Rat-guards must be placed on all mooring lines.

DOCUMENTS: Clearance (inward pratique). Inward clearance is effected on board by Government Port and Customs Officials and a representative of the Oil Movements Department immediately after berthing. The following documents must be ready on arrival:

(1) In ballast:
**(a)* Clearance from Last Port (1 copy).
**(b)* Ballast Manifest from Last Port (1 copy).
(c) Crew List (7 copies).
(d) Steward's Store List (all foodstuff, liquors, tobacco, etc.), to be declared on a separate and independent sheet (5 copies, see note (2)).
(e) Deck and Engine Stores and Spare Parts List (paints, varnishes, chains, ropes, etc.), to be declared on a separate and independent sheet (5 copies, see note (2)).
(f) Medicine Chest Lists (including narcotics accurately itemised) (5 copies).
(g) Slop Chest Lists (5 copies).
(h) Personal Effects Lists (4 copies).
(i) Sailing Permit (issued by Maritime Authority at Last Port of call) (1 copy).
(j) Passenger and Baggage Lists (if any) (2 copies).
(k) List of Passengers in transit (if any) (4 copies).

* Documents marked with asterisk are to be visaed by Venezuelan Consular Authorities at the last port of call.

In the absence of a Venezuelan Consul the documents must be visaed by the Consul of a friendly nation, or by the Local Chamber of Commerce, or by 2 local reputable businessmen, whose signatures shall be notarised.

In the absence of a Venezuelan Consul the following notation should be written in Spanish on each document signed by the alternates designated above.

"Por no existir en la localidad Agente Consular Venezolano y a peticion de los embarcadores, certifico el presente documento".
(Signature)

(2) Both the Steward's Store List, the Deck and Engine Stores and Spare Parts List may be prepared on board prior to the vessel's arrival. However, if the vessel is dispatched from the colonial Antilles or Guianas, these lists as well as the personal Effects List must be visaed by the Venezuelan Consul at the port of departure. The Steward's Stores List must be comprehensive and accurate, especially with regard to cigarettes and liquor. All new clothing, gift, souvenirs, etc. are to be clearly marked. All personal effects of the crew are to be collected and placed in the Bonded Stores Locker, ready for sealing by the Customs Authorities on arrival.

Although vessels proceed directly to Punta Cardon, clearance documents should be made out showing the port as "Las Piedras, Paraguana (Punta Cardon)". Failure to comply with this requirement may result in fines up to a max. of U.S. $600.00.

(3) Clearance documents out-bound: Outward clearance and cargo documents are delivered on board by the Ships Services Representative.

In the event that the berth is required by another vessel, a vessel having completed loading may be required to vacate the berth promptly and proceed to anchorage to await cargo documents and clearance.

PILOTAGE: Pilots are employees of Venezuelan Government and pilotage is compulsory for vessels entering or leaving harbour. The Ships Services Office will arrange for this service at any time. If it becomes necessary for Master of the vessel to disregard Pilot's orders in order to ensure safety to the ship, the Master must promptly submit a written report to the Harbour Master on the matter, via the Ships Services Representative, stating reason for this action.

Pilots sustaining injuries: It is compulsory to submit a full report in cases where a Pilot is injured while performing duties on board vessels.

ANCHORAGE: The anchorage at Cardon roads within a radius of 2 miles from end of jetties has depths varying from 54 to 100 ft. (LWS) and a bottom consisting of mud with some patches of small stones, sand and shells. There are no known obstructions from West to N.W. of the Piers and there is ample water for a clear approach when coming from West and N.W., but the anchorage is limited on the South by a sandspit projecting 1 mile S.W. off Punta Cardon Cape. A beacon is located on this Sandspit in position: Lat. 11° 36′ 03.4″ N., Long. 70° 14′ 15.6″ W. Fl.R. ev. 1 sec. 17 ft. 5 miles (U).

APPROACHES: Restricted Fishing Area. Masters when approaching coast should keep a particularly sharp lookout for fishing boats, nets and small craft.

Mechanically propelled vessels drawing more than 5 ft. are prohibited from navigating in the restricted fishing area that extends off Paraguana Peninsular from Punta Macolla, Lat. 12° 5′ 32″ N., Long. 7° 12′ 55″ W. to Punta Estanques (Los Taques), Lat. 11° 48′ 45″ N., Long. 70° 16′ 45″ W., and a line connecting the position indicated below:

(a) Lat. 12° 07′ 40″ N., Long. 70° 14′ 25″ W.
(b) Lat. 12° 03′ 15″ N., Long. 70° 19′ 23″ W.
(c) Lat. 11° 49′ 25″ N., Long. 70° 21′ 50″ W.

Leading Lines

	Position			*Height in Metres*
Jetty	*Latitude N.*	*Longitude W.*	*Colour*	*(LWS)*
I	11° 37′ 19.2″	70° 13′ 54.6″	Green	4.70
	11° 37′ 23.1″	70° 13′ 47.6″	Green	14.20
II	11° 37′ 32.0″	70° 14′ 02.0″	Red	4.83
	11° 37′ 35.9″	70° 13′ 55.1″	Red	14.30
III	11° 37′ 08.1″	70° 13′ 53.5″	White	3.06
	11° 37′ 09.1″	70° 13′ 50.6″	White	14.94
IV	11° 37′ 41.9″	70° 14′ 12.0″	Blue	5.10
	11° 37′ 42.4″	70° 14′ 09.4″	Blue	21.54

Land Marks

2 radio towers, very conspicuous, with micro-wave antenna at the middle painted in aluminium white, in position, Lat. 11° 38′ 03″ N.,lbong. 70° 13′ 56.2″ W. Height 205 ft. (62.5 m.).

Navigation aids

A light is located on the outer radio tower.
Position: Lat. 11° 38′ 03″ N., Long. 70° 13′ 56.2″ W.
Characteristics: Fl. White and Red, ev. 10 sec. Height 205 ft. (62.5 m.) 21 miles (U).
Sectors: Red 340° – 009°, White 009° – 009°, Eclipse 202° – 340°. (All bearings are true from seaward).
Beacon: Located on sandspit of Punta Cardon.
Position: Lat. 11° 36′ 03.4″ N., Long. 70° 14′ 15.6″ W.
Characteristics: Fl. Red. ev. 1 sec. Height 17 ft. (5.2 m.) 5 miles (U).

2 large chimneys are very conspicuous in the Refinery Area. The North chimney is situated Lat. 11° 37′ 54.6″ N., Long. 70° 13′ 10.8″ W. Height above MLWS 399.6 ft. (121.8 m). The South chimney is situated Lat. 11° 37′ 52.9″ N., Long. 70° 13′ 09.8″ W. Height above MLWS 396.3 ft. (120.8 m.). For daylight distinguishing marks, both are painted with broad red and white bands and at night both have a string of all round fixed red lights at the top and the same at the middle height.

A steel tower. A commercial radio tower is situated outside the Refinery Area in position: Lat. 11° 36′ 29″ N., Long. 70° 13′ 42″ W. Height above MLWS 164.7 ft. (50.2 m.). This is not very visible during the day, but at night it has at the top, flashing every second, an all round Red Light, visible at 12 miles.

MAX. SIZE:

	Jetty/Berth		*Depth LWS*	*Draft*	*Length in feet*	*Displac. in tons*
No. 1	North Outer	(3)	43′ 00″	40′ 06″	710	25,000
	South Outer	(4)	43′ 00″	40′ 06″	710	25,000
	*North Inner	(1)	32′ 00″	30′ 06″	575	
	*South Inner	(2)	35′ 00″	33′ 06″	575	
No. 2	North Outer	(3)	44′ 06″	42′ 00″	710	25,000
	South Outer	(4)	43′ 00″	40′ 06″	710	25,000
	North Inner	(1)	22′ 06″	21′ 00″	424	
	South Inner	(2)	25′ 00″	23′ 06″	424	
No. 3	North Outer	(3)	49′ 06″	47′ 00″	900	62,000
	South Outer	(4)	49′ 06″	47′ 00″	900	62,000
No. 4	North Outer	(3)	50′ 00″	47′ 06″	900	54,000
	South Outer	(4)	49′ 00″	46′ 06″	900	54,000

BALLAST: It is suggested that vessels nominated to load at this installation arrive with the minimum of ballast on board, necessary for the safe handling of the vessel under normal conditions. In this connection experience has shown that, under normal weather conditions, vessels can be safely berthed and unberthed with a quantity of ballast of approximately 20% of their respective Summer deadweights. Clean ballast can be pumped into the sea, but Masters are reminded that pollution of the sea incurs heavy fines. Dirty ballast can be received ashore. Maximum discharge pressure to shore installation is 150 p.s.i. in the 20 in. ballast line of Jetty No. 2; Jetties Nos. 4 and 1 have a 24 in. ballast line, and Jetty No. 3 has a 16 in. line. Masters are requested to endeavour to arrive at this port with 20% SDW ballast.

TUGS: 2 tugs of 1,200 h.p. and 1,600 h.p. respectively are available, and their assistance is compulsory for berthing. Number, disposition and manoeuvres of tugboats are directed by the Pilot. The following tug signals in practice in this port are listed below for Master's guidance:

Short blasts are used to give orders to the tug situated ahead.
Long blasts are used to give orders to the tug situated aft.
1 blast means *push* tug engine, ahead (if it is stopped); *stop* tug engine, stop (if it is moving).
2 blasts, *pull* tug engine, astern.
1 long, 1 short, 1 long and 1 short whistle, "Calling tugs".
2 long and 2 short whistles, "Tugs Dismissed".

RADIO: Arrival messages (ETA). Master of vessels bound for or diverted to Cardon are requested to radio the following information to "Maroven. Caracas" via "La Guaira Radio", call sign YVG, 72 hours in advance of estimated arrival, or as soon as possible.

(a) Name of vessel
(b) Flag
(c) ETA
(d) Last Port.

(*e*) Master's name
(*f*) Number of crew and passengers
(*g*) Port for which the vessel is cleared
(*h*) Quantity of clean ballast on board
(*i*) All requirements

This information is of the utmost importance to the Harbour Authorities in facilitating the entry of vessels in general, and in case of diversion.

VHF Radio Telephony. The radio and communication centre is located in the Oil Movements Office Building situated at the foot of No. 2 Pier at a height of 50 ft. above sea level. The roof of the building is painted black and the word "Marine" painted across in large white letters.

There is a RT set operating 24 hours a day on the following frequencies, and manned by English speaking operators:

156.6 mc/sec.FM	VHF (Channel 12)	Range limit	25 miles
156.8 mc/sec.FM	VHF (Channel 16)	,, ,,	25 ,,
2120 kc/sec. AM	HF	,, ,,	150 ,,
2182 kc/sec. AM	HF (Channel 1)	,, ,,	150 ,,
7620 kc/sec. (SSB)	HF (Channel 3)	,, ,,	300 ,,

Call sign: "Marine Cardon".

Vessels not equipped with radio telephone may call the installation by signal lamp (Aldis' lamp) whereupon the service launch will be sent out to vessel to pick up any message it may have.

BERTHING: Without exception ships always moor head-in on all berths. It is considered prudent to have the outboard anchor hove out prior to approaching piers to facilitate speedy release while docking if necessary. Vessels are to be moored to satisfaction of the Port Services Superintendent or his deputy; mooring lines must be tended regularly and kept hove taut to prevent surging and possible damage to ships, docks or hoses. When adjusting mooring lines, the assistance of harbour tugs should be requested before slackening off any mooring line.

MEDICAL: Facilities are available for medical and dental treatment, vaccination and hospitalisation in a private clinic.

The doctor's working hours for out-patient treatment are as follows: Monday to Friday, 0900 to 1100 hrs., 1400 to 1700 hrs. Saturdays, Sundays and holidays, only urgent cases will be attended to.

Emergency cases will be attended to at all times.

Masters requiring medical or dental service or vaccination for their crew members should call Ships Services by dialling 2105. Our representative will make the necessary arrangements with the clinic and arrange for transportation to pick up the crew members on the pier and to take them to the clinic and back. Any crew member who is sent ashore for medical or dental treatment, and who does not speak English or Spanish, must be accompanied by a crew member who speaks one of these languages.

Doctors do not attend patients on board. In serious cases where the patient is unable to walk an ambulance will be provided to take him to the hospital.

FRESH WATER: Fresh water is available at all berths. Loading rate is 30 t.p.h.

CUSTOMS: Venezuelan National Guards are stationed at the piers to ensure that vessels in port comply with regulations.

1. *Smuggling.* Strict compliance with the Customs laws of the country is enforced by the Authorities and Masters are strongly advised to caution crew members against attempting to smuggle ashore cigarettes in carton lots, cigars, tobacco, souvenirs, gifts (particularly items of women's apparel) or other articles. A maximum of twenty cigarettes per person for personal use is allowed to be carried but a greater quantity will result in the imprisonment of the offender with possible heavy fines and delay to the vessel.

2. *Bar.* On Customs Authorities instructions vessels maintaining a "Bar Service" on board for the use of officers, crew, passengers and visitors, must keep the bar closed during the vessel's stay in port.

3. *Firearms.* Firearms on board any merchant vessel calling at Venezuelan ports must not exceed one per officer, nor can the ammunition exceed 18 cartridges per officer. All firearms and ammunition must be declared on stores list. Officers must not carry firearms while ship is in Venezuelan waters. Said arms should be collected together with the ammunition and held in the Master's safe custody. Crew members should be warned against taking knives or other weapons ashore as these will be confiscated and the bearer fined.

CONSULS: Brazil, Great Britain, Italy, the Netherlands and Norway have Consular representatives in this area.

TIME: Local time is GMT minus 4 hours.

CERTIFICATES: All ships arriving in Venezuelan ports for the first time must be measured by the Maritime Authorities for issuance of a Venezuelan Tonnage Certificate, known as "Certificado de Arqueo". This document gives the measurements and weight of the vessel in accordance with existing laws. The cost of measuring and issuing of the Certificate is contingent on size and tonnage of vessel.

It is usual practice to take ashore the ship's "General Arrangement" and "Capacity" plans, which are used as a basis for calculations. These plans and the Venezuelan Tonnage Certificate are later forwarded to ship's Owners.

Vessels registered in following countries are exempt from above regulations, due to existing reciprocal agreement with Venezuela: U.S.A., Great Britain, Denmark, France, Germany, Holland, Ireland, Sweden, Norway, Portugal.

The Venezuelan Tonnage Certificate is used in calculating Venezuelan Government Port charges, such as Port Captain Habilitation for entry and despatch of vessels and Pilotage Dues, for all vessels except those registered in the countries mentioned above, in which case the Lloyd's Registered Tonnage is used.

HOLIDAYS: By order of the local Port Authorities it is requested that all ships in port be fully dressed on the following national holidays: January 1st, April 19th, July 5th, July 24th, October 12th, December 25th.

REPAIRS: Shore facilities are available for emergency repairs of a minor nature. The nearest dry docks are located at Puerto Cabello and Curacao, N.A. Request for repairs should be mentioned in the ship's ETA message.

SHORE LEAVE: Shore leave is permitted and Harbour Master's representative who boards vessel on arrival issues the required number of shore passes. These passes must be shown when proceeding ashore to the Government and Company Guards at the gangway and refinery gates. They are to be collected by Master prior to sailing and handed to Pilot unberthing the vessel. Masters are reminded that in accordance with the instructions of local police, crew members be properly dressed before leaving the vessel, i.e. long trousers and shirts.

Masters are requested to have shore leave expire at least 2 hours before expected departure. Men then found missing should be reported to the Ships Services Office, tel. 2105, who will endeavour to locate them. An officer must accompany shore personnel in order to identify the missing crew member.

Vessels are not permitted to sail until all crew members are on board, unless said crew members are hospitalised or previously signed off by the Master through the Ships Services representative. If any crew member is missing at sailing time and cannot be found, his passport and other personal documents must be handed to the Ships Service representative, as well as written instructions as to his repatriation, when found. All costs and expenses of a crew member so left behind will be for ship's account.

GENERAL:

1. *Animals:* The importation and transit of all birds belonging to the genus parrot or parakeet is prohibited. For other birds a valid health certificate is required. For so-called "small animals" e.g. dogs, cats, monkeys, rabbits, etc. a valid health certificate and a valid rabies vaccination certificate are required.

2. *Bonded Stores:* Stores in bond are not obtainable in Punta Cardon. The nearest port with bonded stores facilities is Curacao.

3. *Board of Trade Gangway;* A safe gangway must be provided by the vessel and should be rigged as soon as possible after mooring to allow the Port Authorities to board, and should not be taken in until Pilot has boarded to unmoor vessel. The use of rung ladders, pilot ladders, etc. is contrary to Port Regulations and Port Authorities will not board except by means of a safe gangway or accommodation ladder.

4. *Damage during Manoeuvres;* When a vessel or the pier sustains damage during manoeuvres with an official Pilot on board, it is the responsibility of the Master to submit to the Ships Services representatives, immediately after the accident, a report in quintuplicate, for presentation to the Harbour Master. Such reports should give full details of the accident and of all engine movements as ordered by the Pilot, as well as a sketch in triplicate of the ship's manoeuvring position at the time. These will be translated by the Agents into Spanish and forwarded to the Harbour Master.

5. *Cash Advance to Masters:* Cash advances to Masters are made only in Venezuelan currency, which is the Bolivare. Cash requirements should be included in the vessel's ETA message. Foreign currencies are accepted in the United Seamen's Service Club.

6. *Rat-guards:* By order of the Port Authorities rat-guards must be fitted to all mooring lines. Non compliance entails a fine of 200 bolivares for each unguarded line.

7. *Kerosene, Motor Gasoline, Gas-Oil, Solvents:* Supplies for ship's purposes are available in drums. The return of empty drums ashore is prohibited by Customs regulations. Therefore the cost of each drum will be billed to the vessel in the Port Disbursement Account.

8. *Lubricants, Oils and Greases:* Supplies of products are available. Vessels arriving at Punta Cardon on Saturday or Sunday or on a holiday should give ample notice of their requirements by cable in order that the necessary labour arrangements for delivery can be made. This procedure also applies to the delivery of white oils mentioned under 7 above, when required outside working days.

9. *Laundry Service:* Laundry service is available throughout each working day. Such service should be requested in the vessel's ETA message.

10. *Wireless Transmitters in Port:* It is strictly prohibited to use vessel's wireless transmitters in the Port of Cardon. Non-compliance with this regulation may result in a fine being imposed on the vessel by the authorities.

11. *Mail:* On vessels' arrival, blank Mail List Forms will be handed to the Master to be completed in sextuplicate and duly signed by him, when sending ship's and crew mail ashore for posting. Ship's mail received after ship has sailed, or for vessels on which no advice has been received, will be held for 15 days and then returned by airmail to the owners or operators or senders, at ship's expense unless specific instructions have been received beforehand.

12. *Marine Surveyors:* Both the Lloyd's Agents at Maracaibo and Norske Veritas at Caracas have a representative in Punta Cardon who acts on their behalf when a surveyor is requested. However, in the case of continuous or classification surveys, advance notice of 4 days should be given in order to arrange for an appointed

surveyor to come from Caracas. There is also a representative of the American Bureau of Shipping in this area (Caracas).

13. *Miramar Club:* Masters, chief engineers and their wives can visit the Miramar Club. For this purpose entrance passes should be requested from the Ships Services Office, tel. 2105.

14. *Manaure Bathing Beach:* The above mentioned bathing beach is open to all ship's staff and crew members.

15. *Norwegian Government Seamen Service:* A Norwegian Vice Consul and Welfare Officer is stationed at Punta Cardon, and provides the usual services to seamen of this nationality. His telephone number is 4359.

16. *Navigation Charts:* Navigation charts are not available at this port.

17. *Passengers;* Movement of passengers over Cardon Piers is subject to restriction under terms of agreement with the government. Passengers will not be permitted to disembark unless in possession of the required Venezuelan visa and travel documents. If passengers are carried, Master should so advise in his radio ETA so that arrangements can be made for Immigration Authorities to visit vessel on arrival and thus facilitate clearance.

18. *Petroleum Inspection:* Charles Martin & Co., and E. W. Saybolt, petroleum inspectors, are available in this area. Contact can be made through the Loading Supervisor (tel. 2821).

19. *Personnel – Seamen Left Ashore:* In the case of seamen left ashore for hospitalisation, repatriation, desertion or other reasons, all documents and personal effects are to be handed to the Oil Movement Department's representative before sailing. A letter is required from the Master advising the maximum advances, if any, to be made to the seaman, and instructions concerning his repatriation. All expenses incurred by seamen left ashore, including cost of repatriation, are for ship's account. It is important that Masters bear in mind that the Venezuelan law will at all times hold the vessel, her Master, or Owner responsible for any seaman left behind in Venezuela.

20. *Photographing:* The taking of photographs within the boundary fence of the Cardon Refinery is prohibited. Taking cameras ashore is likewise prohibited.

21. *Provision and Stores;* Provisions and stores are available. Requisitions should be conducted through the Ships Services Office. Telephone number 2105 or the Ships Services representative when he calls on board with the authorities on arrival. Ships chandlers are not permitted to visit ships, unless specifically instructed to do so by the Agents.

22. *Radar and Radio Repairs:* Repair and maintenance services for radar, radio, gyro compass, radio direction finder, echo sounder, etc. are available. The repair man should be contacted through the Ships Services Office, telephone number 2105.

23. *Safety of Personnel:* It will be appreciated that persons intoxicated by alcoholic drinks can create risks of accidents; therefore we ask the Master's co-operation to ensure that these persons do not enter the refinery gates and/or board their vessel unless accompanied by sober members of their crew. In this connection we will advise the Master or one of his officers, so that measures can be taken to ensure the safety of the forementioned person(s) e.g. by sending one or more of the crew to the gate to accompany him (or them) to the ship.

24. *Visitors:* Visits to ships are prohibited except from those company employees, petroleum inspectors, etc., whose duties require their presence on board.

25. *Walport Film Exchange:* Subscribers to the Walport service may exchange films at the U.S. Seamen's Club situated at the foot of No. 2 Pier, from 0730 to 2200 hrs. every day, by telephoning 2803.

26. *Staff and Crew Changes:* No staff and/or crew should be engaged or discharged without consulting Ships Services (telephone 2105). In case of discharge, identification documents must be handed to the Ships Services representative or the Norwegian Consular Officer in the case of Norwegian vessels.

27. *Tank Cleaning and Mopping:* Several contractors in the area provide labour for tank cleaning and mopping. Masters in need of this service should submit their requirements to the Ships Services Office (telephone 2105), who will contact and request a contractor to go on board to discuss details and estimate costs of work to be effected. It must be pointed out that the Master of the vessel is solely responsible for the proper fitness of the ship's tanks for loading his next cargo, and will therefore be held liable for any contamination of the cargo after loading, due to inadequate tank cleaning. Therefore it is up to him to decide the degree of tank cleaning necessary. He may, of course, seek advice from the installation representative in this respect, whenever there is any doubt.

28. *Turnaround:* To promote the economical operation of their vessel, Masters are requested to co-operate with installation representatives in minimising their in-port time. Any delays which are considered unnecessary or extensive should be reported to the loading Supervisor (tel. 2133) so that corrective measures can be taken.

29. *U.S.S. Club:* All seamen are welcome to the club operated by United Seamen's Service which is located at the shore end of Pier No. 2. Shore passes are required to reach this Club. Beer, soft drinks, ice-cream, candies and various souvenirs and presents can be purchased at reasonable prices. Free cinema shows are usually held twice weekly. A letter-posting service is available as well as recreational facilities, e.g. billiards, table tennis, darts, etc. A barber shop operates during daytime.

TELEPHONES:

Communications Office (General and Port Information, 24 hours service), 2604. Ships Service Office (All services to ships: mail, doctor, taxi, papers, etc., 24 hours service), 2105. Agents Office (Weekdays) (07.00 to 12.00 – 13.00 to 16.00 hrs.), 2125. Loading Supervisor (Re cargo and bunkers), day, 07.00 to 16.00 hrs., 2821/2133; at night, after 16.00 hrs., 2133. U.S.S. Seamen's Club, 2803.

AUTHORITY: Maroven, S.A.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Vietnam, Democratic Republic of

DANANG: (Tourane): 16.04 N. 108.13 E.

(See Plan)

SHIPMASTER'S REPORT: (July 1976)

DOCUMENTS: On arrival usually dealt with immediately by the: Immigration Service, Police Service, Customs Service, Agency and Health Service.

Ships Documents: Certificate of Registry, Radio Certificate, Load line Certificate, Safety Equipment Certificate, Port Clearance from last port.

Cargo-Documents: Bill of Lading (8 copies), Cargo Manifest (8 copies), Stowage Plan (5 copies), In Transit Cargo Manifest (if any).

Immigration: Crew List (7 copies), Store List (2 copies), Crew's Effect Declaration (2 copies), Passports of the Crew.

Health: Vaccination List (2 copies), Provision List (2 copies), International Vacc. Certificates.

All documents to be ready on arrival. Cameras and binoculars to be collected and placed in a locker, to be sealed. Bonded stores not sealed.

PILOTAGE: Pilot station at a position 16.10 N. 108.11 E. Pilot boards from a tugboat and moves the ship to a position about one mile West of Phare de l'observatoire. Pilot boarding during daytime only. Ships arriving at night should anchor in a position close to the pilot station. Pilot will board the ship at 0600 hrs in the morning. ETA should be given 48 hours and 24 hours prior to arrival at the pilot station.

RESTRICTIONS: There are no restrictions for entering the bay.

HEALTH: A 24 hours cable should be sent to the Agent, stating that all crew are fit and healthy. If any sickness on board cable 48 hours in advance.

RADIO:

Callsign	*Frequency*	*Working hours GMT*
XVT	500 kc/s.	0000 — 1200 hrs.
XVT 2	417.5 kc/s.	0000 — 1200 hrs.
XVT 2	8,570 kc/s.	0130 — 0145 hrs. 0830 — 0845 hrs. 1200 — 1315 hrs.

VHF: There is no VHF station.

RADAR: There is no radar post.

TUGS: There are three tugboats available, one of 1,200 h.p., two of 800 h.p. each. Tug's lines are used if necessary.

BERTHING: There is one fingerpier of 250 m. and another under construction. The latter to be ready towards the end of 1976. A tanker berth is situated in position 16.04 N. 108.15 E. called My Khe. Tankers proceed to this position, after clearance, with pilot rounding by the peninsula. (See Plan). At the cargo pier all discharging is done by ship's gear.

CRANES: There are no cranes available. There is one heavy lift Floating Crane of 100 tons capacity.

BULK HANDLING FACILITIES: Bulk cargoes are sometimes handled at the port (i.e. maize) but there are no special facilities.

BRIDGES: No bridges.

STEVEDORES: Ordered by the Agent. No ETA necessary. Working hours 0000 — 0400 hrs., 0800 — 2400 hrs. Approx. discharging rate general cargo 400 tons/gang.

MEDICAL: Six hours notice required for medical assistance. There is a hospital in town. Inoculations required for cholera, smallpox and yellow fever.

TANKERS: Two submarine hoses of 8 in., all kinds of white spirits discharged through both lines. Maximum back pressure 8 kg. at ship's manifold. Average discharging rate 200 t.p.h. per line.

DENSITY: Cargo pier brackish depending on the season. At the tanker berth salt.

FRESH WATER: Available by barge, rate of delivery 50 t.p.h.

REPAIRS: Repairs taking longer than 2 hours are not permitted unless permission is granted by the Port Master. Small repair facilities can be carried out ashore. There are no drydocks at this port.

DECK WATCHMEN: Cargo ships alongside the pier are provided with a gangway watch. Tankers discharging at My Khe will get two security guards on board during the stay in port.

HATCHES: Old type hatches opened and closed by shore labour. Special patent hatches by crew.

CUSTOMS ALLOWANCE: The bonded stores are not sealed. There are no restrictions for quantity of spirits, cigarettes beer etc. It is strictly prohibited to supply any bonded stores to shore personnel.

CARGO GEAR: There is one floating heavy lift crane of 100 tons.

REPATRIATION: Possible, but takes some time and can be very difficult. Haiphong is a better place for crew changes.

AIRPORT: There is an airport about 7 km. from the town. Air services to Ho Chi Min City and Haiphong, local flights only, twice a week.

TIME: GMT plus 7 hours (no Summertime) is kept along the whole coast.

HOLIDAYS: There are no special holidays.

POLICE/AMBULANCE/FIRE: Via local Agent, telephone number 21161.

SERVICES: There are laundry facilities (2 days ashore) with a 24 hours service. Shipschandler available at all times. Good fresh vegetables and fruits, depending on the season. Also good sea food.

SHORE LEAVE: Permitted via local Agent with 6 hours notice. Persons with invalid passport are not allowed to go ashore.

REGULATIONS: It is strictly prohibited to throw any garbage into the bay, heavy fines. Garbage collected by barge.

DELAYS: Remittance has to be granted by owners or charterers before sailing. Without a sufficient remittance the vessel does not receive a clearance.

Alongside the pier berthing and unberthing only between sunrise and 1400 hrs. due to strong winds in the afternoon. At any other time when strong winds are experienced berthing and unberthing not allowed. The fore mentioned also for the tanker berth at My Khe, here berthing is normally carried out during the morning hours, when there are weak winds. During a strong monsoon it is sometimes necessary to stop discharging operations and unberth the ship.

GENERAL: Ships calling for the first time at Danang port should give their ETA and call sign, nationality, all other necessary particulars so that the ship can be identified by the Navy. Ships, chartered by the Vietnamese Government should state this also and whether time or voyage charter. Ships carrying general cargo should also give all particulars about the stowage of the cargo, whether any deck cargo, heavy lifts etc.

AGENTS: Ocean Shipping Agency, 1a Quang Trung, Danang. Cable: OSA Danang, telephone 21161.

HAIPHONG: 20.52 N. 106.41 E.

SHIPMASTER'S REPORT: (August, 1976).

DOCUMENTS:

8 Crew Lists.

2 Ships Stores Manifests.

2 Crew Personal Effects Declaration (especially: cameras, binoculars, and Foreign Currency).

2 Vaccination Lists: smallpox and cholera. All International Vaccination Certificates. All Passports (are taken in custody by Security Officials).

Special Documents: Special forms which are handed to vessel on arrival.

Health Dept:

1 Declaration of Health on arrival.

1 List of Provision Store (incl. vegetables, fruits, fish, shellfish, meats etc. and where taken).

1 Report of water taken on board: (Drinking — or Ballast water, tons, ports where taken) — tank now being used to supply drinking water.

State Security Dept.:

4 Copy List of Articles forbidden to be used in port: ie. radio transmitter/receiver — Numbers and power; radar; VHF; radio direction finder; echo sounder; sextant, signal gun, signal rockets, flare signals, arms, ammunitions, cameras, binoculars, tape recorders, band recorders.

Note: The radio transmitter, VHF, radar, binoculars, cameras are sealed.

2 Copies: Declaration of Arrival.

Note: Cameras, binoculars of the crew have to be collected and placed in a locker which is sealed. Bond is *not* sealed, and consumption is free.

PILOT: Boards at ZERO buoy.

Note: There is no VHF radio contact possible and there is no signal station available, ETA should be given as exact as possible.

RESTRICTIONS: Max. draft to enter: 25 ft. (on HW).

If ship's draft is more than 25 ft. ship has to lighten into lighters. This is done in Baie d'Halong. The procedure is that after embarking the pilot at Zero buoy, the ship is brought to this bay (in daylight hours only) via: Bai de Lan Ha - Entree Profonde - Rade du Crapaud - Chenal du Volta - Chenal de la Cathedrale.

In our case we anchored in Chenal de la Cathedrale; 20.52 N. 107.03.1 E. and discharged our gas oil cargo into tanker barges varying in size from 125 - 400 long tons. Some coastal tankers (1,500 - 2,000 long tons) are also available for accepting the cargo.

When discharging into lighters - ship should provide suitable hoses.

GENERAL: 1. Ship was cleared by authorities at this anchorage. In view of the distance to Haiphong - 5 hrs. by motorboat - this clearance is only given in daylight hours. Often the ship's Agent stays on board during cargo operations.

2. Because the radio transmitter is sealed, no direct contact with the outside world is possible. All messages for the Agents at Haiphong should be given to the lighters going there.

3. Medical assistance: A doctor and Hospital is available in Hongay - on the other side of the Baie d'Halong. The doctor inspects the patient first on board before permission to go ashore is given.

4. Outward clearance: Same procedure as inward clearance. Authorities come by motorboat from Haiphong (boat leaves there at about 0600 and arrives in Halong Bay at about 1100 hrs. Passports are handed back to crew.

5. On inward as well as on outward clearing, crew has to stay in their cabins for inspection by customs and security officials.

AGENTS: Vietnam Ocean Shipping Agency, 11 Dai 16 Tran Phu, Haiphong. Phone: 166-245-513. Telegrams: VOSA Haiphong.

HO CHI MIN CITY: 10.45 N. 106.45 E.

DOCUMENTS: On arrival at Nha-be or at the Port. As usual, the examination is executed immediately by the Officers representatives of: Sanitary Service, Immigration Service, Customs Service, Police Service, Stevedoring Agencies.

Documents	Customs		Immi-gration	Quar-antine		
	Vung-tau	Ho Chi Min City	Ho Chi	Min City	Agent	Total
Health Declaration (form issued by local authority)				×		
International Certificate of Vaccination for Passengers and Crew				×		
Ship's Deratisation Certificate				×		
Immigration Declaration (form issued by local authority)			×			
Passengers' Passports (if any)			×			
Crew Lists	2	3	2	1	2	10
Passenger List in Transit (if any)	2	3	2	1	1	9
Passenger Disembarking Lists (if any)	2	3	2	1	1	9
Mail List	1	3			1	5
Arms and Ammunitions List	2	3	2		1	8
Explosive List	2	3	2		1	8
Narcotic List	2	3			1	6
Store List (including engine store)	2	3			1	6
Foreign Currency List (including crew and ship's cash)	2	3			1	6
Crew Dutiable Goods List or Personal Belonging List	2	3			1	6
Inward Cargo Manifests for Tankers	2	3			2	7
Inward Cargo Manifests for Dry Cargo Vessels	2	6			1	9
Transit Manifests	2	2			1	5

Stevedoring Agencies:

8 Ho Chi Min City Inward Cargo Manifests or In-transit Cargo Manifests at Ho Chi Min City.
2 Crew Lists.
All Original Cargo Manifests.
3 Landing or In-transit Passenger Lists.
2 Landing Passengers Luggage Lists.
2 Free of Tax Goods Lists.

Ho Chi Min City Port Authority:

Following Documents are to be presented to the Ho Chi Min City Port Authority by the Stevedores:

1 Report, informing the arrival of the ship.
2 Cargo Plans on board.
3 Cargo Manifests.
3 Cargo Unloading Plans.
1 General Cargo Unloading Permit.
6 Requests to Sanitary Officer for sanitary examination operation.

Important Notices:

(1) Manifests of Ho Chi Min City Inward Cargo are to be compiled by complete set, each set comprising original port's manifests; a recapitulation table will be added to each set indicating the total amount of parcels, tonnage or volume loaded on board for each port. This total amount will be repeated in all letters, stating: "This total amount has been visaed by the Customs Office."

(2) On arrival at Vung-Tau, (Cape St. Jacques), the Commandant of the ship should collect all required documents and get them ready to be presented. The Quarantine Officials may possibly come unawares on board for prior examination and would never admit mistakes.

PILOTAGE: Upon arrival at pilot station the pilot service should be informed by cable of the exact position of anchorage, draft of the vessel, and the maximum speed the ship can do in the river.

Every evening from 2000 hrs. to 2200 hrs. (local time) radio watch should be kept with Ho Chi Min City XVS on the frequency of 500 kc/s. In case the vessel is to proceed up the river the next morning the pilot service will cable the Captain the exact hour of departure from Cape St. Jacques (Vung Tau).

The pilot service will not send any Pilot to ships that do not give the information as to draft, speed of vessel, and exact position at the anchorage station at Cape St. Jacques (Vung Tau).

Pilot station at Vung Tau, tel. 6. Pilot station at Ho Chi Min City, tel. 21222 and 90503. Pilot boards at Vinh Dua (Gulf of Coco Trees).

RESTRICTIONS: River transits, berthing and unberthing are effected in daylight hours only. Vessels should arrive 2 hours before daylight HW. At least 1 ft. keel clearance required. Least depth in channel, 27 ft. below chart datum.

ANCHORAGE: In depths of about 30 ft.

MAX. SIZE: Length 673 ft. Vessels can proceed without restrictions above 27 ft. depending on daily tide.

RADIO: Ho Chi Min City Radio, call sign XVS.

HEALTH: Port officials board at Vung-Tau if vessels call at Vung-Tau. Free pratique will be obtained from local authorities. For vessel calling at Ho Chi Min City, port officials will board upon docking alongside at Ho Chi Min City. Port and free pratique will be pratique at Ho Chi Min City.

TUGS: Available up to 2,600 h.p. Tankers usually berth without tug assistance.

BERTHING: Depth at quays 26 ft. to 36 ft.

TANKERS: Discharge at Nha-Be: Ex-Caltex Terminal, narrow pier with mooring buoys, depth in berth 27 ft. Ex-Shell Terminal, "T" jetty with mooring buoys, depth in berth 31 ft. Ex-Stouvae Terminal, pier with mooring buoys, depth in berth 30 ft. No slop disposal facilities.

DENSITY: About 1005 at berths.

MEDICAL: Doctors and hospital facilities available.

FRESH WATER: Can be supplied by barge subject to advance notice of 24 hours.

FUEL: Diesel oil can be supplied.

REPAIRS: Machine shop facilities only.

AIRPORT: Situated about 5 miles from the city. International services.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Virgin Islands

FREDERIKSTED, St. Croix: 17.43 N. 64.53 W.

DOCUMENTS: All forms are standard U.S. Government Forms:
Passenger List (I–418) – 3 copies.
Crew List (I–418) – 3 copies.
Clearance from Last Port.
Inward Customs Manifest (7527-B) – 4 copies.
Ship's Stores Declaration – Customs Form 1303 – 2 copies.
Crew Effects Declaration – Customs Form 1304 – 1 copy.
(Also see separate headings – "Health" – "Customs" – "Immigration".)

PILOTAGE: Services available day or night. Payment for Pilot services is mandatory whether Master uses Pilot or not. (Vessels commissioned by the U.S. or foreign government, yachts and vessels under 100 gross tons are exempt from pilotage fees, except when the services of a Pilot are requested).

ANCHORAGE: Open roadstead on the lee (West) side of St. Croix, providing a good anchorage with no significant tide.

TUGS: None readily available – tugs can be arranged with 48 hours advance notice.

BERTHING: A government-owned pier with a 1,400 ft. long approachway, bridging Maritime Zone to a pier-head 240 ft. long by 60 ft. wide. Vessels 600 ft. and over with a max. forward draft of 25 ft. have been accommodated.

RADIO: *(a)* Vessels may communicate with Island via:

Mackay Radio, Amagansett, New York	Call Letters WSL
Chatham, Massachusetts Radio	Call Letters WCC
Lantana, Florida Radio	Call Letters WOE
Barbados Radio, Barbados	Call Letters VPO
Destrellan Radio, Guadeloupe	Call Letters FFO
Fort de France Radio, Martinique	Call Letters FFP
Tuckerton Radio, New Jersey	Call Letters WSC

All stations maintaining 24-hour service. These radio stations then relay the messages by cablegram to Frederiksted via either ITT World Communications Inc. or Cable and Wireless, Western Union International.

(b) Master of every vessel arriving Frederiksted is required to give at least 24 hours advance notice of arrival to Captain of the Port, U.S. Coast Guard – San Juan, Puerto Rico, by wireless on 500 kc/s. or by radio telephone 2182 kc/s.
Call Letters for U.S. Coast Guard, San Juan, Puerto Rico – NMR.

(c) Masters are requested to advise Agent their expected time of arrival as far in advance as is possible, vessels arriving from ports other than U.S. or Caribbean Islands should give at least 7 days notice, and vessels arriving from U.S. ports should give at least 4 days notice. In addition, a message should be sent verifying arrival at least 48 hours in advance, with delays reported as necessary. Arrival messages should include information regarding repairs, stores, number of crew and passengers on board. If cash is required, a minimum of 7 days (prior to date of arrival) notice is mandatory.

(d) While vessels are in Frederiksted the authorities do not permit the use of the ship's radio transmitters.

(e) Vessels equipped with VHF equipment should commence radio watch on Channel 16 when vessel is 100 miles from St. Croix. Contact with Agents and shore facilities can be made direct or via Virgin Islands Marine Operator – Station WAH – Call Letters WAH.

FRESH WATER: Very limited, delivered by truck.

TIME: GMT minus 4 hours. Atlantic Standard Time.

HOLIDAYS: The following are legal holidays: Sundays; January 1 (New Year's Day); January 30 (Roosevelt's Birthday); February 12 (Lincoln's Birthday); The third Monday in February (Washington's Birthday); March 31 (Transfer Day); Holy Thursday; Good Friday; Easter Monday; Whit Monday; Last Monday in May (Memorial Day); June 22 (Organic Act Day); July 4 (Independence Day); July 2 (Supplication Day); The first Monday in September (Labor Day); The second Monday in October (Columbus Day); The fourth Monday in October (Veterans Day); November 1 (Liberty Day); The fourth Thursday in November (Thanksgiving Day); December 25 (Christmas Day); December 26 (Christmas Second Day), and such other days as the President or the Government may by proclamation declare as holidays.

The following are legal half-day holidays, commencing at Noon, viz: Every Thursday during the months from April to November, inclusive, except Thursdays in those weeks where there already is a legal holiday other than Sunday. Whenever any holiday falls upon a Sunday, the Monday following is a legal holiday.

REGULATIONS: The U.S. Coast Guard strictly enforces the Harbour Pollution Act of 1924, prohibiting discharge of refuse and oil in navigable waters of the U.S. Virgin Islands. Local Port Regulations are similar to those applying in U.S. Mainland Ports.

HEALTH: See "Health Regulations" before first U.S.A. Port (Albany).

Garbage should be disposed of beyond the 3-mile limit. On passing the 3-mile limit all garbage disposal units which open to the sea should be closed. All garbage should then be placed in covered cans and retained on board until the ship is again beyond the 3-mile limit.

CUSTOMS: Customs Officers will board at anchorage or wharf berths, and will require an accommodation ladder.

Vessels required to enter and clear through Customs House:
Vessels loading or unloading cargo;
Vessels embarking or disembarking passengers;
Vessels remaining in port over 24 hours:
Vessels requesting permission for their passengers to go ashore during the stay of the vessel in port.

Vessels in above categories must present following documents:
Clearance from Last Port;
3 copies of Crew List (Form I.418) or substantially similar form – see note below*)
3 copies Passenger List (Form I.418) or substantially similar form – see note below*)
4 copies Inward Foreign Manifest covering all cargo for discharge at St. Croix, V.I., showing weights or measurements (of basis of how cargo is freighted) on all items (Customs Form 7527-A or 7527-B).
2 copies Stores List (Engine-Deck-Commissary-Narcotics).
1 copy Crew Effects Declaration (Custom's Form 1304).

* List of passengers and crew shall be on Customs and Immigration Form I.418 or on a substantially similar form, except that where no steerage passengers are aboard upon arrival, the listing of the passengers may be in the form of a vessel "Souvenir List". Or similar list, in which the names of the passengers are listed alphabetically by class.

Sealing of Stores: Upon arrival of a vessel from a foreign port, or a vessel engaged in foreign trade from a domestic port, sea stores and ship's stores not required for immediate use of consumption on board while vessel is in port and articles acquired abroad by officers and members of crew, for which no permit to land has been issued, shall be placed under seal, unless customs officer is of the opinion that circumstances do not require such action. Customs Inspectors in charge of vessel, from time to time, may issue stores from under seal for consumption on board by passengers and crew.

Passengers disembarking must present personal baggage declaration if from foreign.

IMMIGRATION: Recommended that Masters who are unfamiliar with U.S. Immigration Procedure should seek clarification from Agents as far in advance as is possible.

If a vessel arrives direct from a United States mainland port or from Puerto Rico no immigration inspection will be performed. If a vessel arrives direct from a foreign port the vessel shall undergo immigration inspection.

Vessels arriving without a visaed crew list, may be able to obtain a waiver from Officer in Charge of U.S. Immigration & Naturalisation Service, by making application on Form I.193. A fee of $10.00 is required to obtain a waiver.

In order to expedite the clearing of the vessel, it is suggested that prior to arrival all passengers subject to inspection should be assembled where the inspection is to be performed.

Stowaways must be reported in ETA Message and listed on a Passenger Manifest (Form I.418) and on Form I.94, and must be reported to the U.S. Immigration Officer as soon as he boards.

All non-resident alien crew members, whether shore leave is required or not, are required to have in their possession valid Passports, Seamen's Book or Identification Card (with photo) and Form I.95 (crewman's Landing Permit) or Form I.184 (Alien Crewman's Permit and Identification Card) on arrival. All resident alien crew members are required to have in their possession Alien Registration Receipt Card (Form I.151) on arrival.

SHORE GANGWAYS: Available.

LAUNCHES/TENDERS: Not available.

AIRPORT: Distant 8.5 miles.

AUTHORITY: Virgin Islands Port Authority.

AGENT: Rob't. L. Merwin & Co., Inc., 1 Strand Street (mailing address PO Box 427), Frederiksted, St. Croix, U.S. Virgin Islands 00840. Cables "Merwin St. Croix via either ITT or C & W/WUI. Telex Merwin 3473286 via ITT or 367812 Merwin via C & W/WUI. Telephone (809) 772-0913 Mon.-Fri. 8–5 or (809) 772-0519 after 5, week-ends or holidays. Shipping Agents and Customs Brokers, Contract Stevedores and Truckers, Lloyd's Agents.

LIMETREE BAY, St. Croix: 17.41 N. 64.44 W.

LOCATION: The facilities of Hess Oil Virgin Islands Corp. (Hovic) are located in Limetree Bay on the South coast of the island of St. Croix, U.S. Virgin Islands. St. Croix is 32 miles South of St. Thomas and St. John Islands and 50 miles S.E. of the island of Puerto Rico. It is the largest of the U.S. Virgin Islands being 19 miles long and averages 3.5 miles in width.

The sea buoy "ELB" No. 2 marking the entrance to Limetree Bay channel is located in 60 ft. of water on the Westerly side of the channel: Latitude, 17° 40′ 42″ North, Longitude 64° 44′ 18″ West.

The sea buoy is painted red and is equipped with a flashing white light having a 1 second flash, 9 second eclipse with a visibility of 7 miles.

DOCUMENTS: Clearance (U.S. – Foreign). Inward clearance is effected on board immediately after docking Clearance should be made for Christiansted, St. Croix, via Limetree Bay.

The following documents are required by the Customs and Immigration authorities for entry and clearance:
Master's Certificate on Preliminary Entry.
Master's Oath.
Stores List.
Crew Purchase List (Curio List).
Inward Foreign Manifest.
Quarantine Free Pratique.
Deratisation Certificate.
Crew List (Certified).
Clearance from Last Port.
Crew men Landing Permits.
Passenger List (if any passengers).

PILOTAGE: Service is available 24 hours a day and is compulsory for all vessels using HOVIC facilities in Limetree Bay. The HOVIC Harbour Master acts as Pilot and will assist the Master in docking and undocking vessels using Hess facilities; however, the Master of the vessel retains full responsibility for the ship at all times. The Pilot can be contacted by VHF Channel 16. Pilot boards at the sea buoy, position 17° 40.7′ N., 64° 44.3′ W. Vessels over 45,000 d.w.t. are subject to movements in daylight only. Vessels should remain outside the sea buoy until boarded by the Pilot. The Pilot will be placed aboard by a company tug.

The tug HOVIC 1 is equipped with a radio-telephone having the following crystals: 2182 kc/s. U.S.C.G., 2638 kc/s., Ship to ship. 2738 kc/s., Ship to ship 2134 kc/s., San Juan, Puerto Rico and Galveston, Texas. Ships having the above crystals should call the HOVIC 1–3 hours before their arrival at the sea buoy, and advise of any change in their ETA.

ANCHORAGE: There is no suitable anchorage for deep draft vessels off the port. Normal practice is to stop engines and wait 6 to 8 miles from the sea buoy if required to wait instructions. In bad weather vessels should proceed to Frederiksted and anchor in the vicinity of the long pier in depths of 30 to 60 ft. Vessels shall have their anchors ready to let go upon entering the channel into Limetree Bay.

APPROACHES: Entrance to channel marked by a black sea buoy, equipped with a white flashing light, visible 8 miles. The buoy (ELB No. 1) (flashing every 5 seconds) is at the West side of the channel (Lat. 17° 40′ 42″ N., Long. 64° 44′ 18″ W.). At sea buoy there is 60 ft. of water and the channel has a depth of 60 ft. to Nos. 3 and 4 berths.

The turning basin opens up Eastward from the channel line and is approximately 1,200 ft. long and 1,000 ft. wide. The West turning basin is 1,500 ft. by 1,200 ft. with a max. depth of 35 ft.

RESTRICTIONS: Navigation permitted 24 hours a day except for ships over 50,000 d.w.t.

The Harbour Master will check and report on each vessel's draft before piloting them inbound or outbound.

HEALTH: National quarantine laws are enforced in the U.S. Virgin Islands by officers of the U.S. Public Health Service. All vessels are subject to inspection.

RADIO: Masters are requested to advise both HOVIC – St. Croix and their Agents by radio 48 hours and 24 hours in advance of their ETA giving the vessel's name, date and hour of arrival (local time), bunkers and water required.

TUGS: Tug assistance in the channel, docking and undocking is mandatory and is provided by 3×1,800-h.p. diesel tugs stationed in the port to provide this service. All tugs are under the orders of the HOVIC Harbour Master and are equipped with fire pumps and monitors to assist in fire fighting.

There are also 2 tugs of 7,000 h.p. available for the mooring of large tankers.

BALLAST: United States laws prohibit the pumping overboard of dirty ballast while a vessel is within U.S. coastal waters. All ballast must be pumped to facilities available ashore. However, if a vessel is especially equipped with clean segregated systems which are reserved for ballast use only, it is permissible to pump overboard at the dock after first being inspected and approved by the Dock Master.

In pumping dirty ballast ashore, the ballast is received through 1×12-in. shore line at a max. discharge pressure to shore installations of 125 p.s.i. The ballast is pumped into a ballast facility about 1 mile North of the dock. Due to the limited facilities and to the possibility of 2 vessels deballasting at the same time, it is requested that vessels arrive with the min. possible ballast.

The U.S. Oil Pollution Act of 1924 applies to the Pollution of Coastal Waters. Violators are subject to fines of up to $2,500 and a year's imprisonment for each offence.

NOTICE OF READINESS: Notice of readiness to load or discharge is a warranty that the vessel is in all respects ready to load or discharge, and that all of the ship's equipment (including, but not limited to tanks, pumps, valves, and pipe-lines) is ready and fit to load or discharge petroleum and/or petrochemical products. Notice of readiness will not be accepted unless the vessel is in all respects ready to load or discharge as appropriate. Vessel will not be deemed ready to load or discharge and pumping will not commence until the senior deck officer shall have executed and delivered to HOVIC a "Declaration of inspection prior to bulk cargo transfer" as required by U.S. Coast Guard Regulations.

BERTHING: A shore gangway is provided.

There are at present, 7 berths on finger pier, 3 on East side and 4 on West side.

Deepest berths are No. 3 and No. 4 each with 60 ft. depth of water alongside.

LOADING: Loading operations are normally carried out at relatively high pumping rates. Loading rates may be reduced by request. Loading cargo overall will not be permitted without specific written authorisation from HOVIC'S General Manager.

Hose pressures should not exceed 125 p.s.i. during loading or discharging.

Oil Dock is serviced by: 1×24-in. diameter crude line, 1×24-in. diameter No. 6 oil line. 1×20-in. diameter gasoline line, 1×20-in. No. 2 oil line, 1×10-in. diameter kerosene line, 1×12-in. diameter ballast line, 1×8-in. diameter fresh water line.

4×10-in. hoses are available for connecting up to each of the 20 in. and 24 in. shore lines – single 10 in. hoses are available for the kerosene and ballast lines.

Oil Dock 2 serviced by: 1×24-in. diameter crude line, 1×24-in. diameter 6 oil line.

MEDICAL: Medical attention is generally available from the public hospital at any hour of the day or night to crew members of all vessels. The representative of the ship's Agent should be contacted by the Master with any requests for medical attention for the crew. For each man needing medical or dental attention, a form should be completed in duplicate and signed by the Master, or in his absence, by the Chief Officer. The form should provide the date, patient's name, rating, and the name of the vessel. In case of emergency, or when a patient cannot be moved from the vessel, the Master should advise the ship's Agent by radio if at sea, or on the telephone if in port.

DENSITY: 1025.

FRESH WATER: The island of St. Croix is dependent almost entirely on rainfall for its supply of fresh water. There are wells but many of them are rather saline in nature. As a result fresh water is scarce and expensive. In conjunction with its refinery operation HOVIC operates a desalination plant and limited quantities of fresh water are available providing at least 48 hours notice of these requirements is given prior to the ship's arrival. All fresh water is metered aboard ship.

FUEL: Both No. 6 fuel oil (Bunker C) and light marine diesel are available by prior arrangement. Advice concerning quantities should be given in the vessel's arrival message (ETA) sent 48 hours prior to arrival.

DEVELOPMENTS: New docks under construction.

AIRPORT: Situated 5 miles from port facilities.

SHORE LEAVE: Under normal circumstances, no restrictions are imposed by the Immigration Authorities on shore liberty. Masters are requested to have all crew members on board at least 1 hour prior to departure time, to avoid delay "awaiting crew members". If crew members of foreign vessels are to be given shore leave, Form I–95 must be prepared for each member of the crew.

TIME: The U.S. Virgin Islands use Atlantic Standard Time, which is four hours slow of Greenwich Mean Time.

GENERAL: *(a) Immigration:* The United States immigration laws apply in the U.S. Virgin Islands. Passports and visas are required.

(b) Customs: The customs collection district of the U.S. Virgin Islands is under the jurisdiction of the U.S. Treasury Department but has its own Customs laws.

(c) Liquors: The transportation of alcoholic beverages inside HOVIC's property is strictly prohibited; consequently, no liquor or beer may be removed from vessels. the only exception to the foregoing is in the case of bonded stores ordered by Masters.

(d) Visitors: No visitors are permitted in the dock area. Only persons on official ship's business are permitted on the piers.

(e) Laundry: Only limited facilities are available to handle ship's laundry.

(f) Surveyors: Representatives of the American Bureau of Shipping, Lloyd's Register and other maritime classification societies are available in San Juan, Puerto Rico on 12 to 24 hours notice. The ship's Agent will assist Masters in soliciting their services.

(g) Mail: Official and personal mail will be delivered on board by the ship's Agent when vessels are being cleared inwards. Mail received for vessels while in port will be delivered on board prior to sailing. Outgoing mail is accepted from Masters, provided it is accompanied by a mail transmittal slip to support disbursements.

(h) Transportation: Walking through the refinery is not permitted. Arrangements for transportation will have to be made through the ship's Agent or the Refinery General Manager's Office.

(i) Supplies and Repairs: Limited supplies of provisions and marine hardware are available on the island. There are no facilities for major repairs closer than San Juan, Puerto Rico. Machine shops in Christiansted and Fredriksted can assist in making minor repairs.

(j) Overloading: Masters are advised that the international laws are strictly enforced with regard to overloading and should be guided accordingly. In cases where overloaded cargo has to be discharged, all expenses incurred, including ship delay, will be for the vessel's account.

(k) Weather Conditions: The loading and discharge of all crude petroleum and its products will be stopped during any electrical storm. Ullage screens or ullage plugs must be in place. Loading gasoline or other similar low-flash products will be stopped during periods of calms when the heavy vapours cannot be dispersed quickly enough to prevent hazards from accumulated gas pockets. Ship's officers are cautioned to be on their guard during such conditions. In the event of abnormal weather conditions in the area, such as a hurricane, vessels will be notified that additional moorings are required. If the situation so demands, Masters will be told to suspend all operations and proceed to sea until normal weather conditions again prevail.

(l) Demurrage: Vessels are required to vacate berth promptly upon completion of cargo handling operation (loading or discharging operations, as the case may be). Permission to lay alongside at any time the vessel is not engaged in cargo handling operations must be granted in writing by the Dock Master. The Harbour Master will keep vessels advised of other vessels awaiting berth. If any vessel fails to vacate its berth upon completion of cargo handling operations and expiration of free laytime for dock usage as outlined below, the vessel will be responsible for penalties and demurrage as follows:

(a) To pay dock demurrage.
(b) To hold HOVIC blameless for any demurrage and damages incurred as a result of other vessels awaiting berth.

The following rules shall govern the determination of demurrage:

(*a*) One hour free laytime will be allowed after completion of cargo handling operations. This free time will start at the time cargo hoses are disconnected from the ship's manifold on completion of loading or discharge of cargo. Vessels awaiting cargo papers and/or Customs clearance must vacate the berth within 1 hour of such completion and move outside to wait for their papers.

(*b*) Three hours free laytime will be allowed for ballasting after discharge operations.

AUTHORITY: Hess Oil Virgin Islands Corp.

AGENT: See "Frederiksted".

ROAD HARBOUR & PORT PURCELL, Tortola, British Virgin Islands: 18.25 N. 64.37 W.

PORT LIMITS: All the area of water North of an imaginary line drawn from Burt Point to Hog Point (see Admiralty Chart 2020).

DOCUMENTS:

Clearance from last port;
1 Declaration of Health Certificate;
4 Crew Lists;
2 Crew Store Lists;
2 Ships Stores Lists.

PILOTAGE: Only compulsory for vessels of 200 n.r.t. and over, when proceeding alongside or leaving Port Purcell unless a vessel is in possession of a valid Exemption Certificate issued by the Ports Manager. Pilot boards at Port limits after receiving advice from Agents preferably 12 hours prior to arrival. Link calls made through Tortola Radio, Channel 27 daytime and Channel 16 at night.

Vessels arriving ahead of ETA sound "G" on whistle if unable to advise Agent.

No inward pilotage at night, unless emergency, night Pilotage outwards by special arrangement.

ANCHORAGES: Between Buck Island and Beef Island or immediately South of Port limits, approximately 12 fathoms.

RESTRICTIONS: Anchorage within Port limits prohibited unless authorised by Ports Manager, max. draft alongside Port Purcell 21 ft.

MAX. SIZE: Tanker anchorages independent of Port Authority and maintained by Shell and Esso, for small vessels only, little tidal influence.

HEALTH: Customs issue pratique for vessels with clear bill of health, otherwise request doctor to board on arrival alongside or at anchor.

RADIO: Cable and Wireless maintain a Public Coast Station on Tortola, callsign Tortola Radio, with an approximate range of 50 miles and provides linked telephone calls between ships and any shore based telephone subscriber. Continuous watch is kept on Channel 16.

For distances in excess of 50 miles any other convenient shore station, (eg. Barbados, St. Thomas) that will accept messages for onward cabling or telephoning to Tortola.

BERTHING: Port Purcell quay is 800 ft. long, max. draft 21 ft. at any state of tide, salt water. Ships discharge with own gear.

CRANES: Port Purcell has 1 mobile shore crane, max. lift 8 tons. Prior advice required for use.

MEDICAL: Hospital facilities available, no routine inoculations, etc., required unless specially notified.

DENSITY: Entirely salt water within port limits.

FRESH WATER: Available in limited quantities at Port Purcell, approx delivery 20 t.p.h. and costs US$4.48 per ton.

FUEL: Diesel only for small vessels delivered by road tanker to Port Purcell, 2 hours notice.

REPAIRS: Elementary only.

HATCHES: Opened and closed by crew.

CUSTOMS ALLOWANCE: No sealing of tobacco, wine or spirits.

AIRPORT: Beef Island, 7 miles, regular local flights to St. Thomas, Puerto Rico, Antiqua which connect with several main lines to Europe and the Americas.

TIME: GMT Minus 4 hours.

HOLIDAYS: Port Purcell closed Xmas Day, Good Friday and August Monday (1st in month).

POLICE/AMBULANCE/FIRE: Dial 999.

TELEPHONES: Telephones available for use on board ship, cost for connecting US $25.00 and 8 cents for local calls.

SHORE LEAVE: No restrictions for crews.

IDENTIFICATION CARDS: None required.

DELAYS: None should be expected. Cargo working is geared to ship's arrival irrespective of time and 24 hours continuous working if required.

AUTHORITY: Ports Manager and Harbour Master, Road Town, Tortola.

ST. THOMAS: 18.20 N. 64.56 W.

Harbour of St. Thomas, U.S.V.I. situated on South side of Islands of St. Thomas. It is 1,434 miles from port of New York. Northern side of Islands borders on Atlantic Ocean, and Southern side on Caribbean Sea. The Harbour is one of the best in the West Indies, being almost landlocked.

WEATHER: There is a signal station on Cowell Hill which shows storm signals. The weather is usually mild with little wind. Squalls when they occur, usually come from the N.E.

DOCUMENTS: *Quarantine.* – see "Health". *Customs* – see "Customs". *Immigration* – see "Immigration". *Agent:*

1 Copy Crew List (Form I. 418).
1 Copy Passenger List (Form I. 418).

PILOTAGE: Compulsory and available day and night. Pilot Boat has letter "P" on deck house and flies International Code flag "P". Pilots will meet vessels 1 to 3 miles outside harbour, boarding via Jacob's ladder.

ANCHORAGE: Outer Harbour Anchorage located beginning at Scorpion Rock Lighted Buoy No. 1 (18° 91′ 25.6″ N: 64° 55′ 8″) thence 180° 1,580 yards; thence 263°, 2,490 yards; thence due North 1,255 yards; thence due East to the Southerly tip of Sprat Point, Water Island; thence to Cowell Point, Hassel Island, and thence to point of beginning. This anchorage is considered good and is about 8 fathoms with sand bottom.

TUGS: Normally not considered necessary for docking, however tugs are available for docking and undocking ships.

RADIO: The St. Thomas Marine Operator will guard the following from 0600 to 2100 hrs.: Channel 26, 16 VHF, 2009–2506 and 2182 AM, and the upper side band (2010.4–2507.4) of the same frequency. The Harbour Master's Office maintain a 24-hour watch on VHF Channel 16 (talk Channel 12).

(*b*) Master of every vessel arriving St. Thomas is required to give at least 24 hours advance notice of arrival to Captain of the Port U.S. Coast Guard – San Juan, Puerto Rico by wireless on 500 kilocycles or by radio telephone 2182 kilocycles.

(*c*) Masters are requested to advise Agents their ETA, at least 36 hours in advance. Arrival messages should include cash requirements (local currency U.S. Dollar) and advice regarding repairs, stores, etc. This information is particularly necessary in the cases of vessel arriving on weekends or holidays. For cruise vessels the arrival messages should also include the number of passengers and crew on board.

(*d*) While vessels are in St. Thomas Harbour, the authorities do not permit the use of the ship's radio transmitters.

(*e*) U.S. Coast Guards: This organisation maintains a small Light Attendant Station in St. Thomas to observe, service and effect repairs to aid navigation in vicinity of St. Thomas. An 82-ft. Coast Guard Patrol Boat "Point Whitehorn" (82364) is attached to the station for primary purpose of search and rescue work. Maintains watch on VHF Channel 16. Radio telephone marine information broadcasts, including Notices to Mariners, will be made on 2670 kc/s., after first making a preliminary announcement on 2182 kc/s. Radio telephone urgent and safety broadcasts or Marine Informations will continue to be made on 2182 kc/s.

BERTHING: Wharf of the West Indian Company Limited, located on Eastern shore of harbour basin. Wharf is bulkhead type, 2,234 ft. long, running N.E./S.W., and is well protected to seaward. Mooring bits are spaced at intervals of 50 ft. There is a "cut out" in the wharf 950 ft. from N.E. corner, which is 22 ft. wide and approximately 3.5 ft. above low water. This ramp is slanting from 8.3 to 3.5 ft. over a distance of 20 ft. Similar type of ramp located on West Corner of wharf. Safe depth alongside from 27 ft. near N.E. end to 30 ft. on S.W. end. Bulwark is 8.3 ft. above mean tide. Average difference between high and low tide is 11 in.

Dockages dues are payable to the West Indian Company Limited, as per tariff.

In the Crown Bay area (access via East or West Gregerie Channels) the VI Port Authority maintains facilities which include a "T"-head pier extending 500 ft. from shore, where ships up to 25,000 g.t. can moor to breasting dolphins 200 ft. on centres, and mooring dolphins 200 ft. fore and aft from them. Controlling depth presently 30 ft. This pier is used for berthing tourist and tanker vessels only. A curved bulkhead at top of Crown Bay, approximately 900 ft. long, is used for roll-on/roll-off, container and break bulk cargo. Controlling depth 15 ft. 24-hour arrival notice is required.

CARGO HANDLING: Containers are handled at the West Indian Company and the Crown Bay area (VI Port Authority), but no special gantry cranes are available. Roll-on/roll-off cargo handled at these facilities as well. No liquid chemicals facilities exist here but there is a small privately-owned LPG plant limited to 20 ft. draft and 250 ft. length. Shell uses this facility for gasoline and light diesel. The "T"-pier in Crown Bay is used for the VI Water and Power Authority for movement of fuel and water, and Texaco has its own pipe-line on the same pier for their products.

STEVEDORES: Discharging and/or loading arranged by the West Indian Company Limited for account and risk of vessels.

Rates of discharging and /or loading dependent on vessel's equipment and stowage. However, following may be considered average:

General Cargo 6 weight tons per gang hour.
Bagged Goods 8/10 weight tons per gang hour.
Lumber 10/12 weight tons per gang hour.

Each stevedore gang normally consists of 12 stevedores (10 on board and 2 ashore) 2 winchmen, 1 signalman, 1 foreman.

FUEL: The West Indian Company Limited operates the bunkering terminal and are agents for Esso. Marine diesel fuel handled through 6 in. or 8 in. pipe-lines (4 in. or 6 in. hoses) at maximum rate of approximately 125 t.p.h., at the wharf of the West Indian Company Limited, where vessels drawing up to 30 ft. can be accommodated.

Delivery by barge is not available. Bunkers available at all hours, including Sundays and holidays. Owners of vessels must make prior arrangements for bunkers.

Overtime as incurred will be charged to ships for bunkers supplied outside normal working hours, Saturdays, Sundays and holidays.

FRESH WATER: Mostly rain water which when available is supplied by the West Indian Company Limited. Delivery effected by pipe alongside wharf. Water by barge can be delivered in St. Thomas.

MEDICAL: Local hospital is the Knud-Hansen Memorial Hospital, which is equipped with facilities for operations, etc.

TIME: Official St. Thomas time is Atlantic Standard Time, which is 4 hours behind GMT.

HOLIDAYS: The following are legal holidays in St. Thomas: Sundays; January 1 (New Year's Day); January 15 (Martin Luther King); January 30 (Roosevelt's Birthday); February 12 (Lincoln's Birthday); The third Monday in February (Washington's Birthday); March 31 (Transfer Day); Holy Thursday; Good Friday; Easter Monday; Whit Monday; The last Monday in May (Memorial Day);,June 22 (Organic Act Day); July 4 (Independence Day); July 25 (Supplication Day); The first Monday in September (Labour Day); The second Monday in October (Columbus Day); The fourth Monday in October (Veterans Day); November 1 (Liberty Day); The fourth Thursday in November (Thanksgiving Day); December 25 (Christmas Day); December 26 (Christmas Second Day), and such other days as the President of the Government may by proclamation declare as holidays.

The following are legal half-day holidays, commencing at Noon, viz: Every Thursday during the months from April to November, inclusive, except Thursdays in those weeks where there is already a legal holiday other than Sunday. Whenever any holiday falls upon Sunday, the Monday following is a legal holiday.

REGULATIONS: The U.S. Coast Guard strictly enforces the Harbour Pollution Act of 1924, prohibiting discharge of refuse and oil in navigable waters of the U.S. Virgin Islands.

Local Port Regulations are similar to those applying in U.S. Mainland Ports.

HEALTH, CUSTOMS, IMMIGRATION: Refer to Frederiksted.

CONSULS: Following countries have consular representatives in St. Thomas.

Belgium
Denmark
Dominican Republic
El Salvador
France
Great Britain
Haiti
Netherlands
Norway
Panama
Sweden

AIRPORT: Distance 2 miles. Connections with International flights from Puerto Rico.

GENERAL: *Gangway.* 1 aluminium gangway available which is 34 ft. long and 2 ft. 6 in. wide – made with skidding prevention strips only and therefore not recommended for use as a passenger gangway. Since presently this is the only gangway it is made available to vessels on first-come-first-served basis.

Stores. St. Thomas should not be depended upon for large quantities of provisions or deck and engine stores, as practically all commodities are imported making prices higher than United States mainland ports and Puerto Rico. No regular Ship's Chandlers established in St. Thomas, V.I.

Storage Facilities: The West Indian Company Limited undertakes ordinary storage for a limited period of time in 8 transit warehouses, all 14 ft. high with a total floor area of 80,000 sq. ft., plus an additional 9,600 sq. ft. roof covered area. There is also a large uncovered area available for outside storage. Only limited cold storage facilities are available on The West Indian Company's Dock.

Ice: Small quantities may be obtained.

Laundry; Modern laundry service is available.

POLICE/AMBULANCE/FIRE: Police 915; Ambulance 774-1212; Fire 921.

AUTHORITY: Virgin Islands Port Authority.

AGENTS: The West Indian Company Limited, (Shipping Department), PO Box 660 – St. Thomas, V.I. 00801. (Passenger & Crewmail PO Box 4400) Telegraphic Address: Occident. Telex Numbers; 3472313 (Wico) (ITT System) 365246 (Wicostt) (Cable & Wireless Western Union System) Tel. (809 774–1780).

Office Hours: Monday through Friday: 8.00 a.m. to 12.00 noon; 1.00 p.m. to 5.00 p.m.

Outside Regular Office Hours Tel. Manager Shipping Department. (809) 774-2683; Ass't. Manager Shipping Dept. (809) 774-0625: Dockmaster (089) 774-5285; Shipping Department (809) 774-4170.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Windward Islands

CASTRIES, St. Lucia: 14.00 N. 60.59 W.

DOCUMENTS:
5 Crew Lists.
5 Passenger Lists.
1 Stores List.
1 Clearance from Last Port.
2 sets of Manifest mailed prior to arrival.
2 Copies each Bills of Lading.
3 copies each of Manifests on arrival.
1 Health Certificate.

PILOTAGE: ETA to Agents at least 48 hours in advance, and further advice if any changes. Agents inform Pilot's office of expected time. Ship remains approximately 3 miles out of harbour, and is located by Lighthouse guard who immediately informs Pilot's office. Pilot meets ship in Pilot boat – *Bertram* 25 ft. Hard top with a "V" hull and twin inboard outboard Mercruiser engine complete with navigation and pilot lights. Painted dark blue all around, with letter "P" painted in white on both sides of bow. Signal for Pilot: day time flag "G"; and night: white light or blue light. VHF and 2182. Pilot embarks on the starboard side via Pilot ladder.

ANCHORAGE: North of leading lights, about 0.5 mile from harbour, depth about 12 fathoms.

RESTRICTIONS: No ship exceeding 100 nett registered tons must enter without a Pilot.

MAX. SIZE: Not longer than 600 ft. (cargo and passenger). Tankers – not longer than 400 ft. Alongside, all ship's draft 24 ft.

HEALTH: Pratique given by Pilot. Health Officer boards ship and if any infectious diseases are on board, ship is anchored out until doctor arrives.

RADIO: 2182 kc/s., 2527 kc/s., 2638 kc/s., 2146 kc/s., 2582 kc/s., 2361 kc/s.

VHF transmitting and receiving in the 156 mHz range on Channels 6, 12, 14 and 16.

These radios are situated at Vigie Lighthouse, Castries and at Moule-a-Chique Lighthouse, Vieux Fort operating on a 24 hour basis.

TUGS: Not necessary.

BERTHING: Berthing arrangements are made by the Port Manager before the ship's arrival having received the ETA.

Castries: Deep and sheltered anchorages off entrance. Approach channel 300 ft. wide, with min. depth of 6 fathoms. Turning basin 1,100 ft. in diameter, depth 6 fathoms. Inter-island cargo berth 450 ft. long, 12–18 ft. deep. Short stay cruise ship berth, 550 ft. long, 28 ft. deep.

Vieux Fort: Depth of 8 fathoms at the entrance and 5 fathoms within the Port. 2 berths, 500 ft. long, 27 ft. 6 in. deep.

MEDICAL: In urgent cases only, advise requirements in advance. Hospital facilities available.

TANKERS: Discharging by marine and floating hose, 6-in. and 4-in. lines. Berths alongside quay (2), off shore (2). Presently fuels discharged: Mogas 95 and 83, kerosine gas oil, colas RS2, cutaback RC2, banana spray oil.

FRESH WATER: Available by delivery hose from water hydrant on wharf.

FUELS: Gas oil 48/52 DI–API. Viscosity at 60° 36.3 S.G. at 60° 0.8435.

GANGWAY/DECK WATCHMEN: Available if required.

OPENING/CLOSING HATCHES: By crew.

CERTIFICATES: Ship's Register required on board.

CUSTOMS ALLOWANCE: Tobacco, one carton of 200 cigarettes. Wine/Spirit, one quart.

CONSULS:

Norway	Tel. 2214	France	Tel. 2351–2
Portugal	Tel. 2811	U.K.	Tel. 2484–5
Holland	Tel. 2811		

REPAIRS: Only welding and painting work available.

DRY DOCKS: None.

REPATRIATION: Facilities available.

AIRPORT: Distance from wharf 2 miles. Flights per day 4. Airlines: BWIA, LIAT, Caribair.

TIME: GMT minus 4 hours. No alterations to clock.

HOLIDAYS: New Year's Day (1st January); New Year's Holiday (2nd January); Statehood Day (1st March); Good Friday (late March or early April); Easter Day (April); Easter Holiday (April); Labour Day (1st May); Whit Monday; Corpus Christi (late June); Queen's Birthday (12th June); Emancipation Day (1st Monday in August); Harvest Day (1st Monday in October); Discovery Day (13th December); Christmas Day (25th December); Boxing Day (26th December).

POLICE/FIRE/AMBULANCE: Police dial 99; Fire 97; Ambulance 95.

TELEPHONES: Arrangements exist for placing on board.

GENERAL: Ships arriving after 2000 hrs. cannot be attended to until 0700 hrs. following day.

SERVICES: Compass adjusting.

SHORE LEAVE: Allowed.

AUTHORITY: St. Lucia Port Authority.

KINGSTOWN, St. Vincent: 13.09 N. 60.57 W.

DOCUMENTS:
Customs:
2 copies Ship's Store List.
1 copy Crew Store List.
1 copy Crew List.
1 copy Passenger List.
1 copy List of Cargo not manifested.
Immigration:
2 copies Passenger List.
2 copies Crew List.
Port Officer:
1 copy Declaration of Health.
1 copy Passenger List.
1 copy Crew List.
2 copies Port Officor Return.

PILOTAGE: Not compulsory. Cable Agents 24 hours prior arrival order arrange Pilot. English-speaking Pilot boards at harbour entrance – about 2 miles from anchorage. By day Pilot vessel flies Pilot flag and by night signal lights.

ANCHORAGE: Well protected. Tourist vessels lie at anchor, between 15 and 20 fathoms, or at pier.

RESTRICTIONS: None. Vessels may arrive and/or sail any hour day or night.

HEALTH: Port Health Officer boards vessel at anchorage requires Bill of Health or Master's declaration, and one copy Passenger List. Vessel's own form of manifest accepted. Vaccination Certificates are not required to be shown and passengers and crew do not require inoculation. Passenger and crew muster, not required. Health Doctor requires letter signed by Ship's Doctor (if any) and certified by Master stating all passengers and crew in possession of valid smallpox vaccination certificates. No persons allowed leave vessel before pratique granted and Immigration officials boarded vessel.

BERTHING: No tidal restrictions, no strong currents. Occasional on-shore South winds during August and September but only light winds. Rest of year off-shore winds. Mooring boats available for taking lines. No special moorings required. Jetty situated at S.E. corner of harbour and about 70 ft. out from beach. Bow and stern lines to landing stage. Landing stage in good condition and well lit. If vessel at anchorage and not at berth transit ashore by ship's motor launches only. Anchorage about 2 cables distant from quay.

TUGS: Not required.

FRESH WATER: Available.

TELEPHONE: May be connected on board if required, charge about 1 Dollar per day.

CUSTOMS/IMMIGRATION: Customs and Immigration officers board vessel at anchorage or quay. Vessel entered and cleared at Customs House by Agents. Ship's own form of manifest accepted by Customs and Immigration. On passenger vessels, ship's bar is sometimes sealed.

IDENTIFICATION CARDS: Not required for going ashore.

VISAS: Not required for crews or passengers, but nationals of foreign countries other than U.S.A. or Canada disembarking for permanent residence require Visas.

PROVISIONS: Limited quantities of provisions, fish, fruit and vegetables. Pasteurised cows' milk obtainable. Stocks of ice available.

CURRENCY: No special currency regulations in force and passengers permitted to take ashore any amount of U.S., Canadian or foreign currency. Currency exchanges at Banks or tourist bureaux, but Bank tellers do not board vessel to exchange currency. Local currency may be re-exchanged for U.S. dollars at local Tourist Bureau before departure. U.S. or Canadian currency accepted by stores, shops, restaurants and hotels.

AUTHORITY: Port Officer.

AGENT: Corea & Co. Ltd., PO Box 122, Kingstown, St. Vincent. Windward Islands, West Indies. Tel. 2201. Cables "George".

PORTSMOUTH, Dominica: 15.32 N. 61.29 W.

Portsmouth is an anchorage port principally engaged in the export, by lighter, of bananas and the export of agricultural produce by small inter-island vessels.

Documentation required is as for "Roseau". Safe anchorage is available anywhere within the port with distance off dependent on the size of vessel. Pilotage is not compulsory and if required must be obtained at the Roseau pilot station.

No alongside facilities (except those for lighters) exist and no cargo handling equipment is maintained.

All enquiries in the respect of the use of the port of Portsmouth should be addressed to the Port Authority, Roseau.

MEDICAL: A Cottage Hospital is available.

POLICE/AMBULANCE/FIRE: Police Tel. 5222, Ambulance Tel. 5237 (Hosptial), Fire Tel. 5215, Custom House Tel. 5255.

ROSEAU, Dominica: 15.17 N. 61.24 W. (See Plan)

The provisions in respect of Woodbridge Bay wharf, are expected to become operational late 1976/early 1977.

PORT LIMITS:

15° 19′ 00″ N., 61° 24′ 29″ W.;
15° 21′ 00″ N., 61° 24′ 29″ W.;
15° 21′ 00″ N., 61° 23′ 09″ W.

DOCUMENTS: Port Authority requires before commencement of discharge, 2 copies of the vessel's manifest, and 1 stowage plan or hatch block sheet. Masters are advised that these should be airmailed ahead of the arrival. On arrival, documents required are:

Port Authority:

Ship's Register to sight.
International Health Declaration.
1 Crew List.
1 Passenger List.
1 Hazardous Cargo List.

Customs:

Clearance from last port.
1 Stores List.
2 Personal Effects Declaration.
1 Manifest.
1 Crew List.
1 Passenger List.

Immigration:

1 Crew List.
1 Passenger List.

PILOTAGE: Pilotage is compulsory for berthing all vessels in excess of 100 g.r.t. Pilotage is available for anchorage on request. Pilots will board in approx. 15° 17′ 54″ N. 61° 24′ 50″ W. The pilot boat will display International code "H" by day and a white light over red light by night. Requests for Pilots should be made 24 hours in advance either through the vessel's Agent or by cable to "Domport". Vessels may contact the Port Authority through Dominica Police Control (call on 2182 kHz) on the hour from 1800-2400 hrs. and 0500-0800 hrs. or Dominica Port Radio on VHF Channel 6 from 0800-1600 hrs., and for 2 hours in advance of the vessel's ETA.

ANCHORAGE: A restricted area exists in Woodbridge Bay between:

15° 19′ 00″ N., 61° 24′ 15″ W.,
15° 18′ 00″ N., 61° 24′ 15″ W.,
15° 18′ 00″ N., 61° 24′ 00″ W.

and vessels may not anchor therein, except under Port Manager's instructions. Anchorage may be taken South of this area and in Roseau Roadstead 1.5 – 2 cables offshore in 15 – 30 fathoms depending on the vessel's size. All anchorages are steep-to and care should be exercised so as not to drag off the bank when anchoring.

MAX. SIZE: See "Berthing".

HEALTH: International declaration of Health. In addition any death, fever or suspected contagious disease should be notified in advance to Agents or Port Authority by cable or radio.

RADIO: See "Pilotage".

TUGS: None.

BERTHING: Woodbridge Bay Ocean Berth Length 500 ft., min. depth 36 ft. MLWOST.

Schooner berth 120 ft. with a depth alongside of 9 ft. (inshore) to 36 ft.

Roseau Jetty, Length 93 ft. min. depth 12 ft.

STEVEDORES: Arranged by vessel's Agents.

CARGO HANDLING FACILITIES:

Mechanised Cargo Handling: Breakbulk cargo is handled palletised on ships/shippers/port pallets. Adequate forklift trucks, trailers, and tractors are available to work all berths, Small inter-island vessels can be discharged by 5-ton mobile cranes (2). Containers up to 18 d.w.t. can be handled ashore if placed on port trailers by ship's gear.

No Ro-Ro facilities are presently available. A ramp with 10 ft. water at MLWOST is planned at the Dominica Mining Co. facility 1 mile North of Woodbridge Bay. This could only be used by special arrangement and prospective users area are advised to contact the Authority well in advance.

Tankers/Bulk cement carriers: Petroleum products are presently handled at 5 different anchorages on the west coast.

L.P.G. Woodbridge Bay (2) max. draft 12 ft. floating hose from vessel.

Mogas – Gasoil (Dieselene), Kerosene, Sprayoils:
Rockaway (2), 1 mile North of Woodbridge Bay, draft 18 ft. 800/900 ft. floating hose from ship.

Boiler Fuel (Bunker C): Belfast, 2 miles North of Rockaway, max. draft. 14 ft. (up to 20 ft., if vessel equipped for stern discharge) 4-in. submarine line.

Bulk Edible Oils and Soap Chemicals: Belfast max. draft 14 ft., 4-in. floating hose (200 ft.) from shore.

The above are single anchor, stern-to berths with stern lines to shore posts. Vessels should have at least 4 ropes available aft and provision to bend 2 lines together.

Bulk Cement: Rockaway, mooring to buoys off Dominica Mining Co. jetty (mooring shackles required). this berth is for specialised cement carriers only, max. draft 15 ft.

Quarry Products: Rockaway – Ro-Ro ramp. Specialised vessels only.

The above are private facilities but pilotage is available. In the case of Woodbridge Bay (L.P.G.) pilotage is compulsory. Tankers in their ETA advice should include their cargo by products and their draft.

MEDICAL: One Government General Hospital, One Private group Medical Clinic and One Private Dental Clinic are available.

On board visits by a Doctor can be arranged.

Where possible advance notice should be given.

DENSITY: Approx. 1025.

FRESH WATER: Available alongside all berths at a cost of EC $12.00 for 1,000 gals.

FUEL: Dieselene (Gas oil) available in limited quantities ex-tank wagon at all berths. Other grades not available.

GANGWAY/DECK WATCHMEN: Available if required.

OPENING/CLOSING HATCHES: Beam and board hatches, crew or stevedores; Ship's option. Patent Hatches; ship's crew.

CERTIFICATES: Previous port clearance; ship's register, to sight.

CUSTOMS ALLOWANCE: 200 cigarettes, or 0.5 lb. tobacco or 25 cigars, 26 ounces of spirits per crew member.

IDENTIFICATION: Dock passes for crew members will be issued through the vessel's Agents.

CONSULS: (Or Consular Agents).

		Business	Residence
France	C. A. Butler	Tel. 2033	Tel. 1146
Netherlands	W. A. Astaphan	3221	2524
Belgium	Achille L. Pinard	2781	2756

REPAIRS: Minor and emergency repairs can be arranged. Engines and deck gear cannot be put out of service without permission of the Port Manager.

REPATRIATION: Limited inter-island flight capacity to nearest international airports – Guadeloupe, Martinique, Antigua, Barbados.

AIRPORT: Melville Hall 37 miles. Inter-island services only.

TIME: GMT minus 4 hours.

HOLIDAYS: New Year's Day, Carnival (Mardi Gras) 2 days. Good Friday, Easter Monday, Labour Day, Queen's Birthday, Whit Monday, August Monday, National Day (Nov. 3–4), Union Conference Day (A Sunday in November), Christmas Day, Boxing Day.

Minimum working: can be arranged on these days, but it is not advised over the Carnival or National Day Holidays.

POLICE/AMBULANCE/FIRE: Police Tel. 2222 or call on 2182 kHz., Fire Tel. 2888, Ambulance Tel. 2321.

At anchor or away from a telephone, blow 3 short and 1 prolonged blast at frequent intervals until acknowledged on VHF Channel 16 or HF 2182 kHz., or by lamp.

TELEPHONES: On board service can be provided at the Ocean Wharf, Woodbridge Bay.

SERVICES: Assistance can be given for emergency repairs to electronic equipment, compass adjusting and D/F calibration subject to advance notice. Provisions can be obtained, but advance notice should be given especially for fruit and vegetables of high quality.

SHORE LEAVE: After inward clearance, there are no restrictions on shore leave. Masters are advised to note that immigration law holds the vessel/owner/agent, financially reponsible for any crew member or intransit passenger left behind (for whatever cause). Vessel's having no accredited Agent will be required to satisfy Immigration Authorities before outward clearance is granted.

AUTHORITY: Dominica Port Authority.

Yemen Arab Republic

HODEIDAH: 14.48 N. 42.55 E.

FLAG: It is essential that from the time they enter Yemen territorial waters all vessels fly the Yemen Arab Republic flag and this should be flown continuously until they leave these waters on sailing. Failure to observe this courtesy may result in a heavy penalty. The design of the flag is red, white and black horizontal strips of equal size with green star in centre of white strip.

DOCUMENTS: On arrival 8 copies of Manifests of cargo for discharge are required and each must be endorsed with the word *Correct* by the *Customs Authorities* at the Port of Loading. It is advisable that at least 2 of the 8 copies of manifests on board the ship should be freighted copies, otherwise 2 additional copies, showing freight details should be airmailed to Hodeidah separately to arrive in advance of the vessel. The Master should also be in possession of 1 copy of each Bill of Lading and certificate to show vessel is not blacklisted.

PILOTAGE: Pilotage is compulsory and as the entrance of the Channel giving access to the Port cannot be observed from the port area itself it is essential that accurate ETA's be given to Hodship Hodeidah (the Agent) in order to avoid delays waiting for a Pilot.

Vessels will be piloted down a dredged channel of about 8 miles in length. The channel, which is buoyed with black starboard and red port buoys, is 7.5 m. deep and 100 m. wide. – *The buoys are not at present lit and therefore entrance and exit from the harbour can only take place during daylight hours.* It is understood that in due course illumination of buoys and leading marks will be carried out and night movement possible.

ANCHORAGE: Masters are also recommended to ensure that on arrival they anchor off the entrance to the new port to await the Pilot and do not anchor off the old port opposite the town some 5 miles to the South and which is still shown as being the Port of Hodeidah on some charts. Vessels anchoring in the wrong area may suffer some delay before they can be contacted and asked to proceed to the correct area. Masters should be advised to anchor at the outer anchorage in the following position: 14° 55′ N., 42° 54′ E.

MAX. SIZE: Max. draft alongside 23 ft.

HEALTH: All members of the crew must be vaccinated against yellow fever, smallpox and cholera otherwise permission will not be given to disembark.

RADIO: Masters should also ensure that a radio watch is kept to receive calls from the Port Authorities. The Hodeidah Radio Station is operative between 0600 and 1800 hrs. daily, the call sign is: 4WD or 4WD3 (short).

TUGS: 1 tug of 450 h.p. Pilot launch 250 h.p. also available to assist.

BERTHING: The quay is 370 m. in length with 3 berths, the first 70 m. long, depth 6 m., the second and third are of 150 m. length and 8.5 m. depth. *Officially, ships berthing are restricted in length to 140 m. and to a max. draft of 23 ft., but vessels up to 150 m. have berthed. For such vessels prior advice is required.*

The quay is concrete construction and is well founded, vessels being secured to bollards in the normal manner. Use of rat-guards is recommended. The quay is equipped with 3 electric cranes described as having a max. capacity of 5 tons. At present only 2 of these cranes can be operated simultaneously owing to insufficiency of current.

There is also a dolphin berth for discharging of petroleum products, which is connected by submarine pipes to storage tanks near the port area. The depth alongside is 6 m.

STEVEDORES: All labour is provided by Agent's representative including winchmen and tally clerks, but winchmen are provided entirely at ships' risk.

Rates of discharge vary but are quite satisfactory and with bagged cargo the average obtained is 15 tons per hatch per hour. Night work is possible.

It is normal for labour working on board to request drinking water to be supplied. Whilst this may be unusual Masters are advised to comply, as otherwise slow working or perhaps even stoppages may result.

Vessels are expected to supply food on board to cargo-supervisors, foreman, and tally clerks. It may be left to Master's discretion whether this is supplied, but if not the Agency will have to supply same and the cost will be debited to the vessels.

WORKING HOURS: Normally from 0600 hrs. to 1400 hrs. and again from 1700 hrs. to midnight. Additional work outside these hours, including after midnight can usually be arranged if necessary, although this cannot be guaranteed. Any work after midnight is overtime.

MEDICAL: Hospitals at Hodeidah and Sanaa-Taiz.

FRESH WATER: Available; pumping rate 10–15 t.p.h.

FUEL: Available from Yemen Petroleum.

CONSULS: (and Embassies):

Algeria
China
Egypt
E. Germany
Ethiopia
France
Italy
Iraq
Korea
Kuwait
Lebanon
Libya
Saudi Arabia
Syria
United Kingdom
U.S.A.
U.S.S.R.
W. Germany
Yugoslavia

REPAIRS: Light repairs can be carried out.

AIRPORT: Flights from Cairo to Hodeidah, Asmara to Taiz and Jeddah to Sanaa. International airport under construction.

TIME: GMT plus 3 hours.

HOLIDAYS: 1st January Eid Al-Adha Wagfa; 26–28th January Eid Al-Adha; 16th February Islamic New Year; 5th May Birthday of the Prophet; 26–30th September Proclamation of the Republic; 5–8th November Eid Alfitr.

Friday is the weekly day of rest, Sunday being a normal working day. There are also a number of Moslem holidays, the date being based on the Moslem calendar, and which therefore vary from year to year on the Christian calendar. Work is usually possible on such days but cannot be guaranteed. Holidays for special occasions are also liable to be declared at short notice. Friday if worked 25% and public holidays 100% surcharge. During the Moslem fast period of Ramadhan lasting about twenty eight days, which again varies from year to year, work is slower.

SHORE-LEAVE: Allowed. The Master should prepare a list of persons wishing to go ashore as Agent has to issue I.D. cards.

REGULATIONS: It is strictly forbidden for crew and passengers on board to take photographs while a vessel is in the harbour approaches or secured to the jetty in harbour.

Any vessel which permits oil and/or water to be discharged into the harbour will be liable to a minimum penalty of US $100.

AUTHORITY: Hodeidah Port Authority.

MOCKA: 13.17 N. 43.10 E.

Mocka is a small port with equipment for loading and unloading.

BERTHING: 100 m. of quay for small craft up to 7 ft. draft. Vessels of up to 28 ft. draft may anchor in open roads 1.5 km. from pier. Cargo is discharged into lighters with total capacity of over 2,000 tons. It is inadvisable to stow cargo in No. 1 hatch during windy season September to May.

TUGS: 2 available.

FUEL: Not available.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Yemen, People's Democractic Republic of

ADEN, (including Little Aden): 12.48 N. 44.54 E.

DOCUMENTS:

3 Crew Lists for Ship's Agent, Police and Immigration.
3 Passenger lists for Ship's Agent, Police and Immigration.
1 Health Form to be shown to Pilot on boarding and handed to Ship's Agent.
Manifests, Bills of Lading if landing cargo only.
Ship's Register to be sighted by Pilot.
Arrival Declaration to be filled in by Ship's Agent after arrival.
Dangerous material declaration to be handed to Pilot on boarding.

PILOTAGE: Compulsory for all vessels proceeding to oil berths or over 100 tons net. To call Pilot fly International Code Flag "G" or red/white/red lights at night. Call "Harbour Control" on VHF Channel 16, or R/T 2182 kc/s., or Signal Station by lamp. 48 hours notice of ETA with draft to Harbour Office.

Pilot boat will meet ship at the Fairway Buoy in all weathers. Pilot boat is 50 ft. launch painted red, flying Pilot flag by day or white/red lights at night. Pilot will board on port side of ship by Pilot ladder. Vessels waiting Pilot can anchor anywhere in Outer Harbour except in a Prohibited Area of 2,000 ft. from Fairway Buoy.

ANCHORAGES: Ample anchorage area available with depths from 18 to 54 ft.

(a) Anywhere North of Fairway Buoy clear of Main and Little Aden Channels and clear of Prohibited Area mentioned above.
(b) Deep water anchorage anywhere to S.W. of Fairway Buoy clear of Little Aden Channel and Prohibited Area mentioned above.

MAX. SIZE:

Aden:

(a) Max. length 900 ft., breadth no restriction, depth 38 ft. at datum for vessels taking bunkers from BP, Shell or Gulf.
(b) Vessels taking bunkers from Mobil, Caltex, Stanvac and Esso, max. length restricted to tankers of 750 ft., and passenger ships of 600 ft., breadth no restriction, depth 39 ft. at datum.
(c) Larger vessels can be considered on application to the Port Officer. Longest vessel to enter 940 ft.

Little Aden Refinery:

Max. length 760 ft., breadth no restriction, depth 40 ft. at datum and max. deadweight 55,000 tons.

Note: In both harbours vessels manoeuvring require 2 ft. water under keel, and vessels of draft 37 ft. and above require 4 ft. water under keel.

Ballast draft for Tankers: All tankers when manoeuvring within the port shall be ballasted properly to a mean ballast draft which shall not be less than half the Summer draft and the trim by the stern not exceeding 6 ft. These figures are the minimum for normal conditions and may be increased when conditions necessitate at the discretion of the Pilot.

HEALTH: Vessels requiring pratique fly International Code Signals or 3 red lights at night.

Control of quarantinable and infectious diseases is direct responsibility of Port Health Officer. All passengers from infected local areas except children under age of one year are required to have valid international certificate of vaccination or revaccination against yellow fever and cholera. Valid certificates of vaccination against smallpox are required of arrivals from all countries.

RADIO: All ships landing passengers are boarded by Assistant Port Health Officer unless radio pratique has been given. Pratique may be obtained by wirelessing Port Health Authorities no earlier than 12 hours and no later than 4 hours before arrival, in accordance with international procedure. All landing passengers medically inspected and vaccination certificates checked on board before free pratique granted. Ships having infectious diseases on board are also boarded; after examining the case and taking any necessary precautions the Assistant Port Health Officer grants restricted pratique. Ships also inspected for issuing deratting exemption certificates. Deratting carried out when necessary and deratting certificate issued.

Cable and Wireless (Mid East) Ltd.: Mercury House, Ras Boradi (Tel. 22223/5).

Wireless telegraph:	*GMT*	*kHz*
Medium wave		
Working frequency		476
24 hour watch on international calling and distress frequency		500
High frequency	0500–0700	
	1100–1200	
	1630–1800	
	1830–1930	
	2130–2200	8710
	0900–1100	
	1300–1500	13060.5
	0700–0800	17175.2
Radio telephone (including spoken telegrams)		
Working frequencies		2595 & 3628
24 hour watch on international calling and distress frequency		2182
Radio telephone circuits set up on request at times shown	0400–0500	
	1000–1100	
	1600–1700	8805.6 & 4409.4

VHF: 24-hour watch on Hague Plan VHF Channel 16 with duplex working on Channel 26.

TUGS: Tugs for both harbours normally join just outside Breakwater. Ships' ropes always used in Aden harbour, tugs' wires in Little Aden.

BERTHING: (also see "Tankers"): 24 -hour service at all berths.

Berth	*Type*	*Normal maximum length of ship in feet*	*Datum depth in feet*
1 (a)	2 buoys	350	30
1 (b)	2 buoys	350	30
1 In	Anchors & buoy	275	30
2 Out	Anchors & buoy	550	38
2 In	2 buoys	600	38
3 In	Anchors & buoy	700	38
4 Out A	Anchor & 3 buoys (oil)	650	36
4 In B	Anchor & 3 buoys (oil)	750	40
5 Out R	Anchor & 3 buoys (oil)	630	37
7 Out S	Anchor & 3 buoys (oil)	630	38
8 Out E	Anchor & 3 buoys (oil)	580	36
8 In F	Anchor & 3 buoys (oil)	600	36
9 Out	Anchors & buoy	900	41
9 In	Anchors & buoy	550	36
10 Out U	Anchor & 3 buoys (oil)	600	36
10 In V	Anchor & 3 buoys (oil)	600	36
11 Out G	Anchor & 3 buoys (oil)	600	30
11 In H	Anchor & 3 buoys (oil)	530	28
13 Out	Anchors & buoy	550	28
13 In	Anchors & buoy	450	30
14 Out	Anchors & buoy	350	18
14 In	Anchors & buoy	350	18
15 Out	Anchors & buoy	350	18
15 In	Anchors & buoy	350	18
Dolphin Berths			
6 Out C	Dolphin & breast buoys (oil)	900	39
6 In	Dolphin & breast buoys (oil)	800	38
7 In T	Dolphin & breast buoys (oil)	750	39

The capital letters in column one denote alternative designation of mooring buoys/dolphins.

Free zone. Initial Stage 525,420 sq. ft. open space and 162,000 sq. ft. covered space. Import and export industrial facilities. No restrictions, no taxes. Transhipment storage Free for unlimited period.

STEVEDORES: ETA advice to Ship's Agents at least 48 hours before arrival.

MEDICAL: Advance notice for medical attention not normally required except for serious cases requiring doctor's attendance on board, or ambulance cases. Vaccination certificate required for landing. Hospital facilities available.

TANKERS: Tankers carrying dangerous petroleum (flash point below 73° F) and those not gas free cannot enter Aden Harbour during hours of darkness. They can enter Little Aden day or night. Slop (residue) discharge facilities available at Little Aden. 4 tanker berths for discharge/loading at Little Aden with max. datum depth of 40 ft.

Berthing at Oil harbour: Functions of Oil Harbour Little Aden to receive crude oil in bulk for oil refinery and to export refined petroleum products. Vessels carrying cargo for refinery other than oil discharge at Inner Harbour.

Oil harbour has finger jetty and 2 T-head jetties which provide berths for 4 tankers. Tankers of up to 55,000 tons Summer deadweight can be accommodated.

Berth	*Type*	*Normal maximum length of ship in feet*	*Datum depth in in feet*
1	Dolphin & mooring dolphins	750	40
2	Dolphin & mooring dolphins	750	40
3	Dolphin & mooring dolphins	750	40
4	Dolphin & mooring dolphins	750	40

DENSITY: Salt water at all times.

FRESH WATER: Ample available, delivered by barge in Aden at about 50 t.p.h. Ordinary water in Little Aden supplied by pipe-line at about 40 t.p.h. and condensate at about 2 t.p.h.

FUEL:

(A) B.P., Shell Gulf.
Marine fuel 2500 sec., 1000 sec., 600 sec., 200 sec.
Diesel oil and gas oil.
(b) Caltex, Mobil, Esso, Stanvac.
Marine fuel – all grades below, 3,500 sec.
Diesel oil and gas oil.
All supplies done on a Nomination basis through the Company's Head Offices, with the vessel giving at least 48 hours notice to Aden.

FIRE PRECAUTIONS: As per the Refinery regulations. Tug wires to be rigged.

GANGWAY/DECK WATCHMEN: It is recommended watchmen are employed; they can be supplied by Ship's Agent.

OPENING/CLOSING HATCHES: Normally carried out by stevedores, derrick-topping by ship's crew. Vessels not to move in harbour with beams off.

CUSTOMS ALLOWANCE: Tobacco/Wine, Spirit allowance. No restriction at the moment. Bonded stores not allowed to be supplied more than 1 hour before ship sails.

IDENTIFICATION CARDS: Not required at the moment.

CONSULS:

Embassies	*Consuls*
United Kingdom	Belgium
U.S.S.R.	Denmark
A.R.E.	Netherlands
Somalia	Norway
Italian	Sweden
India	Portugal
Iraq	Greece
Spain	Ethiopia
Pakistan	G.D.R.
Yugoslavia	

REPAIRS: Workshops are equipped to carry out: Boiler repairs; Plating and sheet metal work; Galvanising work/moulding work; Welding and blacksmith's work; Main and auxiliary machinery repairs; Carpentry and joinery work; Electrical and plumbing work; Refrigeration repairs; painting, cleaning and chipping. Repairs afloat to vessels up to 80,000 tons are undertaken; repairs to the largest vessels carried out mostly in Outer Harbour.

Wireless engineering section with fully qualified personnel giving round-the-clock service of repairs and maintenance of radar and wireless equipment.

DRY DOCK: 1 sideways slipway taking 1,500 tons and 1 floating dock lifting about same tonnage.

REPATRIATION: Arranged through Ship's Agent and Immigration.

AIRPORT: About 5 miles from port. Flights to U.K. via Beirut (Middle East Airlines), Nairobi (East Africa Airways), Khartoum (Sudan Air Lines), Cairo (United Arab Airlines). 2 flights each a week.

TIME: GMT plus 3 hours. No alteration of clocks.

HOLIDAYS: Most holidays are religious which have moveable dates. National holidays are 14th October and 30th November. Cargo work usually carried out during all holidays. Friday is a public weekend holiday.

POLICE/AMBULANCE/FIRE: Ambulance Crater 53232; Harbour Police 22851; Port Health 22626/7; Fire 22222.

TELEPHONES: No connection to ships but link calls can be made on VHF through Cable & Wireless Ltd. using Channel 16 to call and working on Channel 26. Some Agents have private VHF channels.

GENERAL: Outer harbour contains ample anchorage area for vessels requiring datum depths up to 54 ft. Inner harbour approached by 2.7 mile dog-leg channel, dredged to 38 ft., from Fairway buoy in Outer Harbour where Pilots board. Inner harbour protected by breakwater at Steamer Point and by rubble mound. It provides 24 buoy or anchor-and-buoy berths, including 13 with oil bunkering facilities. Majority of these berths have a datum depth of 30 or 38 ft., with max. length of ship ranging from 275 to 750 ft. In addition 3 dolphin berths, with bunkering facilities, of 39 ft. datum depth and normally accommodating ships of 750–900 ft. max. length; vessels of greater length can be accommodated with the approval of the Port Officer. Quays and wharves cater for shallower-draft vessels and lighters.

Oil harbour, serving refinery at Little Aden, reached by 38 ft. channel from Fairway buoy, provides facilities for tankers of up to 750 ft. All berths and anchorages are under the jurisdiction of the Port Officer.

SHORE LEAVE: *Regulations:* In accordance with Art. 8 of the Immigration Rule No. 28 of the year 1969, all crew members coming ashore will be excused from obtaining visa provided they surrender their passports to the Immigration Officer-in-Charge. These passports will be given back to the holders before they return to their particular vessels. Any crew member unable to comply with these instructions will not be permitted to visit the town.

Ships' crew are not allowed to stay ashore after 0300 hrs., unless permission is granted for longer period.

REGULATIONS: Vessels must fly the National flag of PROSY at foremast. No movement of "dangerous petroleum" at night. Vessels must vacate oil berths on completion of bunkering. Main engines must not be immobilised in an oil berth. Sufficient crew must remain aboard vessel at all times to move her.

SHIPMASTER'S REPORT: (April 1976)

Documents:

Pilot: Sights Ship's Register to check tonnages.
Customs: 2 Crew Lists; 1 Bond List.
Immigration: 2 Crew Lists.
Doctor: 1 Health Form; 1 Vaccination List (smallpox).

Note: Crew List should have consecutive numbers as well as Agreement numbers.

Agents:

2 Crew Lists; Arrival information sheet; Statement of Owners full address also Cable address; 2 Arrival declaration for Yemen Ports Corporation; 2 Aden Port Log; 1 Charges sheet for Mail; 1 Sailing information sheet; 1 Currency refund sheet.

Agent brings these Forms on board and will assist with filling in the information.

Communications: It was found impossible to make Radio Contact with Aden prior to 5 days before arrival. Best time seems to be after Aden sends its Traffic List. VHF contact was made at 12 miles as the hills around Aden appear to blanket signals when further away. Channels 16 or 12.

Approach: This is straight forward. The B.A. Charts appear to be well up-to-date. The Fairway Buoy is easily seen at 8 miles. Pilot boards here. Pilot ladder required. Authorities will not allow the accommodation ladder to be used.

Mooring: There was a trainee Pilot with both the inward and outward Pilot. Ship was swung using starboard anchor and 1 tug aft. Berthed at No. 4 Berth. Forward: 3 ropes to buoy on inside plus starboard anchor 5 shackes. Aft: 1 rope from port quarter and 1 from starboard quarter taken to outside buoy, then 2 ropes, 1 from each quarter taken to inside buoy. Ship then hove to be centred between the 2 after mooring buoys. When ship in position oil pipe-line, on floats is towed alongside.

Visit: Agent boarded with Doctor. At first Doctor was insisting all had to have Cholera vaccinations but this seems to be so that he can charge the fees and is not really necessary. Immigration and Customs boarded. All pleasant and helpful. Bond was sealed.

Port Facilities: 2 fairly powerful tugs. Numerous mooring boats, 1 floating crane seen but as to lift capacity this was not ascertained. Port is run by The Yemen Ports Corporation. Like the Agency it is State owned.

Watchmen: Agents automatically provide 2 watchmen. Seemed to be alert.

Regulations: Masters are requested to assist the Port Authority by not allowing Bumboatmen or fishermen to board without written permission. The Port Authority advises Masters to be most careful if they do issue written permission. There were no bumboats about and no one seeked permission to come aboard to do business.

One half hour prior to sailing the Pilot signal red-white-red in a vertical line or "G" to be hoisted also call Port Control on VHF 16.

Use of ship's whistles or sirens is very controlled.

Bunkering: Ship's crane used to hoist pipe-line aboard. The bunkering operation went smoothly and the Oil people seemed co-operative.

Walport Film Exchange: Agents were cabled but it is necessary for an Officer to go with the Agent to make the exchange.

Mail: Mail posted in London on 22nd March or 23rd March was stamped as having arrived Aden 28th or 29th March.

General: It would seem that the Port Authority, State, etc., are very keen to build up a thriving Port. It would also seem that they endeavour to give a good efficient service. I gather there is a special duty free shop ashore for the purchase of souvenirs, goods, etc.

AUTHORITY: Yemen Ports Corp.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Yugoslavia

BAR: 42.05 N., 19.03 E. (See Plan)

DOCUMENTS/HEALTH: Same as "Rijeka".
PILOTAGE: Advance notice 24 hours through ships Agent. Pilot boat blue hull, white deck house, with letter "P" on each side. Pilot boards off West Breakwater.
ANCHORAGE: Safe anchorage in about 57 m. off West Breakwater. Anchoring not allowed nearer then 0.5 mile off Breakwater.
RESTRICTION: Vessels enter/leave port by day and night. Tankers allowed only during daylight. Max. draft 10 m. depth entrance.
MAX. SIZE: See "Tankers".
RADIO: Bar-Radio, call sign YUW, 500 kc/s. and 447 kc/s. Radio telephony on 2182 kc/s and on 2 meters band on 16 Channel.

Pilots/Agents can be contacted through Bar-Radio on VHF.
TUGS: Available.
BERTHING: Berth assigned at Agent's request or Receiver's/Shipper's, both for liners or tramps, at the daily meeting of the Harbour Board.
STEVEDORES: the Port Enterprise "Luka Bar" is the sole stevedoring company. Work is done in 2 shifts: first 0600–1400 hrs., second 1400– 2200 hrs. Third shift can be ordered at daily meeting, paid as overtime.
MEDICAL: Medical care available at Medical Centre at Bar.
TANKERS: New oil berth can accommodate tankers up to 60,000 d.w.t., draft limit 14 m. Bunkers for local bunker station. Tank cleaning, pumping of slops and degassing not permitted in port.

Tankers must be ready to leave port at 30 minutes notice, at any time and at request of Port Authorities.
CARGO-HANDLING FACILITIES: Available for fuel, bulk, general and chemical cargoes. Regular passenger service – car ferry to Italy.
DEVELOPMENTS: Now under construction second phase of port development. Development prospect new berth for chemicals plus about 450 m. of berth for general, container cargoes and also for passenger service.

Port entrance to be dredged up to 14 m. depth.

Normal guage railway to Hinterland completed, to be operational in 1976.
FRESH WATER: Available from hydrants on quay.
DENSITY: Sea water Salinity.
FUEL: Can be obtained from local bunker station. All grades available.
GANGWAY/DECK WATCHMEN: Available at Captain's request.
OPENING/CLOSING HATCHES: Normally performed by crew, or as per Charter Party.
CARGO GEAR: 6 cranes of 5–6 tons, 3 cranes of 3 tons. shore mobile. All kinds fork-lifts, vacuvator, conveyors. Loading/discharging normally with shore cranes, or if per C.P. ship's gear.
CUSTOMS ALLOWANCE: About 40 cigarettes and reasonable amount wine/spirits per man per day.
IDENTIFICATION CARDS: Shore passes issued by local Police.
SHORE LEAVE: Allowed.
CONSULS: Same as "Rijeka".
REPAIRS/DRY DOCKS: Dry Docks at Shipyard "Veljko Vlahovic', Bijela 36 miles from Port of Bar, capacity of about 130,000 d.w.t. and 35,000 d.w.t., available for all types of deck and engine repairs. Minor damage can be done while loading/discharging.
REPATRIATION: From Bar by bus, train (international Lines), and ship. From Airports Tivat, Titograd and Dubrovnik by plane.
TIME: Central European Time, GMT plus 1 hour. No daylight saving.
SERVICES: At nearby town of Tivat is representative of Yugoslav Register of Shipping, and compass adjuster. Other services at Captain's request.
HOLIDAYS: January 1st and 2nd, May 1st and 2nd, July 4th and 13th, November 29th and 30th. work can be arranged on Sundays and 2nd day of two-day holiday.
POLICE/AMBULANCE/FIRE: Police Tel. 92; Ambulance Tel. 94: Fire Tel. 93.
AUTHORITIES: Lucka Kapetanija.

AGENTS: Transagent, Rijeka Branch office Bar, Marsala Tita, 13. Tel. 22 433. Cable 'Transagent'-Bar.

DUBROVNIK (Gruz Harbour): 42.38 N. 18.07 E.

DOCUMENTS/HEALTH/HOLIDAYS: Same as "Rijeka".
PILOTAGE: Compulsory. Pilot boards at a point situated approximately in centre of triangle formed by Kolocep Island, Daska Island and Grebeni Rocks.
ANCHORAGE: In about 22 fathoms in channel between Daksa Island and mainland. This anchorage is exposed to strong N.N.E. winds in Winter time.
RESTRICTIONS: Only port of Gruz is open to commercial traffic, the old port of Dubrovnik (within the city walls) can accommodate only yachts and small craft drawing under 9 ft.
MAX. SIZE: Max. length 230 m., max. draft 32 ft., no limits on beam.
RADIO: Call sign YUX, working on 500 kc/s. and 447 kc/s., from 0800 to 1100 hrs. and 1600 to 1900 hrs.
TUGS: No permanently stationed tug boats, but can be ordered when necessary from other ports.
BERTHING: Berths for 5 ocean going vessels. Six cranes from 1, 5 to 25 tons lifting capacity.
CARGO HANDLING FACILITIES: The port handles some bulk cargoes (grain and bauxite) occasionally and in small quantities but is not specially equipped for handling these and other cargoes.
STEVEDORES: One State stevedoring company.
MEDICAL: General hospital and medical facilities available.
FRESH WATER: Available from hydrants on quay.
FUEL: Not available. Only oil for diesel engines in limited quantities. Heavy fuel can be delivered by coastal tankers from Split.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: If not performed by crew, stevedores.
CUSTOMS ALLOWANCE: About 40 cigarettes and limited amount wine/spirits per man per day.
CARGO GEAR: Although operations are performed usually with shore cranes ship must have efficient cargo gear and relative certificates.
IDENTIFICATION CARDS: Issued by local police.
CONSULS: None.
REPAIRS: Small repairs only.
REPATRIATION: By bus, ship or plane from Dubrovnik International Airport.
TIME: Central European Time. GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Police, tel. 92; Fire, 93; Ambulance, 94.
SHORE LEAVE: Allowed.
AUTHORITY: Lucka Kapetanija Dubrovnik.

AGENT: Transagent, Dubrovnik, Gruska, Obala 50. Tel. 3161. Cables: "Transagent".

KOPER: 45.31 N. 13.44 E.

DOCUMENTS/HEALTH: Same as "Rijeka". If the vessel has to wait for a berth the Agent, Immigration officer and Customs officer will board at the anchorage in the Bay.
PILOTAGE: Pilot boards in roads.
ANCHORAGE: During Winter N.N.E. gales best anchorage is in 10 fathoms of water West of Debeli Rt. (Punta Grossa).
RESTRICTIONS: Vessels enter port by day and night, except tankers which enter during daylight hours and at nights in fair weather.
MAX. SIZE: General cargo berths, vessels drawing up to 31 ft. Crude oil berth, berth for tankers up to 60,000 d.w.t.
RADIO: Communication on MW and SW through Rijeka Radio. VHF Communication ship-to-shore on short range to vessels in roads.
TUGS: 2 available, 750 h.p. and 1,500 h.p. Equipped for fire fighting.
STEVEDORES: Working hours: 0600–1300 hrs., 1400–2100 hrs. Overtime is worked only in special cases.
CRANES: 5 shore cranes with capacity of 20 tons. 3 are in operation and 2 being assembled.
MEDICAL: Medical assistance and hospital available.
CARGO-HANDLING: 1,200 m. of operative quays with depths from 6 to 12 m.

The container berth is completed and will start operations in the very near future.

The special Roll-on/Roll-off berth and the lift-on/lift-off berth will be in operation by March 1977.

The Port is able to tranship heavy lifts up to 40 tons.

A timber yard with 2×8-ton portal cranes.

All harbour services are mechanised, i.e. performed by fork-lift trucks, transporters, pallets and other modern means. Moreover, the port is able to trans-ship heavy lifts up to 25,000 kg/s.
TANKERS: Crude oil terminal, depth alongside 16 m.
FRESH WATER: Available from quay. Rate of delivery about 10 t.p.h.
FUEL: Diesel available locally. Marine fuel delivered by barge from Rijeka or Trieste.
GANGWAY/DECK WATCHMEN: Available at ship's request.
OPENING/CLOSING HATCHES: If not performed by crew, then stevedores.
REPAIRS: Small repairs can be carried out at Koper. At Izola, 2 miles from Koper, the repair firm "2 October" has commenced operations.
DRY DOCK: At Izola, drydock for vessels up to 16,000 d.w.t.
CUSTOMS ALLOWANCE: About 40 cigarettes and reasonable amount wine/spirits per man per day.
IDENTIFICATION CARDS: Shore pass issued by local police.
REPATRIATION: By train or bus, and by plane via Ljublijana Airport.
TIME: GMT plus 1 hour.
HOLIDAYS: January 1st and 2nd; April 27th; May 1st and 2nd; July 4th; July 22nd; November 1st; November 29th and 30th.
POLICE/AMBULANCE/FIRE: Police, No. 92; Ambulance No. 94; Fire, No. 93.
TELEPHONE: Can be installed aboard at many berths.
SHORE LEAVE: Allowed.
GENERAL: Immigration Officer, on boarding, will make out crew passes. (Identity Books to be available).

All crew passes, with 1 crew list to be handed in on departure.

If any changes in crew on departure, 3 correct crew lists to be tendered. (Assurance given that this can be done by amending copy of original crew list landed.)
AUTHORITY: Lucka Kapetanija Koper.

AGENT: Interagent, International Shipping Agency, Verdijeva 5, POB 27. Cables: "Interagent – Koper". Telex; 34150 – Yu Intrag. Tel. 22-051, 21-750.

PLOCE: 43.03 N. 17.26 E.

DOCUMENTS/HEALTH/HOLIDAYS: Same as "Rijeka".

PILOTAGE: Compulsory for vessels over 500 g.r.t. Pilot boards vessel at entrance of the channel.

ANCHORAGE: Vessels may anchor under lee of the coast between Point Visnjica and Dobrogosce Bay except in case of S.W. and West winds when recommended drop anchor about 1 mile South of Soline Bay (S.E. of the entrance of the channel). Good holding.

RESTRICTIONS: Ship entering channel between Visnjica Point and embankment of right hand bank must keep in middle, leaving buoys to starboard. Recommended speed 5–8 knots.

MAX. SIZE: Only draft limited to a max. 38 ft.

RADIO: Nearest Radio Station Split Radio YUS – 2574 kc/s.

TUGS: 2 tugs of 850 h.p.

BERTHING: New Dock No. 5, depth 38 ft. Channel depth 38 ft. All other berths from 31 to 34 ft. 6 ins.

STEVEDORES: Port Enterprise of Ploce is sole stevedoring company.

MEDICAL: Medical service available. Nearest hospital at Mostar (64 km.).

FRESH WATER: Available from quay.

FUEL: Nearest bunker station at Split.

DEVELOPMENTS: Dredging to accommodate vessels of 60,000 d.w.t. and construction of facilities for unloading tankers with crude oil for refinery of Bosanski Brod.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: If not performed by crew, stevedores.

CUSTOMS ALLOWANCE: About 40 cigarettes and reasonable amount wine/spirits per man per day.

IDENTIFICATION CARDS: Shore pass issued by local police.

REPAIRS: Only small repairs.

REPATRIATION: By train or bus. By plane from nearby airports, Mostar, Split and Dubrovnik.

TIME: GMT plus 1 hour.

POLICE/AMBULANCE/FIRE: Police, Tel. 79-006; Ambulance, 79-115; Fire, 79-029.

SHORE LEAVE: Allowed.

AUTHORITY: Lucka Kapetanija – Ploce.

AGENT: Transagent Ploce, Saobracajni Trg BB. Tel. 79025. Cables: "Transagent".

RIJEKA: 45.21 N. 14.26 E.

DOCUMENTS:

10 Crew Lists – 2 by mail from last port of call if time allows.
5 Passenger Lists.
3 Manifests of Dangerous Cargo (send cable before arrival with description).
3 Stores Lists.
2 Private Declaration.
8 Cargo Manifests with one extra for customs.
2 Transit Cargo Manifests.
1 List of Organic goods.

Cargo Manifests and copy of Cargo Plan with Hatch Lists, if possible, should be mailed to Agent from loading port.

PILOTAGE: Compulsory in Inner Harbour only for vessels over 500 BRT. Pilot boards in the roads 0.5 mile from main breakwater. Pilot on VHF Channel 8.

ANCHORAGE: All vessels, with the exception of those loaded with dangerous or hazardous cargoes, must anchor in the zone enclosed by the following points:

a) 45° 20.0′ N. – 14° 22.7′ E. c) 45° 15.1′ N. – 14° 27.1′ E.
b) 45° 17.5′ N. – 14° 20.0′ E. d) 45° 18.4′ N. – 14° 28.5′ E.

Tankers and vessels with dangerous cargoes must anchor in the following zone:

a) 45° 17.8′ N. – 14° 28.0′ E. c) 45° 14.1′ N. – 14° 29.4′ E.
b) 45° 15.1′ N. – 14° 27.1′ E. d) 45° 16.1′ N. – 14° 31.8′ E.

RESTRICTIONS: At Bakar petroleum berth only daylight berthing permitted.

MAX. SIZE: Rijeka and Susak Basins, permitted draft 31 ft. but 34 ft. at the Silo berth. Bakar Basin, permitted draft 50 ft. Vessels up to 120,000 d.w.t. have discharged ore at Bakar.

HEALTH: To obtain free pratique radio 24 hours before arrival advising following details; number of crew and passengers, health conditions and possible infectious diseases. No one allowed to leave vessel until free pratique obtained.

RADIO: Rijeka Radio, call sign YUZ, 500 and 512 kc/s. Radio telephone on 2 m. band covering area of Kvarner Gulf.

TUGS: From 600 to 2,170 h.p. available.

STEVEDORES: Port works 5 days a week in 2 shifts: 1st shift from 0630 to 1430 hrs. 2nd shift from 1430 to 2230 hrs. The third shift may be worked on overtime, from 2230 to 0630 hrs. Saturdays, Sundays and holidays may be worked on overtime.

Unloading of bulk cargo at the basin of Bakar during the first shift on Saturday from 0630 to 1430 hrs. is considered to be an ordinary working shift. The working week of this basin, therefore, lasts from Monday 0630 hrs. to Saturday 1430 hrs.

Unloading of bulk cargo at the above mentioned Basin includes, as well as the unloading, continuation of unloading the vessels that might be, for some special operational reasons, shifted from Bakar Basin to Susak Basin.

Loading/unloading of cereals and oilseeds in bulk by means of loading/unloading towers in Silo Rijeka in the first shift on Saturday, from 0640 to 1430 hrs. is considered to be an ordinary working shift, and therefore the working week for such operations lasts from Monday 0630 hrs. to Saturday 1430 hrs.

The working week for handling timber at Susak Basin lasts from Monday to Friday from 0630 to 1430 hrs.

Shipmaster's Report: Floating crane 100-ton capacity available.

MEDICAL: 2 hospitals and all kinds of medical assistance.

TANKERS: Old Petroleum Port, for tankers up to 150 m. length, berthing alongside breakwater.

Bakar, 2 berths for tankers up to 70,000 d.w.t. stern to quay. 1 berth alongside quay for tankers up to 30,000 d.w.t.

Urinj, 5 miles East of Rijeka, a new berth for tankers up to 200,000 d.w.t. Slop reception facilities available – advance notice required. Vessels moor stern to quay using both anchors.

DENSITY: 1020 to 1025, depending on place, season and weather.

FRESH WATER: Available from quay in any quantity.

FUEL: All grades of bunkers available by barge at 48 hours' notice.

FIRE PRECAUTIONS: If 2 tankers moored side by side in Bakar a tug required standing by. Tankers moored stern to quay, must have towing wire rigged.

GANGWAY/DECK WATCHMEN: Service available.

OPENING/CLOSING HATCHES: Crew may do this, otherwise stevedores for extra payment.

CUSTOMS ALLOWANCE: About 40 cigarettes and 0.5 litre wine per man per day.

CARGO GEAR: Although operations usually by shore cranes, ship must have efficient cargo gear and relative certificates.

IDENTIFICATION CARDS: Shore passes issued by local police.

CONSULS: Netherlands. Others at Zagreb and Beograd.

REPAIRS: All kinds available. Floating cranes up to 100 tons capacity.

DRY DOCKS: 3 docks floating up to 5,600 d.w.t., 12,000 d.w.t and 24,000 d.w.t. lifting capacity.

REPATRIATION: Possible by train, bus and air. New airport at Rijeka.

TIME: GMT plus 1 hour.

HOLIDAYS: January 1st and 2nd; May 1st and 2nd; July 4th; July 27th; November 29th and 30th. Work can usually be arranged on Sundays, January 2nd, May 2nd and November 30th from 0700 to 1400 hrs. for extra payment. If a holiday falls on a Sunday the first working day after becomes a holiday.

POLICE/AMBULANCE/FIRE: Police, tel. 92; Ambulance, tel. 94; Fire, tel. 93; Port fire brigade, tel. 25–126.

SHORE LEAVE: Allowed. Crew members and passengers have to be on board 1 hour before scheduled sailing time.

AUTHORITY: Lucka Kapetanija – Rijeka.

AGENT: Transagent, Rijeka, Trscanska Obala 8. Cables: Transagent Rijeka. Tel. 22-406. Telex: 24219.

SIBENIK: 43.43 N. 15.52 E.

DOCUMENTS/HEALTH/HOLIDAYS: Same as "Rijeka".

PILOTAGE: Pilot boards vessel at the entrance of St. Ante Channel, within a circle of 3 miles radius from Jadrija Lighthouse.

ANCHORAGE: Vessels waiting Pilot must anchor between Prvic Island and the shore if coming from the West, or between the South point of Zlarin and the shore if coming from the East, all in depths of 22 m.

In the Bay of Sibenik, vessels may anchor on the N.W. side of St. Ante Channel in depths of 30–40 m. Alternatively, a buoy mooring is available.

RESTRICTIONS: All vessels over 50 g.r.t. must apply for permission to enter St. Ante Channel by using International Code Signal Z by flag, or sound signal or light signal. Alternatively, a white light above a red light visible all round may be used.

Vessels may enter channel only when authorised by a signal, 2 black balls vertically disposed by day or 2 green lights vertically displayed by night, made by the signalling station at Jadrija

MAX. SIZE: Only draft limited. 33 ft. alongside in deepest berth.

RADIO: None. Vessel may call Agent through Rijeka Radio.

TUGS: 1 of 750 h.p. 1 of 350 h.p.

STEVEDORES: Port Enterprise Sibenik.

MEDICAL: Medical service available including hospitalisation.

FRESH WATER: Available from quay.

FUEL: Can be delivered by barge from Split. Recommended to check well in advance.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: If not performed by crew, can be done by stevedores.

CUSTOMS ALLOWANCE: About 40 cigarettes and reasonable amount wine/spirits per man per day.

CARGO GEAR: General cargo discharged using ship's gear. Ore and other dry bulk cargoes handled by shore cranes fitted with grabs.

IDENTIFICATION CARDS: Shore passes given by local police.

REPAIRS: Small repairs only.

REPATRIATION: By train or bus, by air from Split Airport nearby, or from Zagreb or Zadar.

TIME: GMT plus 1 hour.

POLICE/AMBULANCE/FIRE: Police, 92; Ambulance, 94; Fire, 93.

SHORE LEAVE: Allowed.

PORT AUTHORITY: Lucka Kapetanija.

AGENT: Transagent Sibenik, Obala Oslobodjenja. Tel. 2582. Cables: Transagent.

SPLIT: 43.31 N. 16.26 E.

DOCUMENTS/HEALTH/HOLIDAYS: Same as "Rijeka".
PILOTAGE: Pilot boards vessel in roads.
ANCHORAGE: Vessels anchor in Solin Basin within a circle with centre approximately in 43° 32′ 36″ N. 16° 24′ 36″ E.
MAX. SIZE: Length and breadth not limited. Draft permitted in Southern Basin 29 ft. Northern Basin 34 ft. (ore, coal), 36 ft. (grain). General Cargo, 31 ft.
RADIO: Split Radio working on 2182 and 1574 kc/s.
TUGS: From 240 to 1350 h.p. available.
MEDICAL: All medical assistance including hospitalisation.
TANKERS: 2 berths for tankers, max. length 200 m., draft 31 ft.
FRESH WATER: Available from quay.
FUEL: Available from local storage tanks.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: By crew or stevedores.
CUSTOMS ALLOWANCE: About 40 cigarettes and reasonable amount wine/spirits per man per day.
IDENTIFICATION CARDS: Shore passes issued by local police.
CONSULS: British, Dutch, Italian, and German.
REPAIRS: Any kind, including dry docking.
DRY DOCKS: Floating dock at Trogir for vessels up to 28,000 d.w.t.
REPATRIATION: By train, bus or air from Split Airport.
TIME: GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Police, 92,; Ambulance, 94; Fire, 93.
GENERAL: Port consists of 2 basins: The Old Southern Port for passenger ships and with a few berths for general cargo.
SHORE LEAVE: Allowed.
AUTHORITY: Lucka Kapetanija.

AGENT: Transagent Split, Saveznicka Obala 10. Tel. 3351. Cables: Transagent.

ZADAR: 44.07 N. 15.14 E.

DOCUMENTS/HEALTH/HOLIDAYS: Same as "Rijeka".
PILOTAGE: 48 and 24 hours notice of ETA must be given to Agent. According these notices Agent arranges for Pilot to board on arrival. Pilot boat blue motor launch with large "P" on bows and "H" flag. No particular signals to be made by vessels requiring Pilot. Pilot boards ship in the anchorage.
ANCHORAGE: About 4.5 cables, 245° from green port light, (FL G 2 sec.) on the North part of Zadar Peninsular. Average depth about 18 fathoms.
MAX. SIZE: Zadar, old port, maximum permissible draft 20.5 ft. Zadar-Gazenica, new port for dry cargo, max. draft 21.7 ft. forward. Max. length 160 m. Also see "Tankers".
RADIO: Rijekaradio, JUZ.
TUGS: No tugs available, but can be ordered from Split.
STEVEDORES: Number of gangs required to be stated in usual notice of ETA.
MEDICAL: Advance notice not necessary, hospital facilities available.
TANKERS: At Zadar-Gazenica Port, 1 tanker berth max. draft 34 ft.
DENSITY: Average density in the port – 1026.
FRESH WATER: Fresh water connections on piers, rate of delivery 8–15 t.p.h.
FUEL: Fuel available for coasters only.
DEVELOPMENTS: Completion of Zadar-Gazenica Port second berth for dry cargo ship and berth for soya beans in bulk.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally, but not compulsorily, carried out by stevedores.
CUSTOMS ALLOWANCE: 200 cigarettes per person. Tobacco and liquor sealed in bond.
IDENTIFICATION CARDS: Needed. Issued by local police.
CONSULS: None.
REPAIRS: Only minor repairs as well as classification for ships up to about 2,000 b.r.t.
REPATRIATION: Facilities exist for effecting crew changes and arranging necessary repatriations.
AIRPORT: Zadar airport served by regular daily flight for Zagreb with connection on all international flights.
DRY DOCK: 1 floating dock for ships up to about 2,000 b.r.t. In near future floating dock up to 8,000 tons capacity.
TIME: GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Police, 92; Ambulance, 94; Fire, 93.
TELEPHONES: No facilities for placing telephones on board.
AUTHORITY: Lucka Kapetanija – Zadar.

AGENTS: Jadranska Pomorska Agencija, Filijala Zadar, N. Nodila b.b., Zadar. Tel. 23210, 23215. Telex: 27129 Yu Jadrag. Telegrams: Jadroagent Zadar.

ZELENIKA: 42.27 N. 18.35 E.

DOCUMENTS/HEALTH: Same as "Rijeka".
PILOTAGE: Pilot boards at entrance of the Bay of Kotor, near point Punta Ostro. In bad weather Pilot boards at anchorage.
ANCHORAGE: Good ground for anchorage S.W. of Zelenika, about 0.25 mile off port light in about 27 fathoms.
MAX. SIZE: 2 quays 330 ft. and 420 ft. for vessels drawing 17 ft. to 27 ft. Breadth not limited. Vessels the size of a liberty have been berthed by mooring the vessel a couple of metres off quay. 2 other quays, but with very shallow water, used for coastwise traffic only.
HEALTH: Radio Agent requesting free pratique, 24 hours before arrival. For vessels over 500 g.r.t. pratique is given at the anchorage. For small ships and yachts, pratique is given at Zelenika.
TUGS: None. In cases of necessity can be ordered from shipyard at Bijela.
BERTHING: The berth is assigned through the Agents giving notice 24 or 48 hours in advance.
STEVEDORES: State stevedoring company.
MEDICAL: Nearest hospital at nearby town of Herceq-Novi.
FRESH WATER: Available from hydrant on quay.
FUEL: Nearest bunker station is Bar.
OPENING/CLOSING HATCHES: If not performed by crew, can be done by stevedores.
CUSTOMS ALLOWANCE: About 40 cigarettes and reasonable quantity wine/spirits per man per day.
CARGO GEAR: Loading, unloading performed with ship's gear.
IDENTIFICATION CARDS: Shore passes issued by local police.
CONSULS: None.
REPAIRS: Any kind of repairs including dry docking at nearby shipyard at Bijela.
DRY DOCKS: Floating dock lifting capacity 10,000 tons, LOA. 184 m., length over keelblocks 165.6 m., inside free breadth 25.5 m.

Floating dock lifting capacity 33,000 tons. LOA 252 m., length over keelblocks 235 m., inside free breadth 44 m.

The yard is about 4 miles East of Zelenika. The yard has 1,300 m. of fitting pier.
REPATRIATION: By bus to Dubrovnik, and from there bus, plane or ship to main cities in Yugoslavia.
TIME: Central European Time. GMT plus 1 hour.
HOLIDAYS: January 1st and 2nd; May 1st and 2nd; July 4th and 13th; November 29th and 30th. Work can be arranged on Sundays and on 2nd day of two-day holidays.
POLICE/AMBULANCE/FIRE: No direct connection, in case of necessity call Agency, Tel. 87–436.
SHORE LEAVE: Allowed.
AUTHORITY: Lucka Ispostava Zelenika.

AGENT: Jadroagent, Medunarodna pomorska i saobracajna agencija, Poslovna jedinica, Bijela. Tel. 87–436. Telegraphic address: Jadroagent Bijela.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Zaire Republic

GENERAL:

ETA: It is essential that any change of vessels ETA should be transmitted sufficiently in advance in order to avoid short shipments of cargo.

Matadi is only a transit port where cargo is not stored in order to avoid congestion.

Imported cargo is immediately re-forwarded to the interior while export cargo is only brought to Matadi a few days before the ETA of the vessel for which it has been booked.

Therefore, in order to make the cargo available at Matadi, shippers need a notice varying according to the cargo concerned, but which cannot be less than 2 weeks as is the case for coffee.

Agents at Matadi and Boma have been instructed to inform Port Authorities latest 4 days before berthing of inward cargo tonnages.

Non compliance with this provision may result in berthing delay.

PILOTAGE: Ships bound for Matadi and/or Boma must take a Pilot at the pilot station at Banana (at the mouth of the Zaire river). Pilot station at Banana can be contacted directly by radio (VHF).

In order to increase the safety and to facilitate the navigation on the river the Regie des Voies Maritimes have decided that in case a vessel is not equipped with a VHF installation the Pilot will bring one on board, for which a charge is made.

The following rules must be observed at the request of the Regie des Voies Maritimes for embarking and dis-embarking of Pilots.

If gangway is rigged astern on the port side it is compulsory to use the pilot ladder also.

If gangway rigged amidships on port side it is recommended that the pilot ladder is used in combination.

Pilots requesting only the gangway do so at their own risk.

Ships sailing from Matadi for Banana must pass Boma before 1630 hrs. otherwise they remain at anchor at Boma.

With regard to the trim the pilotage services ask Masters to comply with following rules:

Maximum trim 12 ft. aft; 4 ft. forward.

DOCUMENTS: *Ship's Documents required on arrival:*

7 Crew Lists.
3 Lists of Arms and Ammunition.
7 Passenger Lists.
2 Crew Declarations.
3 Lists of Ports of Call.
2 Stores Lists.
1 International Tonnage Certificate.
1 Deratisation Exemption Certificate.
1 Cargo Ship Safety Equipment Certificate.
1 Certificate of Registry.
1 Radiotelegraphy Certificate.
1 Construction Certificate.
1 Certificate Form on Board.
Free Pratique.

Documents required for disembarking passengers and discharging cargo:

A. To be received by mail at least 8 days before ship's arrival:
(1). Cargo:
3 Freight Manifests
8 Cargo Manifests
5 Copies of Bills of Lading
6 Copies of Stowage Plans.
(2). Passengers:
1 Accountancy
3 Passenger Lists, for passengers for the port/or in transit.
B. To be received by ship's bag at ship's arrival at quay:
On arrival following documents must be available on board:
(1). Cargo:
1 Freight Manifest
4 Cargo Manifests
3 Copies of Bills of Lading.
(2). Passengers:
1 Freight Manifest
4 Passenger Lists for passengers for the port and/or in transit.

It is most important that stowage plans be available before vessel's arrival. Vessel's operations are indeed delayed to the next shift if same are only remitted upon arrival.

DRAFTS AND CURRENTS: Drafts on river Zaire are as follows:
Inwards: High water: 24 ft., Low water: 23 ft.
Outwards: High water: 25 ft., Low Water: 24 ft.

The authorized drafts are notified regularly by the Port Authorities.

The currents of the river and from berth to berth as well in Matadi as in Boma vary and depend upon the high and low levels of the water sometimes adverse currents and still waters as stated before.

For proceeding to Matadi and according to the season vessels must have at least a speed of 10.5 to 11 knots, especially to pass the "Devils Cauldron" located between Boma and Matadi.

STEVEDORES: The ONATRA (Office National des Transports) – public institution, has the monopoly of the handling, stevedoring and transit operations at the ports of Matadi and Boma.

At each berth the responsible "Pier Master" remains in constant contact with the first Mate during the whole operation.

Working shifts are as follows: 1st. shift: 0630–1430 hrs.; 2nd shift: 1430–2230 hrs. overtime; 3rd shift: 2230–0630 hrs. overtime.

Work must be ordered the day before vessel's arrival. However, if gangs are available, work can still be ordered the day of vessel's arrival but latest at 0930 hrs. during week days.

In principle no work is done on Sundays, holidays and during the night. If required same has to be ordered by writing 1 working day in advance before 1000 hrs. Port Authorities will then decide according to the situation at that moment.

According to the situation of the Port, the Authorities can also order labour 24 hours per day Sundays and holidays included.

At Boma there is no third shift – however on special request, work can eventually be granted until 2400 hrs.

At Matadi work during third shift will only be ordered upon special request from vessel.

GENERAL: *Quay Practices:*

The courtesy Zaire flag must be hoisted by foreign ships during daytime.

In view of the proximity of the town, the use of whistles, sirens and similar signals is forbidden.

Safety nets must be put between ship and quay at each of the working hatches and beneath the gangway.

No rubbish whatsoever may be thrown overboard.

Cargo plans:

According to Onatra's instructions stowage plans of ships calling at Matadi/Boma must be issued in such a way that they show clearly where all goods loaded for Matadi/Boma in several ports are located. This enables Onatra to have a clear view of each vessel and to study, before ship's arrival, the discharging/loading possibilities.

Those stowage plans must reach Agent before ship's arrival.

Vessels loading/discharging operations will only start during the next shift if stowage plans are remitted upon vessels' arrival. A request can be made to shift the vessel to a more convenient berth depending upon the cargo concerned.

With regard to cargo loaded Onatra does not issue stowage plans and Masters should consequently be instructed to draw up stowage plans for transmission to corresponding discharging ports.

BANANA: 6.01 S. 12.25 E.

DOCUMENTS: See "General" before first port.

APPROACHES: In view of the strong current, and in view of the fact that the lights of the navigation buoys on the Congo River do not always work properly, night navigation is practically impossible. Tankers, therefore, arriving at night, or in times of congestion, are recommended to anchor approx. 5 miles West of Moita Seca Light in approx. 10 fathoms, about 12 miles from Stella Buoy.

PILOTAGE: River Congo can be entered direct from sea in deep water. Pilots not compulsory. Mooring Master boards incoming tankers to assist mooring at buoys. Notice of arrival to be given to Harbour Master, radio Maritime Banana.

The position of the flare of the SOCIR Refinery at Moanda is:
5° 57′ 51″ S.
12° 25′ 07″ E.

The flare is visible during day and night and may be a good bearing for vessels approaching Congo River.

MAX. SIZE: Tankers up to 40 ft. draft may discharge at buoy moorings. Banana Creek is limited to vessels draft not exceeding 15 ft.

HEALTH: Quarantine Officer boards at sea buoy. Free pratique usually granted as soon as Maritime Health Declaration completed. Valid smallpox, cholera and yellow fever inoculations required for all crew members.

RADIO: At least 3 days notice required to Agent (ETA and draft only) and to Harbour Master, Maritime Banana (ETA only). It is necessary to transmit these notices via another shore station (e.g. Capetown Radio, Libreville Radio, etc.), as the Banana Radio Station can only be reached 2 days prior arrival. Close advice on changes in ETA necessary to prevent delays in waiting for cargo-lighters and push-boats.

Radio Banana (9 PA) working on 495 kc/s. and 8714 kc/s.

BERTHING: Tankers berth in river anchorage between buoys 12 and 14, both anchors used. Tugs not available and not required.

Upon arrival at the berths, tankers should use both anchors on long scope in view of the current. When anchoring it is recommended to drop outside anchor first, up to approx. 3 shackles and subsequently, after the ship's swing to starboard, the starboard anchor. It is essential that ample cable is used on both anchors, approx. 8 shackles. Tankers sail without Pilot and may leave any time.

CARGO OPERATIONS: Tankers discharge-into/load-from cargo barges moored alongside either side. These barges (3 in total) are equipped with 8-in. cargo hoses (position of hose connection amidships) and suitable fenders, have a capacity of 1,650 long tons or 2,050 cu.m., and can receive the cargo at the rate of up to 800 t.p.h. or, alternatively, can load at a rate of approx. 400 t.p.h. Under normal conditions the refinery will handle 3 barges per shift of 12 hours. Cargo operations are effected continuously day and night, during Sundays and holidays, in shifts from 0600 to 1800 hours and from 1800 hrs. to 0600 hrs. Therefore a tanker of approx. 19,000 tons can be completed in a net discharging/loading time of approximately 48 hours. During the cargo operations, 6 Congolese deckhands stay on board to handle cargo hoses and barges. These men are to be provided with meals and accommodation (one spare cabin will be sufficient). Masters are also requested to instruct their crew to assist with the mooring/unmooring of cargo barges alongside.

DENSITY: Brackish to salt.

FRESH WATER: Not available.

FUEL: Must be ordered 48 hours in advance from Petro-Zaire. Bunkering takes place between Buoys Nos. 12 and 14. Gasoil, light

and heavy fuel oil available. Barge capacity 800 ton, minimum order 250 tons.
MEDICAL: Doctor available for emergency only. No dental or hospital facilities.
TANKERS: No tank-cleaning facilities. Barge available for dirty ballast reception limited to 2,000 cu.m. per trip.
REPAIRS: No facilities.
GENERAL: During stay of tankers at anchorage the discharge and/or loading operations are constantly supervised by 1 or 2 European representatives of the refinery, who are to be accommodated on board and to be provided with meals.
SHORE LEAVE: Shore leave is presently not allowed due to lack of communications; only in urgent cases a crew member may join 1 of the refinery tugs. There is no entertainment whatsoever ashore.
AUTHORITY: Office National des Transports, Onatra.

AGENT: See "Matadi".

BOMA: 05.51 S. 13.03 E.

DOCUMENTS: See "General" before first port.
PILOTAGE: Port is situated on the right bank of River Congo, about 44 miles above Pilot station at Banana.

Radio Maritime Banana 24 hours prior arrival giving ETA at Banana and requesting Pilot. Pilot available between 0700 and 2200 hrs. for arriving vessels.
RESTRICTIONS: Depth at bar 30 ft. Permissible draft for navigating Congo River varies between 20 ft. to 27 ft. according to local conditions and should be checked with Port Authority in advance.
HEALTH: Quarantine Officer boards on arrival. All Crew members require valid smallpox, cholera vaccinations and yellow fever inoculation certificates.
TUGS: 2 tugs of 200 and 300 h.p. available to assist berthing.
BERTHING: Total quay length 450 m. with 3 berths alongside. Depth of water at the quay 8 m. at low water. Maximum current at the berths is 3 knots.
STEVEDORES: See "General" before first port.
Port Equipment:
6 electric cranes on rails, capacity 3–6 tons.
2 steam cranes on rails, capacity 7.5 ton at 6 m. 5.0 ton at 10 m.
5 banana conveyors.
1 electric crane, capacity 6 tons.
8 forklifts.
7 barges, capacity 100 tons.
1 pontoon, capacity 75 tons.
FRESH WATER: Available from quays, not suitable for drinking.
FUEL: Not available.
MEDICAL: Doctors and hospital facilities available.
REPAIRS: No facilities.
AUTHORITY: Office National des Transport – Onatra.

AGENT: See "Matadi'.

MATADI, (including Ango-Ango): 05.49 S. 13.27 E. (See Plan)

DOCUMENTS: 7 days before arrival of vessel the following must be in the hands of the Agent:
4 Manifests (detailing explosives, general cargo, heavy lifts).
3 Stowage Plans.
6 Copies of Bills of Lading.
1 Freighted Manifest.
On arrival:
Maritime Declaration.
Ship's Register.
3 Crew Personal Effects Lists.
2 Stowage Plans.
1 Freighted Manifest.
3 Lists of Ports of Call.
7 Passengers Landed.
7 Passengers in Transit.
5 Crew Lists.
5 Crew Boys Lists.
2 Provisions Lists.
4 Individual Manifests.
PILOTAGE: Compulsory for vessels over 500 g.r.t. Radio Maritime Banana 24 hours prior arrival giving ETA at Banana and requesting Pilot. Pilot boards at Banana Pilot station. Distance from Banana to Matadi about 75 miles. Pilot available between 0700 and 2200 hrs. for arriving vessels.
RESTRICTIONS: Depth at bar 30 ft. Permissible draft for navigating Zaire River varies between 20 ft. and 27 ft. according to local conditions and should be checked with the Port Authority 3 days in advance.
MAX. SIZE: Controlled by draft in river.
HEALTH: Quarantine Officer boards on arrival. All crew members require valid smallpox, cholera and yellow fever inoculation certificates.
TUGS: 2 tugs, largest 600 h.p., available to assist berthing.
BERTHING: At Matadi.

Pier 1	149 m.	Pier 6	176 m.
Pier 2	161 m.	Pier 7	188 m.
Pier 3	156 m.	Pier 8	149 m.
Pier 4	158 m.	Pier 9	167 m.
Pier 5	156 m.	Pier 10	143 m.

Min. depth at Piers 8–10 – 10 m.

At Ango-Ango:
Pier A. Length 110 m.
(As a rule for discharge of inflammable goods and explosives.)
UNLOADING RATE: 400 to 600 tons of general cargo per day of 2 shifts.
CRANES:

44 Cranes Electric and hydraulic on rails	3–6 tons	
2 Cranes Steam	5 tons	
1 Crane Steam	10 tons	
1 Derrick Fixed	50 tons	Pier 4
1 Floating Crane	14 tons	
1 Portic Crane	5 tons	
6 Cranes Electric	3–6 tons	
2 Cranes Electric	10 tons	
3 Cranes Electric	6 tons	

BULK HANDLING FACILITIES: Palm oil is stocked by 4 companies in Matadi, 3 of which have pipe-lines to a main quay. The palm oil installations of CCP are at Ango-Ango where ships must berth at Sep Zaire pier. Vessels handling Sep Zaire cargoes are given priority at this pier and in case of unavailability of berth, palm oil would be loaded by barge of 260 tons capacity at Matadi.

P.L.Z. (Plantations Lever au Zaire) capacity	13,450 t.
AMATO-Freres	3,700 t.
MADAIL	2,340 t.
C.C.P.	3,627 t.

BARGES:

2 lighters	capacity 42 tons each
5 pontoons	capacity 75 t.
44 lighters	capacity 558 t.
3 Pontoons	capacity 450/500 t.
1 Tank barge	capacity 279 t.

DENSITY: Fresh water.
STEVEDORES: See "General" before first port.
TANKERS: Discharge at Sep Zaire pier at Ango-Ango. If lightening necessary before berthing, this can be effected at Ramler Buoy, 17 miles above Banana. No tank-cleaning facilities. No fresh water.
FRESH WATER: Drinking and boiler water not always available.
FUEL: Small quantities available at Ango-Ango. Full bunkers may be taken Kitona (entrance of Zaire River). It is possible to take bunkers at the pier of Sep Zaire at Ango-Ango if not occupied by a tanker and not on Sundays and holidays.

Ships coming up river for bunkering only are free of Port Taxes but must pay normal pilotage expenses and 50% of harbour dues.
TIDES: From early December till middle of February current runs at 10.5 to 11 knots. During this period vessels calling at Matadi must have min. speed of 12.5 to 13 knots. It is reported that during the rainy season in June the tide runs at 12 knots plus, between Matadi and River entrance and navigation is very difficult at this time.
MEDICAL: Doctors and hospital facilities available.
REPAIRS: Small repairs possible at railway workshop.
AUTHORITY: Office National des Transports – Onatra.

AGENT: Comexas, S.A. B.P. 83, Matadi, Republic Zaire. Tel: 22.33 and 22.35. Cables: Comexas. Telex: 814.

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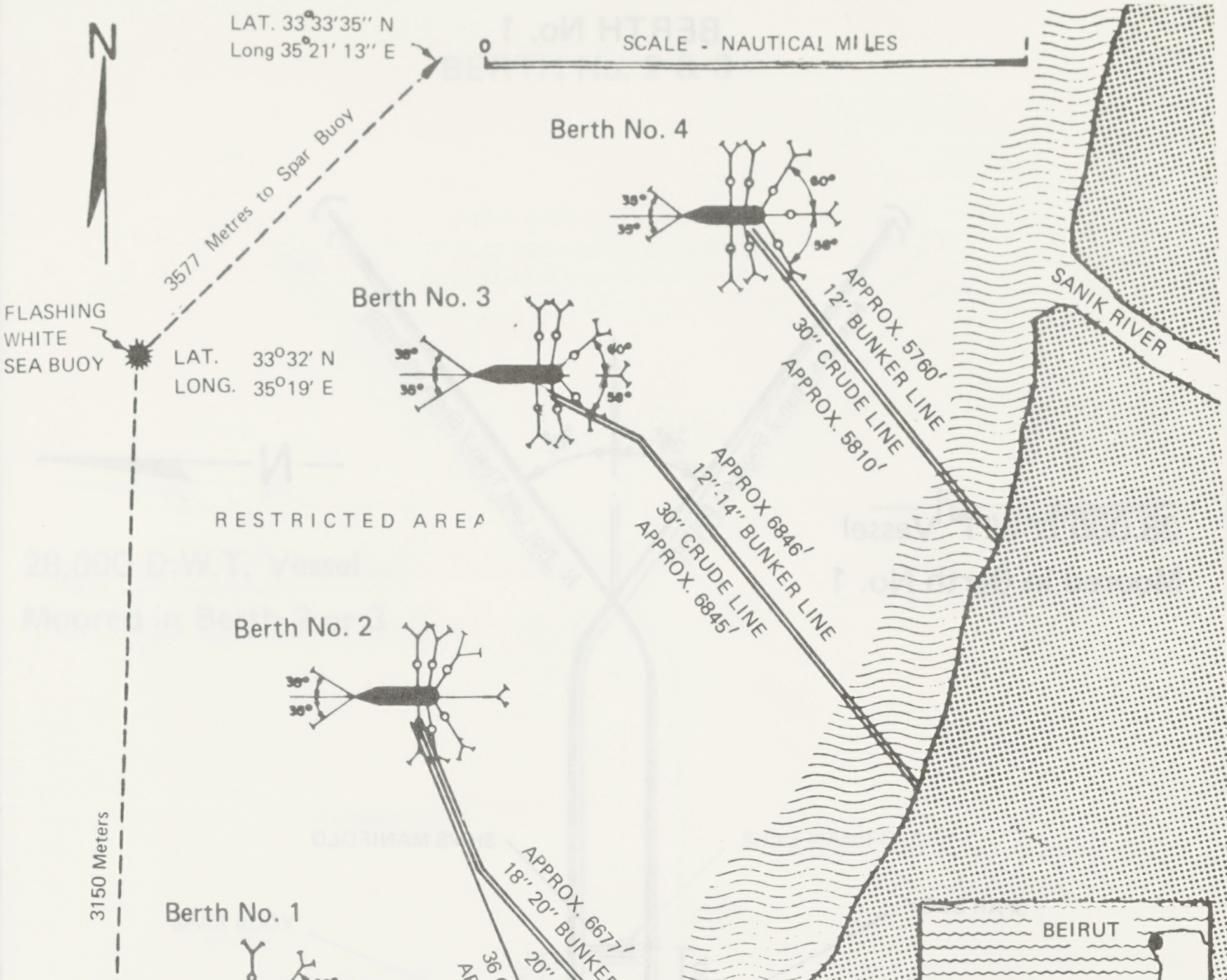
N
LAT. 33°33'35'' N
Long 35°21' 13'' E
0
SCALE - NAUTICAL MILES
1
3577 Metres to Spar Buoy
Berth No. 4
Berth No. 3
Berth No. 2
Berth No. 1
FLASHING WHITE SEA BUOY
LAT. 33°32' N
LONG. 35°19' E
RESTRICTED AREA
3150 Meters
SPAR BUOY
LAT. 33°30' 20'' N
LONG 35° 19' 36.5'' E
LAT. 30 30' 07'' 89 N
LONG 35 20' 18'' 01 E
APPROX. 5760'
12'' BUNKER LINE
30'' CRUDE LINE
APPROX. 5810'
APPROX 6846'
12''-14'' BUNKER LINE
30'' CRUDE LINE
APPROX. 6845'
APPROX. 6677'
18'' 20'' BUNKER LINE
20'' CRUDE LINE
APPROX. 6682'
36 CRUDE LINE
APPROX. 6821'
APPROX. 4211'
24'' CRUDE LINE
14'' BUNKER LINE
APPROX. 4241'
PIER
SANIK RIVER
ZAKRANI RIVER
SIDON TERMINAL
38°
35°
60°
58°
BEIRUT
TAPLINE OPERATING AREA
SIDON
Sanik River
Zahrani River
TYRE
VICINITY MAP

MOORING LAYOUT

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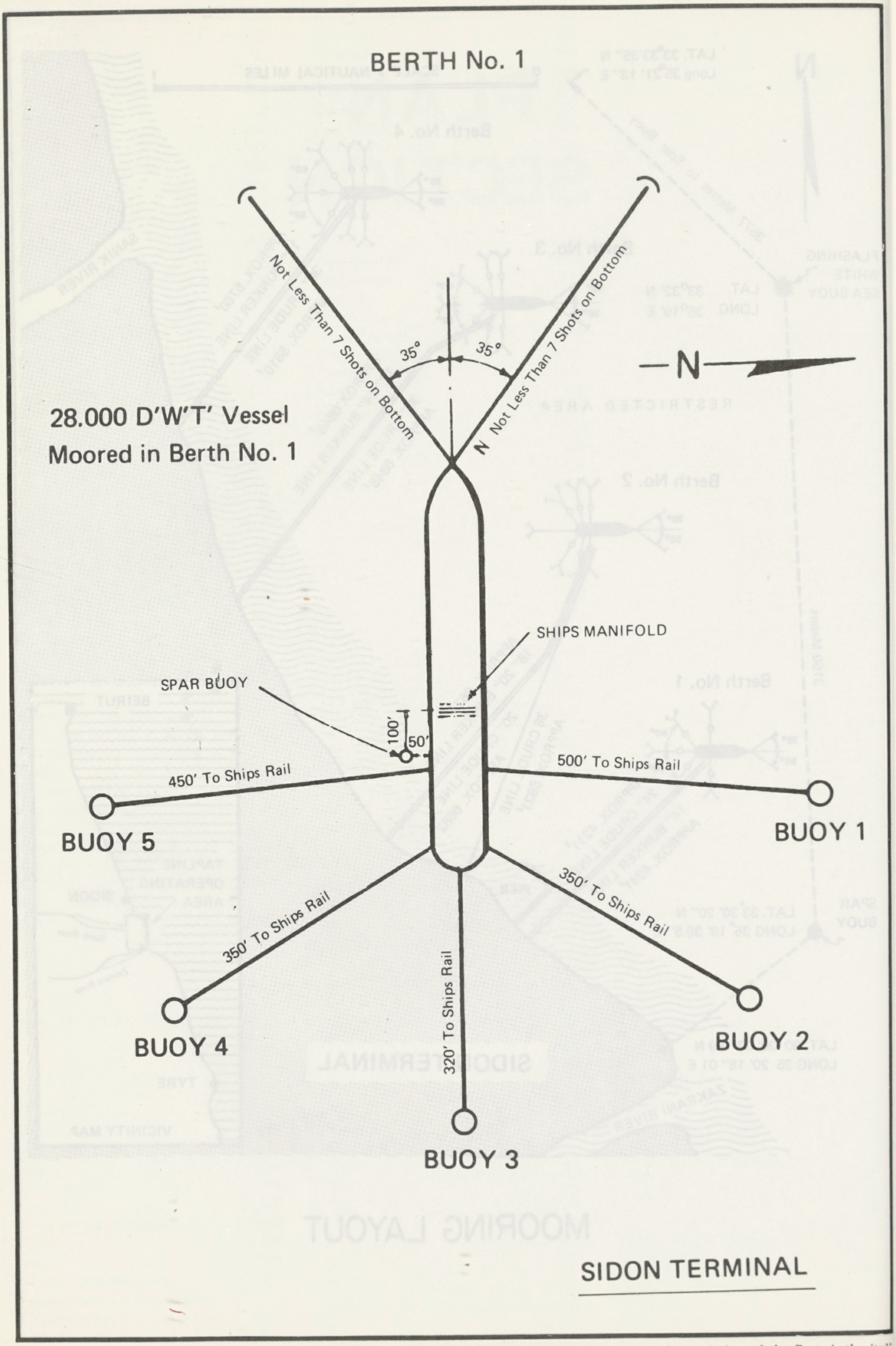
BERTH No. 1
28.000 D'W'T' Vessel
Moored in Berth No. 1
N
35°
35°
Not Less Than 7 Shots on Bottom
Not Less Than 7 Shots on Bottom
N
SHIPS MANIFOLD
SPAR BUOY
100'
50'
450' To Ships Rail
500' To Ships Rail
BUOY 5
BUOY 1
350' To Ships Rail
350' To Ships Rail
320' To Ships Rail
BUOY 4
BUOY 2
BUOY 3
SIDON TERMINAL

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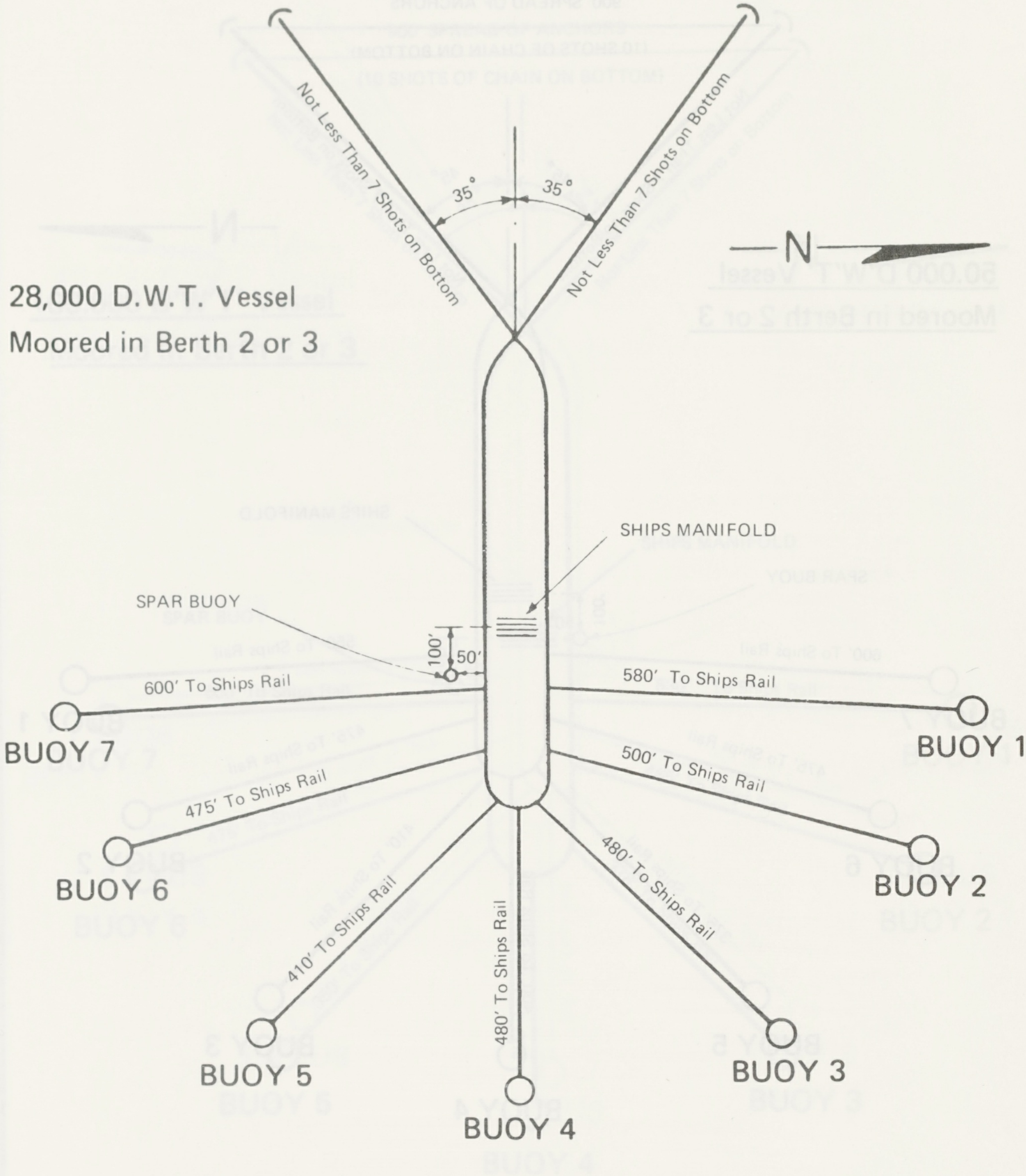
BERTH No. 2 & 3


Not Less Than 7 Shots on Bottom
Not Less Than 7 Shots on Bottom
35°
35°
N
28,000 D.W.T. Vessel
Moored in Berth 2 or 3
SHIPS MANIFOLD
SPAR BUOY
100'
50'
600' To Ships Rail
580' To Ships Rail
BUOY 7
BUOY 1
475' To Ships Rail
500' To Ships Rail
BUOY 6
BUOY 2
410' To Ships Rail
480' To Ships Rail
480' To Ships Rail
BUOY 5
BUOY 4
BUOY 3

SIDON TERMINAL

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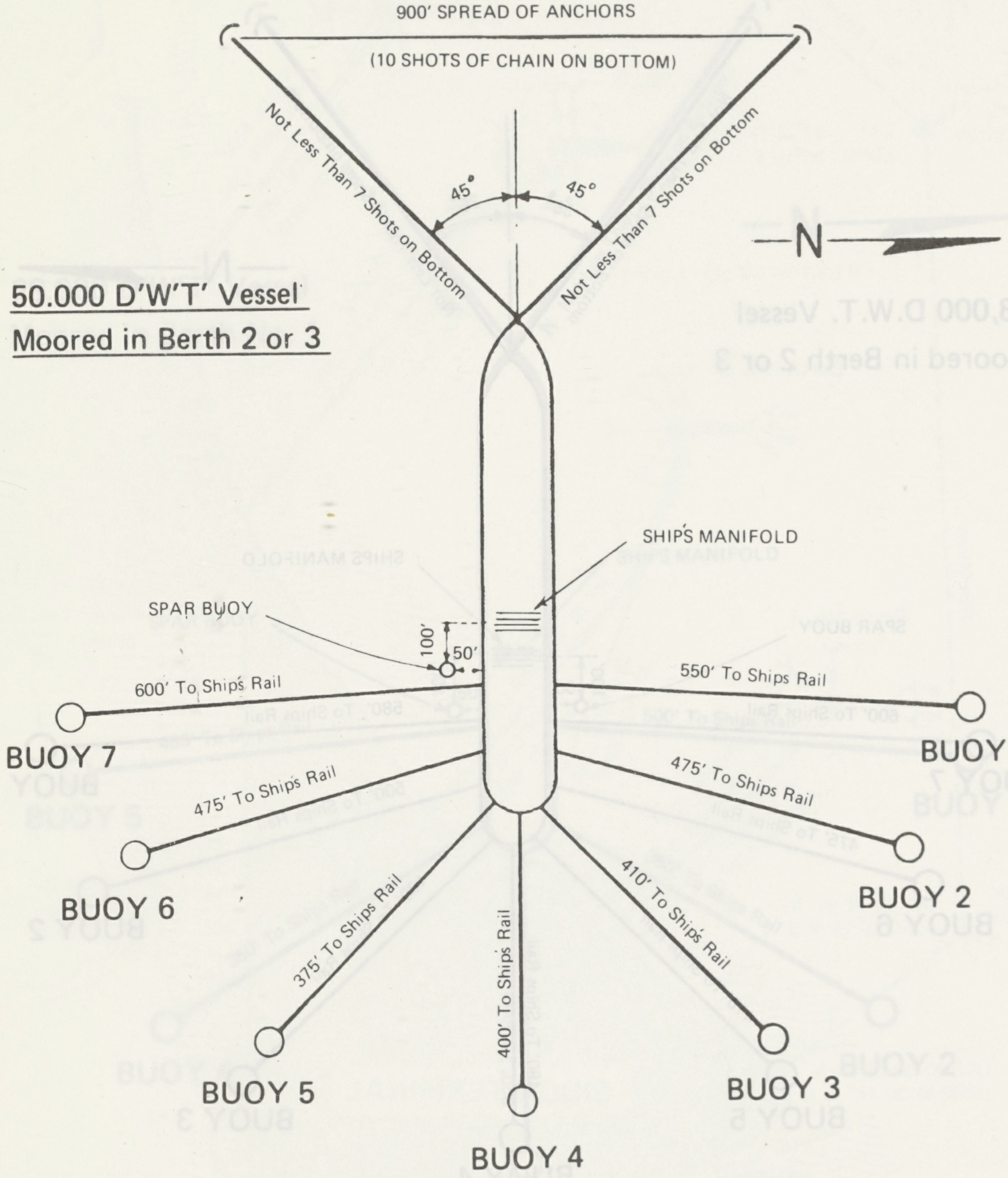
BERTH No. 2 & 3


900' SPREAD OF ANCHORS
(10 SHOTS OF CHAIN ON BOTTOM)
Not Less Than 7 Shots on Bottom
45°
45°
Not Less Than 7 Shots on Bottom
N
50.000 D'W'T' Vessel
Moored in Berth 2 or 3
SHIPS MANIFOLD
SPAR BUOY
100'
50'
600' To Ships Rail
550' To Ships Rail
BUOY 7
BUOY 1
475' To Ships Rail
475' To Ships Rail
BUOY 6
BUOY 2
375' To Ships Rail
400' To Ships Rail
410' To Ships Rail
BUOY 5
BUOY 4
BUOY 3

SIDON TERMINAL

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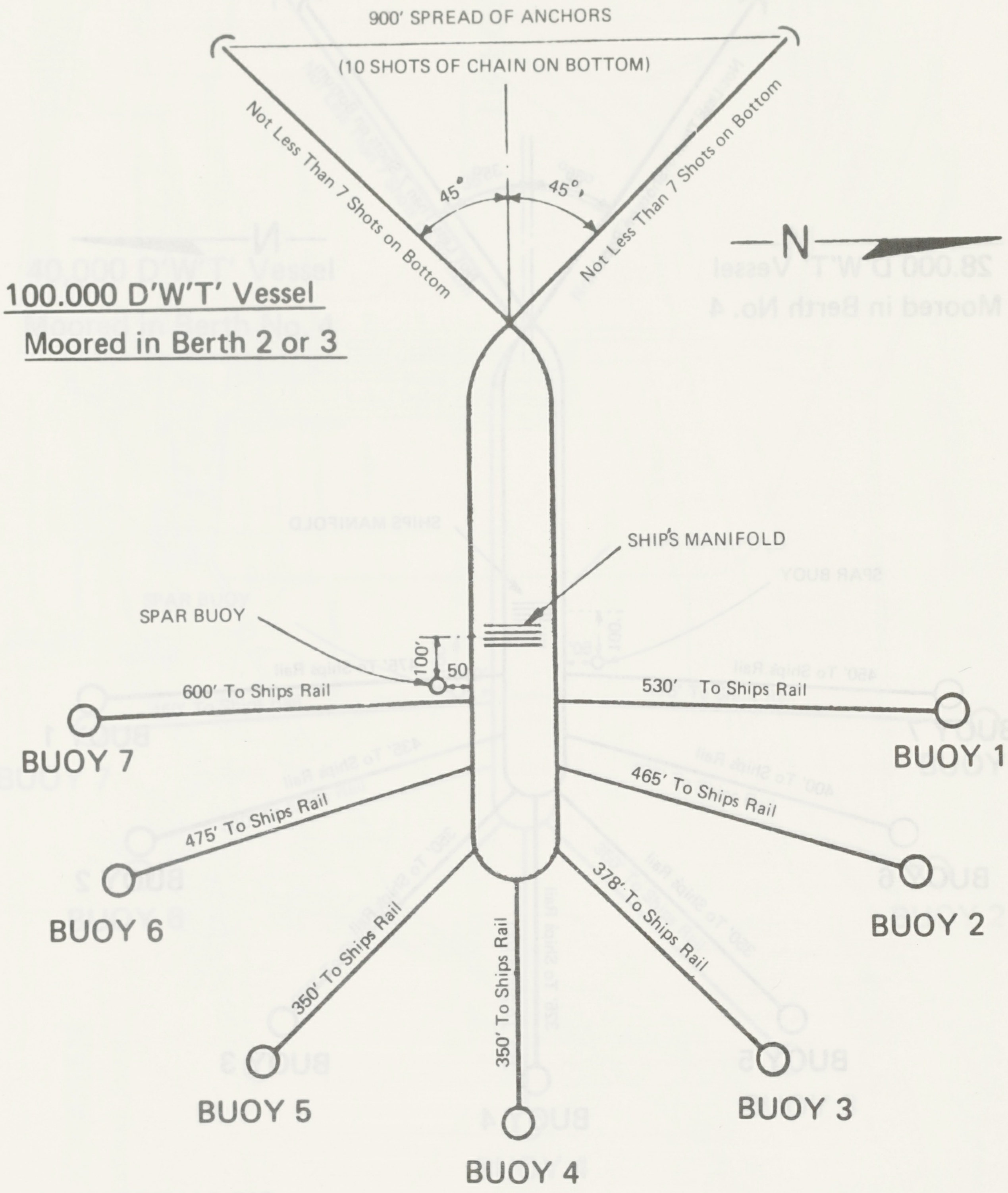
900' SPREAD OF ANCHORS
(10 SHOTS OF CHAIN ON BOTTOM)
Not Less Than 7 Shots on Bottom
Not Less Than 7 Shots on Bottom
45°
45°
—N—
100.000 D'W'T' Vessel
Moored in Berth 2 or 3
SHIPS MANIFOLD
SPAR BUOY
100'
50
600' To Ships Rail
530' To Ships Rail
465' To Ships Rail
475' To Ships Rail
378' To Ships Rail
350' To Ships Rail
350' To Ships Rail
BUOY 7
BUOY 1
BUOY 6
BUOY 2
BUOY 5
BUOY 4
BUOY 3

SIDON TERMINAL

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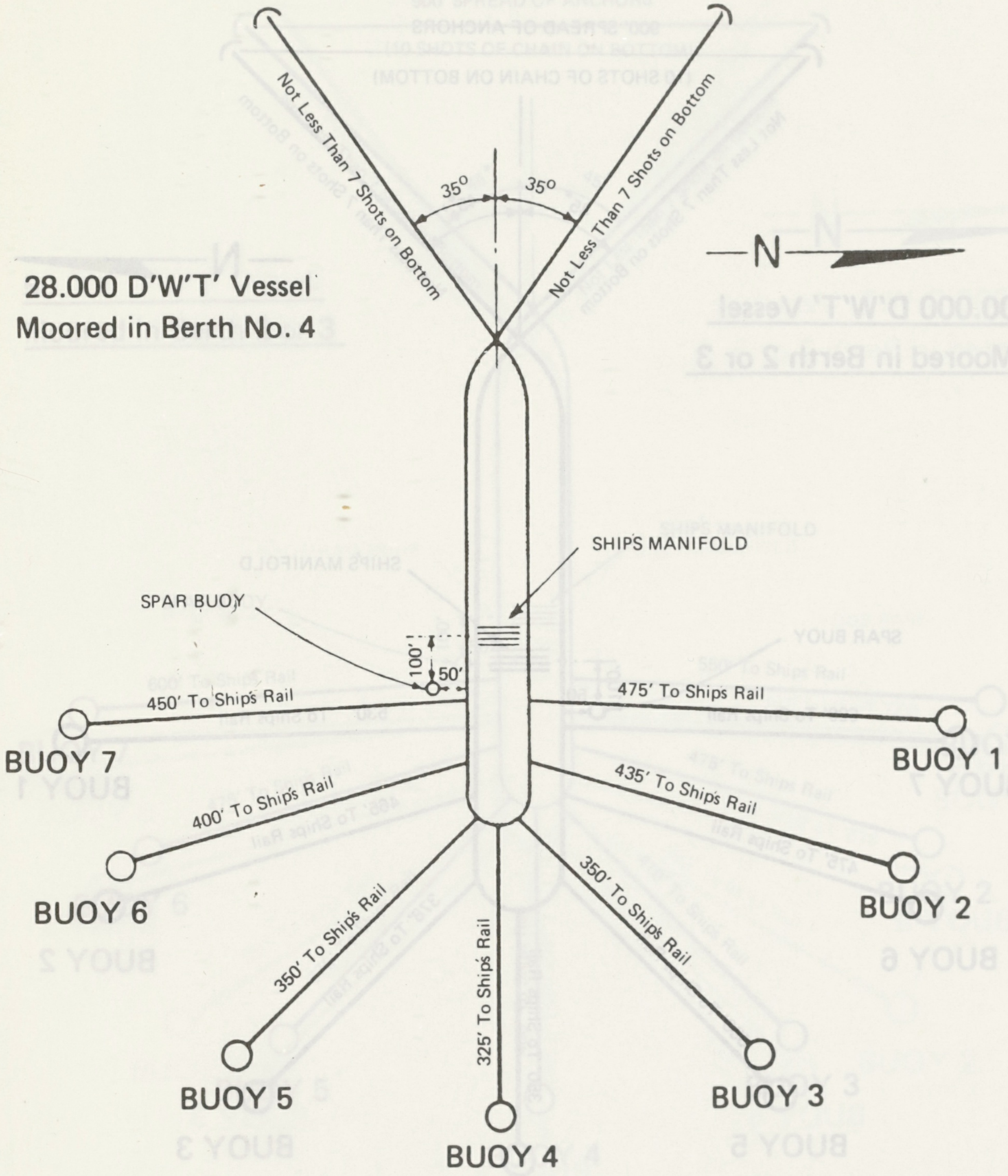
BERTH No. 4


Not Less Than 7 Shots on Bottom
Not Less Than 7 Shots on Bottom
35°
35°
—N
SHIPS MANIFOLD
SPAR BUOY
100'
50'
450' To Ships Rail
475' To Ships Rail
400' To Ships Rail
435' To Ships Rail
350' To Ships Rail
325' To Ships Rail
350' To Ships Rail
BUOY 7
BUOY 1
BUOY 6
BUOY 2
BUOY 5
BUOY 3
BUOY 4

28.000 D'W'T' Vessel
Moored in Berth No. 4

SIDON TERMINAL

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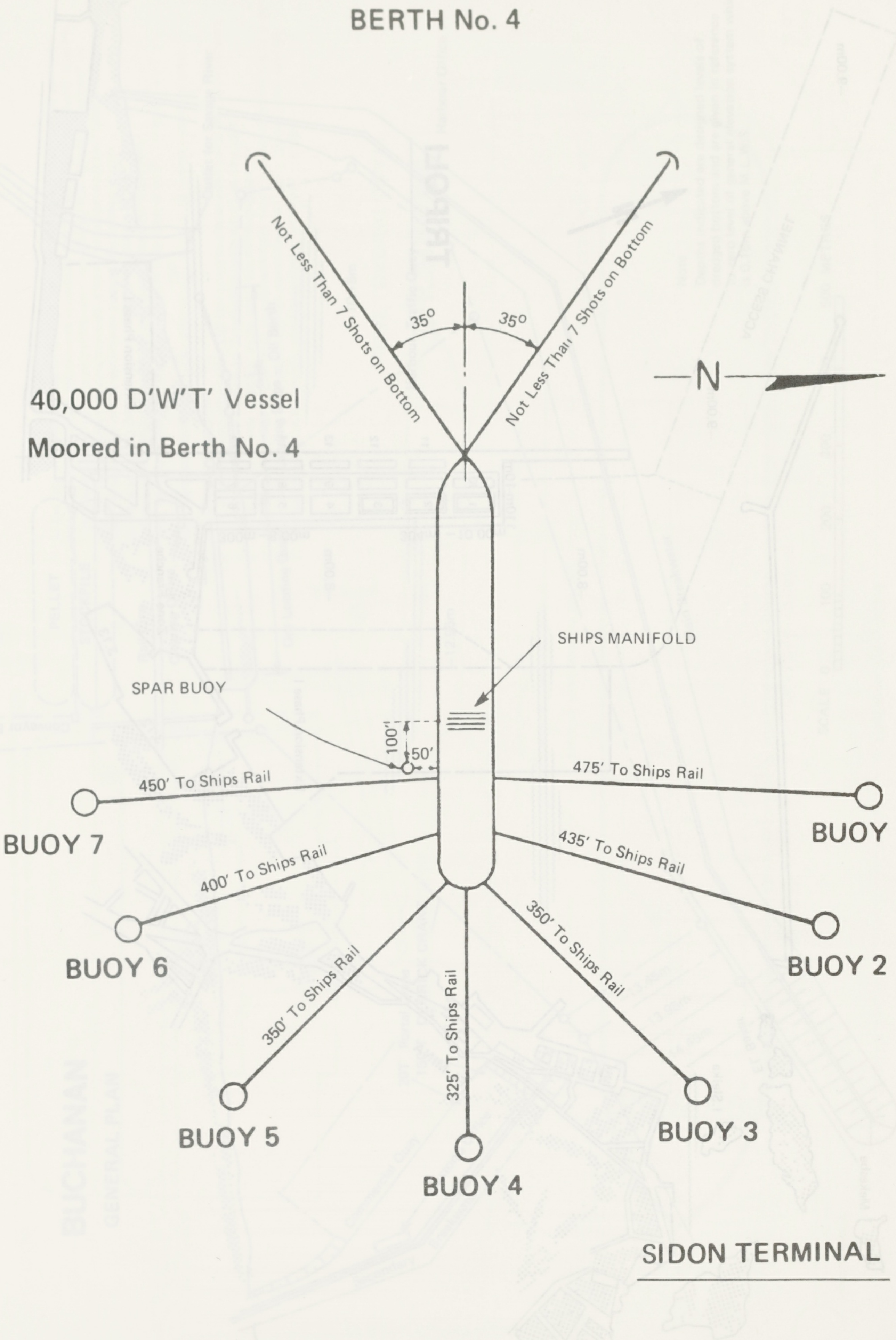
BERTH No. 4
40,000 D'W'T' Vessel
Moored in Berth No. 4
Not Less Than 7 Shots on Bottom
Not Less Than 7 Shots on Bottom
35°
35°
N
SHIPS MANIFOLD
SPAR BUOY
100'
50'
450' To Ships Rail
475' To Ships Rail
400' To Ships Rail
435' To Ships Rail
350' To Ships Rail
325' To Ships Rail
350' To Ships Rail
BUOY 1
BUOY 2
BUOY 3
BUOY 4
BUOY 5
BUOY 6
BUOY 7
SIDON TERMINAL

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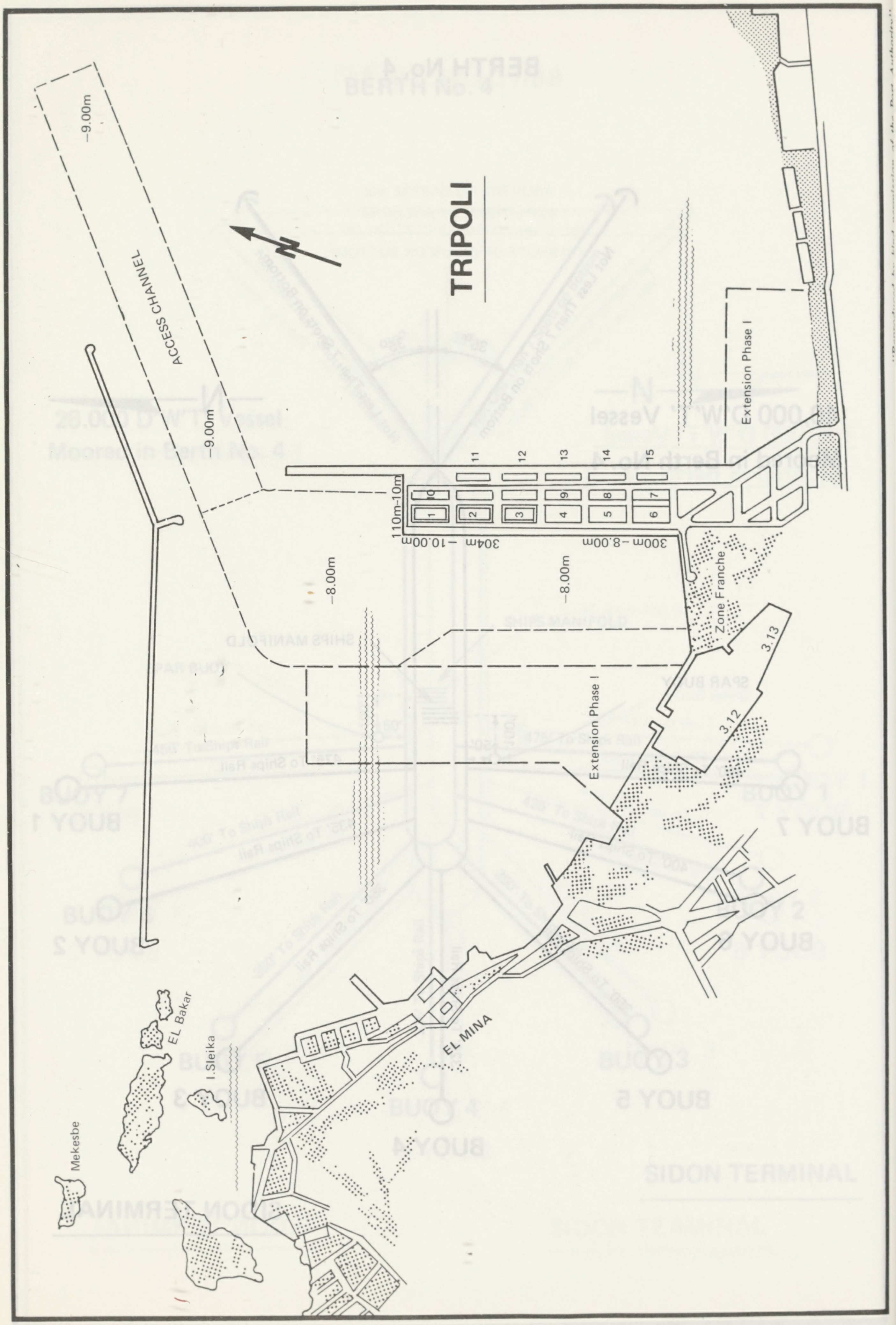
TRIPOLI
N
ACCESS CHANNEL
−9.00m
9.00m
−8.00m
−8.00m
110m−10m
110m−10.00m
304m −10.00m
300m −8.00m
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Extension Phase I
Extension Phase I
Zone Franche
3.13
3.12
EL MINA
I. Sleika
EL Bakar
Mekesbe

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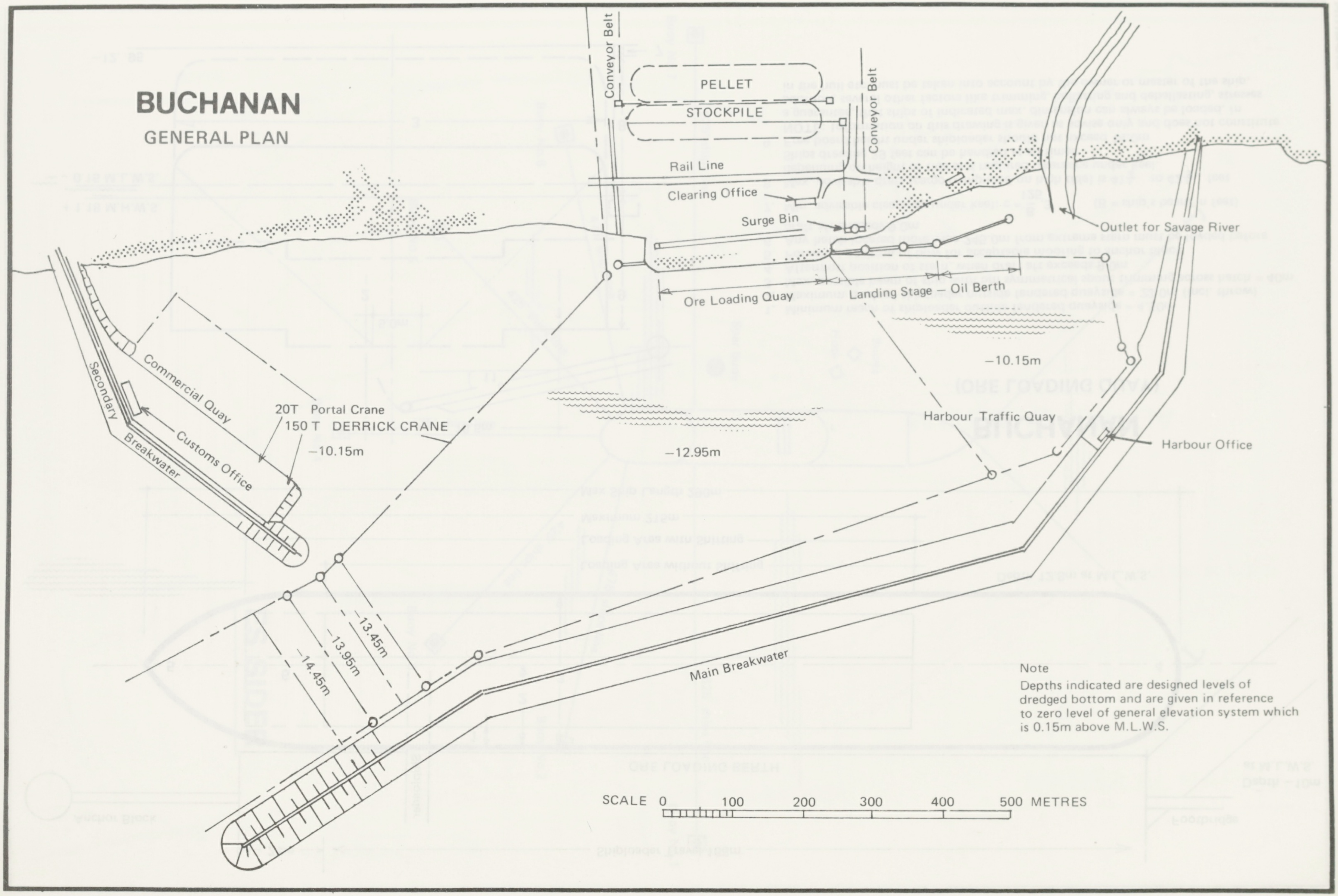
BUCHANAN
GENERAL PLAN


Conveyor Belt
PELLET
STOCKPILE
Conveyor Belt
Rail Line
Clearing Office
Surge Bin
Outlet for Savage River
Ore Loading Quay
Landing Stage – Oil Berth
–10.15m
Harbour Traffic Quay
Harbour Office
–12.95m
Commercial Quay
20T Portal Crane
150 T DERRICK CRANE
–10.15m
Secondary Breakwater
Customs Office
–13.45m
–13.95m
–14.45m
Main Breakwater
SCALE 0 100 200 300 400 500 METRES

Note
Depths indicated are designed levels of dredged bottom and are given in reference to zero level of general elevation system which is 0.15m above M.L.W.S.

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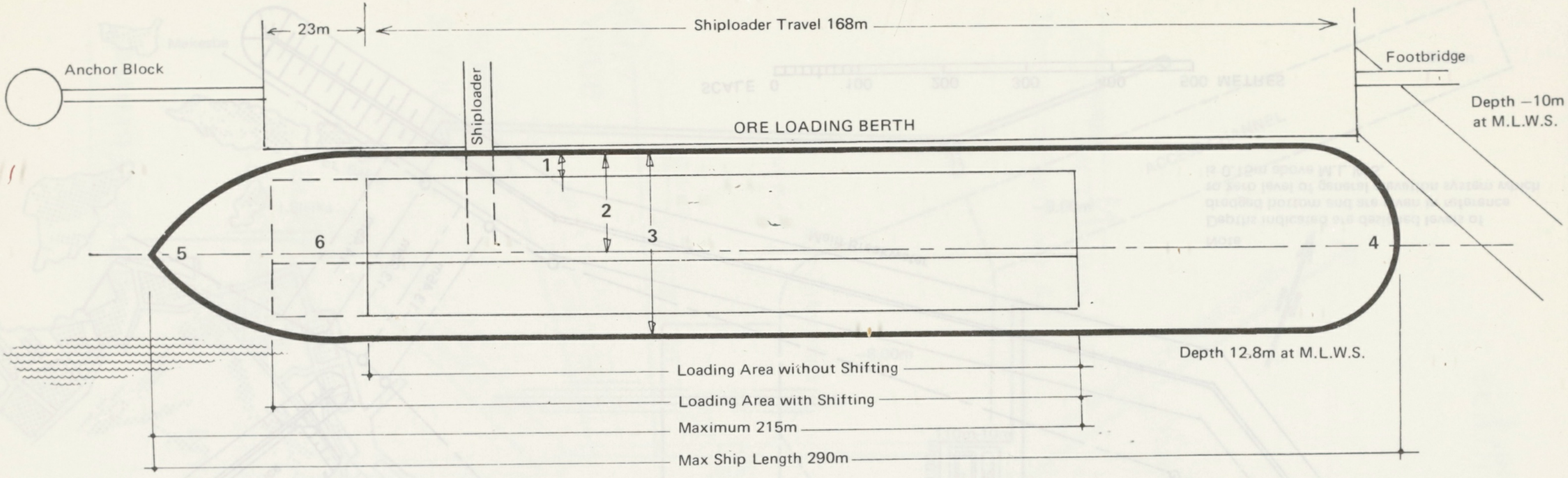
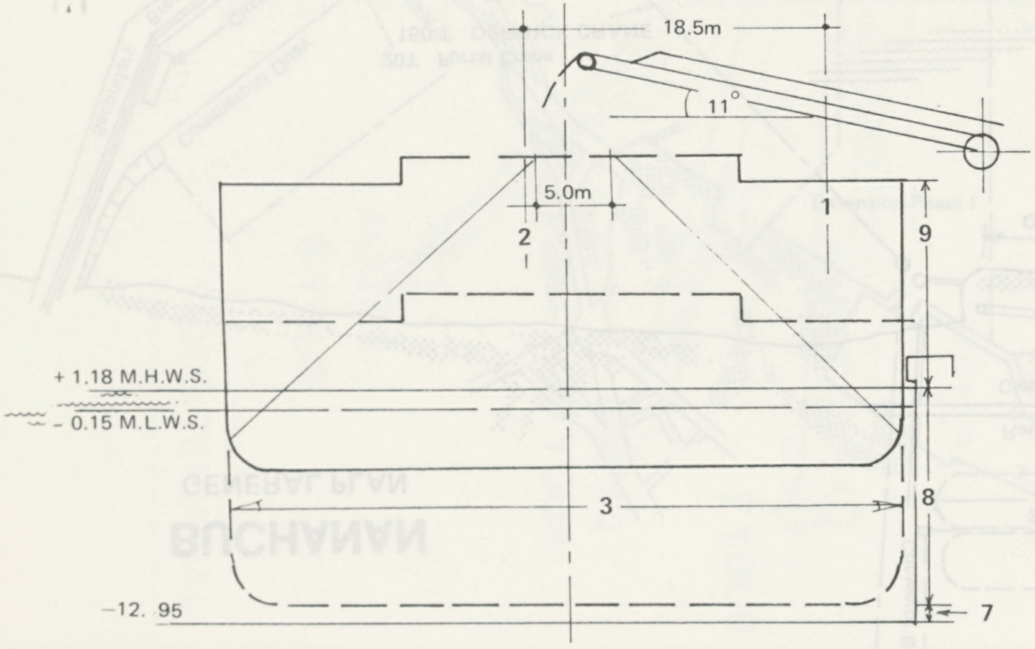

23m
Shiploader Travel 168m
Anchor Block
Shiploader
Footbridge
Depth −10m at M.L.W.S.
ORE LOADING BERTH
1
2
3
4
5
6
Depth 12.8m at M.L.W.S.
Loading Area without Shifting
Loading Area with Shifting
Maximum 215m
Max Ship Length 290m

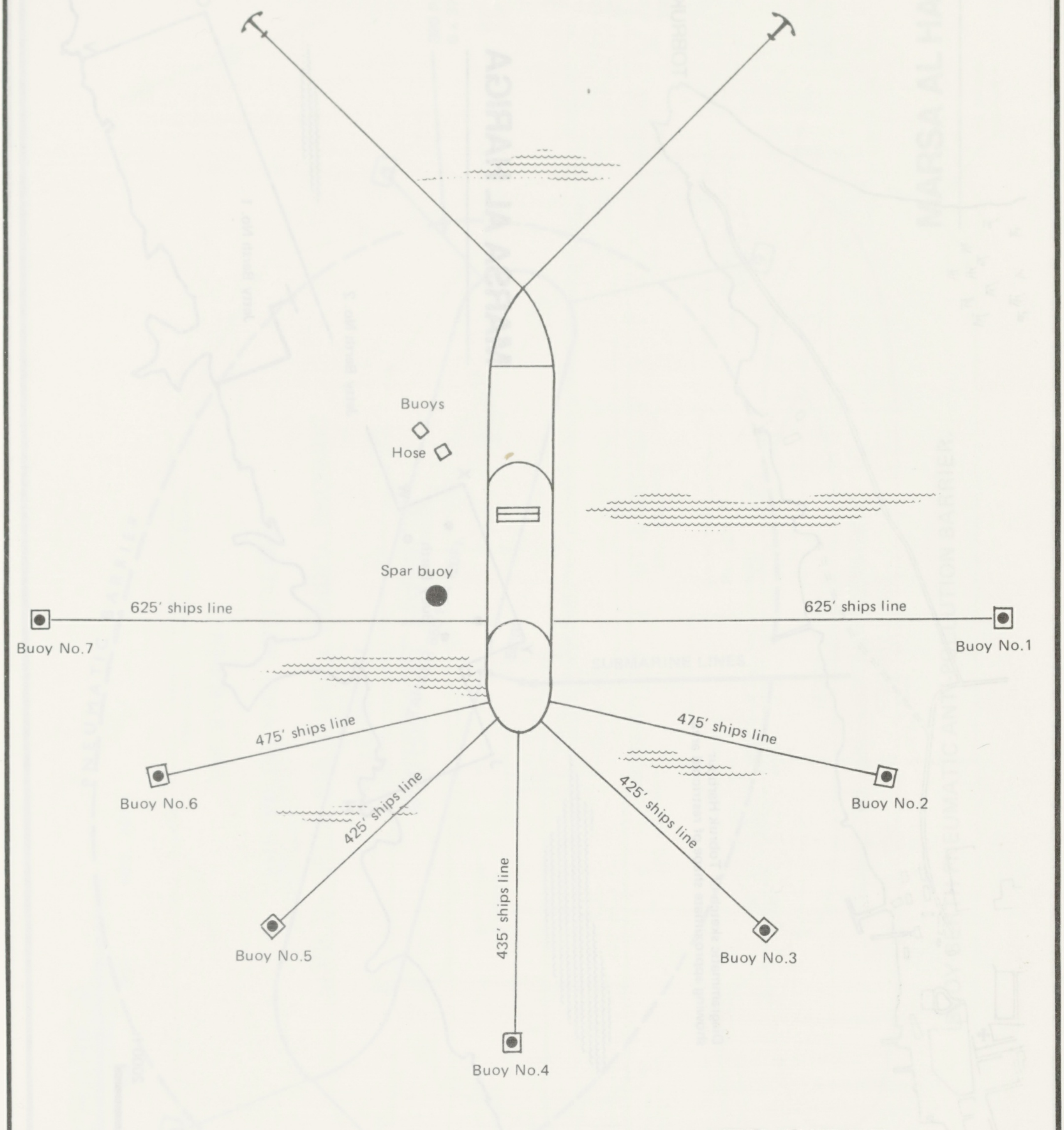
BUCHANAN

(ORE LOADING QUAY)


18.5m
11°
5.0m
1
2
9
3
8
7
+ 1.18 M.H.W.S.
− 0.15 M.L.W.S.
−12. 95

1. Minimum reach of shiploader outside fendered quayside = 4.50m
2. Maximum reach of shiploader outside fendered quayside = 23.0m (incl. throw)
3. Max. possible beam of ship with 5m symmetrical spout trimming across hatch = 40m
4. Aftermost position of stern, when draft aft exceeds 9.0m
5. Foremost position of bow for acceptable mooring to anchor block
6. Any hatch located more than 245.0m from extreme stern must be loaded before draft aft exceeds 9.0m
7. Min. advisable clearance under keel: $c = \frac{B}{125}.3'$ (B = ship's beam in feet)
8. Max. advisable draft (cargo completed on high tide) is 41½ to 42½ feet depending on height of tide and required clearance under keel. Ships drawing 39 feet can be handled at all times
9. Free board height under shiploader should not exceed 14.0m

NOTE: Information on this drawing is given as advise only and does not constitute a guarantee, that ships of indicated max. dimension can always be loaded. In addition, several other factors like trimming, ballasting and deballasting, stresses in the hull etc must be taken into account by the owner or master of the ship.


Buoys
Hose
Spar buoy
625' ships line
625' ships line
Buoy No.7
Buoy No.1
475' ships line
475' ships line
Buoy No.6
Buoy No.2
425' ships line
425' ships line
435' ships line
Buoy No.5
Buoy No.3
Buoy No.4

ES SIDER

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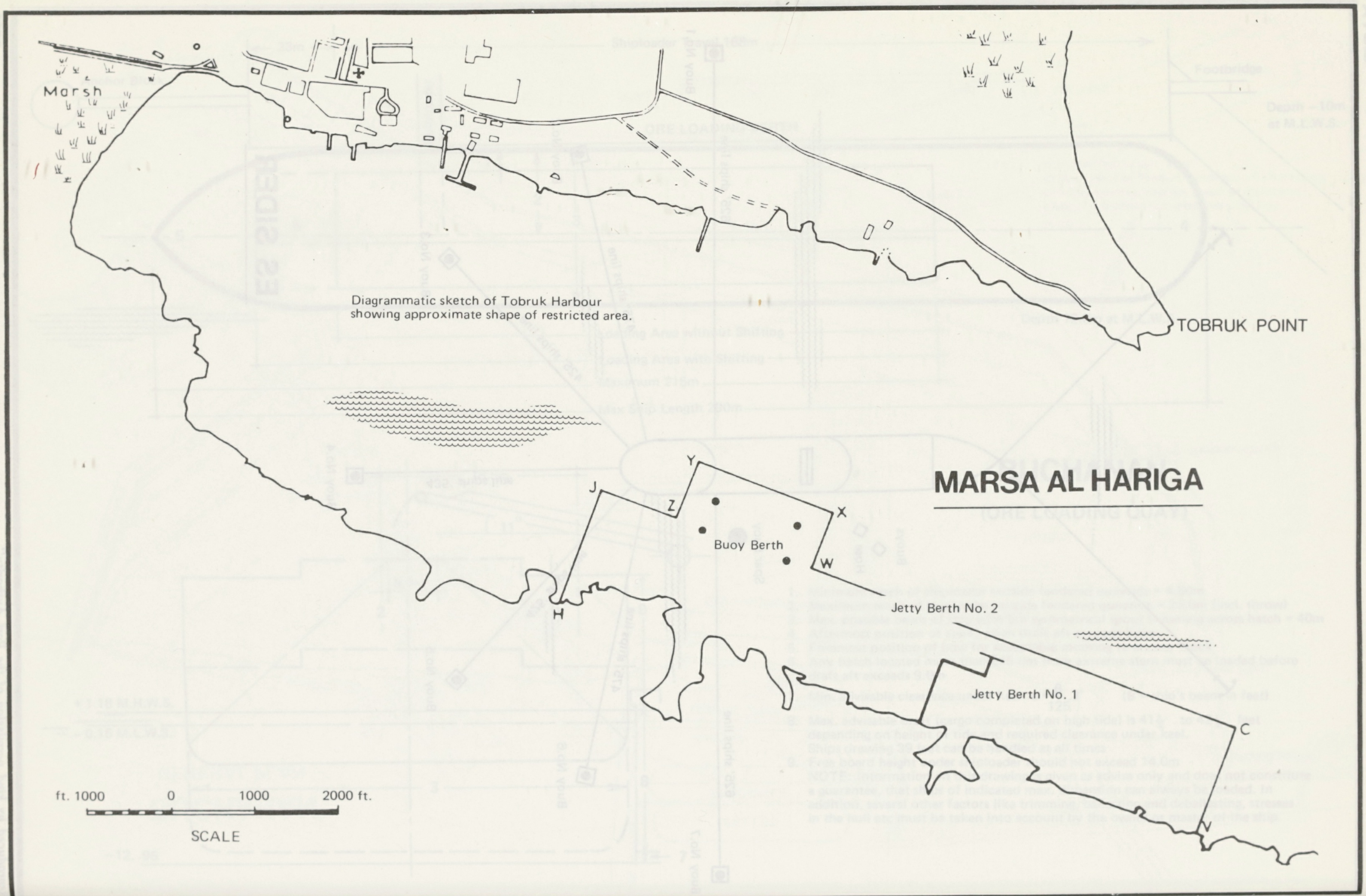
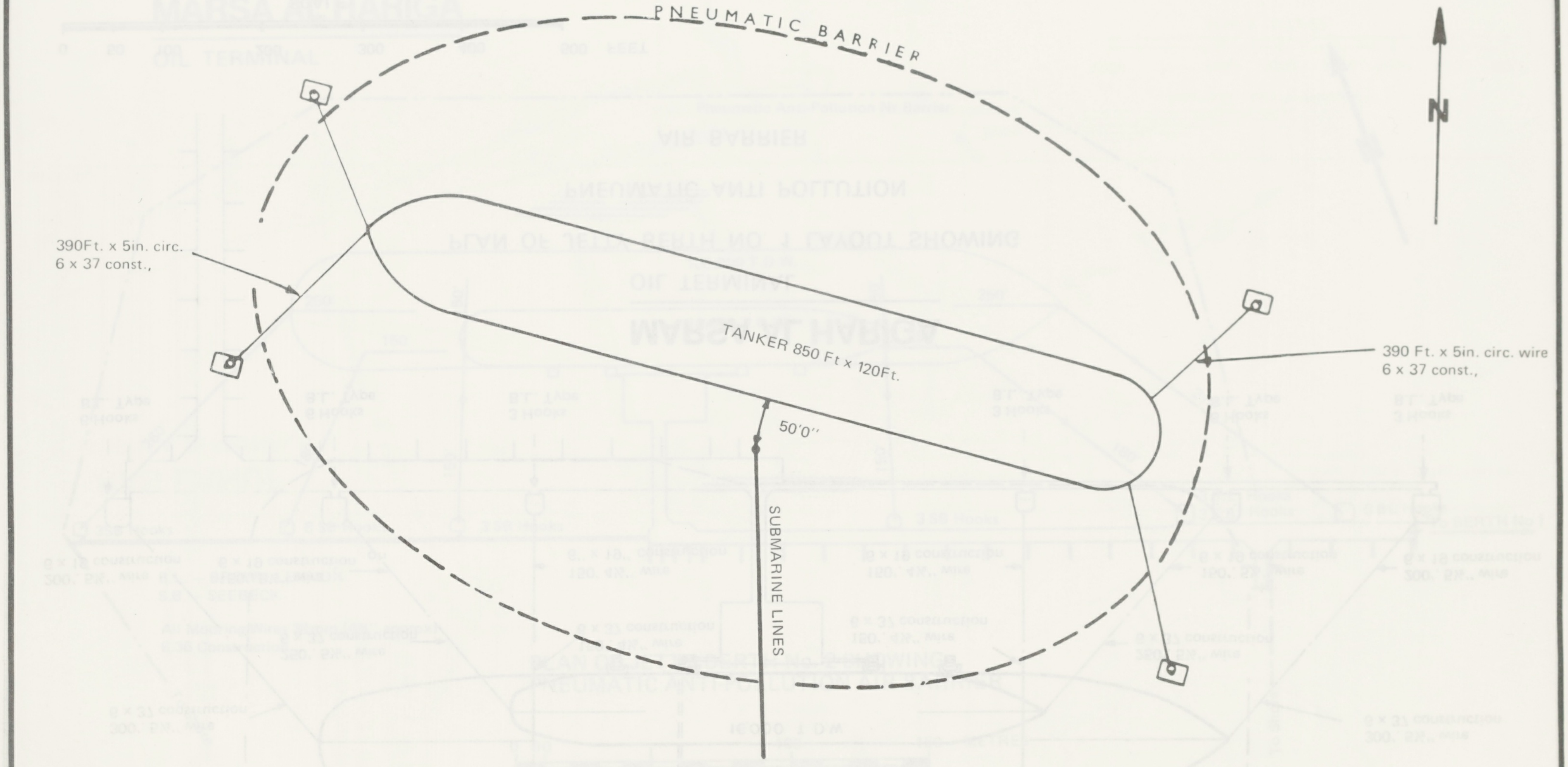
MARSA AL HARIGA



Diagrammatic sketch of Tobruk Harbour showing approximate shape of restricted area.

Marsh
TOBRUK POINT
Y
J
Z
X
Buoy Berth
W
H
Jetty Berth No. 2
Jetty Berth No. 1
C
V
ft. 1000
0
1000
2000 ft.
SCALE


PNEUMATIC BARRIER
N
390Ft. x 5in. circ.
6 x 37 const.,
TANKER 850 Ft x 120Ft.
390 Ft. x 5in. circ. wire
6 x 37 const.,
50'0"
SUBMARINE LINES

BUOY BERTH PNEUMATIC ANTI-POLLUTION BARRIER.

MARSA AL HARIGA

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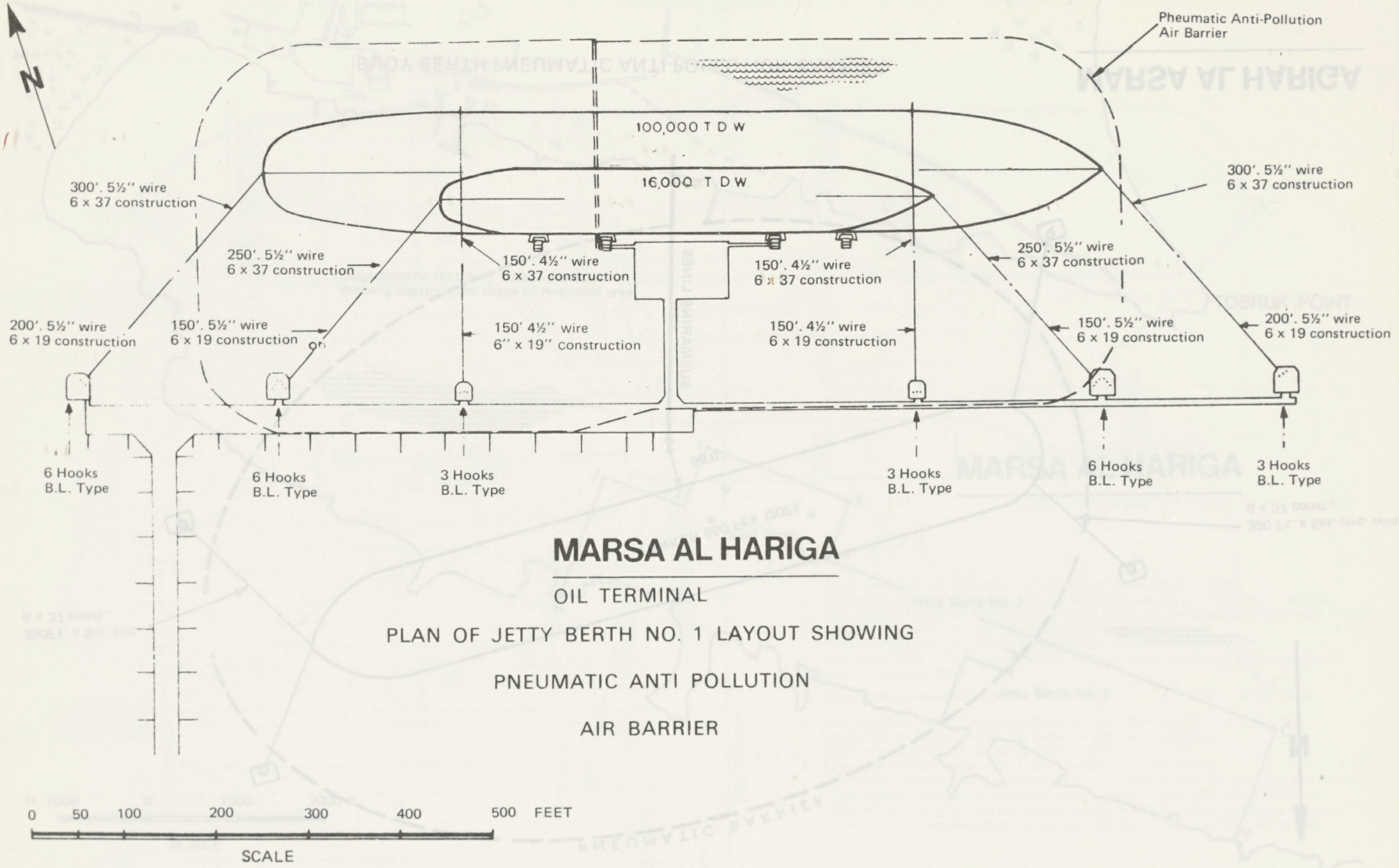
N
Pheumatic Anti-Pollution Air Barrier
100,000 T D W
16,000 T D W
300'. 5½" wire 6 x 37 construction
250'. 5½" wire 6 x 37 construction
150'. 4½" wire 6 x 37 construction
150'. 4½" wire 6 x 37 construction
250'. 5½" wire 6 x 37 construction
300'. 5½" wire 6 x 37 construction
200'. 5½" wire 6 x 19 construction
150'. 5½" wire 6 x 19 construction
150' 4½" wire 6" x 19" construction
150'. 4½" wire 6 x 19 construction
150'. 5½" wire 6 x 19 construction
200'. 5½" wire 6 x 19 construction
6 Hooks B.L. Type
6 Hooks B.L. Type
3 Hooks B.L. Type
3 Hooks B.L. Type
6 Hooks B.L. Type
3 Hooks B.L. Type
0
50
100
200
300
400
500
FEET
SCALE

MARSA AL HARIGA

OIL TERMINAL

PLAN OF JETTY BERTH NO. 1 LAYOUT SHOWING

PNEUMATIC ANTI POLLUTION

AIR BARRIER

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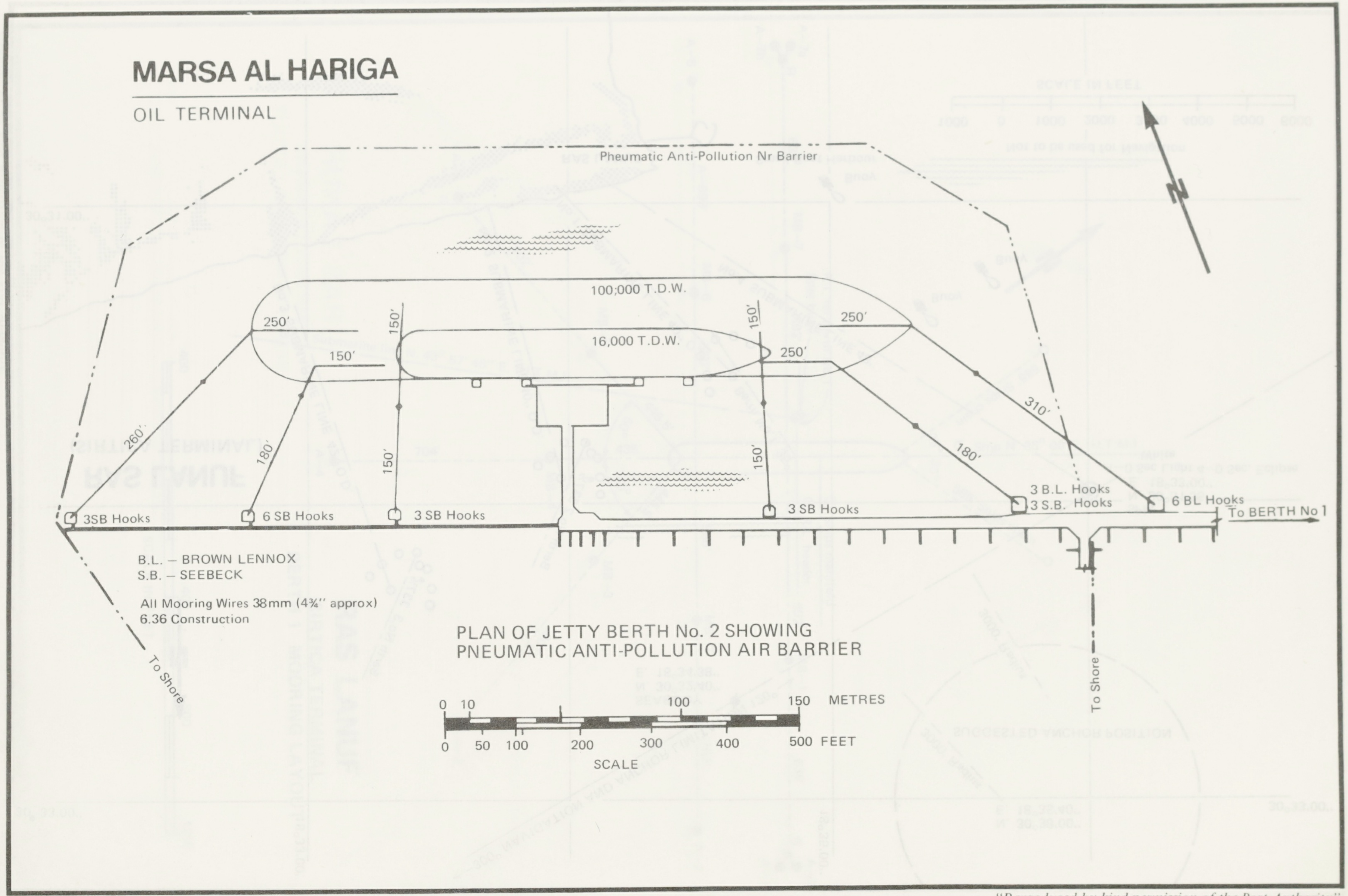
MARSA AL HARIGA

OIL TERMINAL


Pheumatic Anti-Pollution Nr Barrier
100,000 T.D.W.
16,000 T.D.W.
250'
150'
150'
150'
250'
250'
150'
260'
180'
150'
150'
180'
310'
N
3SB Hooks
6 SB Hooks
3 SB Hooks
3 SB Hooks
3 B.L. Hooks
3 S.B. Hooks
6 BL Hooks
To BERTH No 1
To Shore
To Shore
0 10 100 150 METRES
0 50 100 200 300 400 500 FEET
SCALE

B.L. – BROWN LENNOX
S.B. – SEEBECK

All Mooring Wires 38mm (4¾" approx)
6.36 Construction

PLAN OF JETTY BERTH No. 2 SHOWING
PNEUMATIC ANTI-POLLUTION AIR BARRIER

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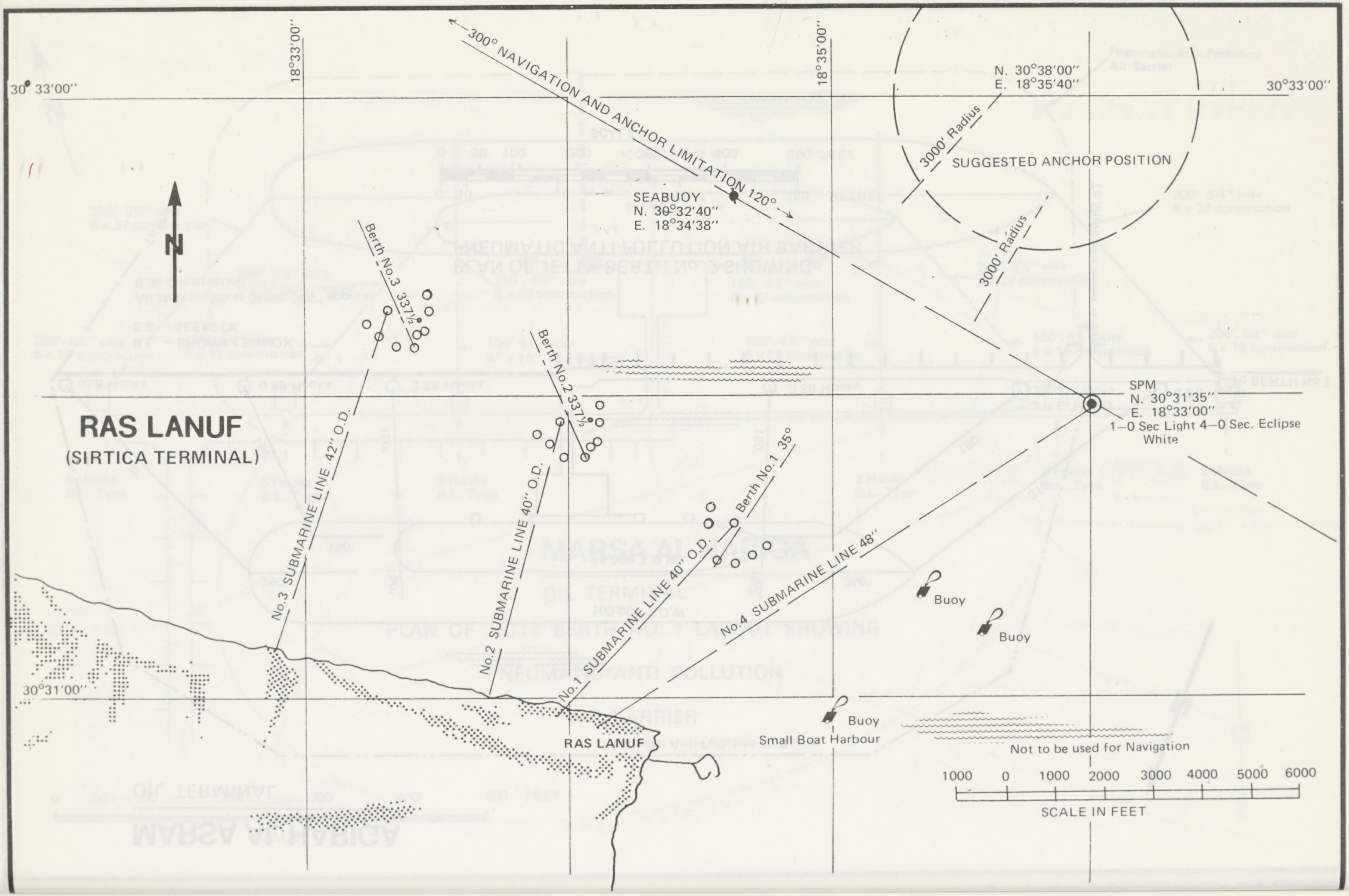
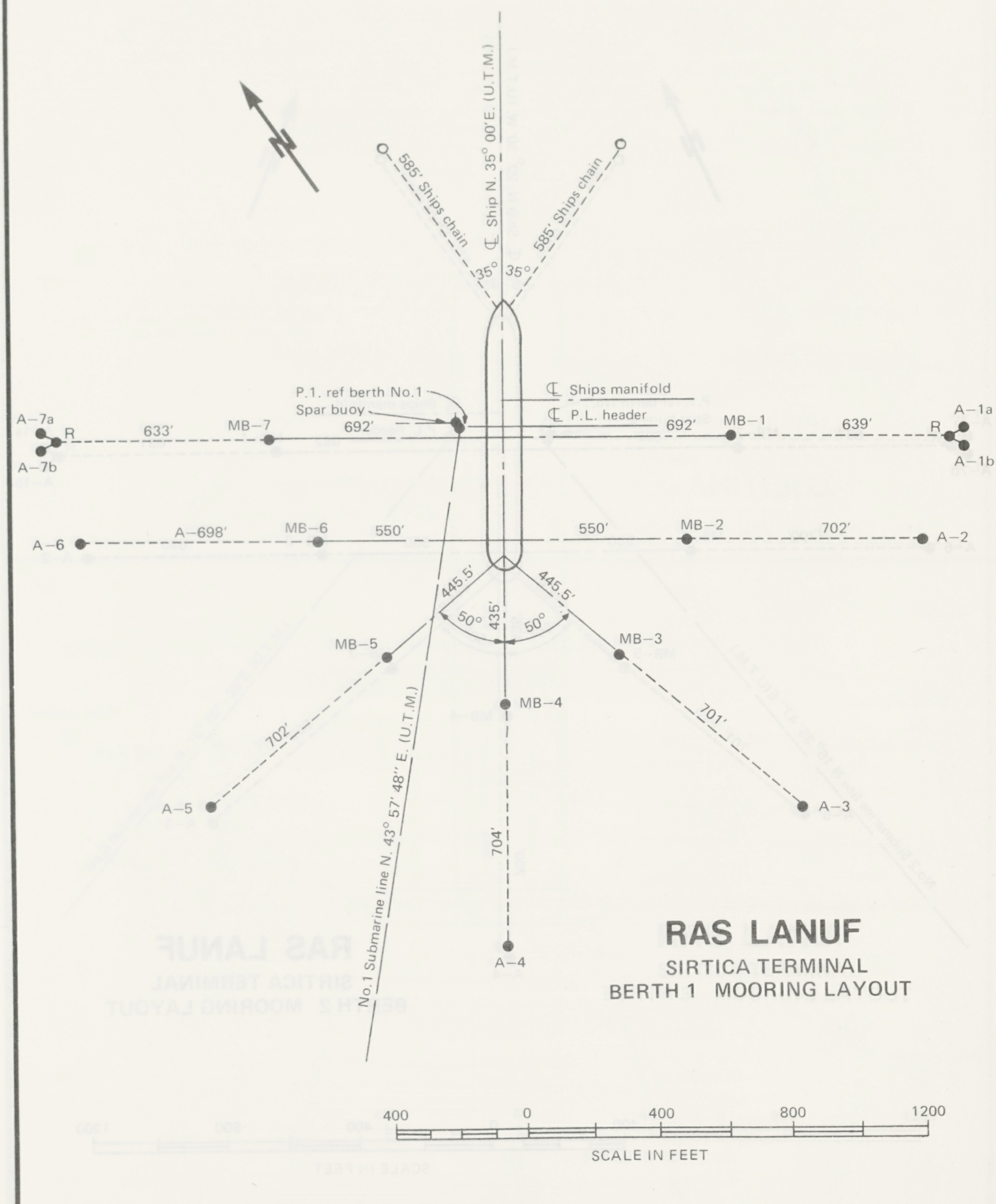


RAS LANUF
(SIRTICA TERMINAL)

30° 33′00″
18°33′00″
18°35′00″
30°33′00″
300° NAVIGATION AND ANCHOR LIMITATION 120°
N. 30°38′00″
E. 18°35′40″
3000′ Radius
3000′ Radius
SUGGESTED ANCHOR POSITION
SEABUOY
N. 30°32′40″
E. 18°34′38″
N
Berth No.3 337½
Berth No.2 337½
Berth No.1 35°
SPM
N. 30°31′35″
E. 18°33′00″
1–0 Sec Light 4–0 Sec. Eclipse
White
No.3 SUBMARINE LINE 42″ O.D.
No.2 SUBMARINE LINE 40″ O.D.
No.1 SUBMARINE LINE 40″ O.D.
No.4 SUBMARINE LINE 48″
Buoy
Buoy
Buoy
Small Boat Harbour
30°31′00″
RAS LANUF
1000
0
1000
2000
3000
4000
5000
6000
SCALE IN FEET

Not to be used for Navigation



RAS LANUF

SIRTICA TERMINAL

BERTH 1 MOORING LAYOUT

℄ Ship N. 35° 00′ E. (U.T.M.)
585′ Ships chain
585′ Ships chain
35°
35°
P.1. ref berth No.1
Spar buoy
℄ Ships manifold
℄ P.L. header
A–7a
A–7b
R
633′
MB–7
692′
692′
MB–1
639′
R
A–1a
A–1b
A–6
A–698′
MB–6
550′
550′
MB–2
702′
A–2
445.5′
445.5′
50°
435′
50°
MB–5
MB–3
MB–4
702′
701′
A–5
A–3
No.1 Submarine line N. 43° 57′ 48″ E. (U.T.M.)
704′
A–4
400
0
400
800
1200
SCALE IN FEET

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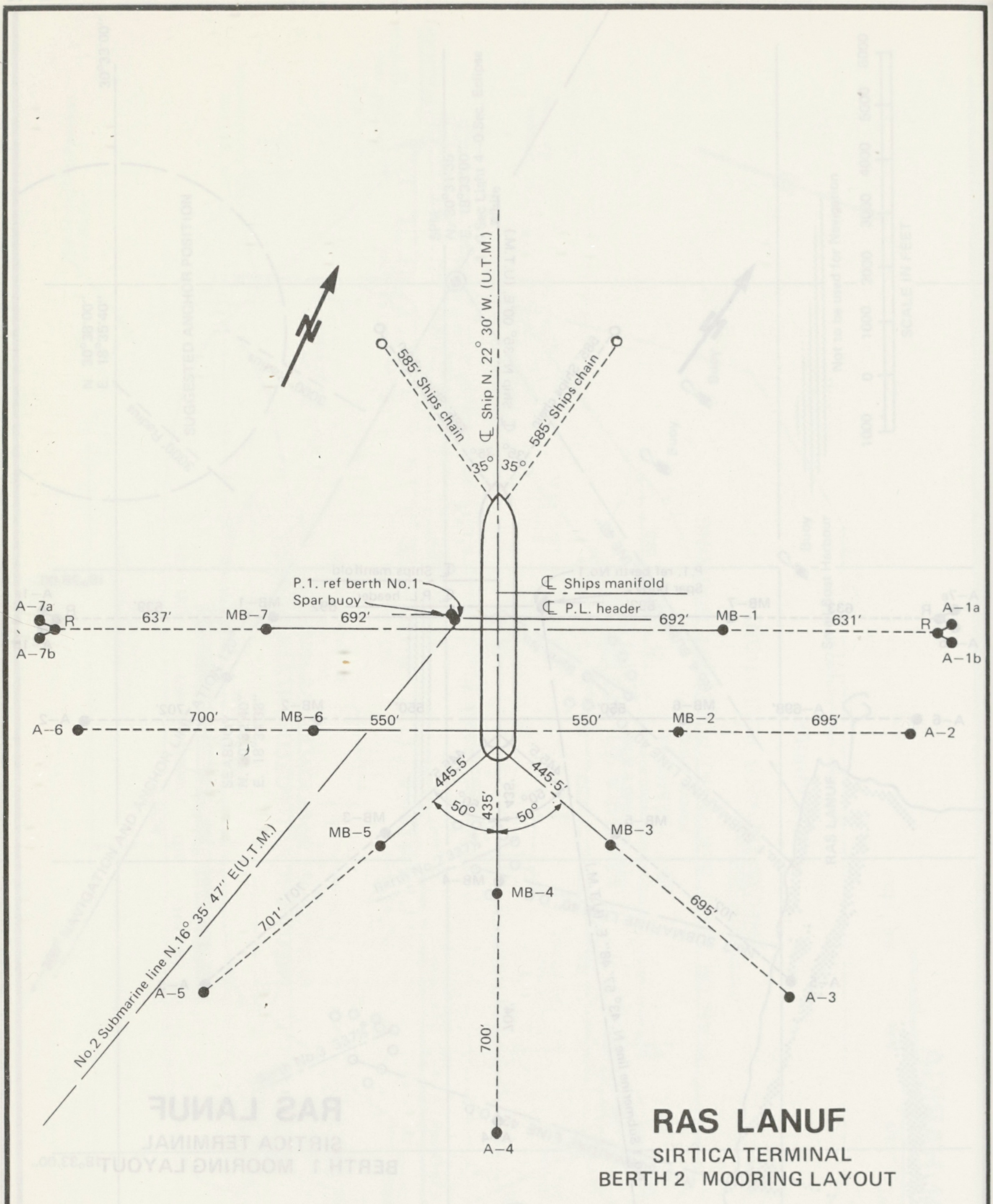
585' Ships chain
585' Ships chain
℄ Ship N. 22° 30' W. (U.T.M.)
35°
35°
P.1. ref berth No.1
Spar buoy
℄ Ships manifold
℄ P.L. header
A–7a
A–7b
R
637'
MB–7
692'
692'
MB–1
631'
R
A–1a
A–1b
A–6
700'
MB–6
550'
550'
MB–2
695'
A–2
445.5'
445.5'
50°
435'
50°
MB–5
MB–3
MB–4
701'
695'
A–5
A–3
No.2 Submarine line N.16° 35' 47'' E(U.T.M.)
700'
A–4
400
0
400
800
1200
SCALE IN FEET

RAS LANUF

SIRTICA TERMINAL
BERTH 2 MOORING LAYOUT

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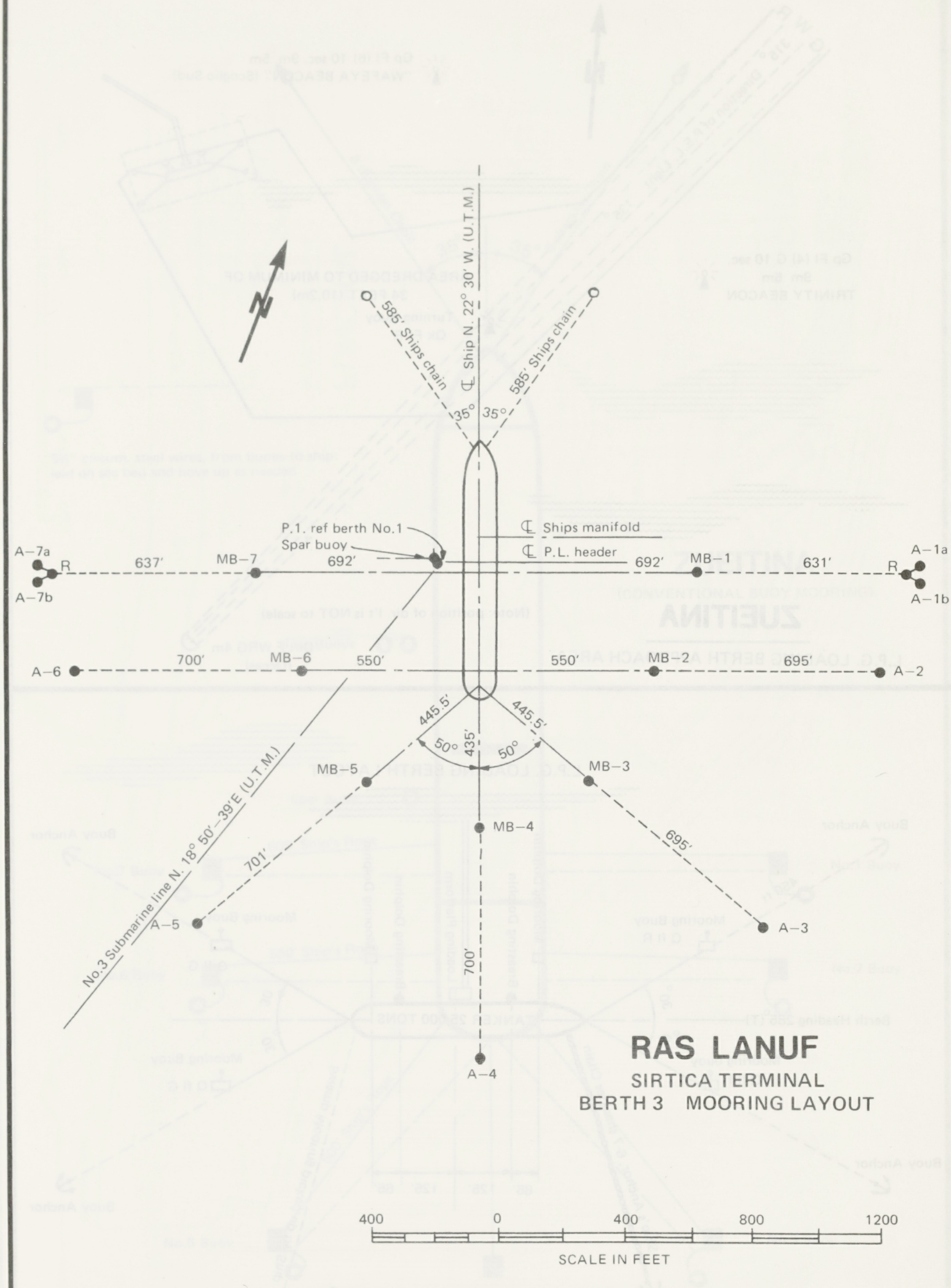
585' Ships chain
585' Ships chain
℄ Ship N. 22° 30' W. (U.T.M.)
35°
35°
℄ Ships manifold
℄ P.L. header
P.1. ref berth No.1
Spar buoy
A–7a
A–7b
R
637'
MB–7
692'
692'
MB–1
631'
R
A–1a
A–1b
A–6
700'
MB–6
550'
550'
MB–2
695'
A–2
445.5'
445.5'
435'
50°
50°
MB–5
MB–3
MB–4
695'
701'
A–5
A–3
700'
A–4
No.3 Submarine line N. 18° 50'–39'E (U.T.M.)
400
0
400
800
1200
SCALE IN FEET

RAS LANUF

SIRTICA TERMINAL
BERTH 3 MOORING LAYOUT

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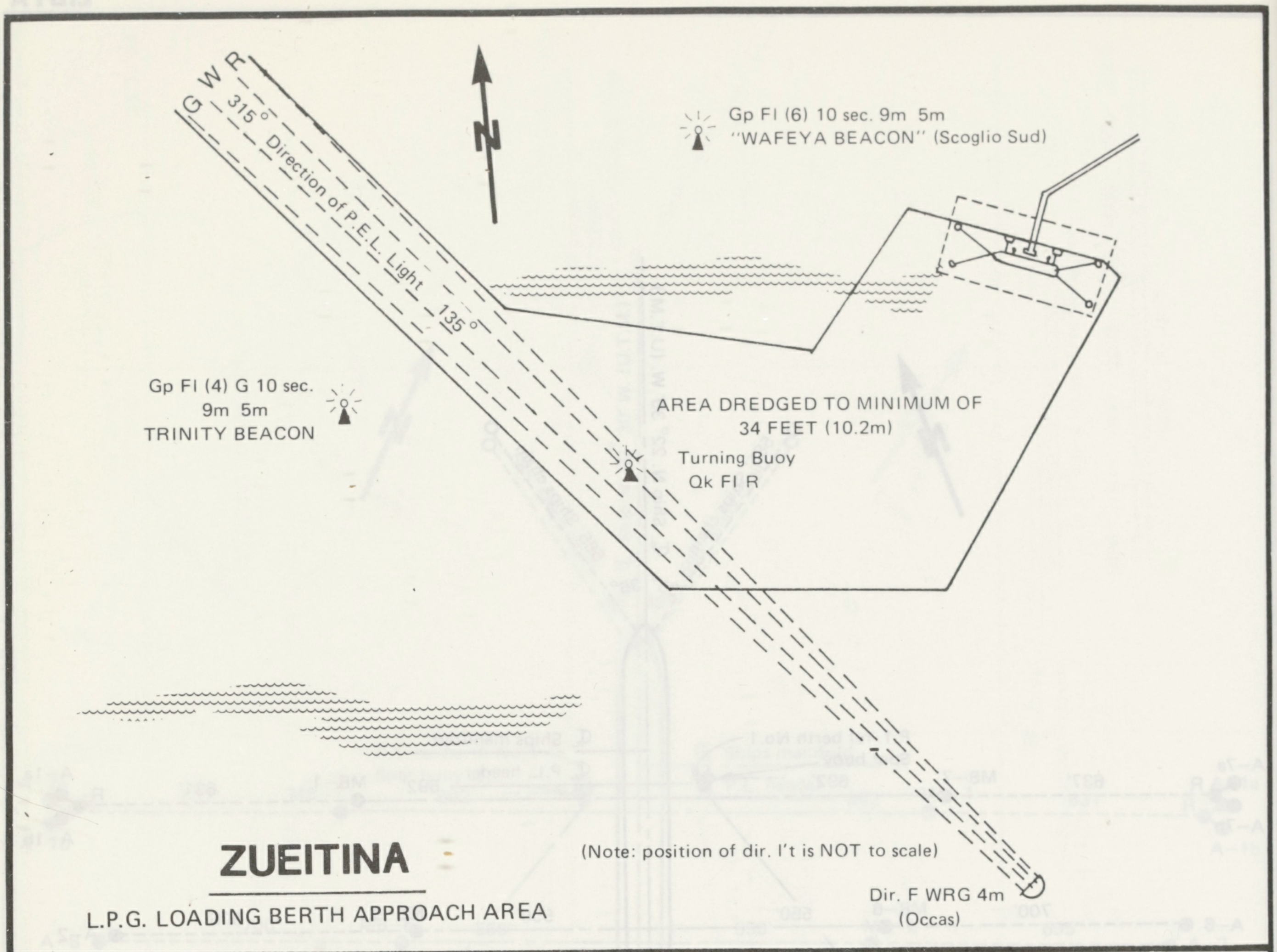
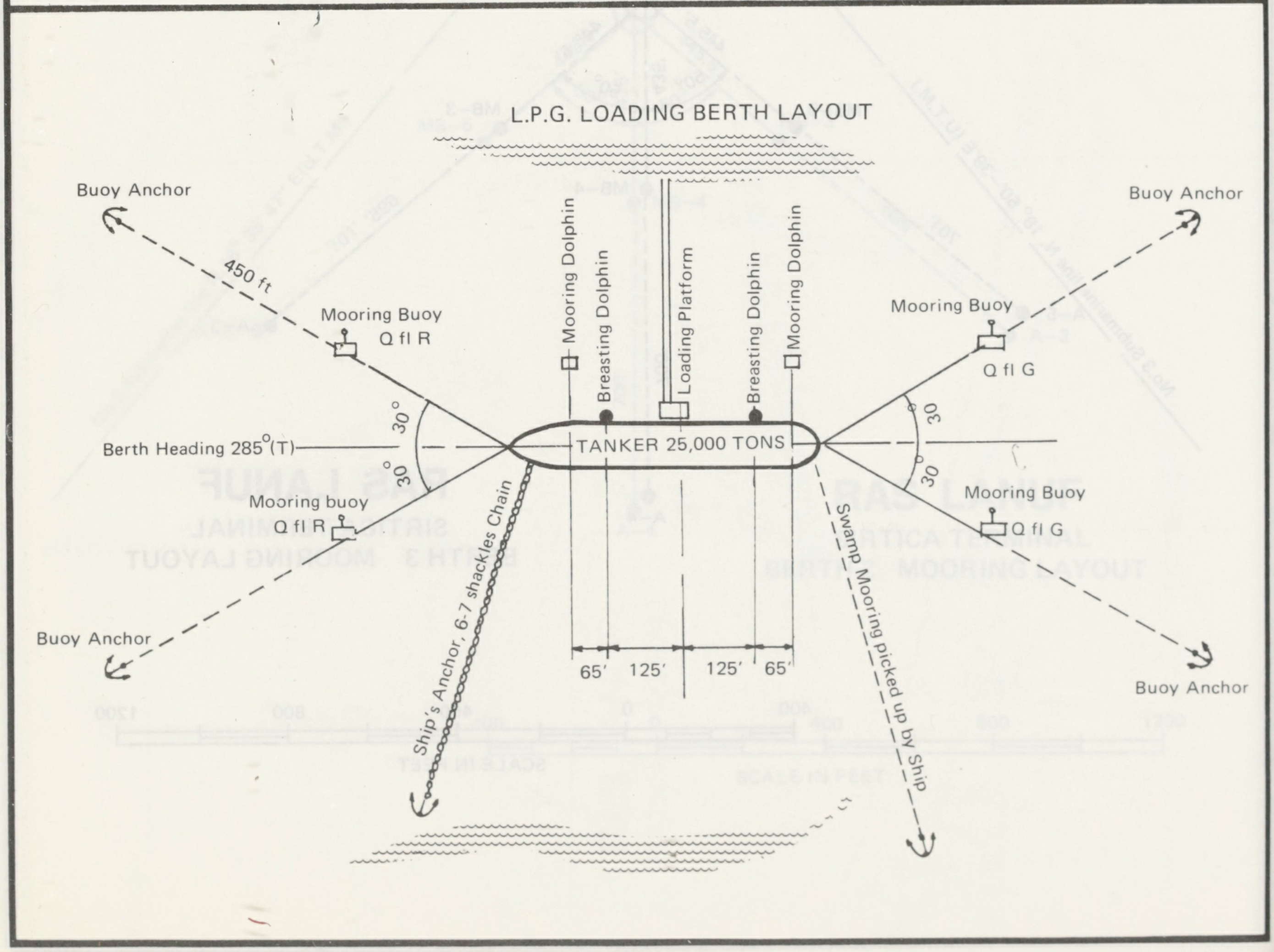

G W R
315°
Direction of P.E.L. Light
135°
N
Gp Fl (6) 10 sec. 9m 5m
"WAFEYA BEACON" (Scoglio Sud)
Gp Fl (4) G 10 sec.
9m 5m
TRINITY BEACON
AREA DREDGED TO MINIMUM OF
34 FEET (10.2m)
Turning Buoy
Qk Fl R
(Note: position of dir. l't is NOT to scale)
Dir. F WRG 4m
(Occas)

ZUEITINA

L.P.G. LOADING BERTH APPROACH AREA



L.P.G. LOADING BERTH LAYOUT

Buoy Anchor
450 ft
Mooring Buoy
Q fl R
Berth Heading 285°(T)
30°
30°
Mooring buoy
Q fl R
Buoy Anchor
Mooring Dolphin
Breasting Dolphin
Loading Platform
Breasting Dolphin
Mooring Dolphin
TANKER 25,000 TONS
Ship's Anchor, 6-7 shackles Chain
Swamp Mooring picked up by Ship
65'
125'
125'
65'
Buoy Anchor
Mooring Buoy
Q fl G
30
30
Mooring Buoy
Q fl G
Buoy Anchor

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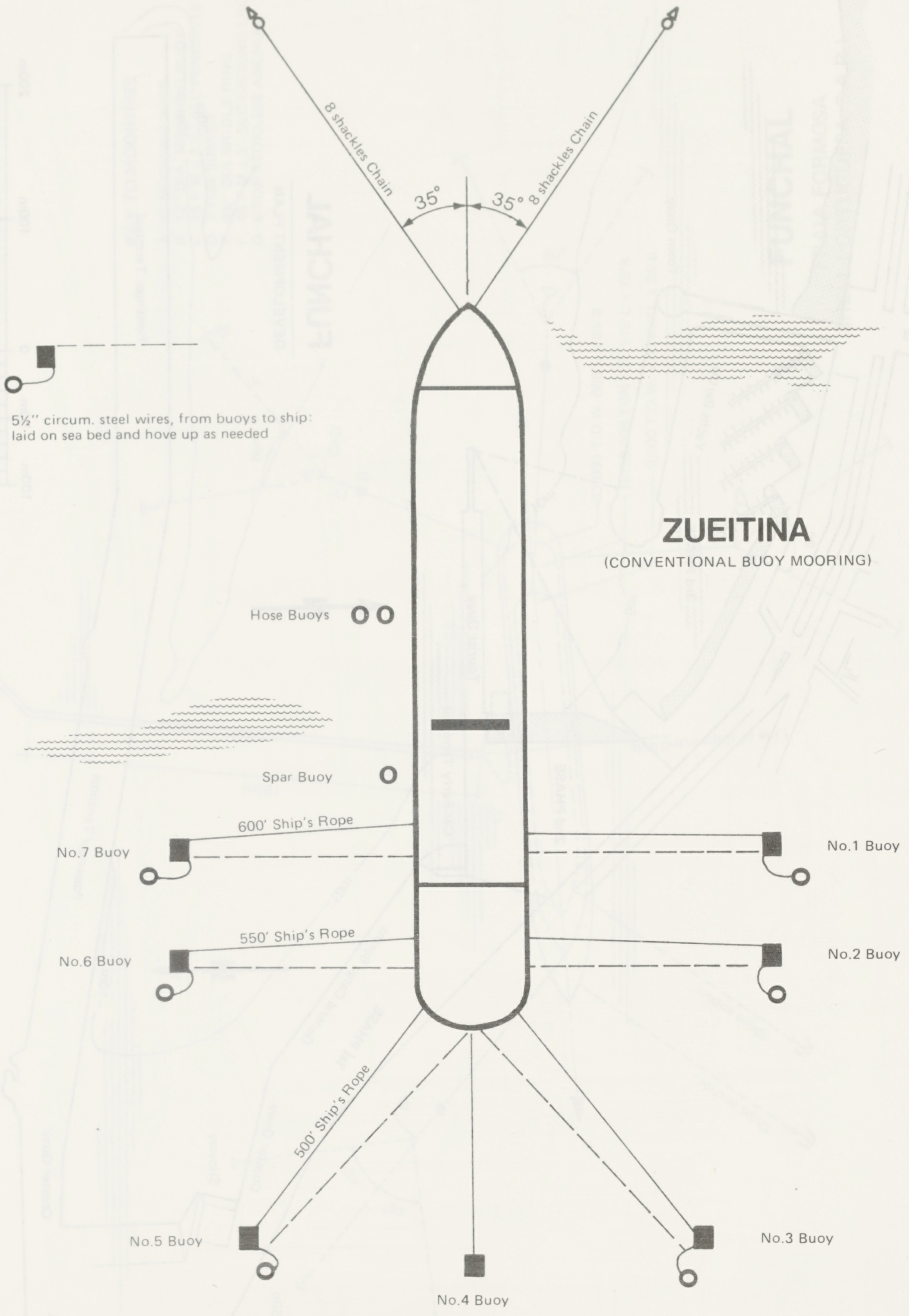
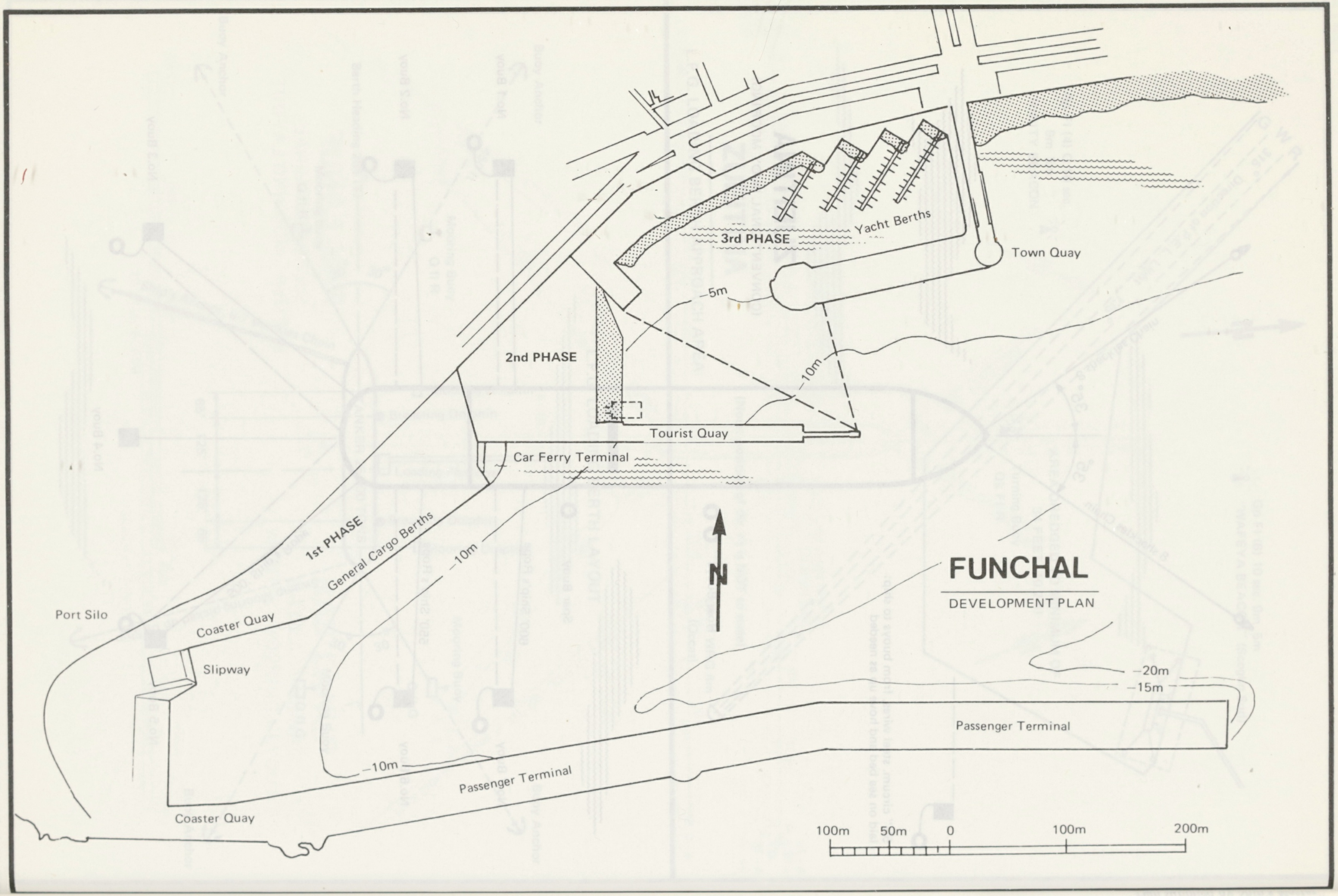
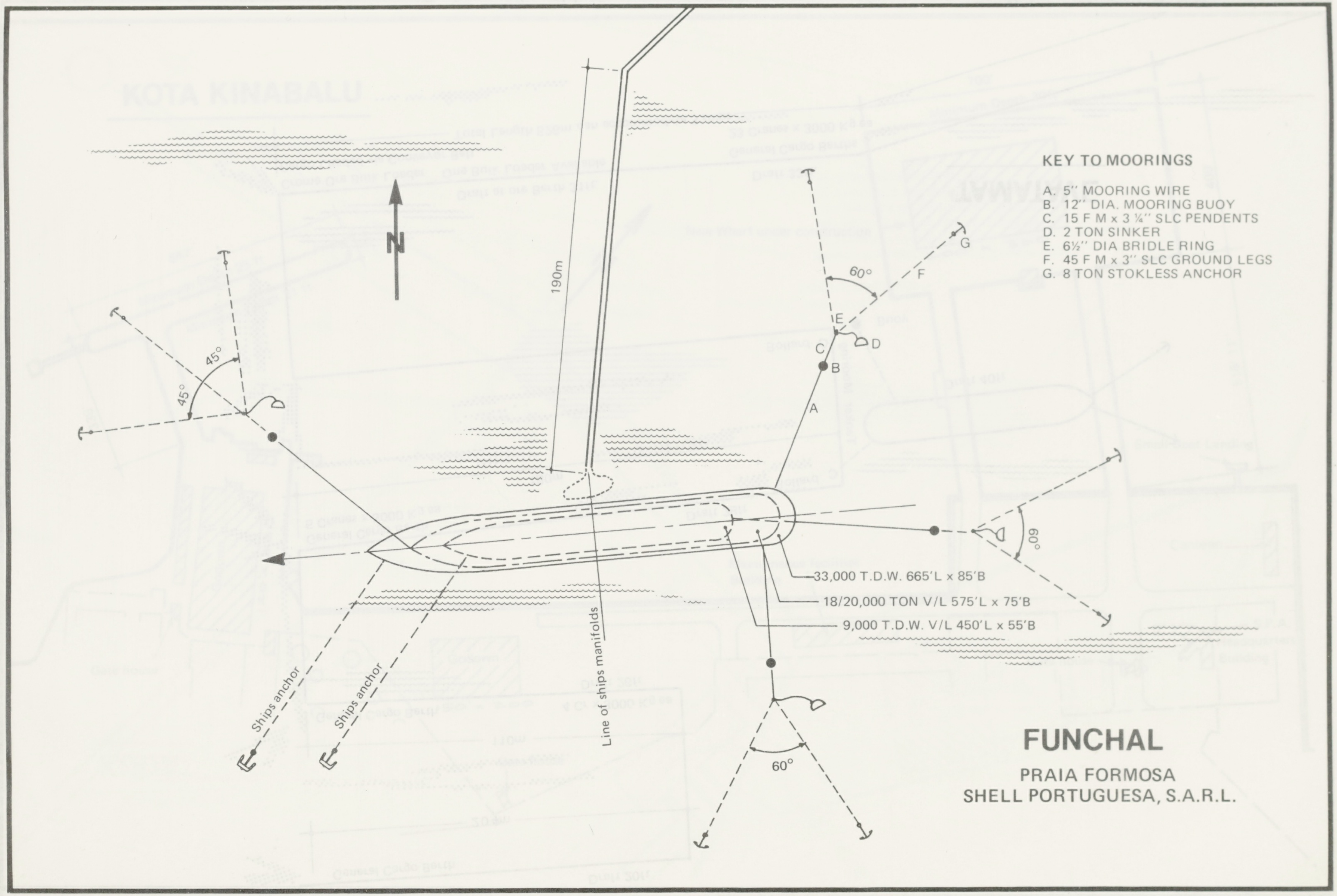
ZUEITINA

(CONVENTIONAL BUOY MOORING)


8 shackles Chain
8 shackles Chain
35°
35°
5½" circum. steel wires, from buoys to ship:
laid on sea bed and hove up as needed
Hose Buoys
Spar Buoy
600' Ship's Rope
No.7 Buoy
No.1 Buoy
550' Ship's Rope
No.6 Buoy
No.2 Buoy
500' Ship's Rope
No.5 Buoy
No.4 Buoy
No.3 Buoy


FUNCHAL
DEVELOPMENT PLAN
Town Quay
Yacht Berths
3rd PHASE
–5m
2nd PHASE
–10m
Tourist Quay
Car Ferry Terminal
1st PHASE
General Cargo Berths
–10m
Port Silo
Coaster Quay
Slipway
N
–20m
–15m
Passenger Terminal
–10m
Passenger Terminal
Coaster Quay
100m
50m
0
100m
200m


N
190m
Line of ships manifolds
Ships anchor
Ships anchor
45°
45°
60°
60°
60°
A
B
C
D
E
F
G
33,000 T.D.W. 665'L x 85'B
18/20,000 TON V/L 575'L x 75'B
9,000 T.D.W. V/L 450'L x 55'B

KEY TO MOORINGS

A. 5" MOORING WIRE
B. 12" DIA. MOORING BUOY
C. 15 F M x 3 ¼" SLC PENDENTS
D. 2 TON SINKER
E. 6½" DIA BRIDLE RING
F. 45 F M x 3" SLC GROUND LEGS
G. 8 TON STOKLESS ANCHOR

FUNCHAL

PRAIA FORMOSA
SHELL PORTUGUESA, S.A.R.L.

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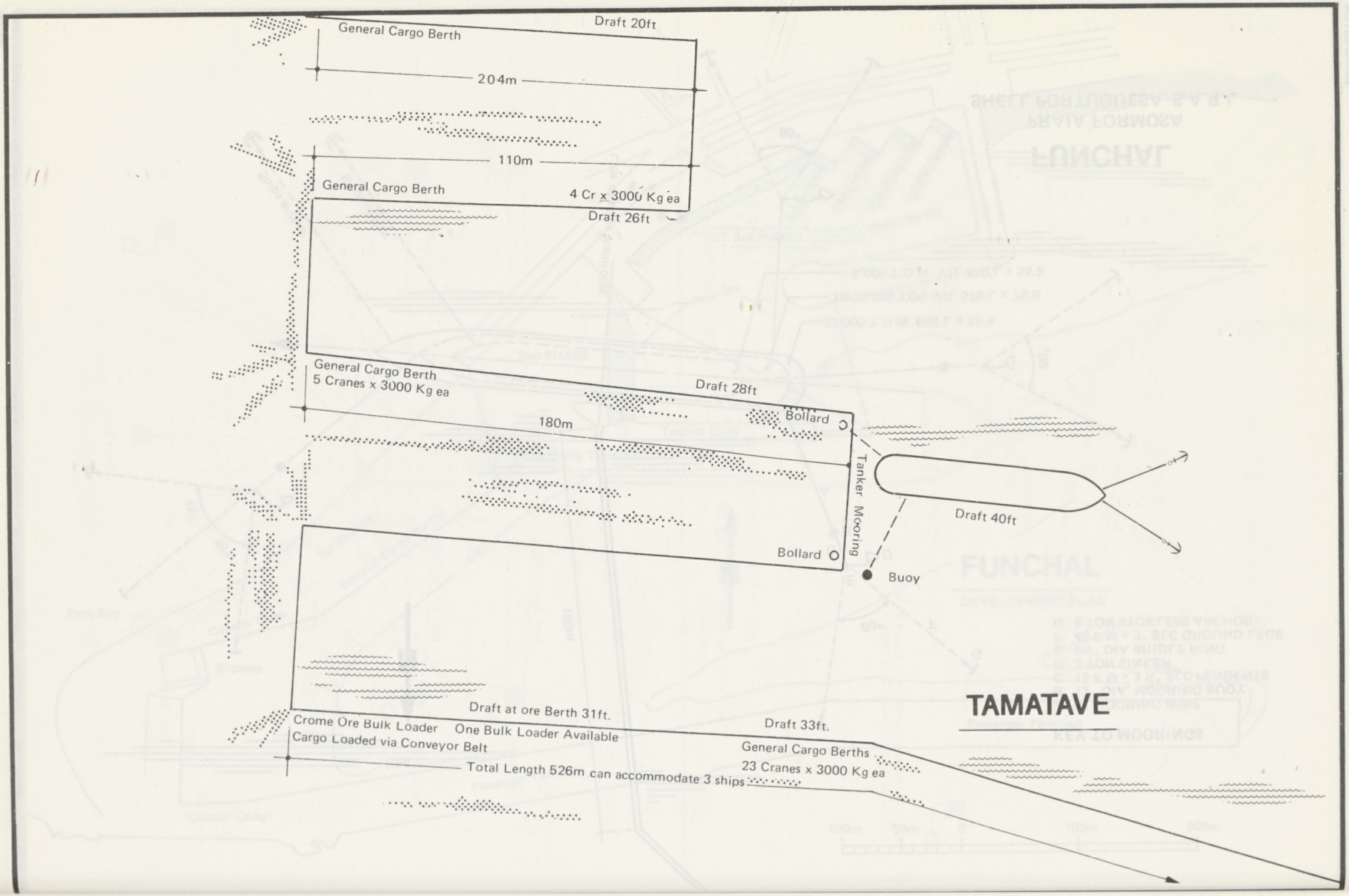
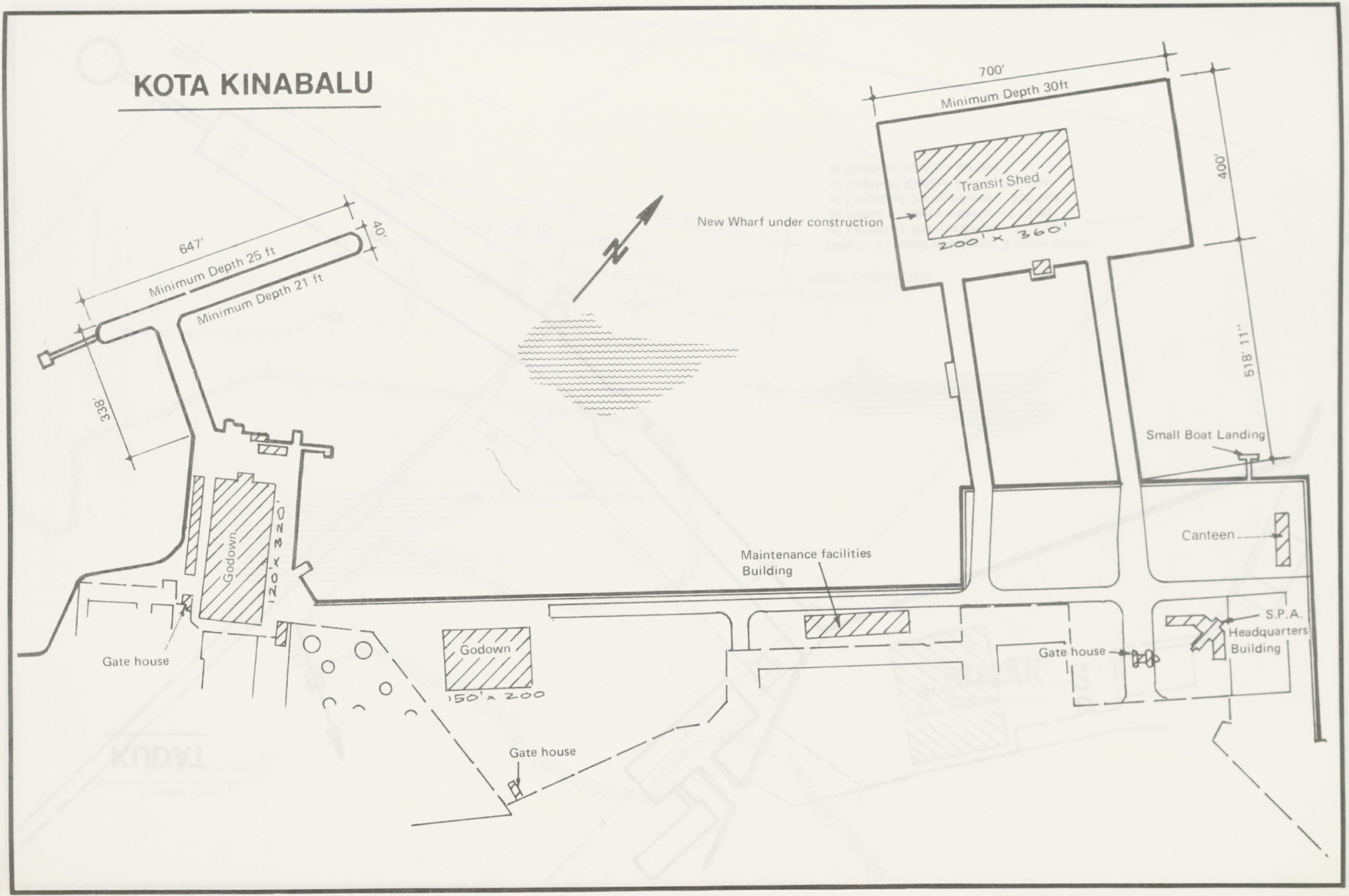
TAMATAVE


General Cargo Berth
Draft 20ft
204m
110m
General Cargo Berth
4 Cr x 3000 Kg ea
Draft 26ft
General Cargo Berth
5 Cranes x 3000 Kg ea
Draft 28ft
180m
Bollard
Tanker Mooring
Bollard
Draft 40ft
Buoy
Draft at ore Berth 31ft.
Crome Ore Bulk Loader
Cargo Loaded via Conveyor Belt
One Bulk Loader Available
Draft 33ft.
General Cargo Berths
23 Cranes x 3000 Kg ea
Total Length 526m can accommodate 3 ships

KOTA KINABALU


700'
Minimum Depth 30ft
400'
Transit Shed
200' x 360'
New Wharf under construction
518' 11"
647'
40'
Minimum Depth 25 ft
Minimum Depth 21 ft
338'
Small Boat Landing
Canteen
Godown
120' x 320'
Maintenance facilities Building
S.P.A. Headquarters Building
Gate house
Godown
150' x 200
Gate house
Gate house

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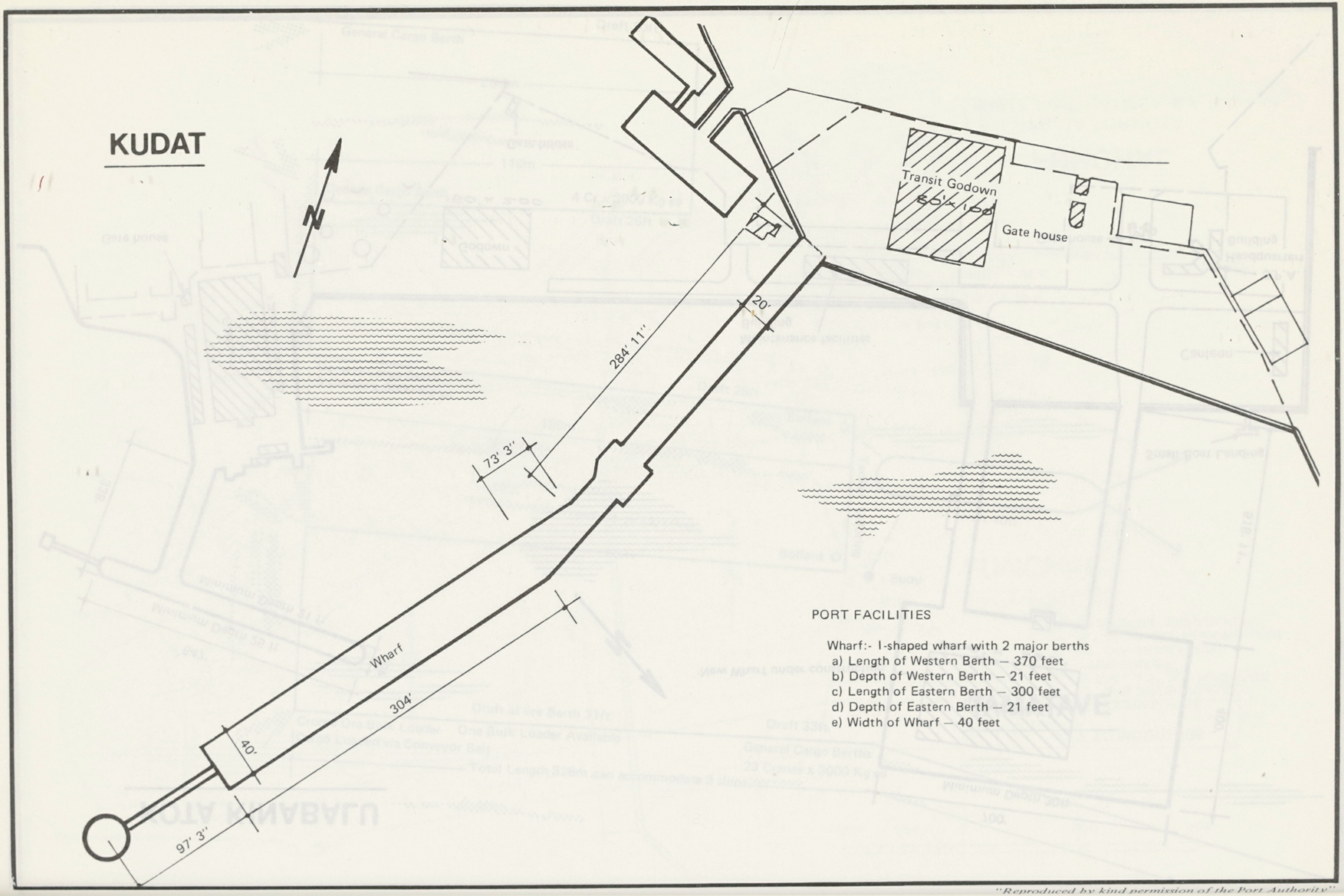
KUDAT


N
Transit Godown
60'x100'
Gate house
20'
284' 11"
73' 3"
Wharf
304'
40'
97' 3"

PORT FACILITIES

Wharf:- I-shaped wharf with 2 major berths
- a) Length of Western Berth – 370 feet
- b) Depth of Western Berth – 21 feet
- c) Length of Eastern Berth – 300 feet
- d) Depth of Eastern Berth – 21 feet
- e) Width of Wharf – 40 feet

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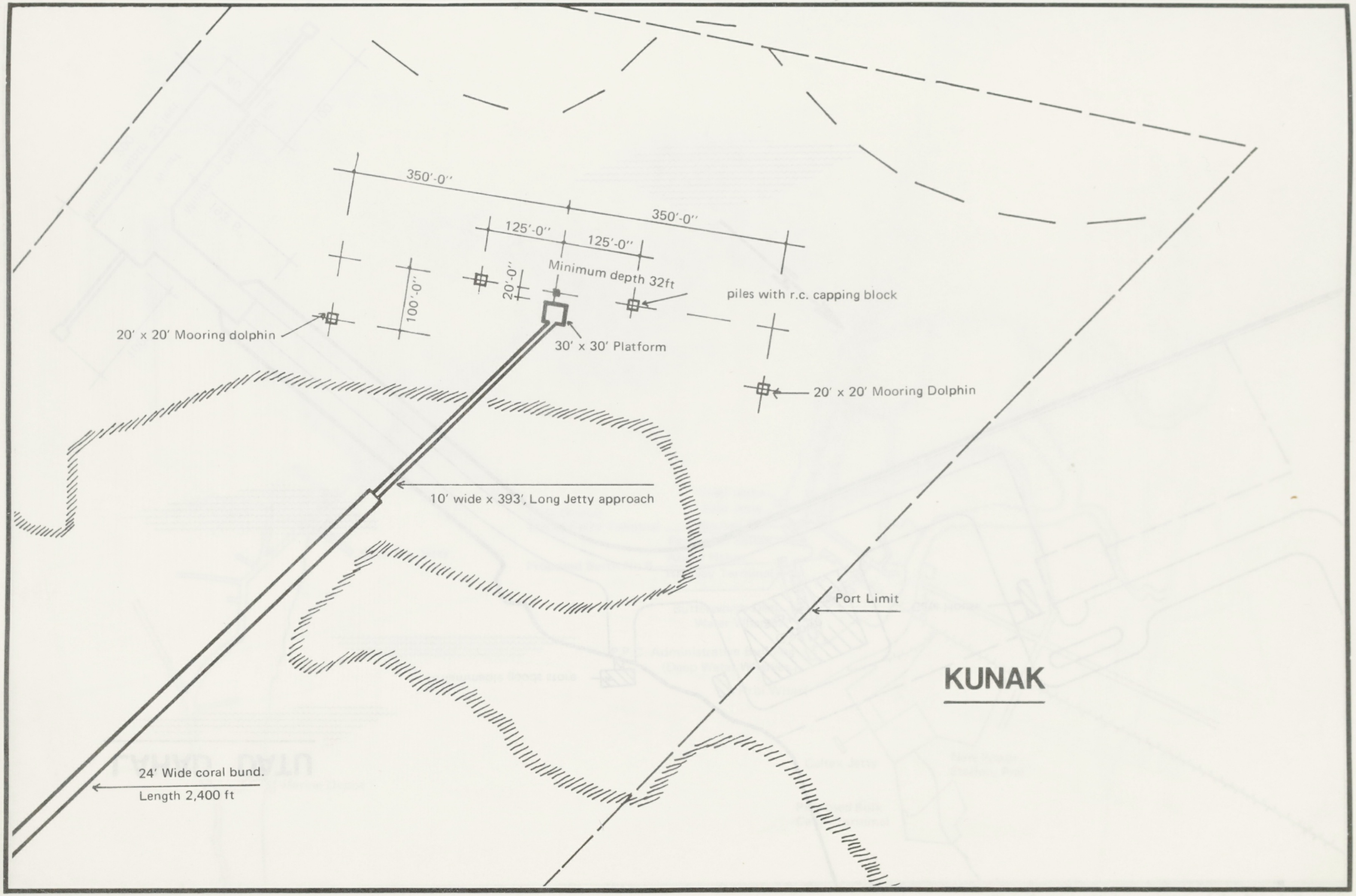
350′-0″
350′-0″
125′-0″
125′-0″
Minimum depth 32ft
piles with r.c. capping block
20′-0″
100′-0″
20′ x 20′ Mooring dolphin
30′ x 30′ Platform
20′ x 20′ Mooring Dolphin
10′ wide x 393′, Long Jetty approach
Port Limit
24′ Wide coral bund.
Length 2,400 ft

KUNAK

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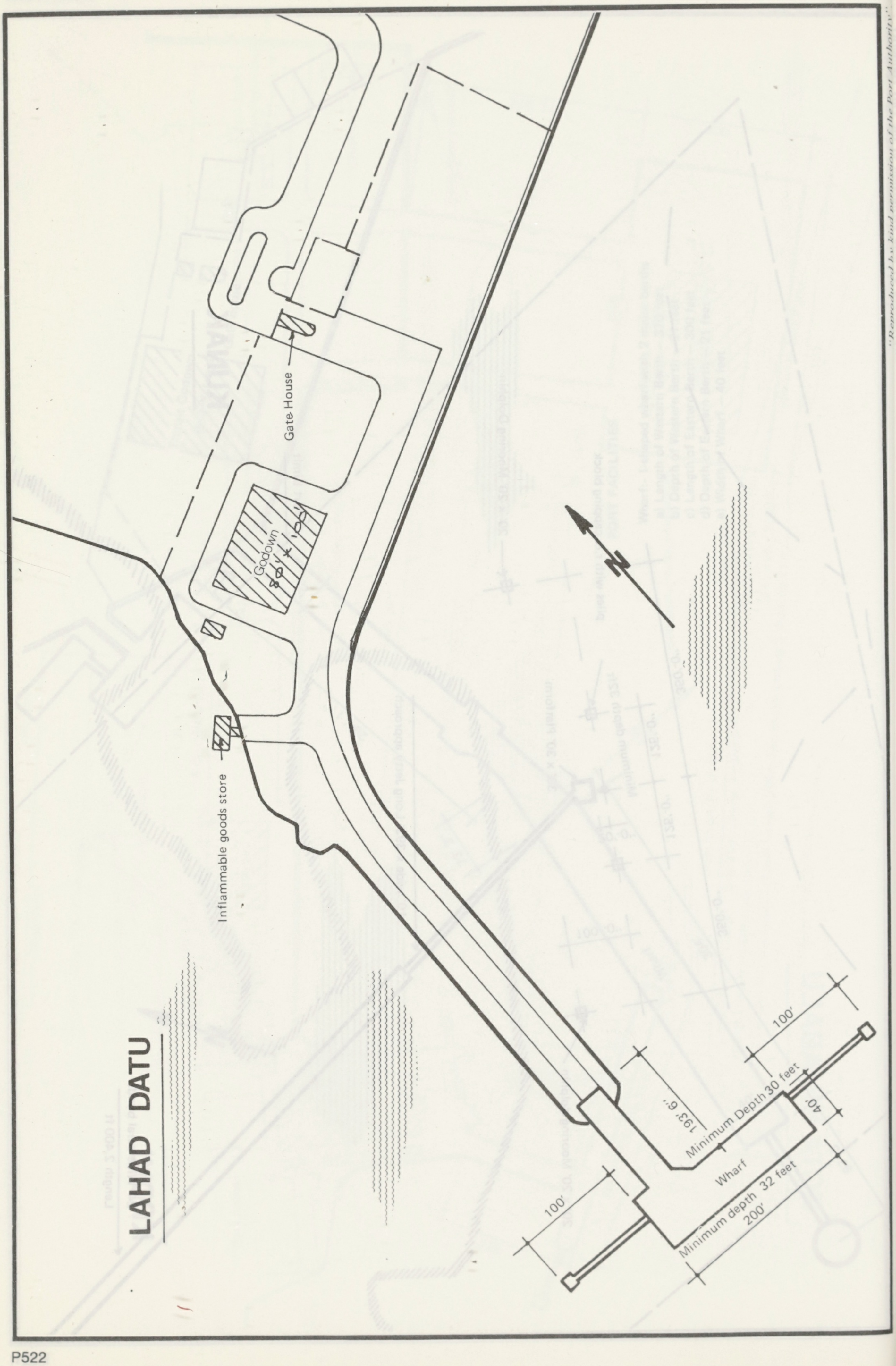
LAHAD DATU


Gate House
Godown
Inflammable goods store
N
193' 6"
100'
100'
Minimum Depth 30 feet
40'
Wharf
Minimum depth 32 feet
200'

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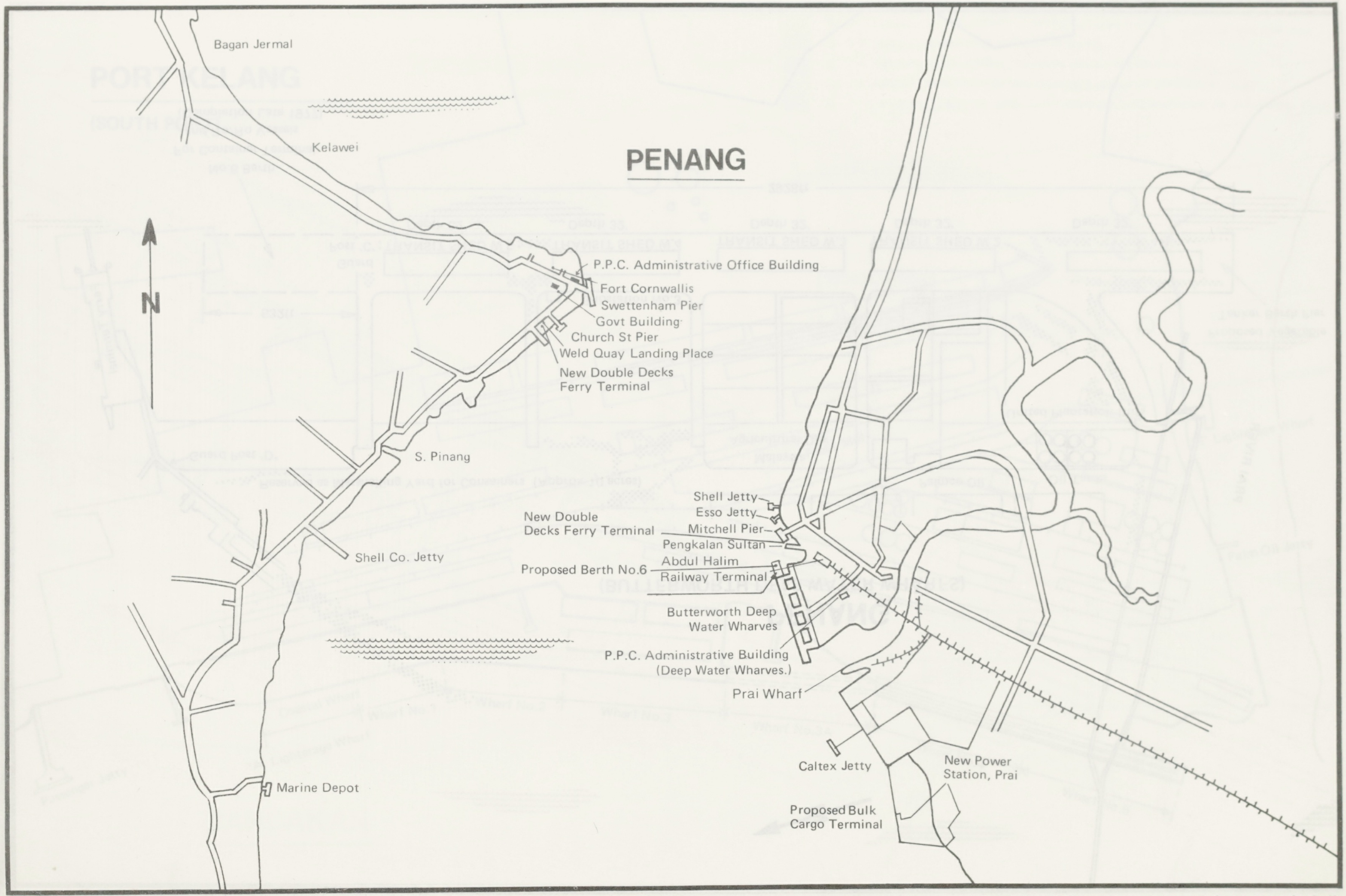
PENANG
N
Bagan Jermal
Kelawei
P.P.C. Administrative Office Building
Fort Cornwallis
Swettenham Pier
Govt Building
Church St Pier
Weld Quay Landing Place
New Double Decks
Ferry Terminal
S. Pinang
Shell Co. Jetty
Marine Depot
Shell Jetty
Esso Jetty
Mitchell Pier
Pengkalan Sultan
Abdul Halim
Railway Terminal
New Double
Decks Ferry Terminal
Proposed Berth No.6
Butterworth Deep
Water Wharves
P.P.C. Administrative Building
(Deep Water Wharves.)
Prai Wharf
Caltex Jetty
New Power
Station, Prai
Proposed Bulk
Cargo Terminal

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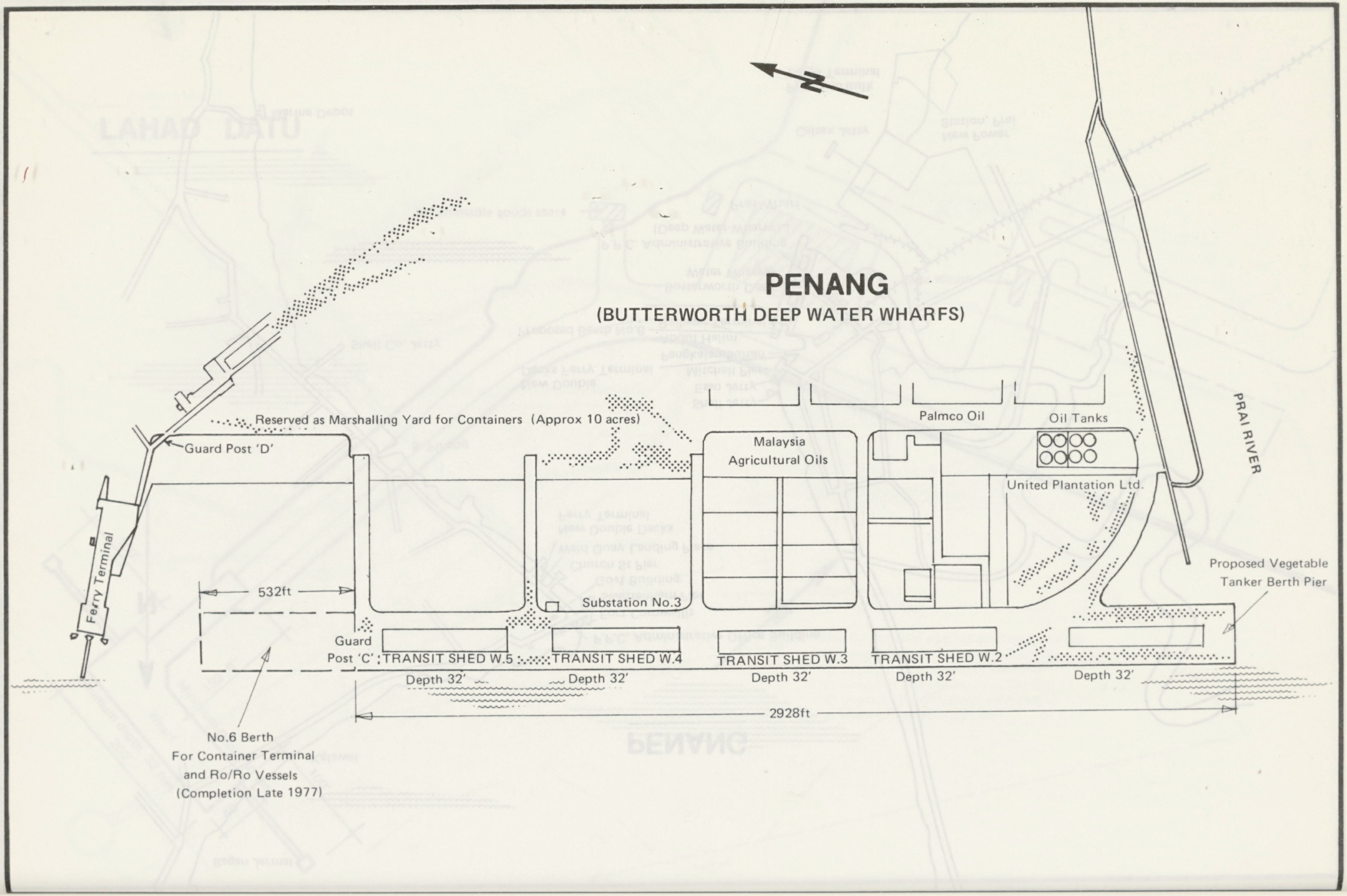


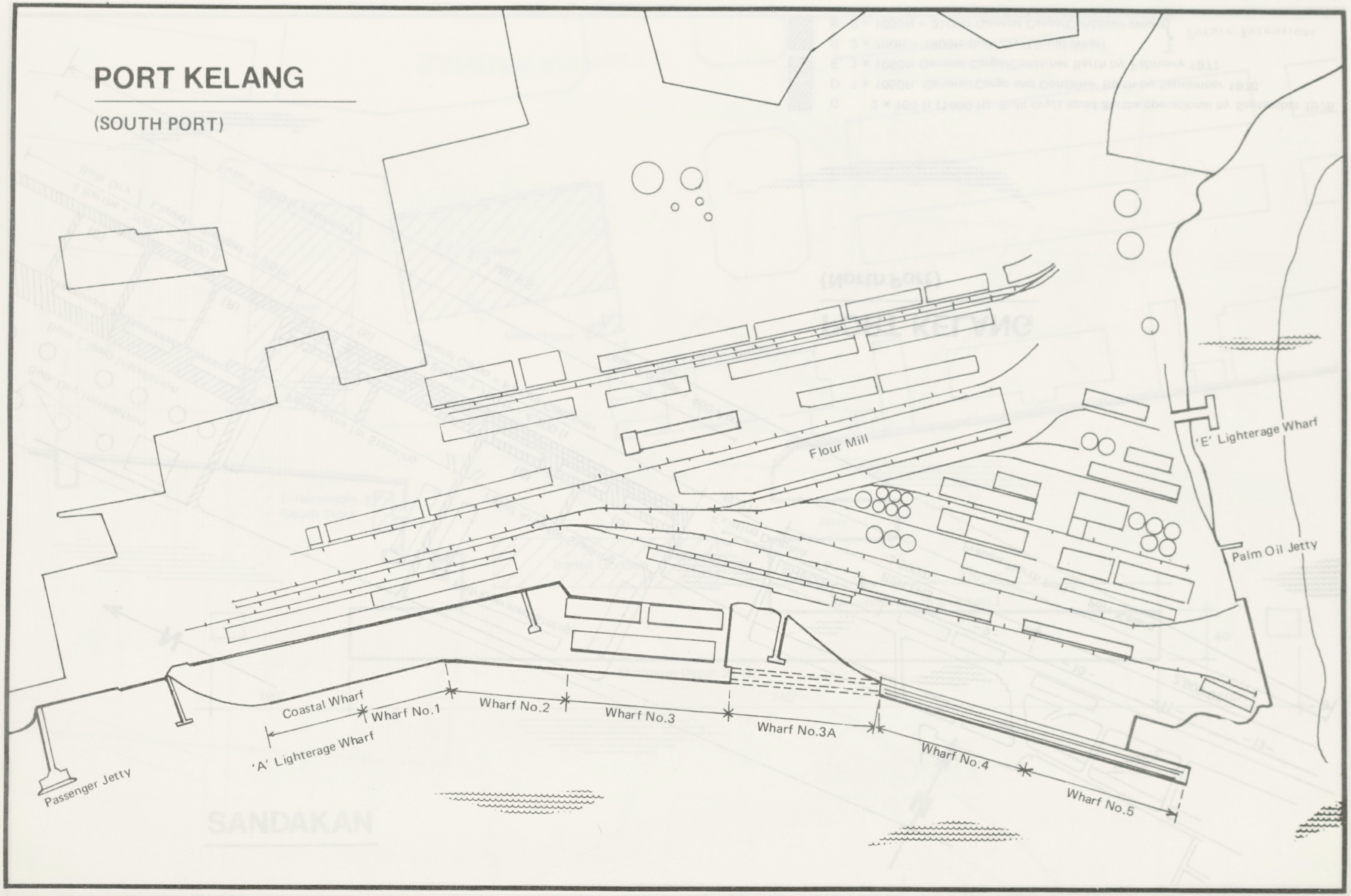
PENANG

(BUTTERWORTH DEEP WATER WHARFS)

N
Reserved as Marshalling Yard for Containers (Approx 10 acres)
Guard Post 'D'
Ferry Terminal
532ft
Guard Post 'C'
TRANSIT SHED W.5
Depth 32'
Substation No.3
TRANSIT SHED W.4
Depth 32'
Malaysia Agricultural Oils
TRANSIT SHED W.3
Depth 32'
Palmco Oil
TRANSIT SHED W.2
Depth 32'
Oil Tanks
United Plantation Ltd.
Depth 32'
PRAI RIVER
Proposed Vegetable Tanker Berth Pier
2928ft
No.6 Berth For Container Terminal and Ro/Ro Vessels (Completion Late 1977)

PORT KELANG

(SOUTH PORT)


Flour Mill
'E' Lighterage Wharf
Palm Oil Jetty
Coastal Wharf
Wharf No.1
Wharf No.2
Wharf No.3
Wharf No.3A
Wharf No.4
Wharf No.5
'A' Lighterage Wharf
Passenger Jetty

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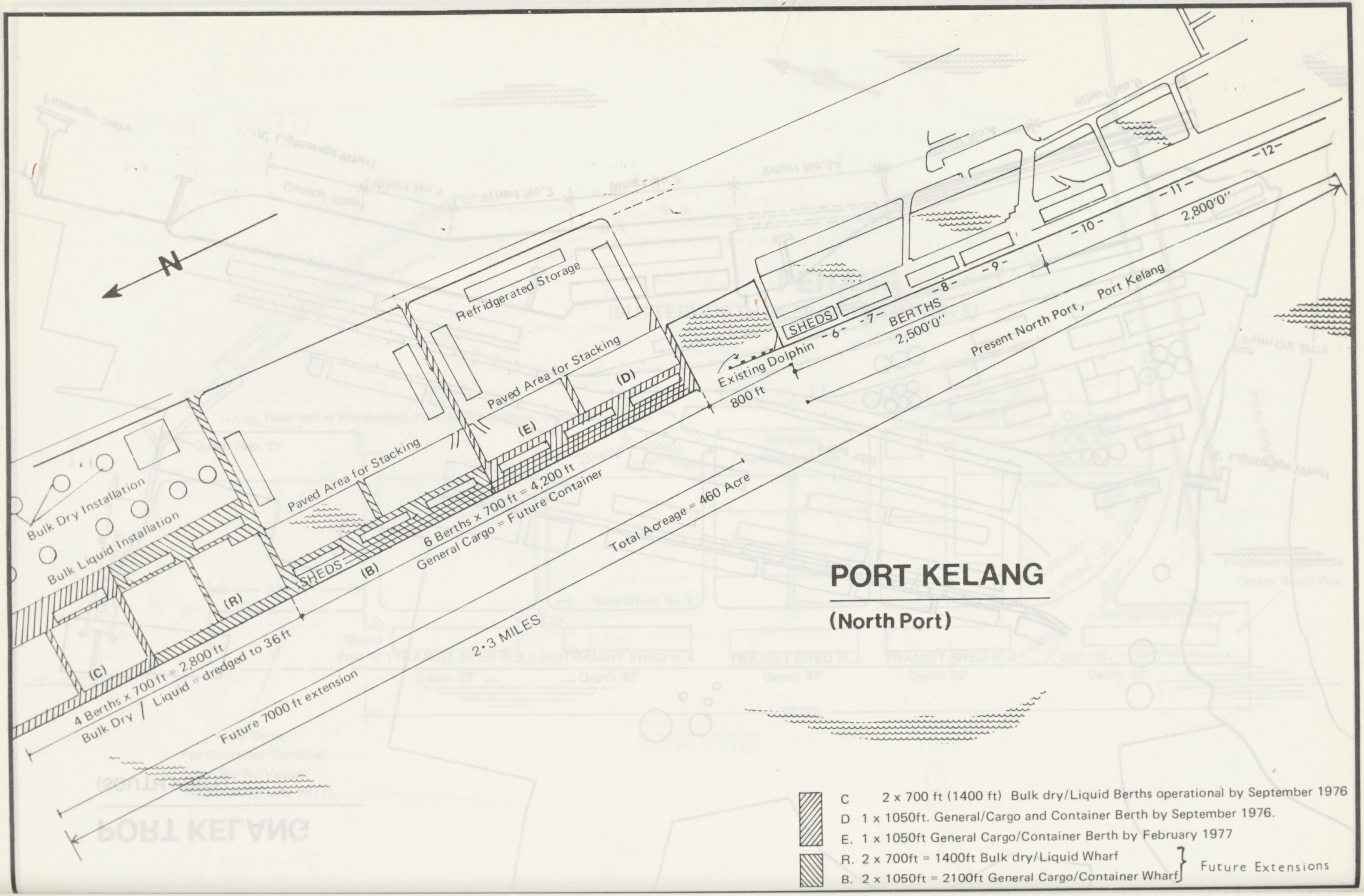

N
Refridgerated Storage
Paved Area for Stacking
Paved Area for Stacking
(D)
(E)
(B)
(R)
(C)
SHEDS
SHEDS
Bulk Dry Installation
Bulk Liquid Installation
6 Berths x 700 ft = 4,200 ft
General Cargo = Future Container
Total Acreage = 460 Acre
2·3 MILES
Future 7000 ft extension
4 Berths x 700 ft = 2,800 ft
Bulk Dry / Liquid = dredged to 36 ft
Existing Dolphin
800 ft
– 6 –
– 7 –
– 8 –
– 9 –
– 10 –
– 11 –
– 12 –
BERTHS
2,500'0"
2,800'0"
Present North Port, Port Kelang

PORT KELANG

(North Port)

▨ C 2 x 700 ft (1400 ft) Bulk dry/Liquid Berths operational by September 1976

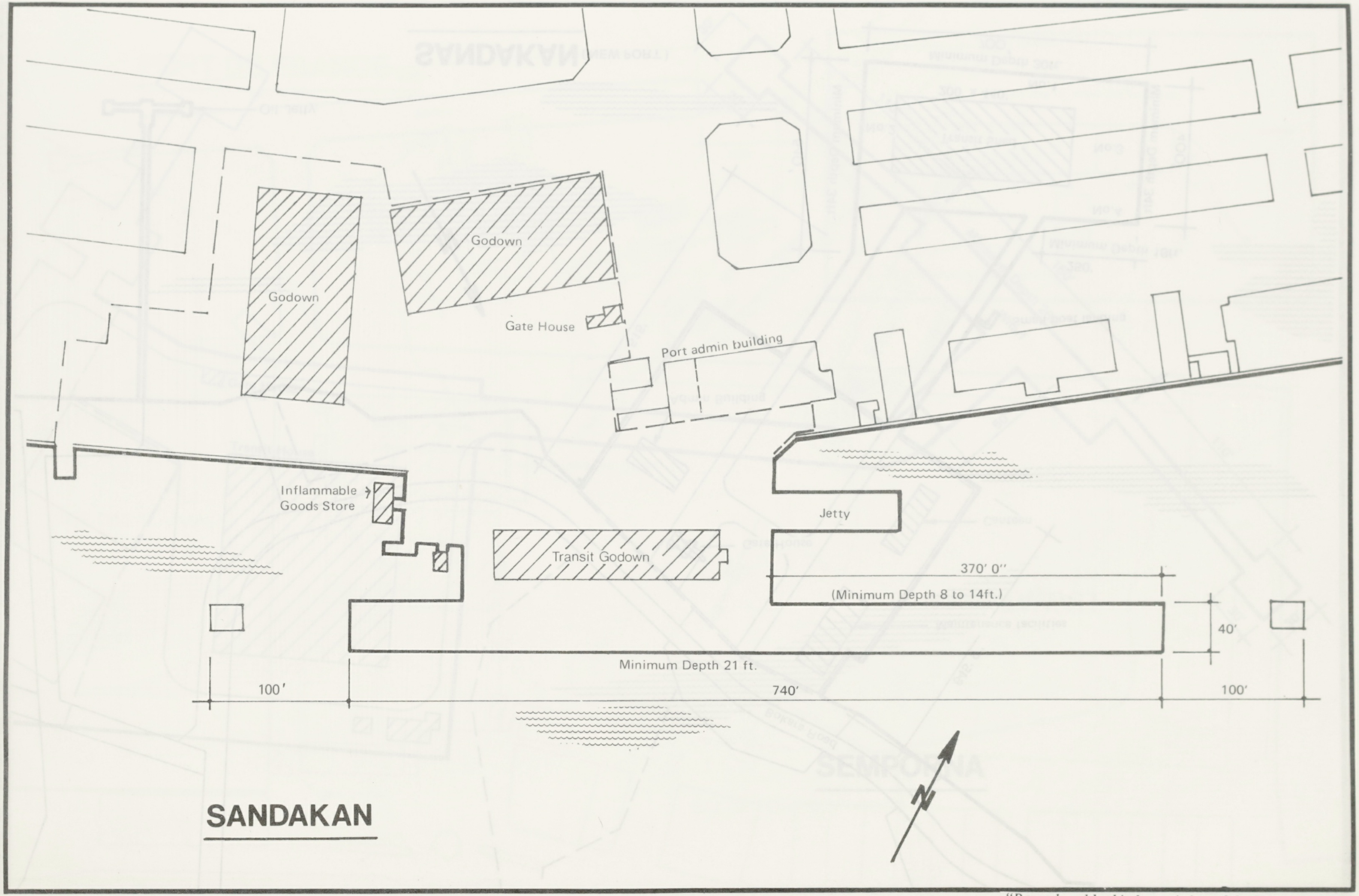
▨ D 1 x 1050ft. General/Cargo and Container Berth by September 1976.

▨ E. 1 x 1050ft General Cargo/Container Berth by February 1977

▨ R. 2 x 700ft = 1400ft Bulk dry/Liquid Wharf

▨ B. 2 x 1050ft = 2100ft General Cargo/Container Wharf

} Future Extensions


Godown
Godown
Gate House
Port admin building
Inflammable Goods Store
Transit Godown
Jetty
370′ 0″
(Minimum Depth 8 to 14ft.)
40′
Minimum Depth 21 ft.
100′
740′
100′
N
SANDAKAN

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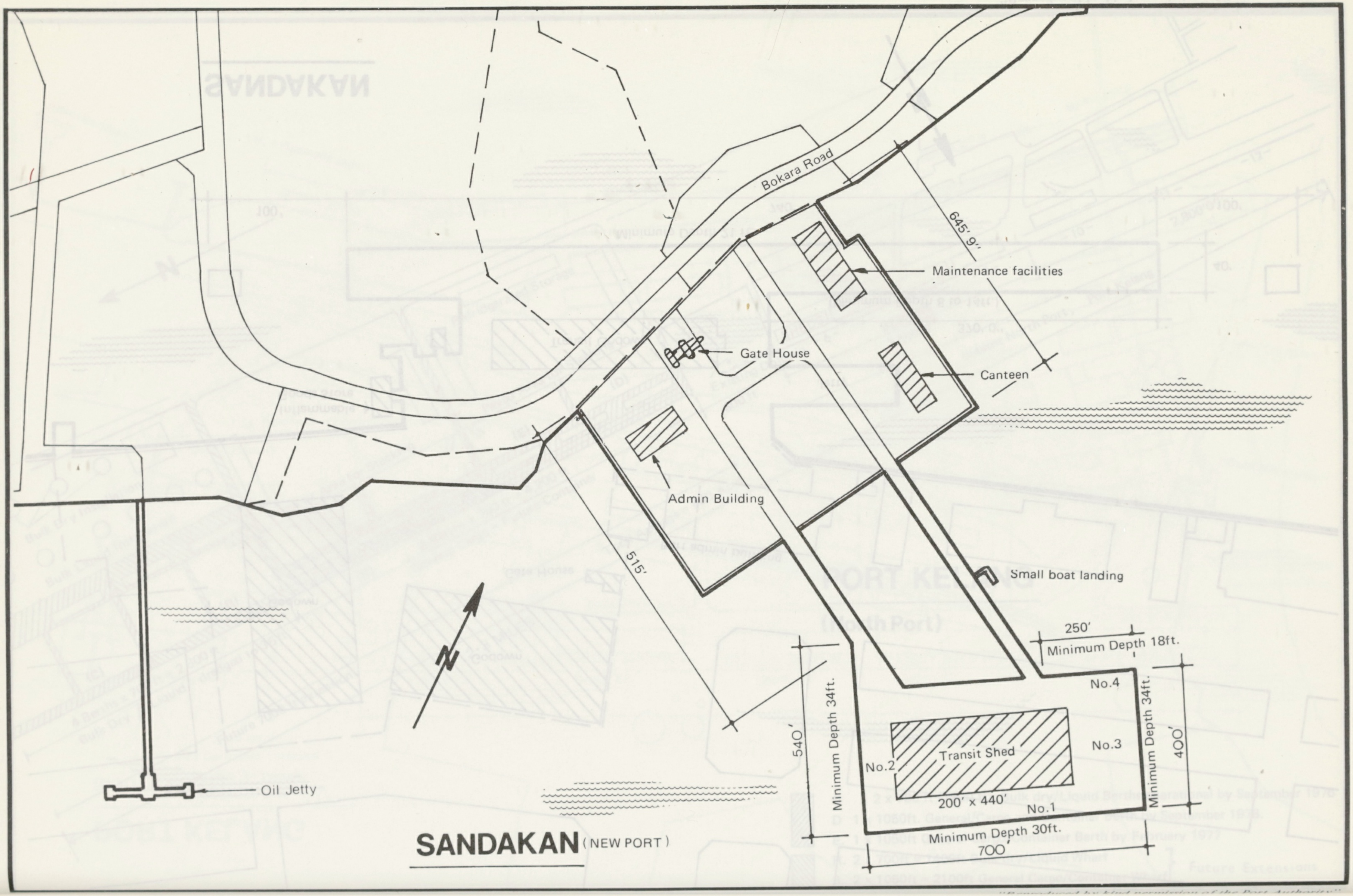
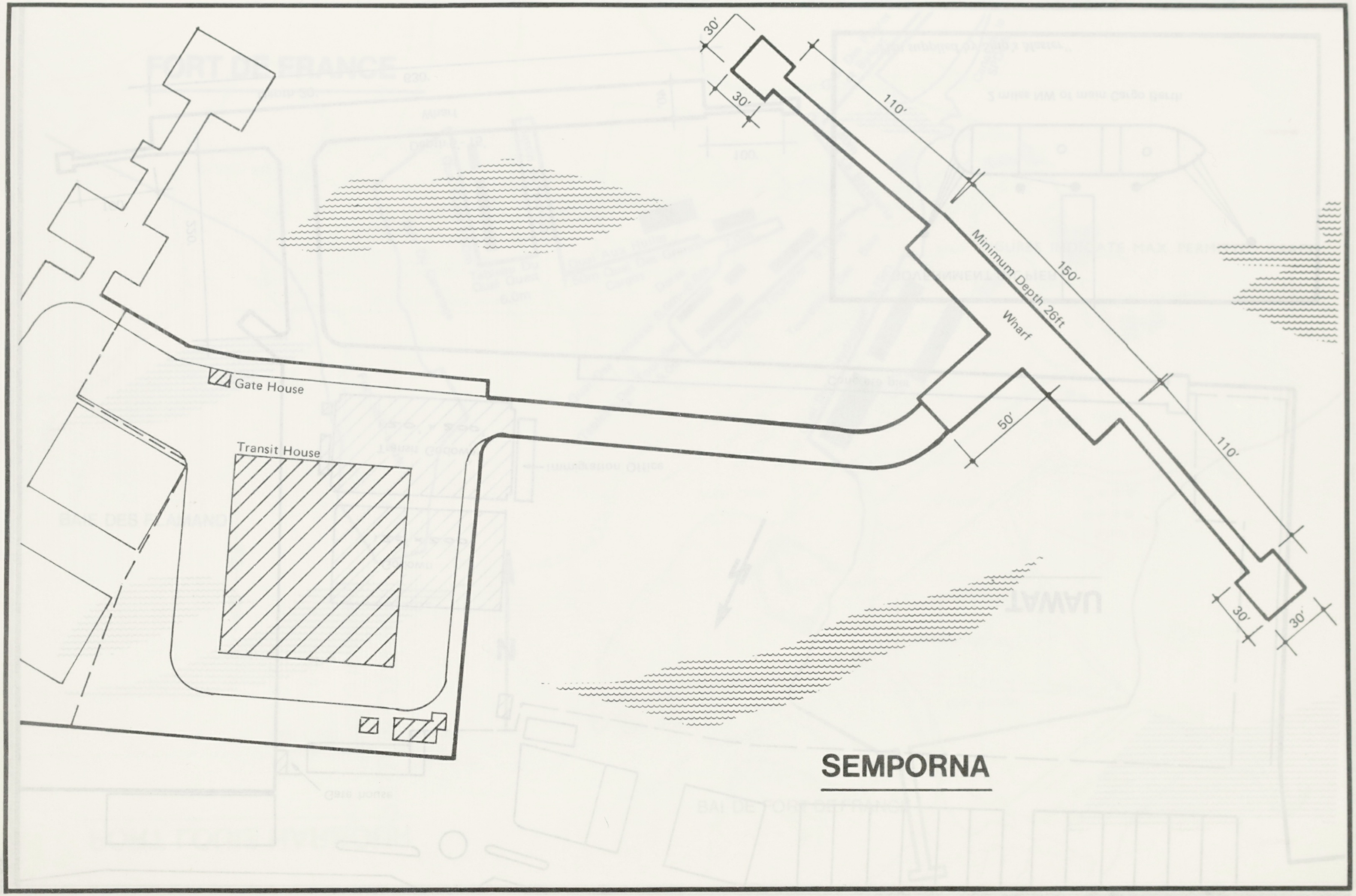

Bokara Road
645' 9"
Maintenance facilities
Gate House
Canteen
Admin Building
515'
Small boat landing
250'
Minimum Depth 18ft.
No.4
Minimum Depth 34ft.
400'
No.3
Transit Shed
No.2
200' × 440'
No.1
Minimum Depth 34ft.
540'
Minimum Depth 30ft.
700'
Oil Jetty
N

SANDAKAN (NEW PORT)


30'
30'
110'
150'
Minimum Depth 26ft
Wharf
50'
110'
30'
30'
Gate House
Transit House

SEMPORNA

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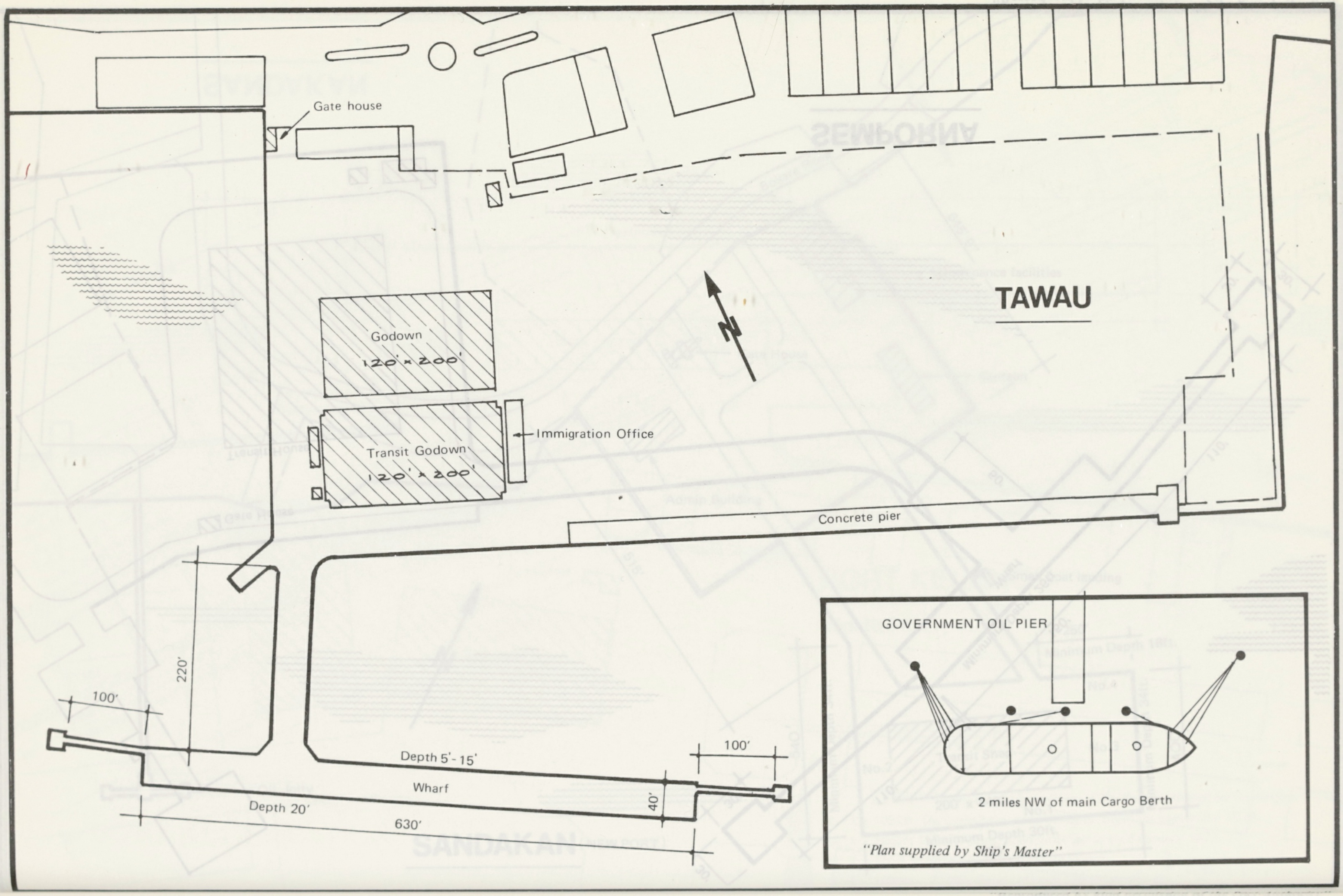
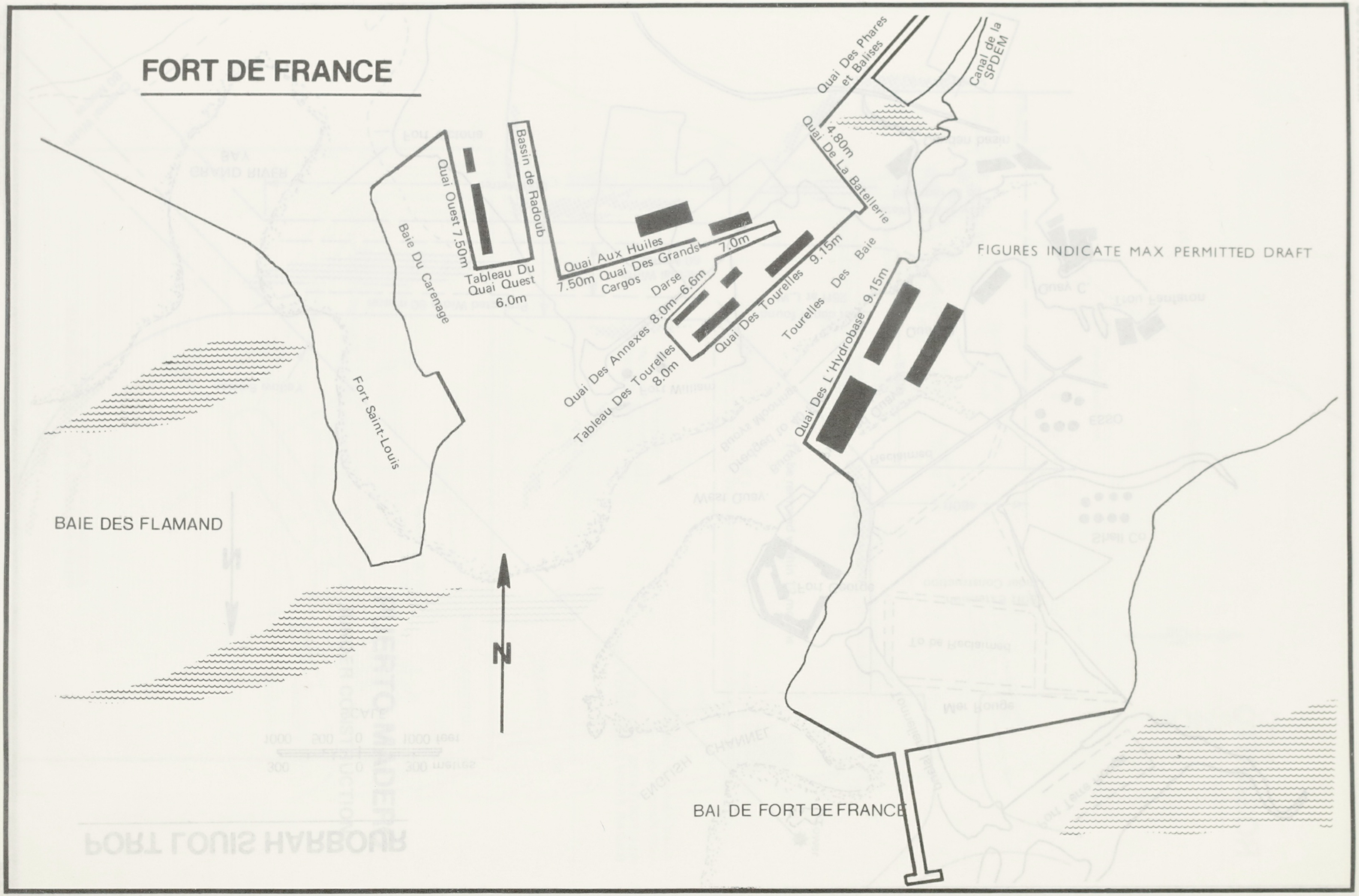

Gate house
TAWAU
N
Godown
120' × 200'
Immigration Office
Transit Godown
120' × 200'
Concrete pier
220'
100'
Depth 5'-15'
Wharf
Depth 20'
630'
40'
100'
GOVERNMENT OIL PIER
2 miles NW of main Cargo Berth

"Plan supplied by Ship's Master"


FORT DE FRANCE
Quai Des Phares et Balises
Canal de la SPDEM
4.80m Quai De La Batellerie
Bassin de Radoub
Quai Ouest 7.50m
Tableau Du Quai Quest 6.0m
Quai Aux Huiles
7.50m Quai Des Grands Cargos
7.0m
Darse
Quai Des Annexes 8.0m–6.6m
Tableau Des Tourelles 8.0m
Quai Des Tourelles 9.15m
Tourelles Des Baie
Quai Des L'Hydrobase 9.15m
Baie Du Carenage
Fort Saint-Louis
FIGURES INDICATE MAX PERMITTED DRAFT
BAIE DES FLAMAND
N
BAI DE FORT DE FRANCE

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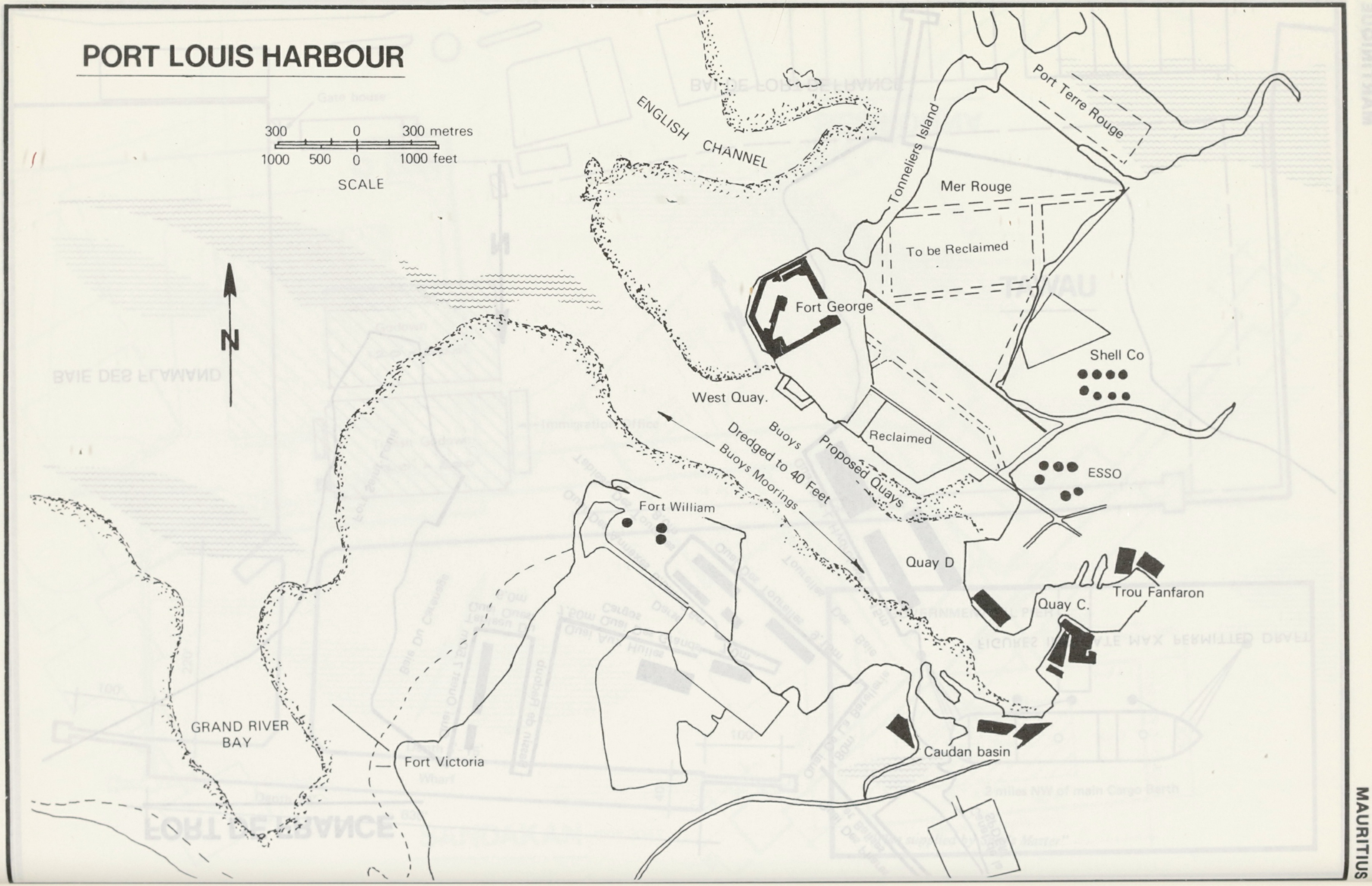
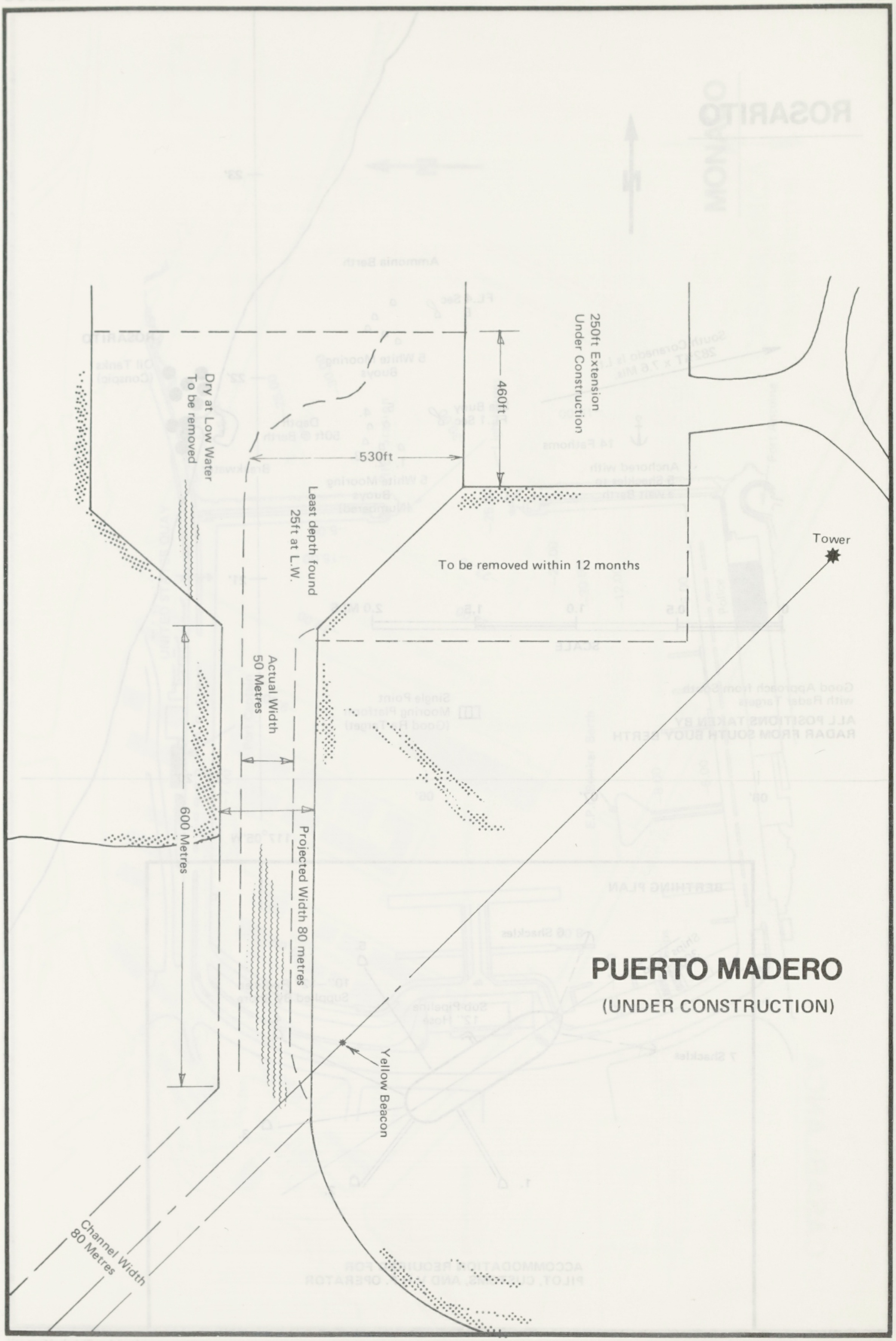
PORT LOUIS HARBOUR


300 0 300 metres
1000 500 0 1000 feet
SCALE
N
ENGLISH CHANNEL
Tonneliers Island
Port Terre Rouge
Mer Rouge
To be Reclaimed
Fort George
Shell Co
West Quay.
Reclaimed
Buoys
Proposed Quays
Dredged to 40 Feet
Buoys Moorings
ESSO
Fort William
Quay D
Quay C.
Trou Fanfaron
GRAND RIVER BAY
Fort Victoria
Caudan basin

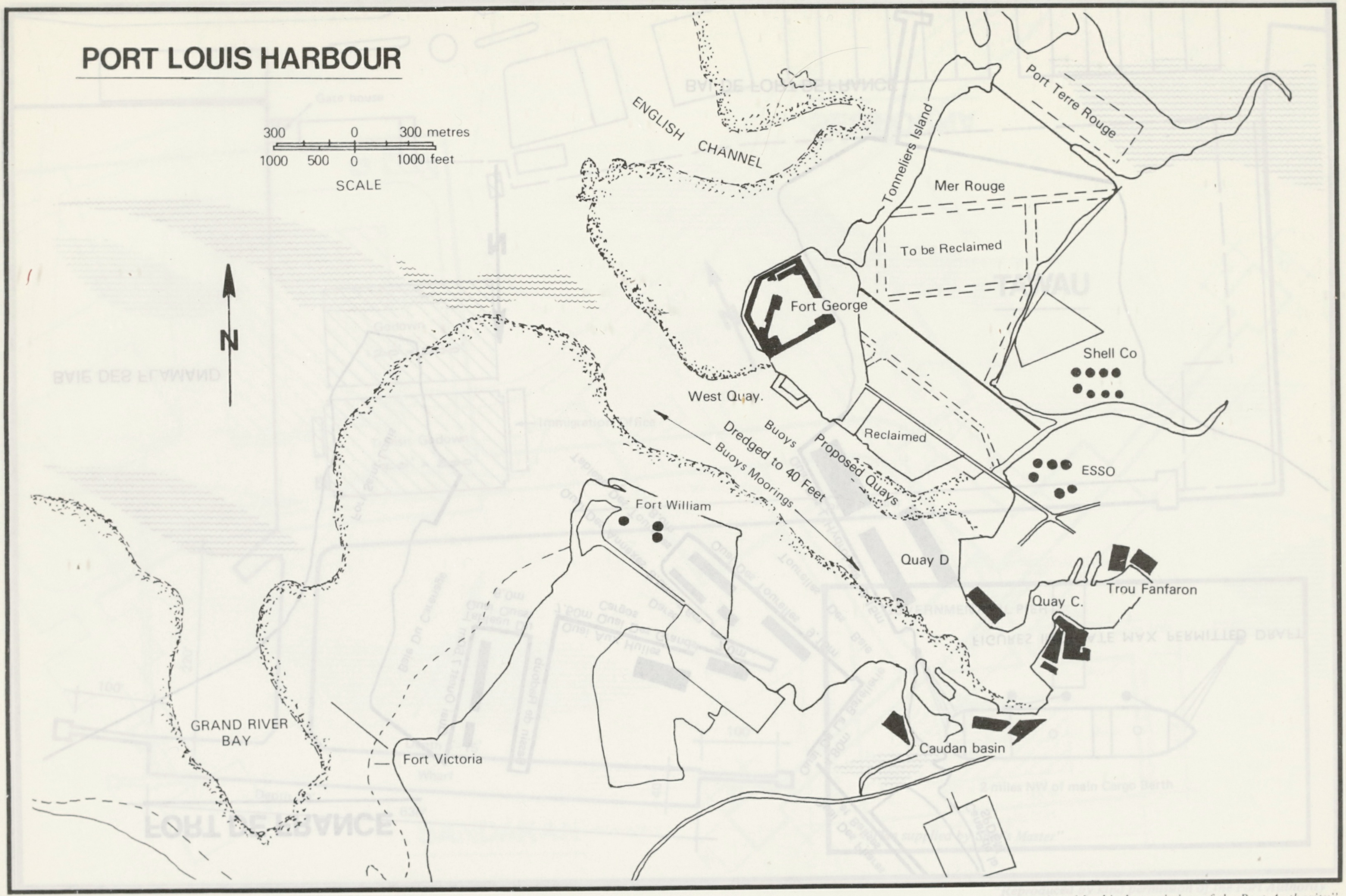
PUERTO MADERO

(UNDER CONSTRUCTION)

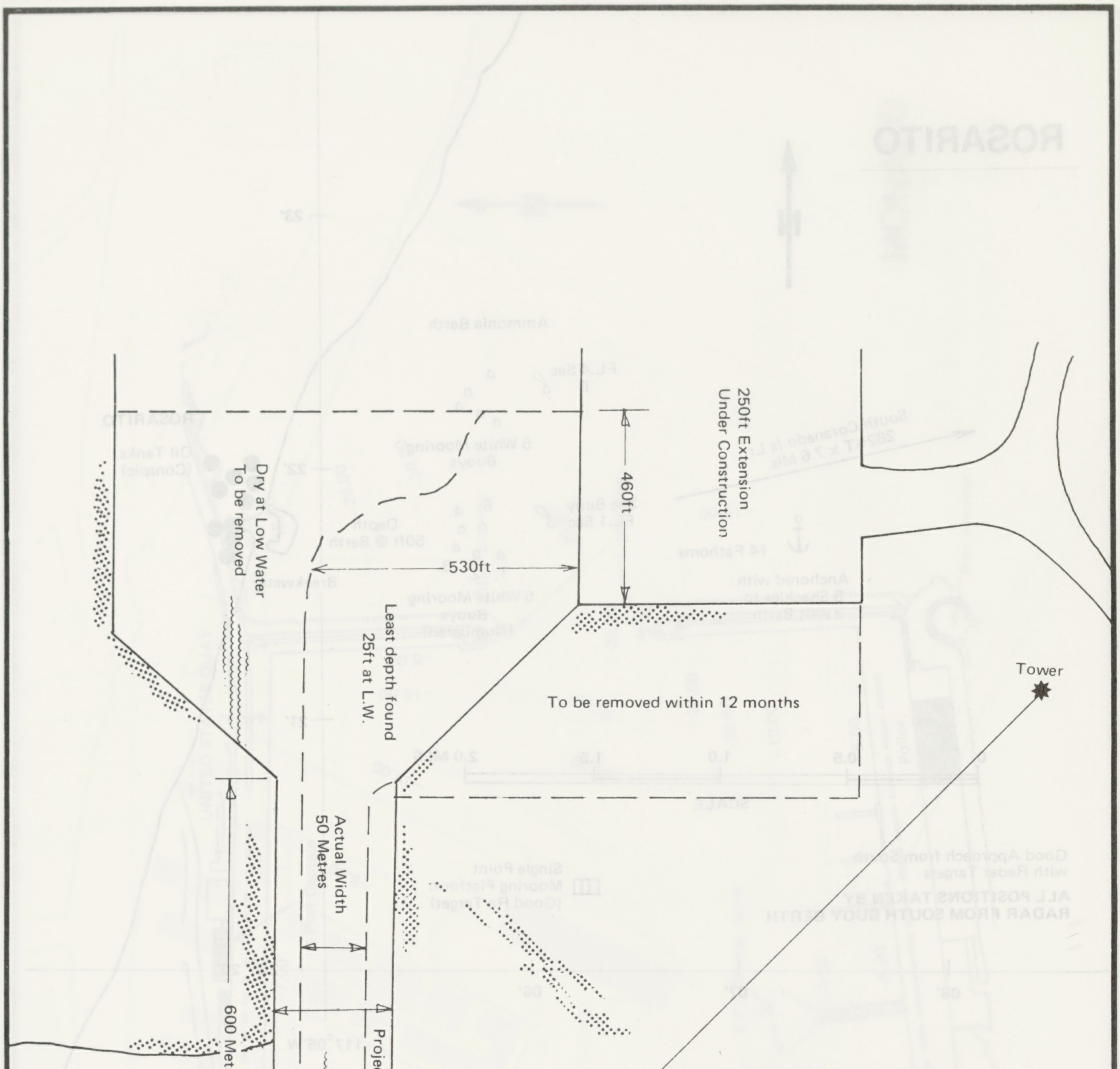

250ft Extension Under Construction
460ft
530ft
Dry at Low Water To be removed
Least depth found 25ft at L.W.
To be removed within 12 months
Tower
Actual Width 50 Metres
600 Metres
Projected Width 80 metres
Yellow Beacon
Channel Width 80 Metres

"Plan supplied by Ship's Master"

PORT LOUIS HARBOUR


300
0
300 metres
1000
500
0
1000 feet
SCALE
N
ENGLISH CHANNEL
Tonneliers Island
Port Terre Rouge
Mer Rouge
To be Reclaimed
Fort George
Shell Co
West Quay.
Buoys
Dredged to 40 Feet
Buoys Moorings
Proposed Quays
Reclaimed
ESSO
Fort William
Quay D
Quay C.
Trou Fanfaron
GRAND RIVER BAY
Fort Victoria
Caudan basin

"Reproduced by kind permission of the Port Authority".

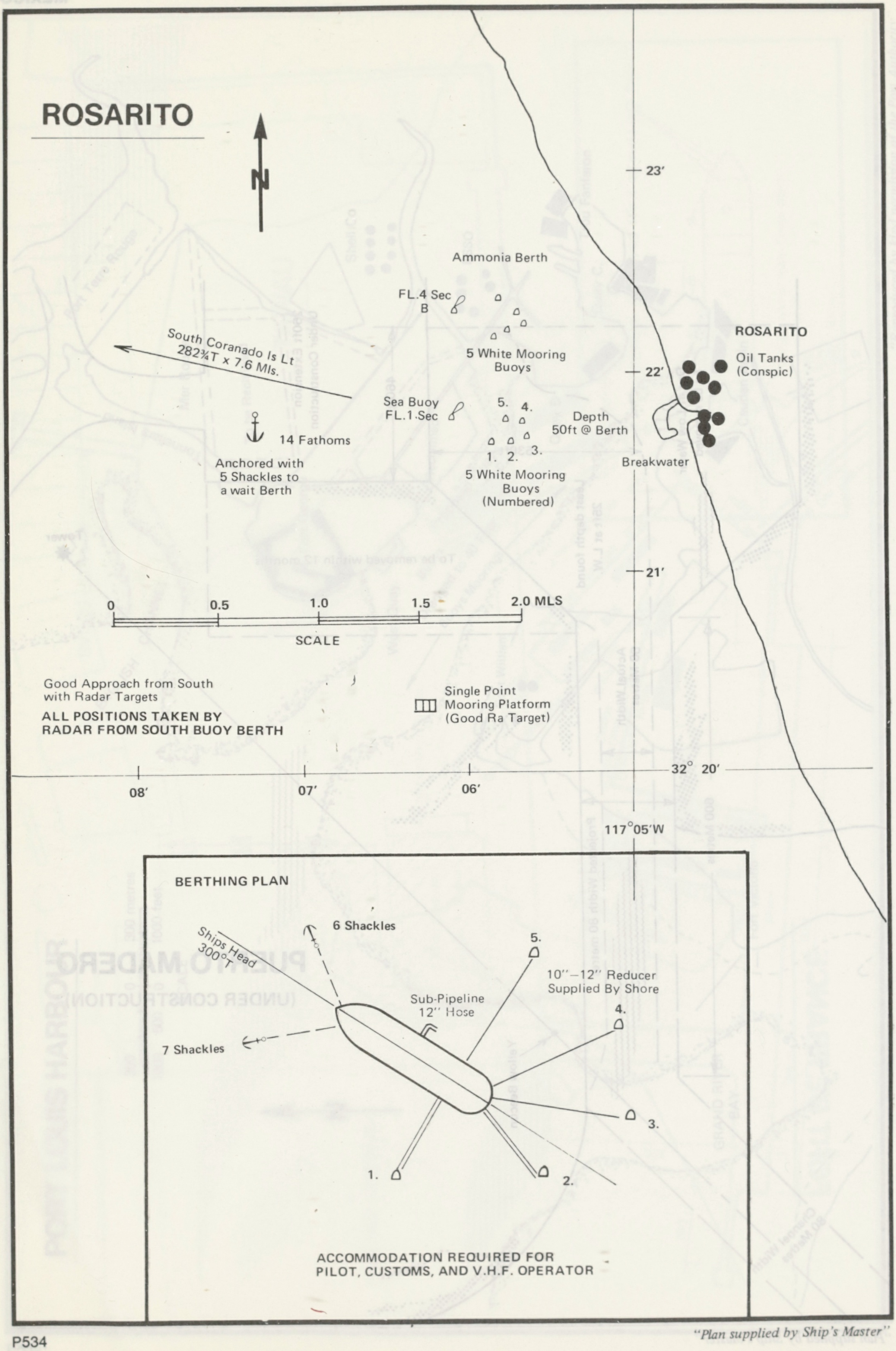

Dry at Low Water
To be removed
250ft Extension
Under Construction
460ft
530ft
Least depth found
25ft at L.W.
To be removed within 12 months
Tower
Actual Width
50 Metres
Projected Width 80 metres
600 Metres
Yellow Beacon
Channel Width
80 Metres

PUERTO MADERO

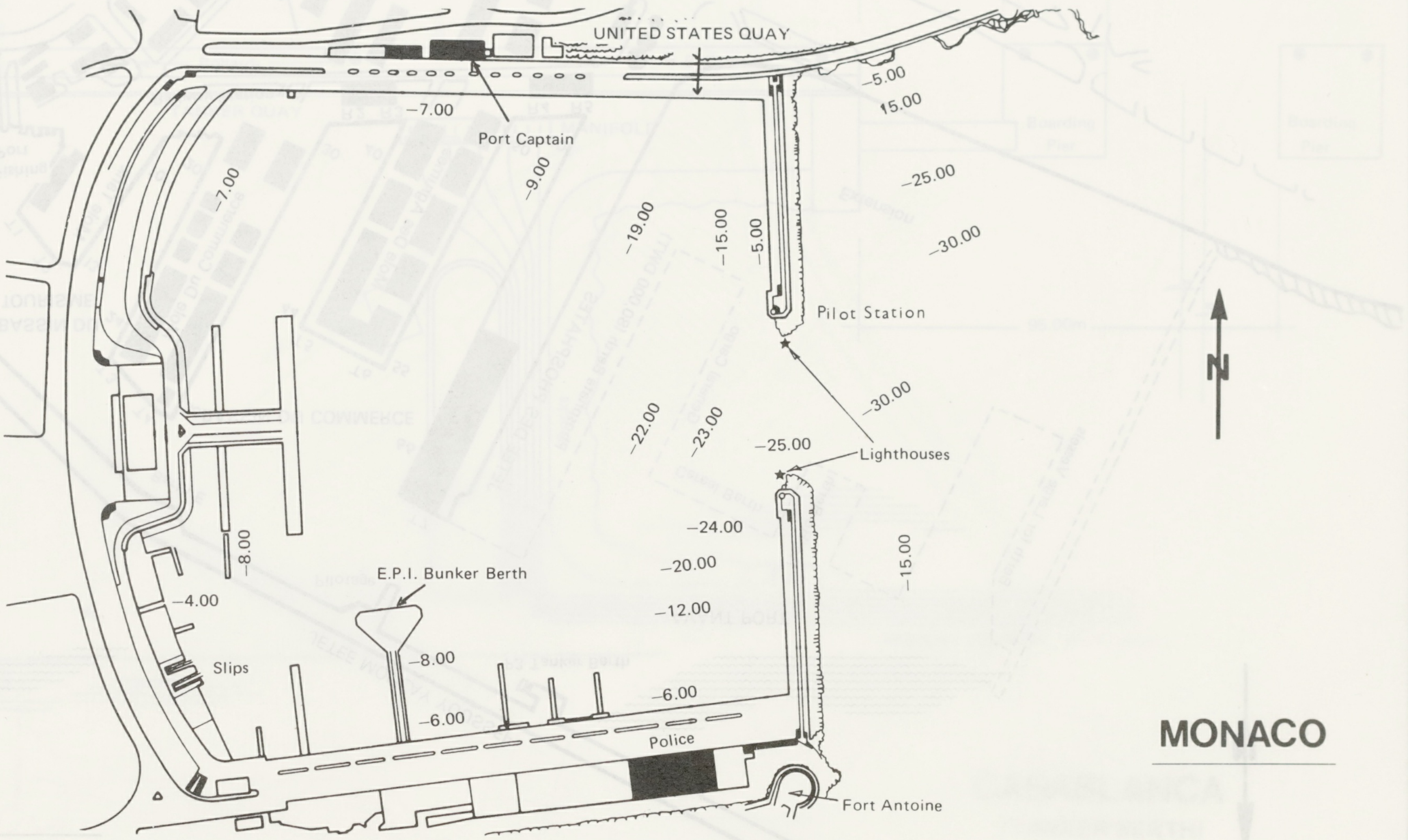
(UNDER CONSTRUCTION)

"Plan supplied by Ship's Master"

ROSARITO


N
Ammonia Berth
FL.4 Sec
B
5 White Mooring Buoys
South Coranado Is Lt 282¾°T x 7.6 Mls.
Sea Buoy FL.1 Sec
5.
4.
1.
2.
3.
Depth 50ft @ Berth
5 White Mooring Buoys (Numbered)
14 Fathoms
Anchored with 5 Shackles to a wait Berth
ROSARITO
Oil Tanks (Conspic)
Breakwater
23'
22'
21'
0
0.5
1.0
1.5
2.0 MLS
SCALE
Good Approach from South with Radar Targets
ALL POSITIONS TAKEN BY RADAR FROM SOUTH BUOY BERTH
Single Point Mooring Platform (Good Ra Target)
08'
07'
06'
32° 20'
117°05'W
BERTHING PLAN
6 Shackles
Ships Head 300°T
7 Shackles
Sub-Pipeline 12'' Hose
10''–12'' Reducer Supplied By Shore
5.
4.
3.
2.
1.
ACCOMMODATION REQUIRED FOR PILOT, CUSTOMS, AND V.H.F. OPERATOR

"Plan supplied by Ship's Master"


UNITED STATES QUAY
Port Captain
–7.00
–9.00
–5.00
15.00
–25.00
–30.00
–19.00
–15.00
–5.00
Pilot Station
–30.00
Lighthouses
–22.00
–23.00
–25.00
–24.00
–20.00
–12.00
–15.00
–8.00
E.P.I. Bunker Berth
–4.00
Slips
–8.00
–6.00
–6.00
Police
Fort Antoine
N

MONACO

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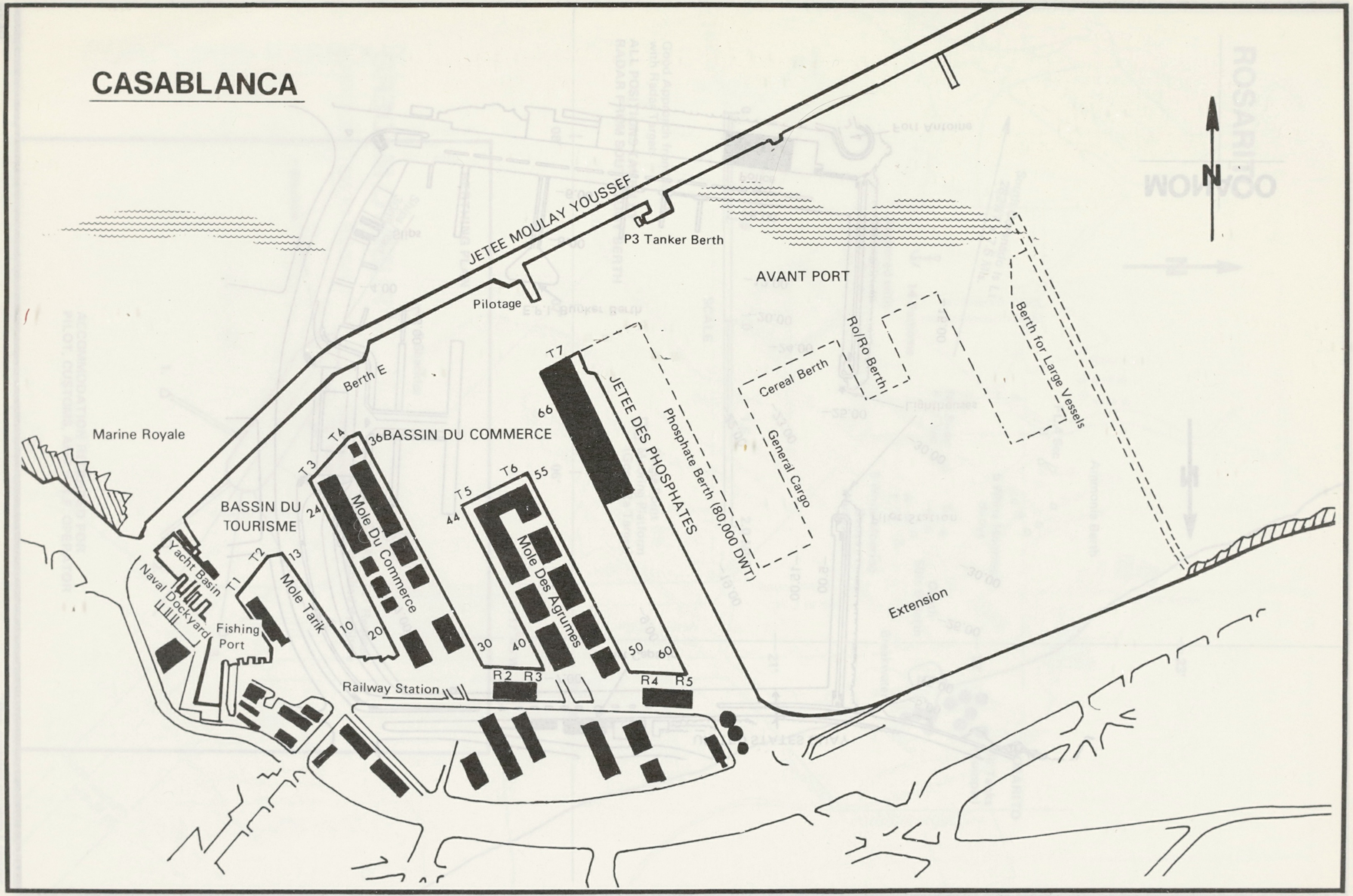
CASABLANCA


N
JETEE MOULAY YOUSSEF
P3 Tanker Berth
AVANT PORT
Pilotage
Berth E
Marine Royale
BASSIN DU COMMERCE
BASSIN DU TOURISME
Yacht Basin
Naval Dockyard
Fishing Port
Mole Tarik
Mole Du Commerce
Mole Des Agrumes
JETEE DES PHOSPHATES
Phosphate Berth (80,000 DWT)
General Cargo
Cereal Berth
Ro/Ro Berth
Berth for Large Vessels
Extension
Railway Station
T1
T2
T3
T4
T5
T6
T7
13
24
36
44
55
66
10
20
30
40
50
60
R2
R3
R4
R5

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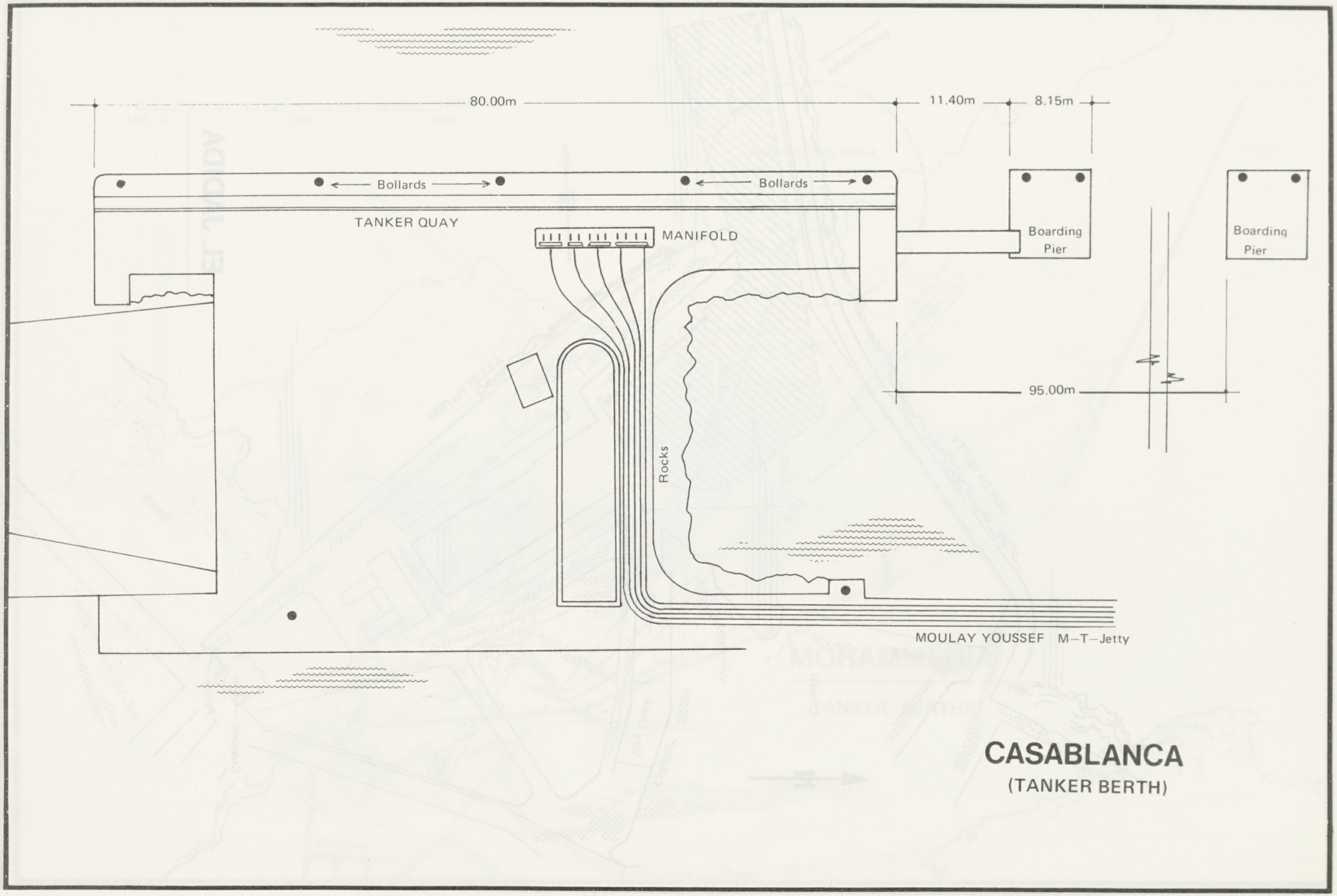
80.00m
11.40m
8.15m
Bollards
Bollards
TANKER QUAY
MANIFOLD
Boarding Pier
Boarding Pier
95.00m
Rocks
MOULAY YOUSSEF M–T–Jetty

CASABLANCA

(TANKER BERTH)

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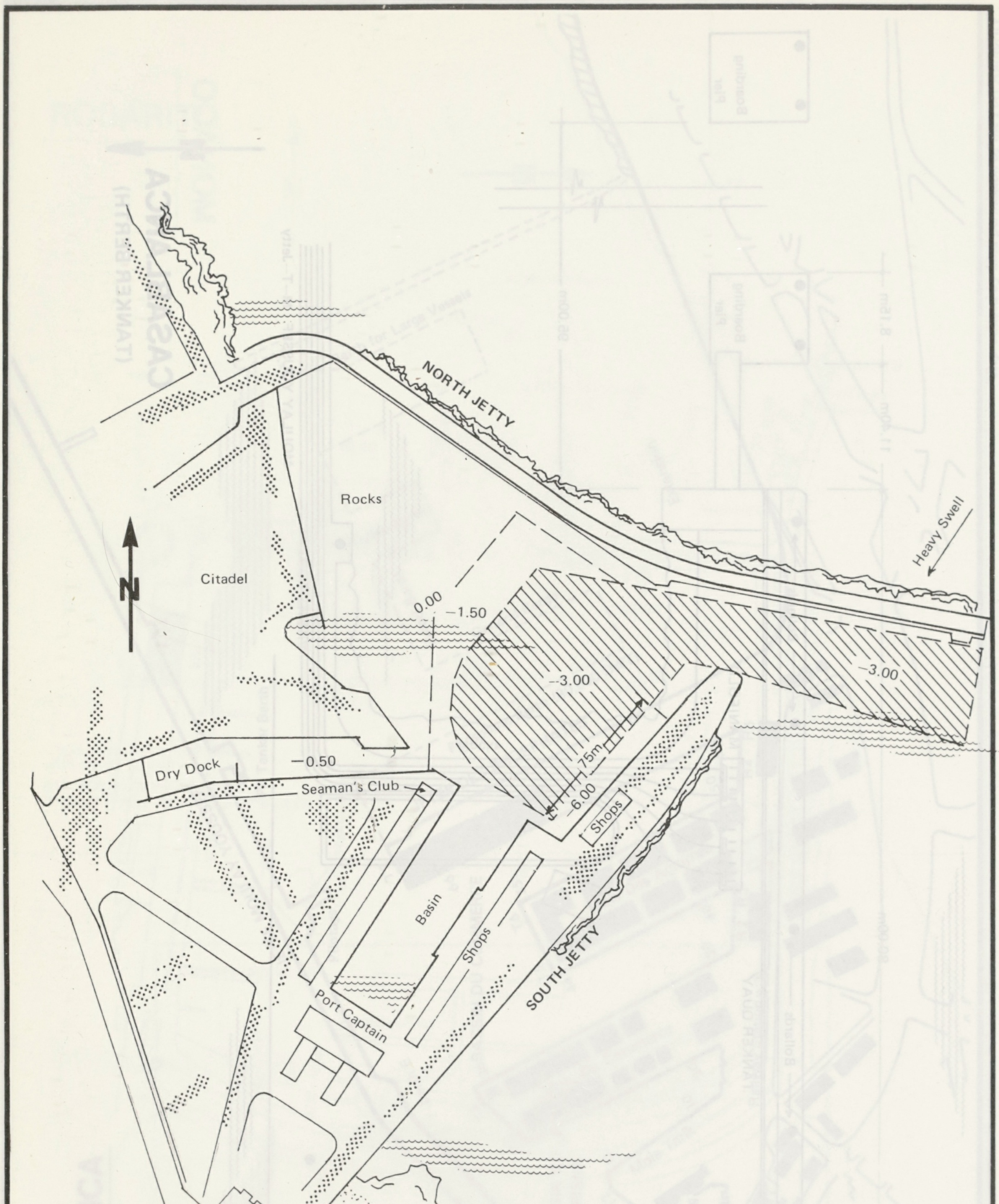
NORTH JETTY
Rocks
Citadel
Heavy Swell
0.00
–1.50
–3.00
–3.00
75m
–6.00
Shops
Dry Dock
–0.50
Seaman's Club
Basin
Shops
SOUTH JETTY
Port Captain
Customs
Police
Beach
N

EL JADIDA

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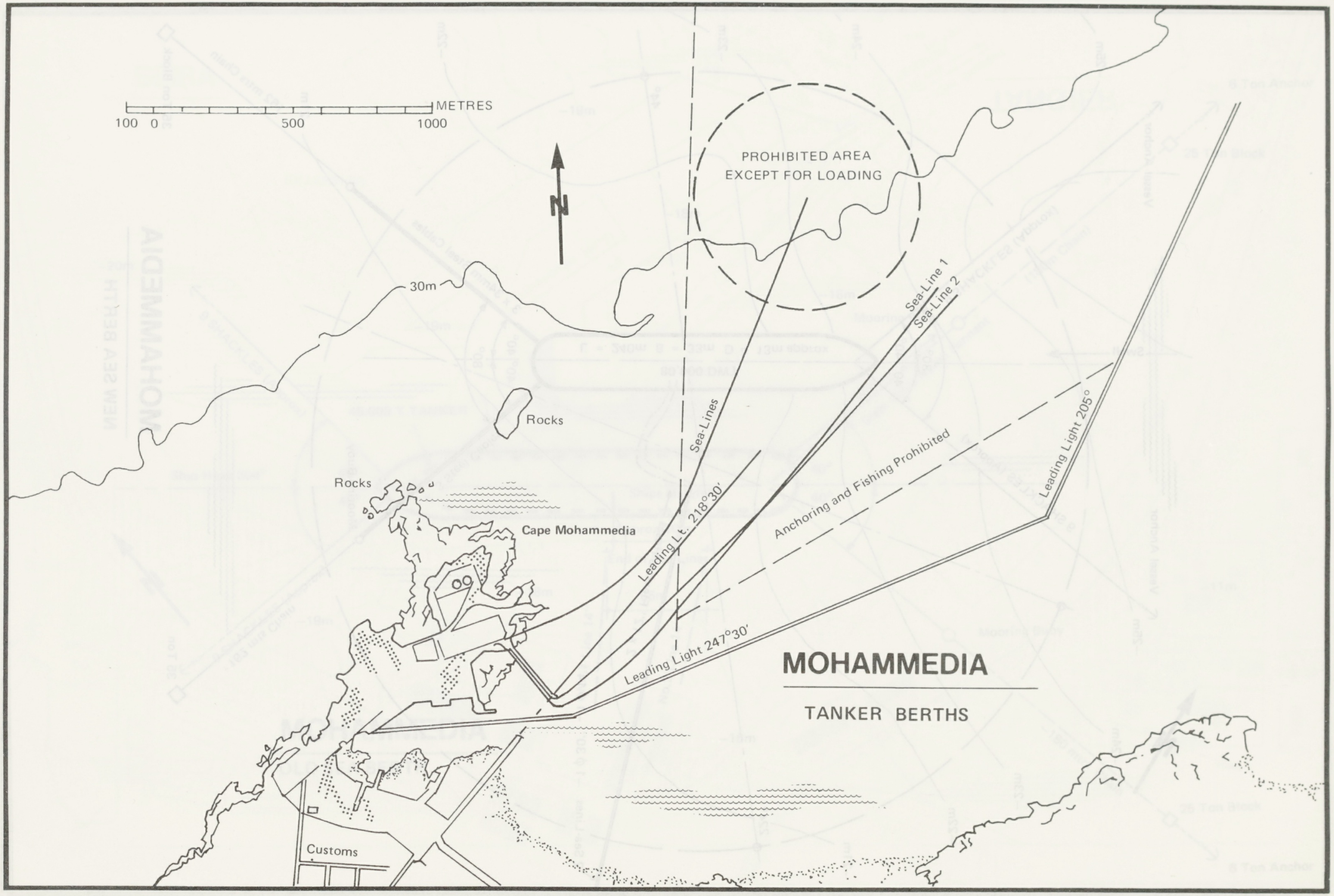
METRES
100
0
500
1000
N
PROHIBITED AREA
EXCEPT FOR LOADING
30m
Rocks
Rocks
Cape Mohammedia
Sea-Line 1
Sea-Line 2
Sea-Lines
Leading Lt. 218°30′
Anchoring and Fishing Prohibited
Leading Light 205°
Leading Light 247°30′
Customs
MOHAMMEDIA
TANKER BERTHS

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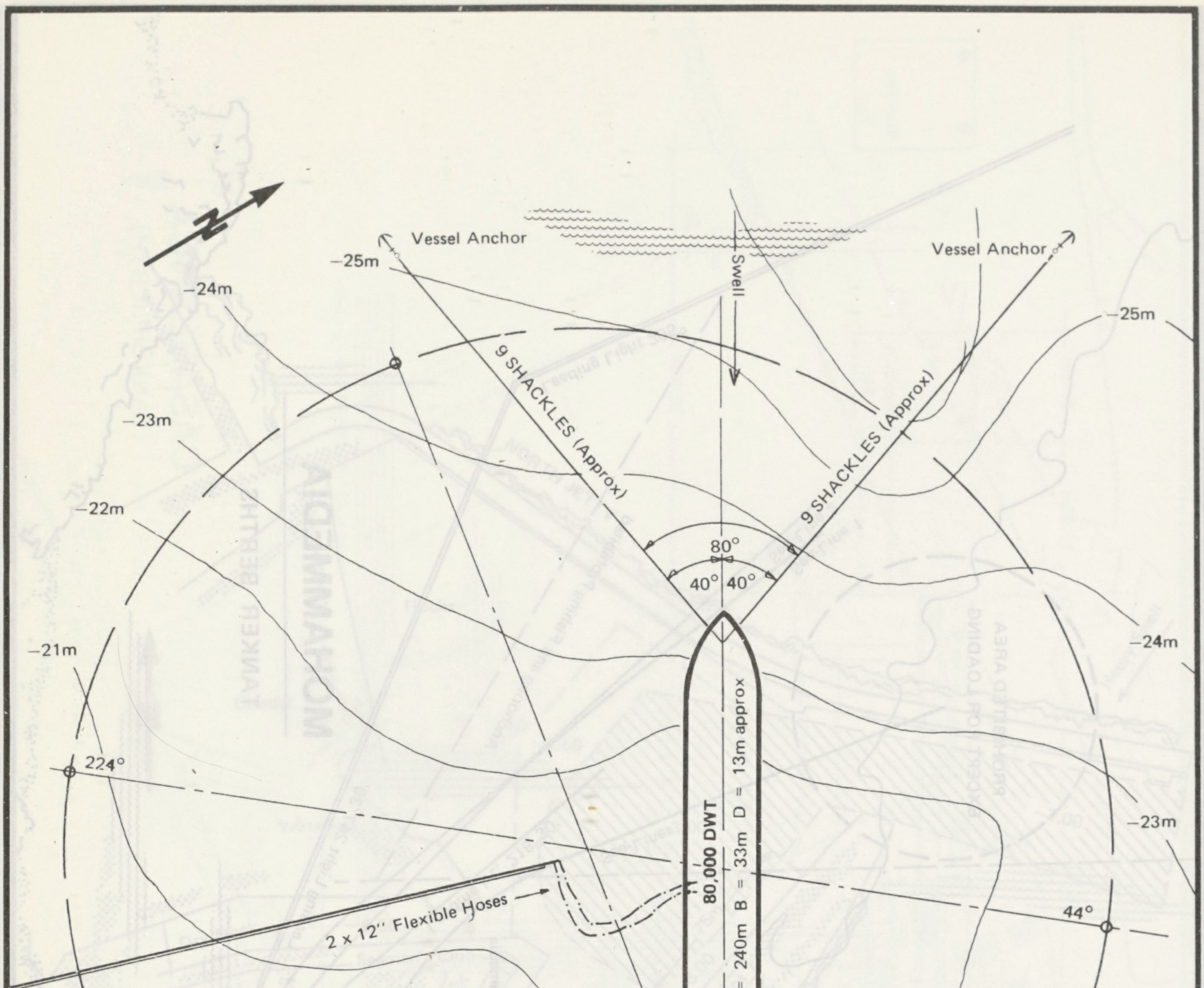
Vessel Anchor
Vessel Anchor
Swell
9 SHACKLES (Approx)
9 SHACKLES (Approx)
80°
40° 40°
−25m
−24m
−23m
−22m
−21m
−25m
−24m
−23m
−22m
−21m
224°
44°
80,000 DWT
L = 240m B = 33m D = 13m approx
2 x 12" Flexible Hoses
2 Sea-Lines −1 ϕ 30" −1 ϕ 14"
40° 40°
80°
3 Steel Cables
3 x 34mm Steel Cables
Mooring Buoy
162 mts Chain
162 mtrs Chain
35 Ton
35 Ton Block

MOHAMMEDIA

NEW SEA BERTH

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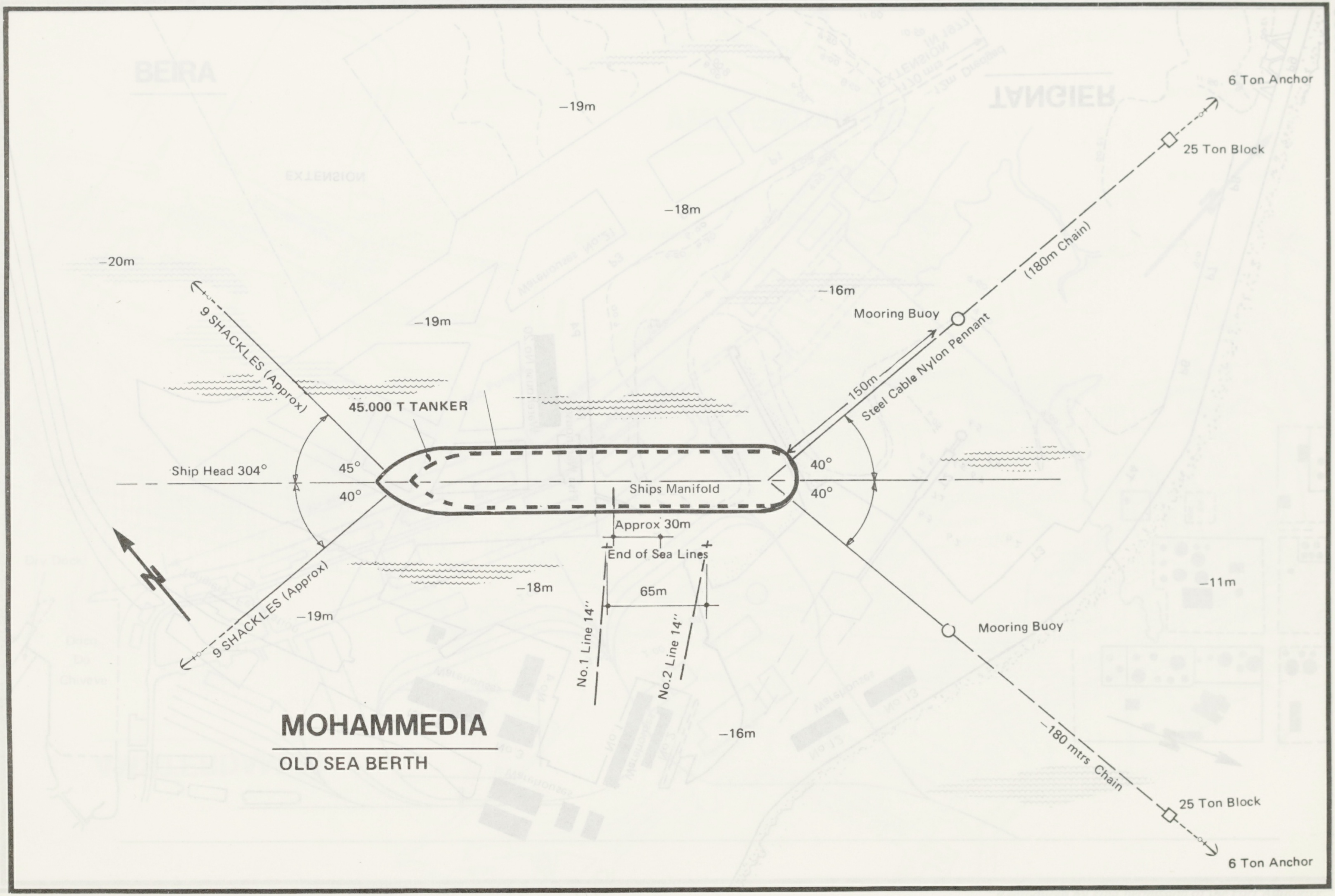

MOHAMMEDIA

OLD SEA BERTH

6 Ton Anchor
25 Ton Block
–19m
–18m
(180m Chain)
–20m
–16m
Mooring Buoy
–19m
9 SHACKLES (Approx)
Steel Cable Nylon Pennant
150m
45.000 T TANKER
Ship Head 304°
45°
40°
Ships Manifold
40°
40°
Approx 30m
End of Sea Lines
N
–18m
65m
–11m
9 SHACKLES (Approx)
–19m
No.1 Line 14"
No.2 Line 14"
Mooring Buoy
–16m
180 mtrs Chain
25 Ton Block
6 Ton Anchor

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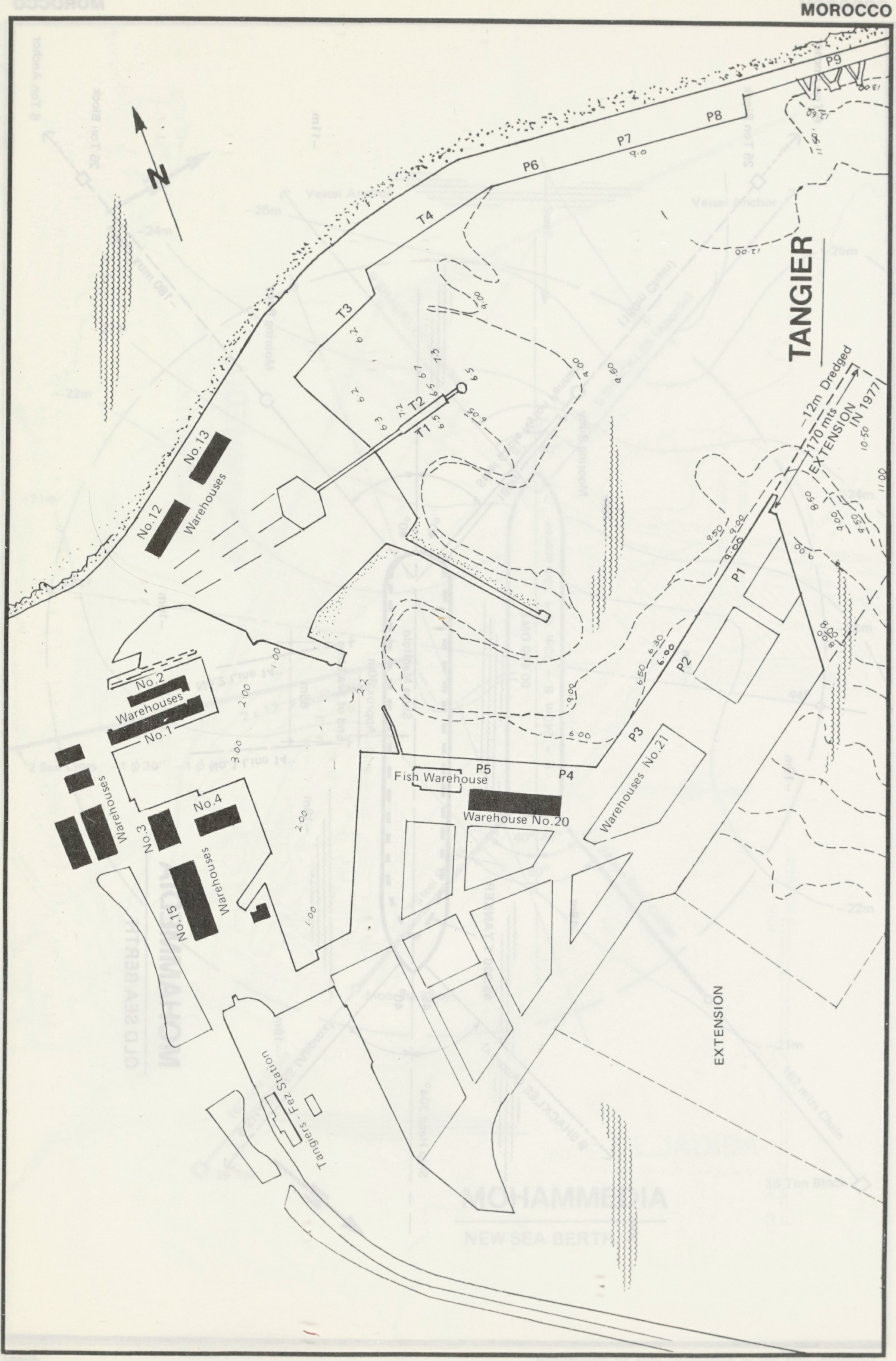
TANGIER
N
T1
T2
T3
T4
P1
P2
P3
P4
P5
P6
P7
P8
P9
12m Dredged
170 mts
EXTENSION
IN 1977
No.13
No.12
Warehouses
No.2
Warehouses
No.1
Warehouses
No.3
No.4
No.15
Warehouses
Fish Warehouse
Warehouse No.20
Warehouses No.21
Tangiers - Fez Station
EXTENSION

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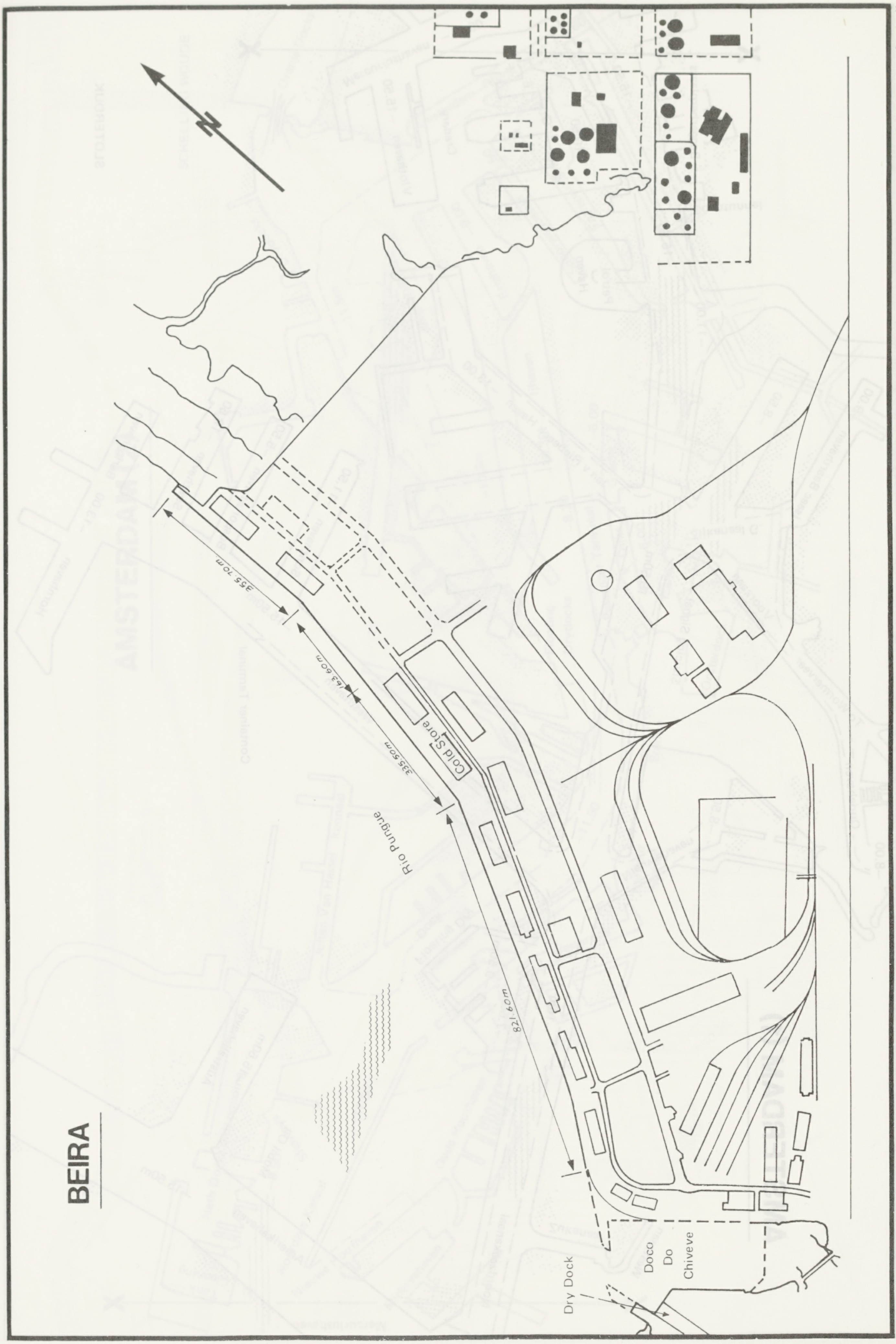
BEIRA


Dry Dock
Doco
Do
Chiveve
821.60m
Rio Pungue
335.50m
Cold Store
163.60m
355.70m

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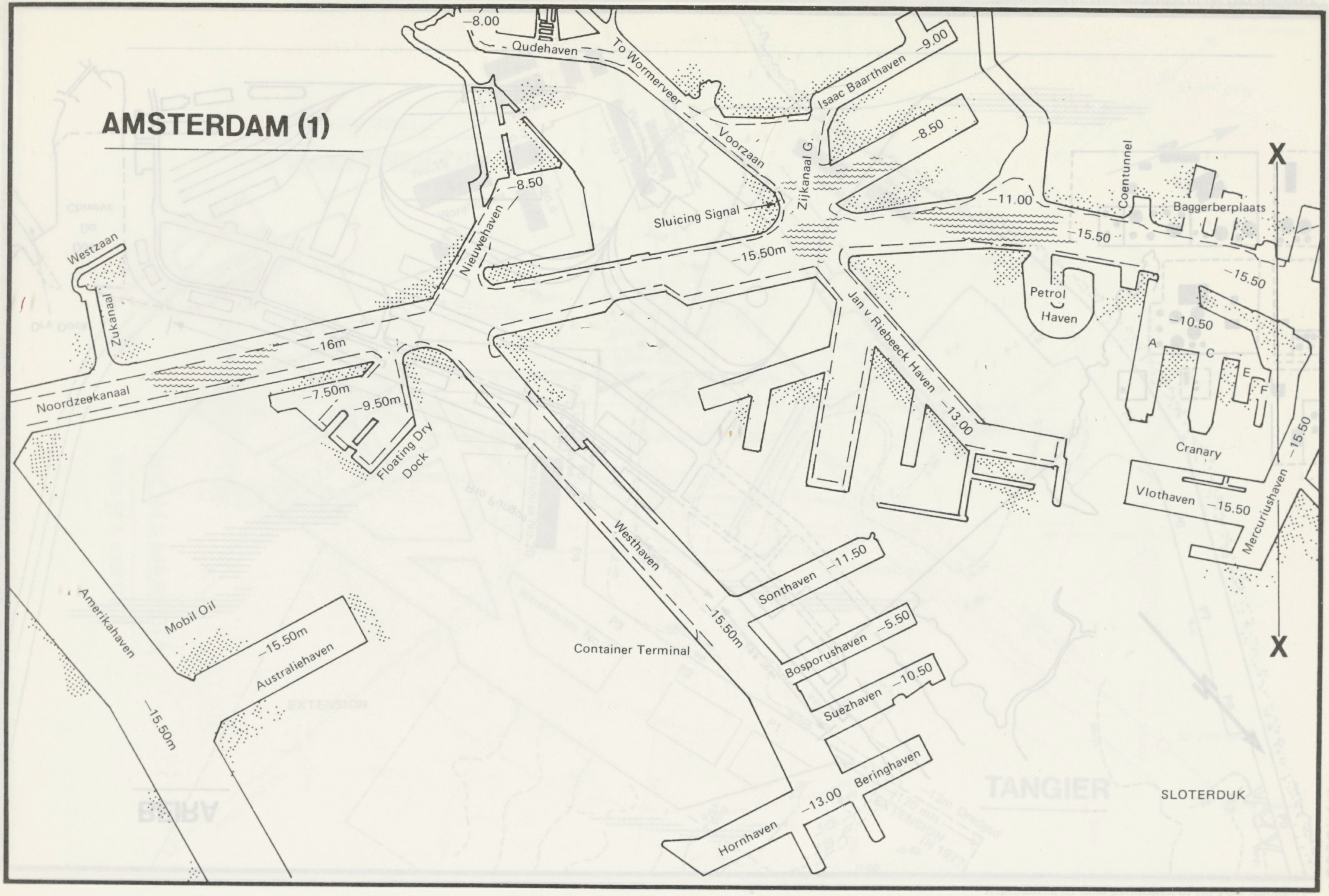
AMSTERDAM (1)


–8.00
Qudehaven
To Wormerveer
Voorzaan
–9.00
Isaac Baarthaven
–8.50
Zijkanaal G.
Sluicing Signal
–11.00
Coentunnel
Baggerberplaats
X
–15.50
–15.50
–15.50m
–8.50
Nieuwehaven
Westzaan
Zukanaal
–16m
Noordzeekanaal
–7.50m
–9.50m
Floating Dry Dock
Petrol Haven
Jan v Riebeeck Haven
–13.00
–10.50
A
C
E
F
Cranary
–15.50
Vlothaven
–15.50
Mercuriushaven
X
Westhaven
–11.50
Sonthaven
–15.50m
–5.50
Bosporushaven
–10.50
Suezhaven
Container Terminal
Amerikahaven
Mobil Oil
–15.50m
Australiehaven
–15.50m
Beringhaven
–13.00
Hornhaven
SLOTERDUK

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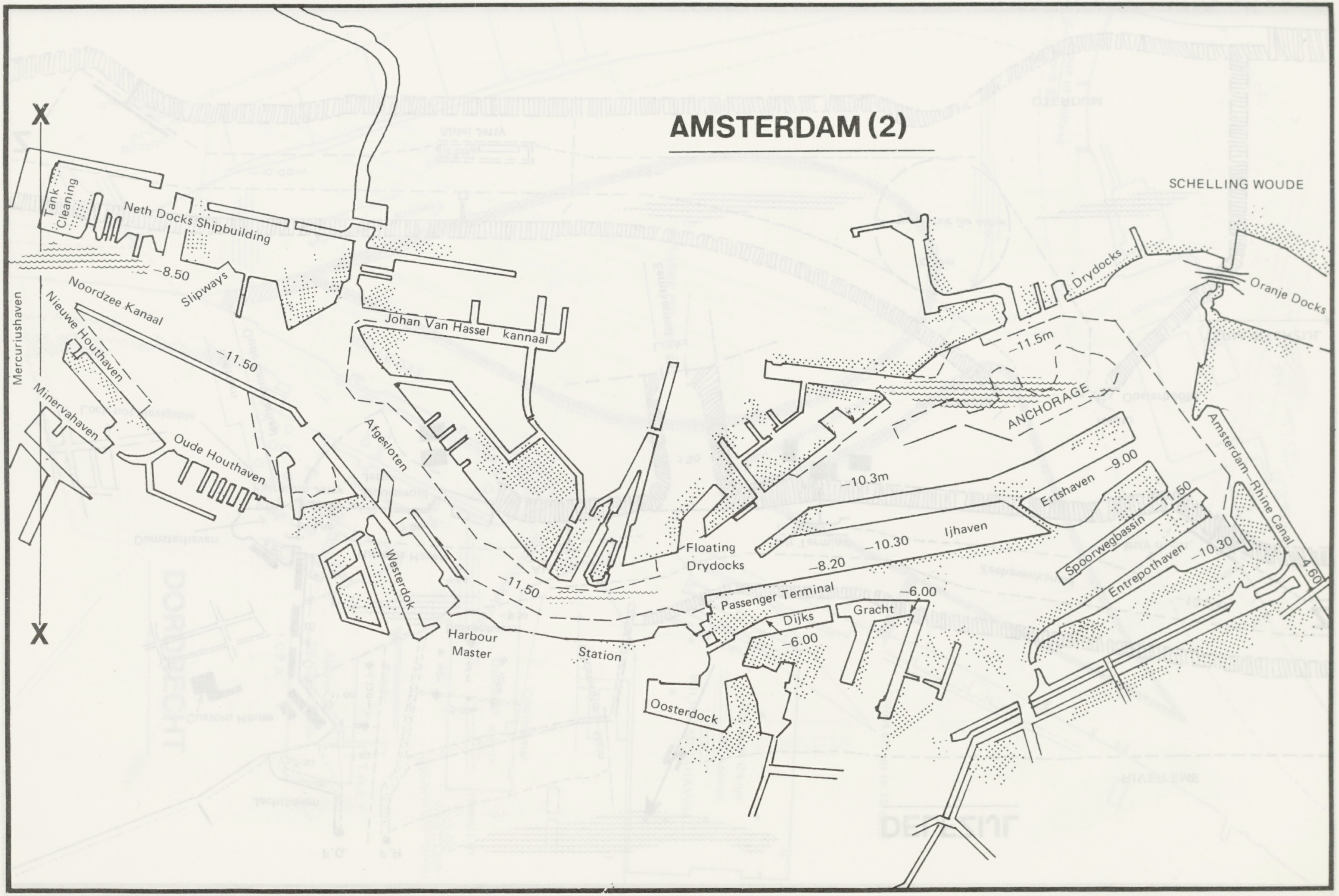

AMSTERDAM (2)

X
X
SCHELLING WOUDE
Tank Cleaning
Neth Docks Shipbuilding
-8.50
Slipways
Noordzee Kanaal
Mercuriushaven
Nieuwe Houthaven
Minervahaven
-11.50
Oude Houthaven
Johan Van Hassel kannaal
Afgesloten
Westerdok
Harbour Master
-11.50
Station
Floating Drydocks
Drydocks
Oranje Docks
-11.5m
ANCHORAGE
-10.3m
Ertshaven
-9.00
Ijhaven
-10.30
-8.20
Passenger Terminal
-6.00
Dijks
Gracht
-6.00
Oosterdock
Spoorwegbassin
-11.50
Entrepothaven
-10.30
Amsterdam-Rhine Canal
4.60

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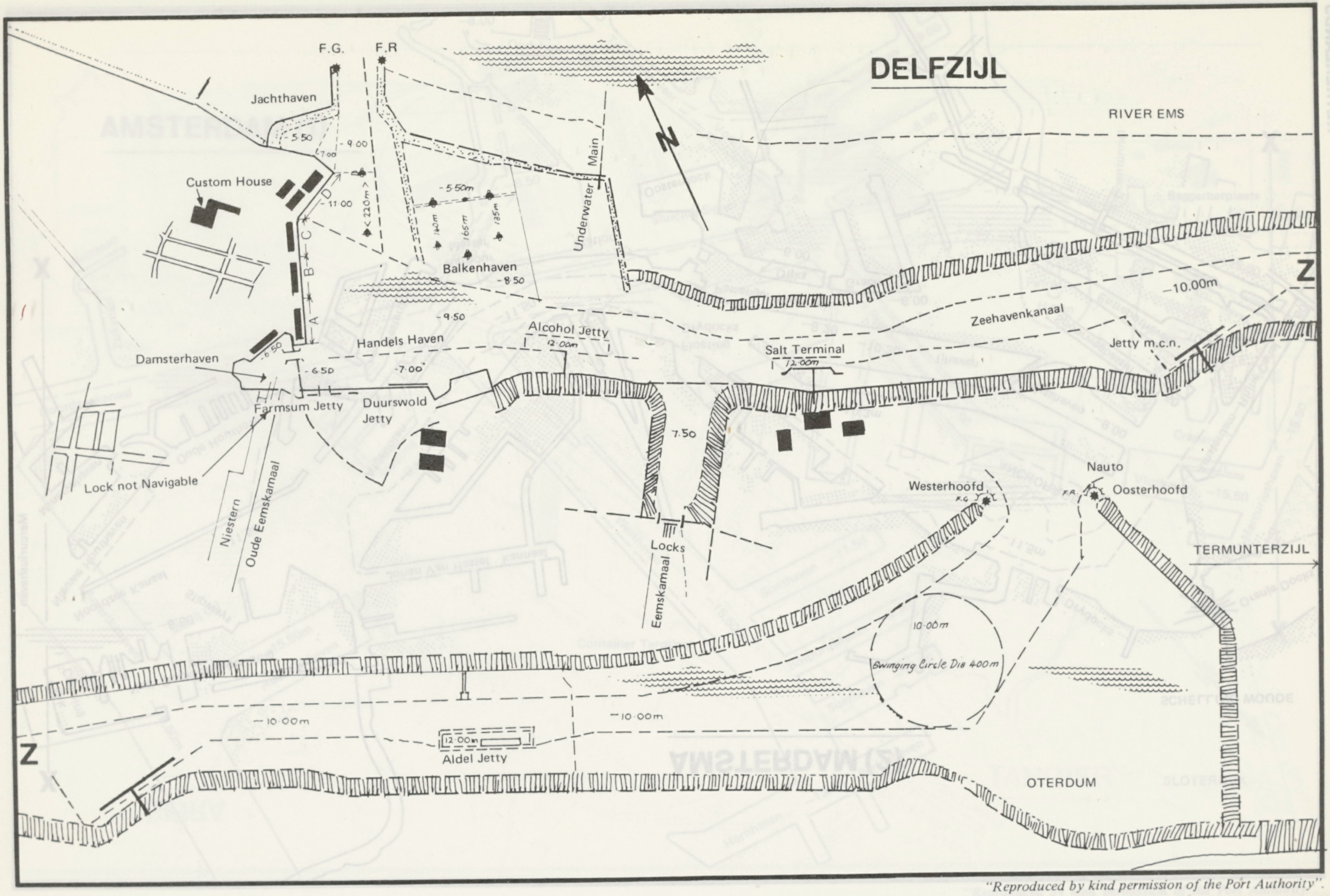

DELFZIJL

F.G.
F.R
Jachthaven
-5.50
-7.00
-9.00
Custom House
D
-11.00
< 220m >
C
B
A
-5.50m
140m
165m
135m
Balkenhaven
-8.50
-9.50
Underwater Main
N
RIVER EMS
-10.00m
Zeehavenkanaal
Z
Jetty m.c.n.
-6.50
Damsterhaven
Handels Haven
Alcohol Jetty
12.00m
Salt Terminal
12.00m
-6.50
-7.00
Farmsum Jetty
Duurswold Jetty
7.50
Lock not Navigable
Niestern
Oude Eemskamaal
Locks
Eemskamaal
Westerhoofd
F.G.
Nauto
F.R.
Oosterhoofd
TERMUNTERZIJL
10.00m
Swinging Circle Dia 400m
-10.00m
-10.00m
12.00m
Aldel Jetty
Z
OTERDUM

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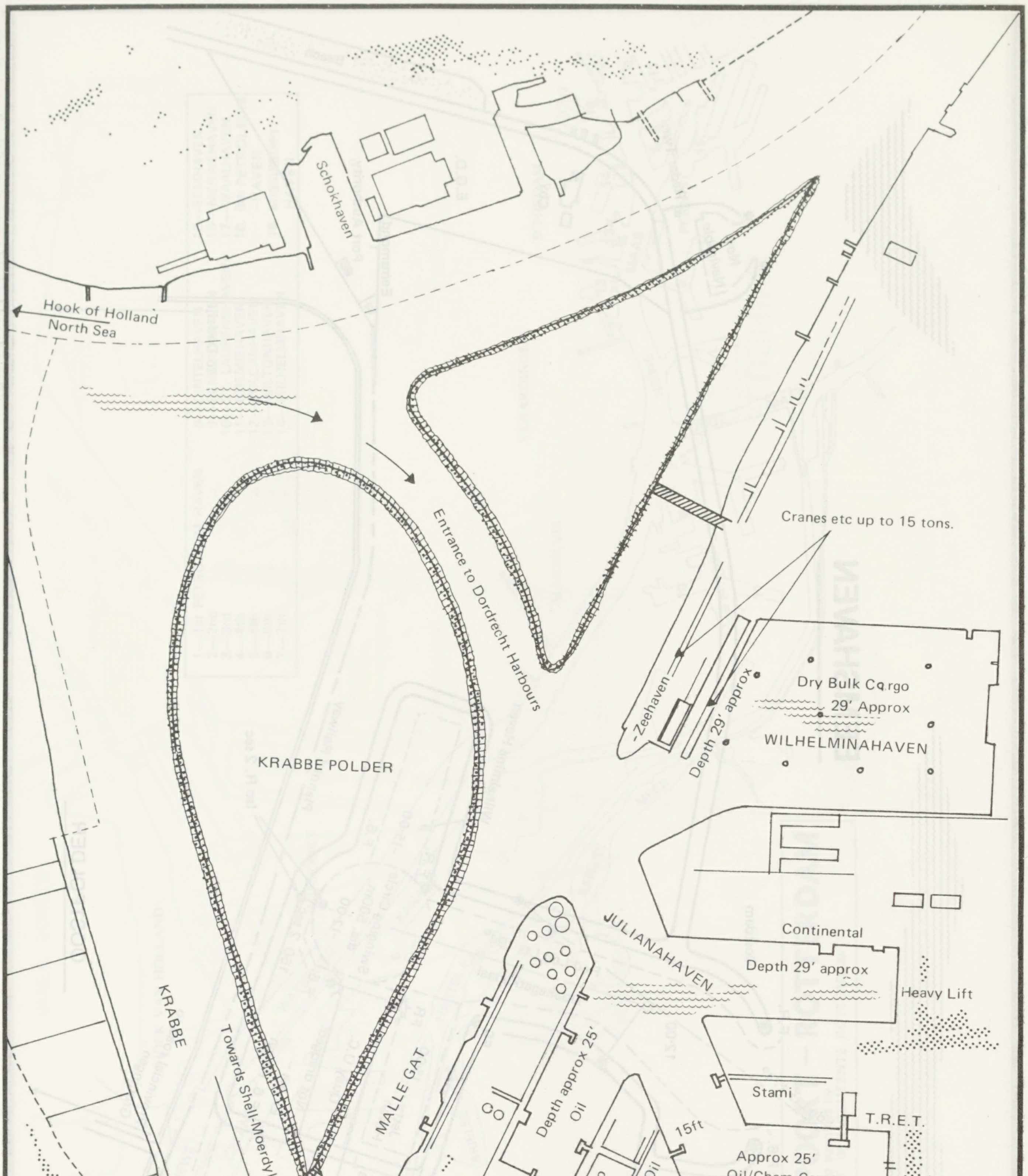
Schokhaven
Hook of Holland
North Sea
Entrance to Dordrecht Harbours
Cranes etc up to 15 tons.
Zeehaven
Depth 29' approx
Dry Bulk Cargo
29' Approx
WILHELMINAHAVEN
KRABBE POLDER
KRABBE
Towards Shell-Moerdyk
MALLE GAT
JULIANAHAVEN
Continental
Depth 29' approx
Heavy Lift
Depth approx 25'
Oil
Stami
T.R.E.T.
15ft
Approx 25'
Oil/Chem Cargo
I.C.P.A.
Ethyl Corp
Ashland Oil
DORDRECHT

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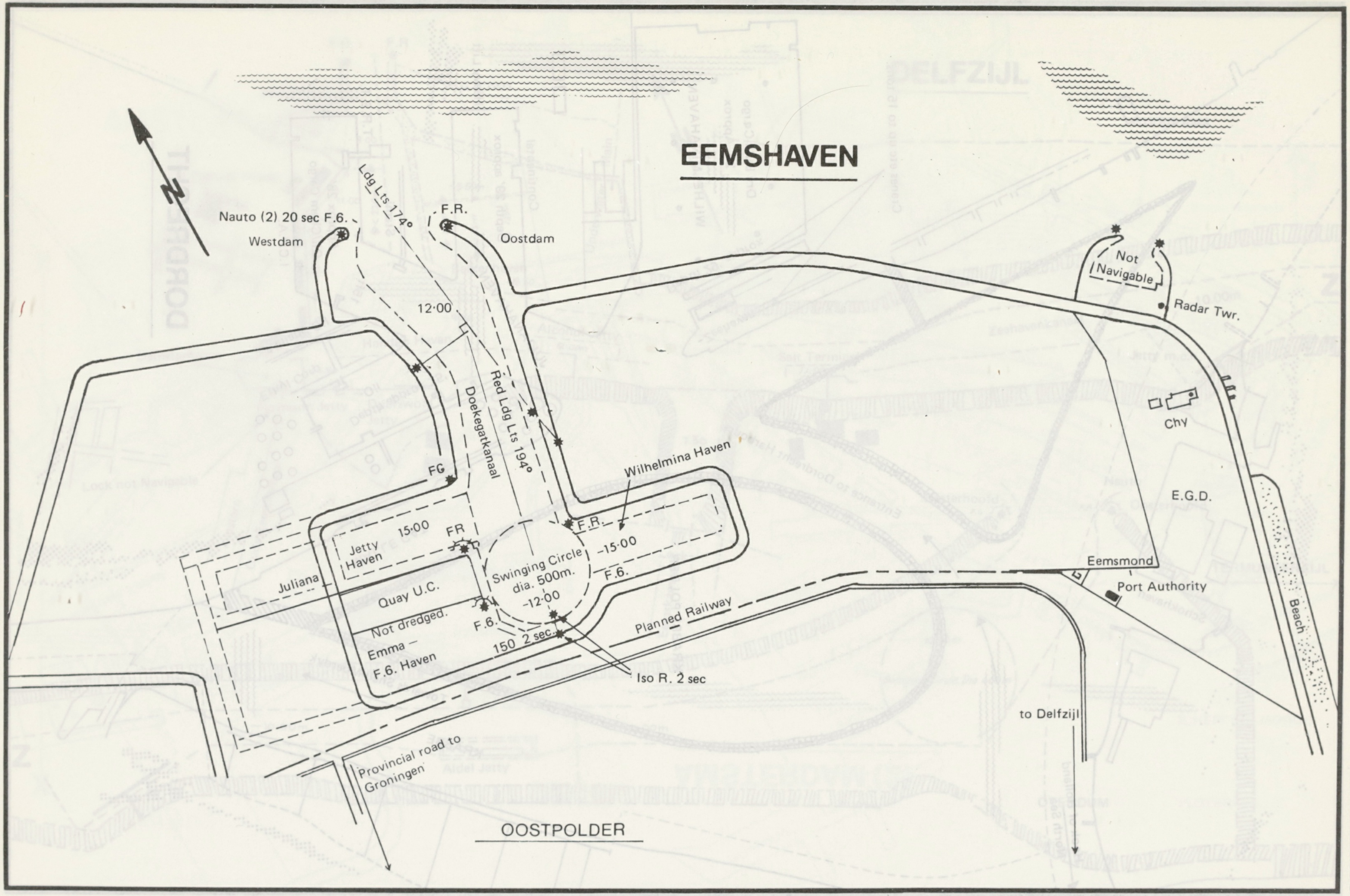
EEMSHAVEN


N
Nauto (2) 20 sec F.6.
Westdam
Ldg Lts 174°
F.R.
Oostdam
12·00
Red Ldg Lts 194°
Doekegatkanaal
FG
Wilhelmina Haven
F.R.
-15·00
F.6.
FR
Jetty Haven
15·00
Juliana
Quay U.C.
Not dredged.
Emma –
F.6. Haven
Swinging Circle dia. 500m.
-12·00
F.6.
150 2 sec.
Iso R. 2 sec
Planned Railway
Provincial road to Groningen
OOSTPOLDER
Not Navigable
Radar Twr.
Chy
E.G.D.
Eemsmond
Port Authority
Beach
to Delfzijl

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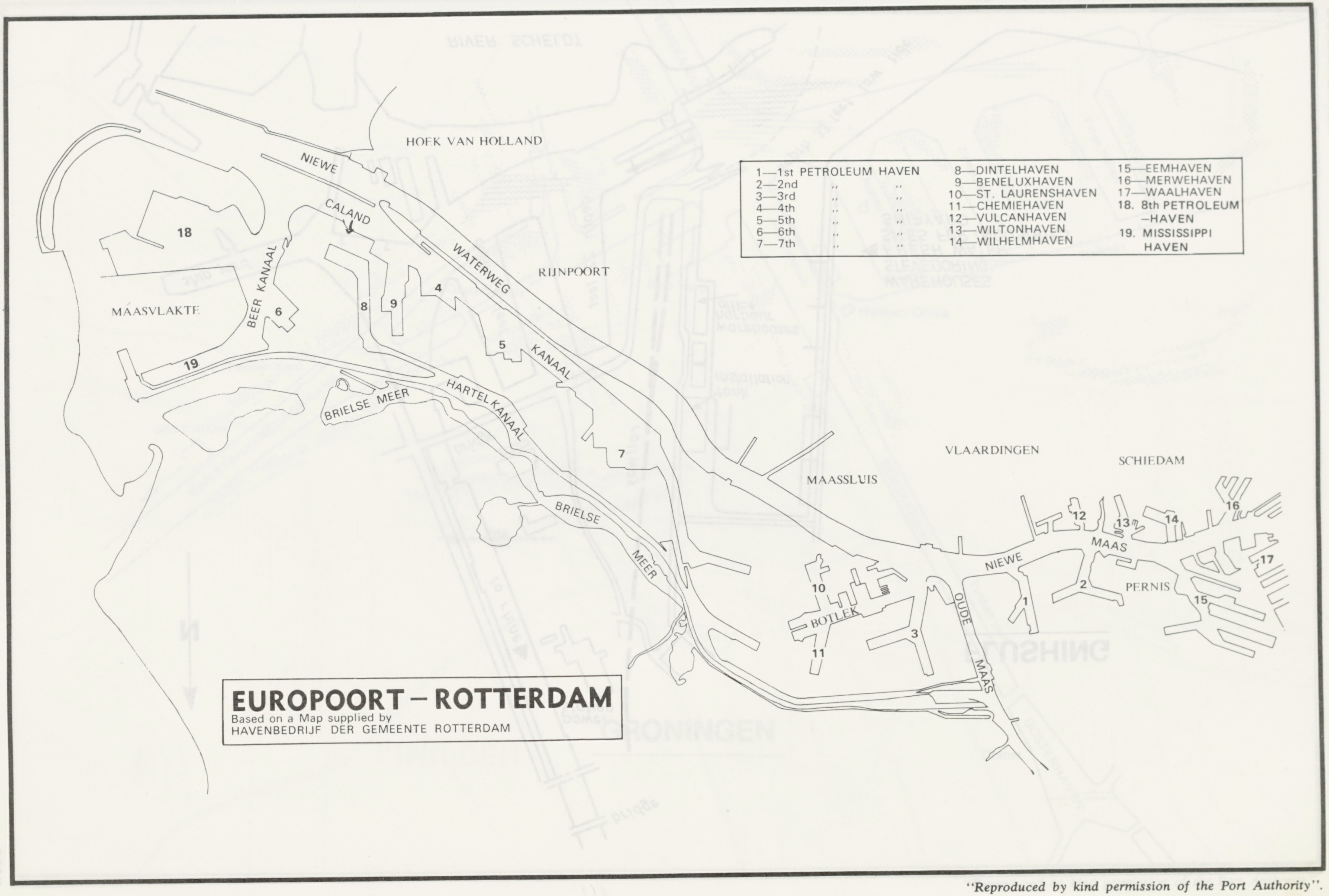
HOEK VAN HOLLAND
NIEWE
CALAND
WATERWEG
KANAAL
RIJNPOORT
MAASVLAKTE
BEER KANAAL
18
6
8
9
4
5
19
BRIELSE MEER
HARTEL KANAAL
7
BRIELSE
MEER
MAASSLUIS
VLAARDINGEN
SCHIEDAM
12
13
14
16
NIEWE
MAAS
17
PERNIS
15
10
BOTLEK
11
3
OUDE
MAAS
1
2
N

EUROPOORT – ROTTERDAM

Based on a Map supplied by
HAVENBEDRIJF DER GEMEENTE ROTTERDAM

1—1st PETROLEUM HAVEN
2—2nd ,, ,,
3—3rd ,, ,,
4—4th ,, ,,
5—5th ,, ,,
6—6th ,, ,,
7—7th ,, ,,
8—DINTELHAVEN
9—BENELUXHAVEN
10—ST. LAURENSHAVEN
11—CHEMIEHAVEN
12—VULCANHAVEN
13—WILTONHAVEN
14—WILHELMHAVEN
15—EEMHAVEN
16—MERWEHAVEN
17—WAALHAVEN
18. 8th PETROLEUM —HAVEN
19. MISSISSIPPI HAVEN

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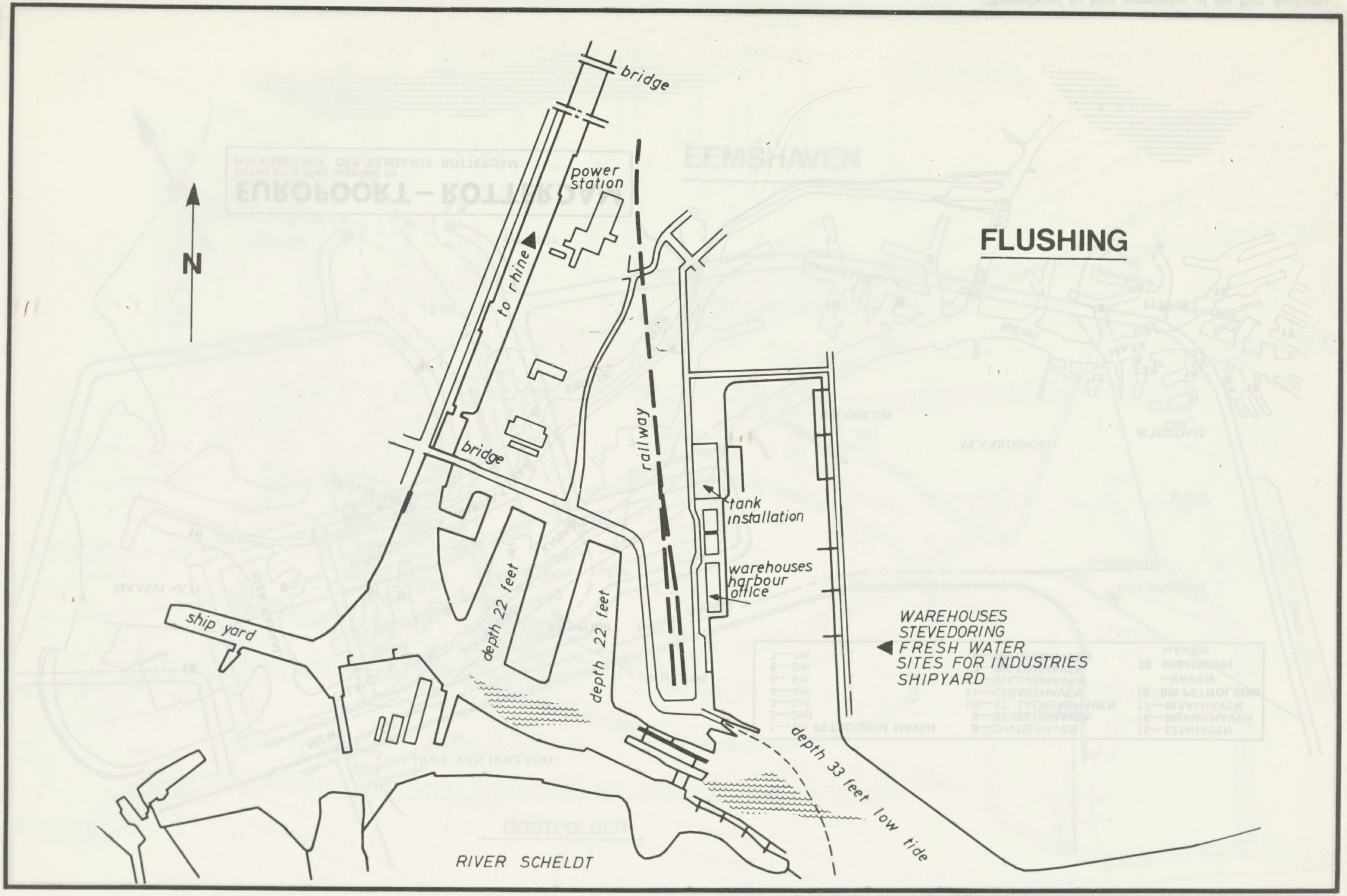
FLUSHING


bridge
power station
to rhine
N
railway
bridge
tank installation
warehouses
harbour office
depth 22 feet
depth 22 feet
depth
ship yard
depth 33 feet low tide
RIVER SCHELDT

WAREHOUSES
STEVEDORING
FRESH WATER
SITES FOR INDUSTRIES
SHIPYARD

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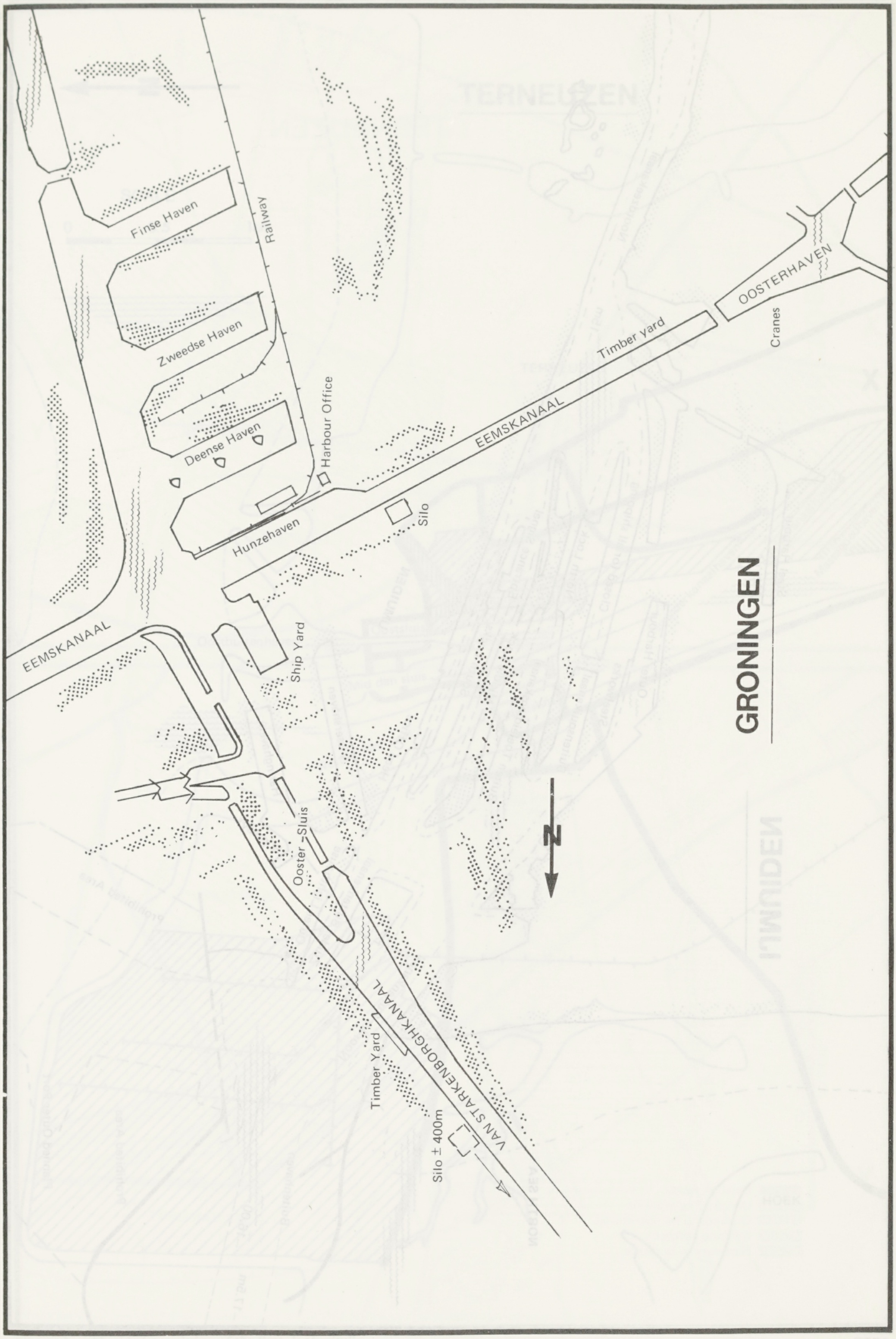

GRONINGEN

EEMSKANAAL
Finse Haven
Railway
Zweedse Haven
Deense Haven
Harbour Office
Hunzehaven
Silo
EEMSKANAAL
Timber yard
OOSTERHAVEN
Cranes
EEMSKANAAL
Ship Yard
Ooster Sluis
N
VAN STARKENBORGHKANAAL
Timber Yard
Silo ± 400m

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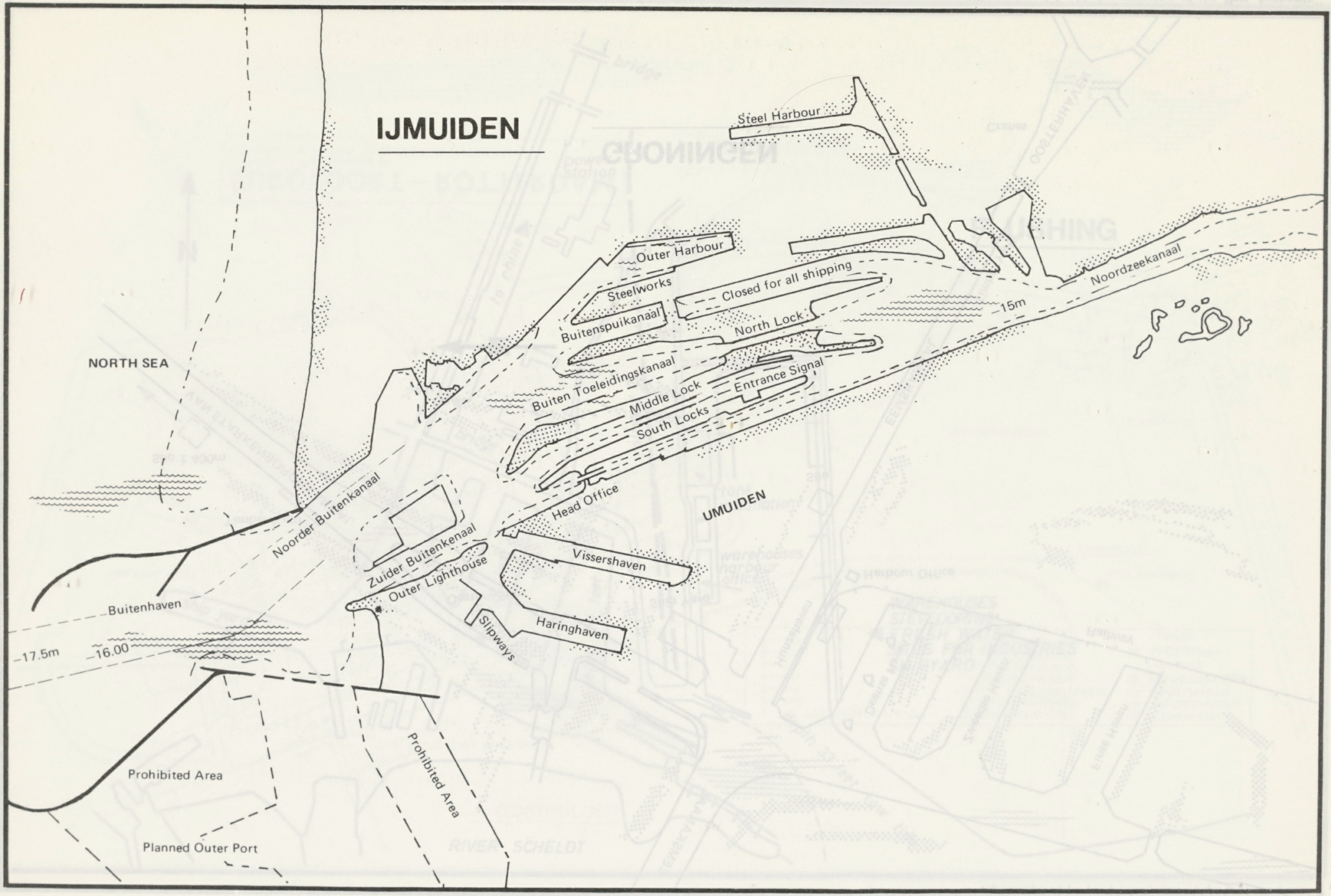
IJMUIDEN


Steel Harbour
Outer Harbour
Steelworks
Closed for all shipping
Buitenspuikanaal
North Lock
Buiten Toeleidingskanaal
Middle Lock
Entrance Signal
South Locks
Noordzeekanaal
15m
NORTH SEA
Head Office
UMUIDEN
Noorder Buitenkanaal
Zuider Buitenkenaal
Outer Lighthouse
Vissershaven
Slipways
Haringhaven
Buitenhaven
-17.5m
-16.00
Prohibited Area
Prohibited Area
Planned Outer Port

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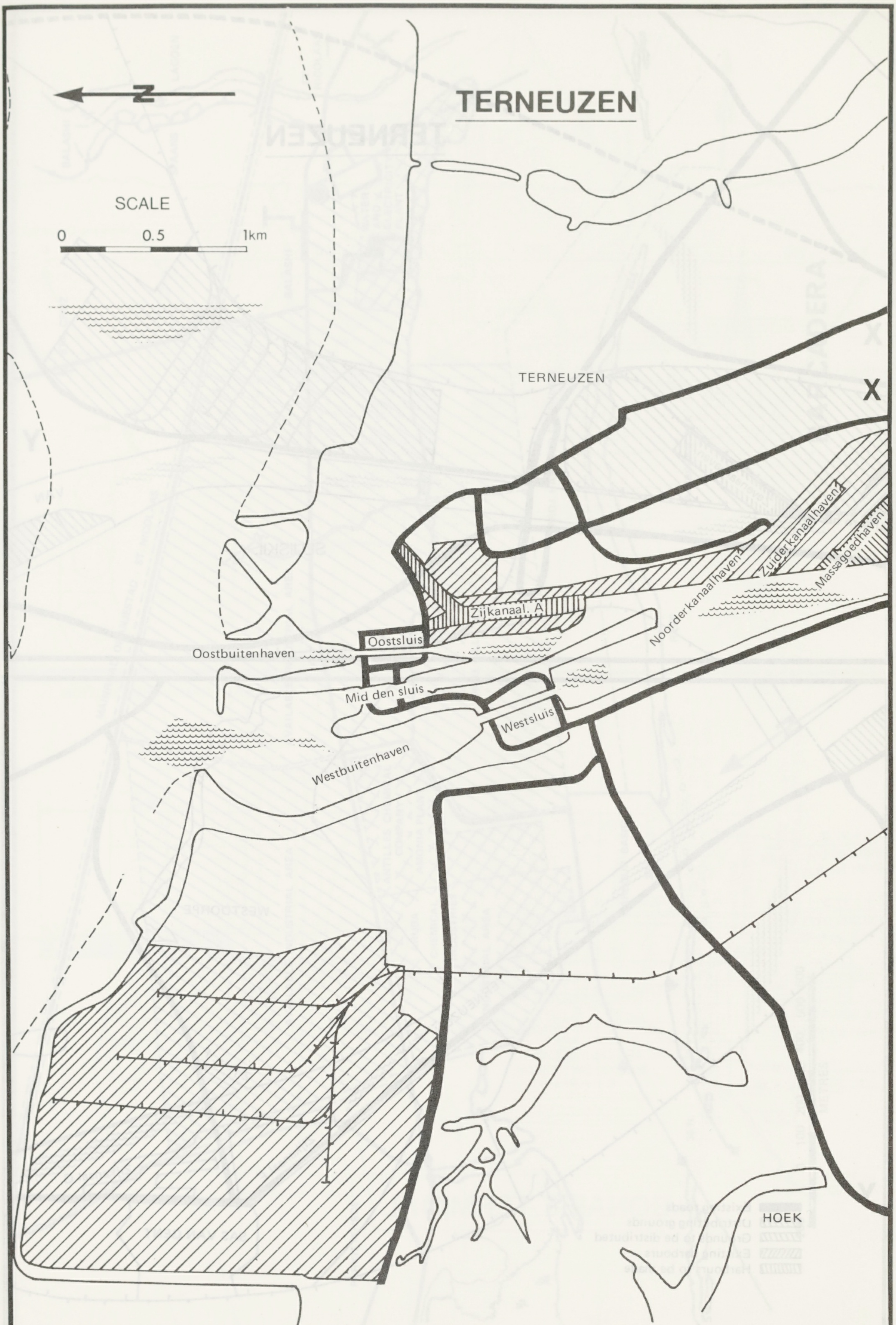
N
TERNEUZEN
SCALE
0
0.5
1km
TERNEUZEN
X
Zuiderkanaalhaven
Massagoedhaven
Noorderkanaalhaven
Zijkanaal. A
Oostsluis
Oostbuitenhaven
Mid den sluis
Westsluis
Westbuitenhaven
HOEK

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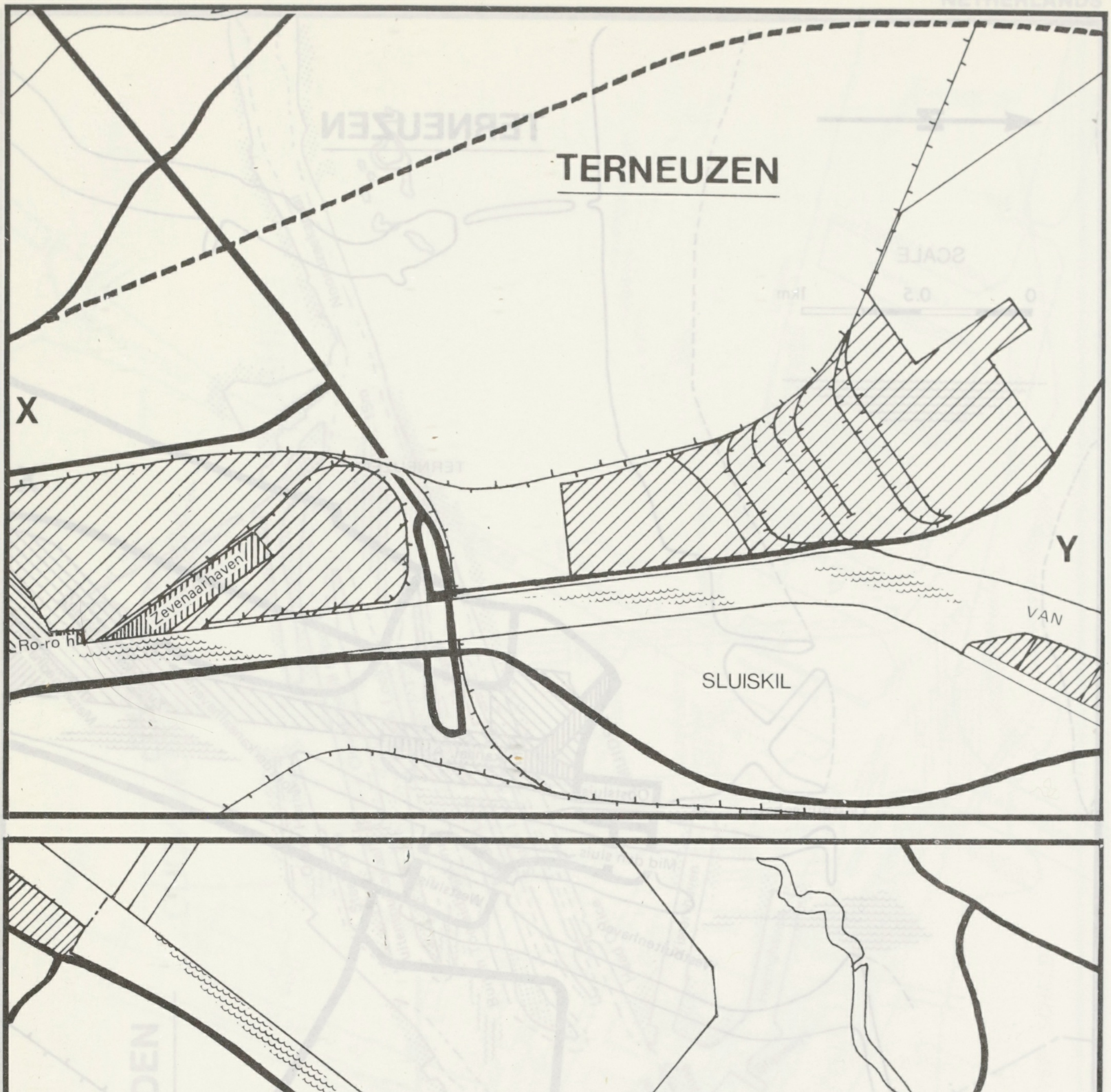
TERNEUZEN
X
Y
Zevenaarhaven
Ro-ro h
SLUISKIL
VAN
Y
WESTDORPE
TERNEUZEN
Zijkan. F
Zijkanaal E
Zijkanaal G
SAS VAN GENT
Existing roads
Distributing grounds
Grounds to be distributed
Existing harbours
Harbours to be made

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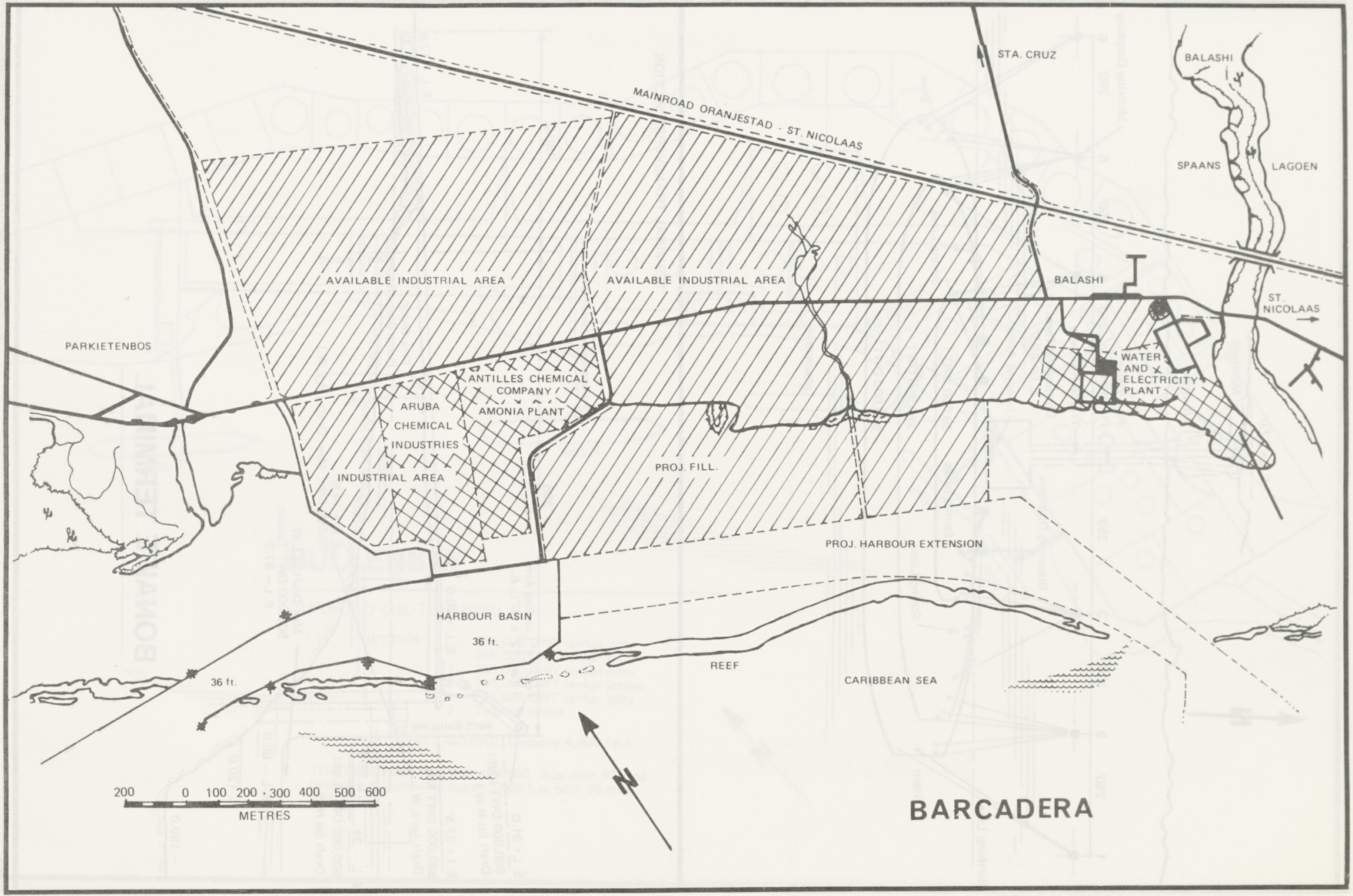
STA. CRUZ
BALASHI
MAINROAD ORANJESTAD - ST. NICOLAAS
SPAANS
LAGOEN
AVAILABLE INDUSTRIAL AREA
AVAILABLE INDUSTRIAL AREA
BALASHI
ST. NICOLAAS
PARKIETENBOS
ANTILLES CHEMICAL COMPANY
AMONIA PLANT
ARUBA CHEMICAL INDUSTRIES
WATER AND ELECTRICITY PLANT
INDUSTRIAL AREA
PROJ. FILL.
PROJ. HARBOUR EXTENSION
HARBOUR BASIN
36 ft.
36 ft.
REEF
CARIBBEAN SEA
200 0 100 200 300 400 500 600
METRES
N

BARCADERA

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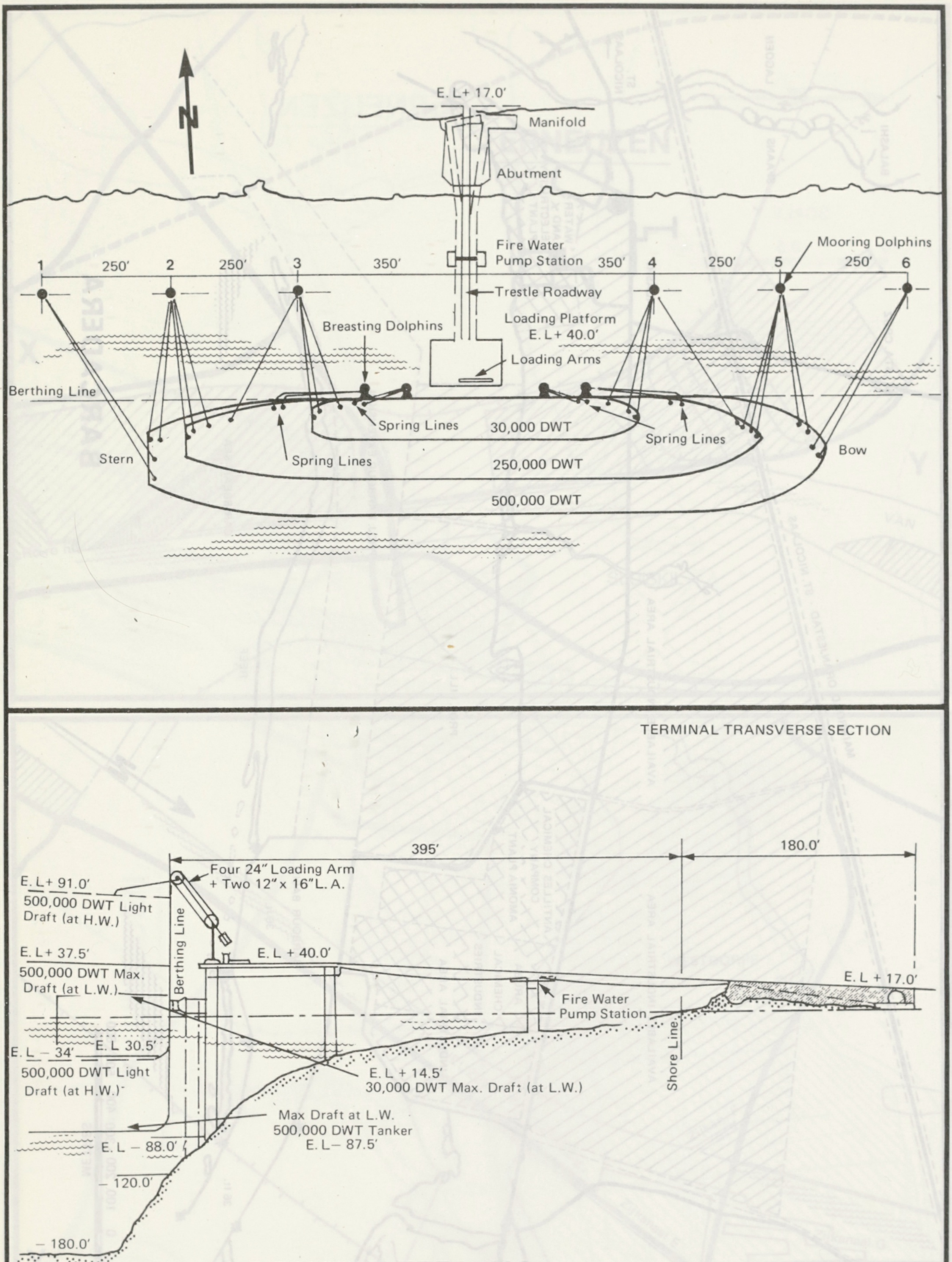
N
E. L+ 17.0'
Manifold
Abutment
Fire Water
Pump Station
Mooring Dolphins
1
250'
2
250'
3
350'
350'
4
250'
5
250'
6
Trestle Roadway
Breasting Dolphins
Loading Platform
E. L+ 40.0'
Loading Arms
Berthing Line
Spring Lines
30,000 DWT
Spring Lines
Stern
Spring Lines
250,000 DWT
Bow
500,000 DWT
TERMINAL TRANSVERSE SECTION
395'
180.0'
E. L+ 91.0'
500,000 DWT Light
Draft (at H.W.)
Four 24" Loading Arm
+ Two 12" x 16" L. A.
Berthing Line
E. L+ 37.5'
500,000 DWT Max.
Draft (at L.W.)
E. L + 40.0'
E. L + 17.0'
Fire Water
Pump Station
Shore Line
E. L – 34'
E. L 30.5'
500,000 DWT Light
Draft (at H.W.)
E. L + 14.5'
30,000 DWT Max. Draft (at L.W.)
Max Draft at L.W.
500,000 DWT Tanker
E. L– 87.5'
E. L – 88.0'
– 120.0'
– 180.0'

BONAIRE TERMINAL

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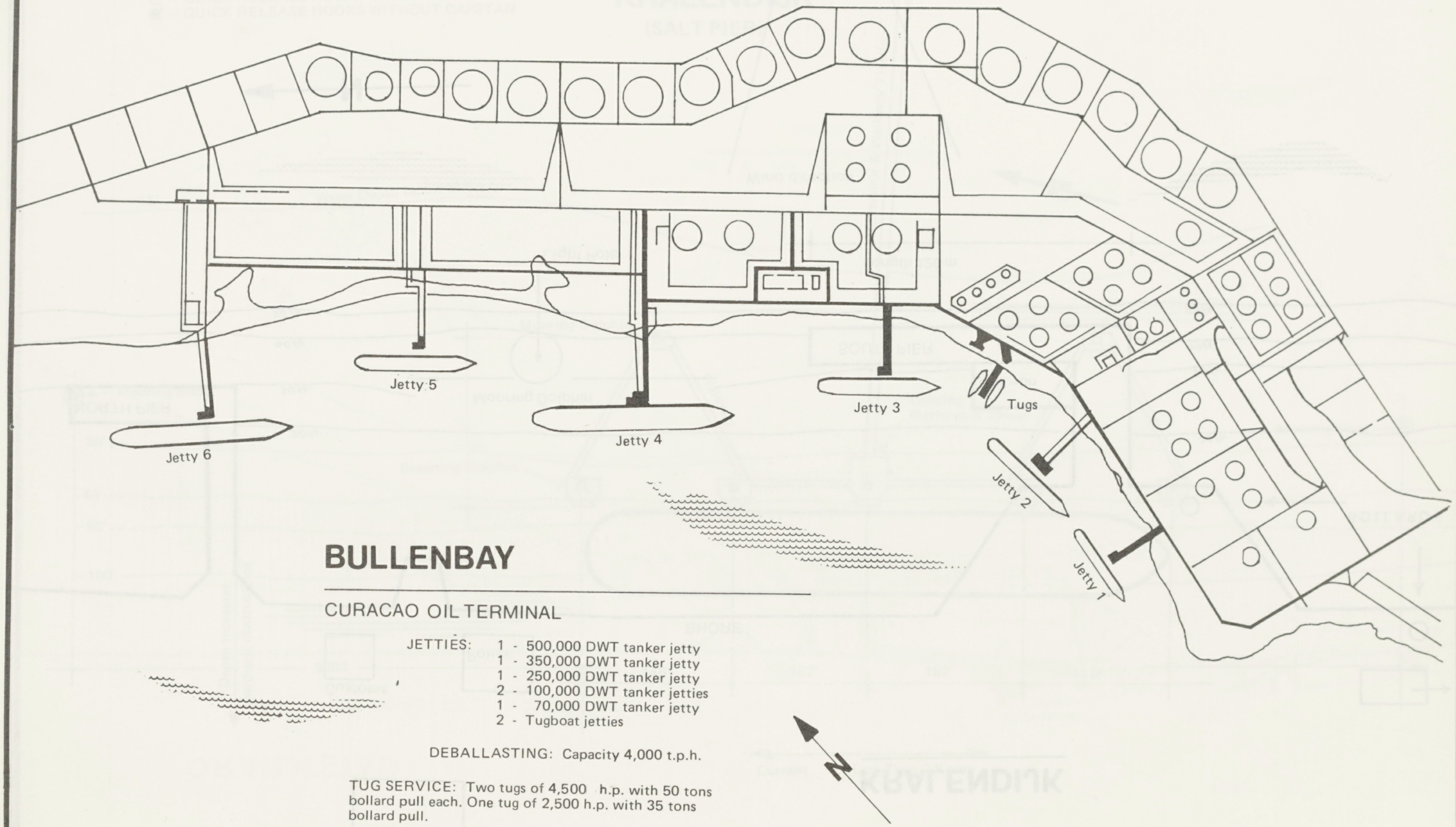
Jetty 6
Jetty 5
Jetty 4
Jetty 3
Tugs
Jetty 2
Jetty 1
N

BULLENBAY

CURACAO OIL TERMINAL

JETTIES:
1 - 500,000 DWT tanker jetty
1 - 350,000 DWT tanker jetty
1 - 250,000 DWT tanker jetty
2 - 100,000 DWT tanker jetties
1 - 70,000 DWT tanker jetty
2 - Tugboat jetties

DEBALLASTING: Capacity 4,000 t.p.h.

TUG SERVICE: Two tugs of 4,500 h.p. with 50 tons bollard pull each. One tug of 2,500 h.p. with 35 tons bollard pull.

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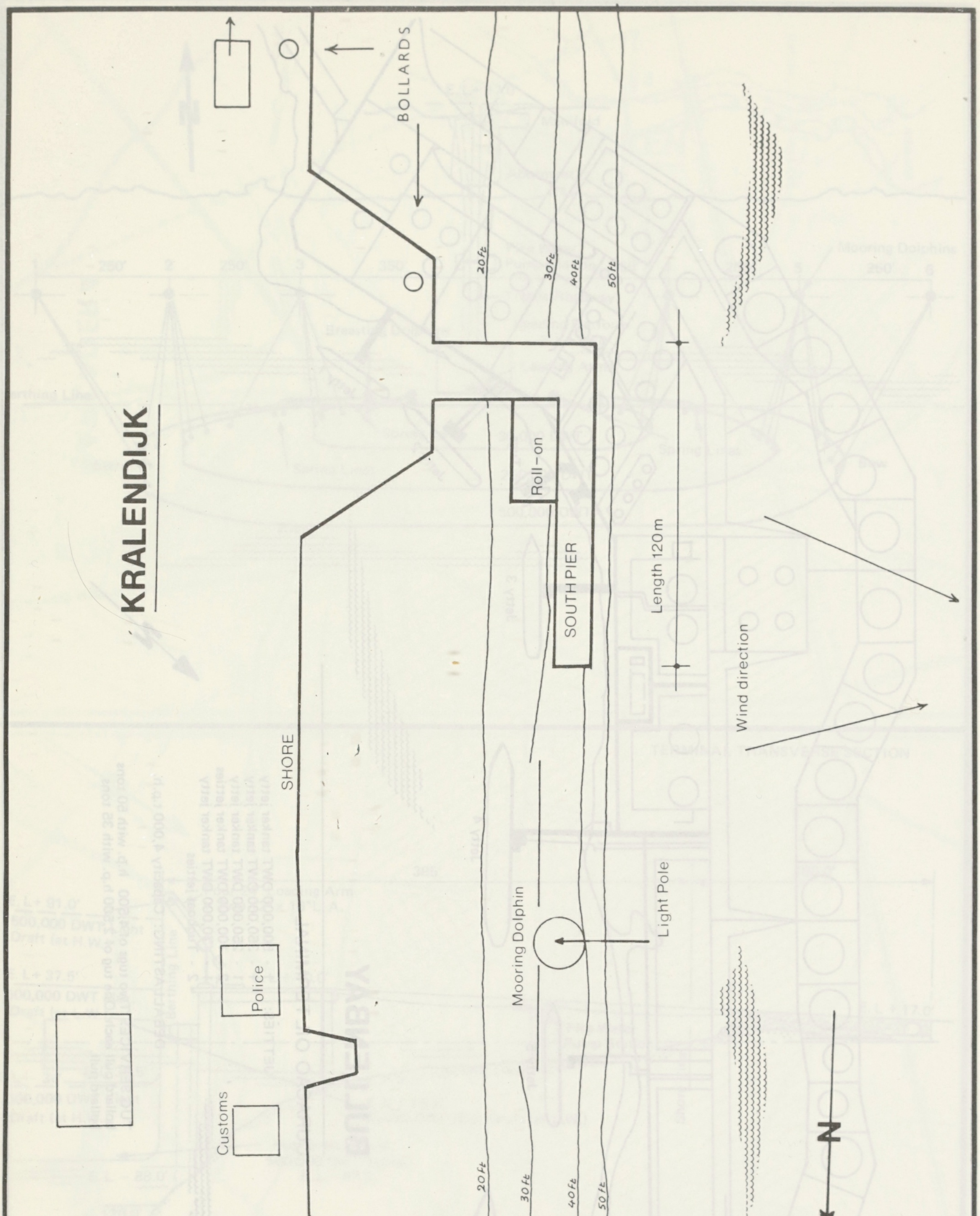
KRALENDIJK
BOLLARDS
SHORE
Police
Customs
NORTH PIER
SOUTH PIER
Roll-on
Mooring Dolphin
Light Pole
Length 120 m
Wind direction
N
20 Ft
30 Ft
40 Ft
50 Ft

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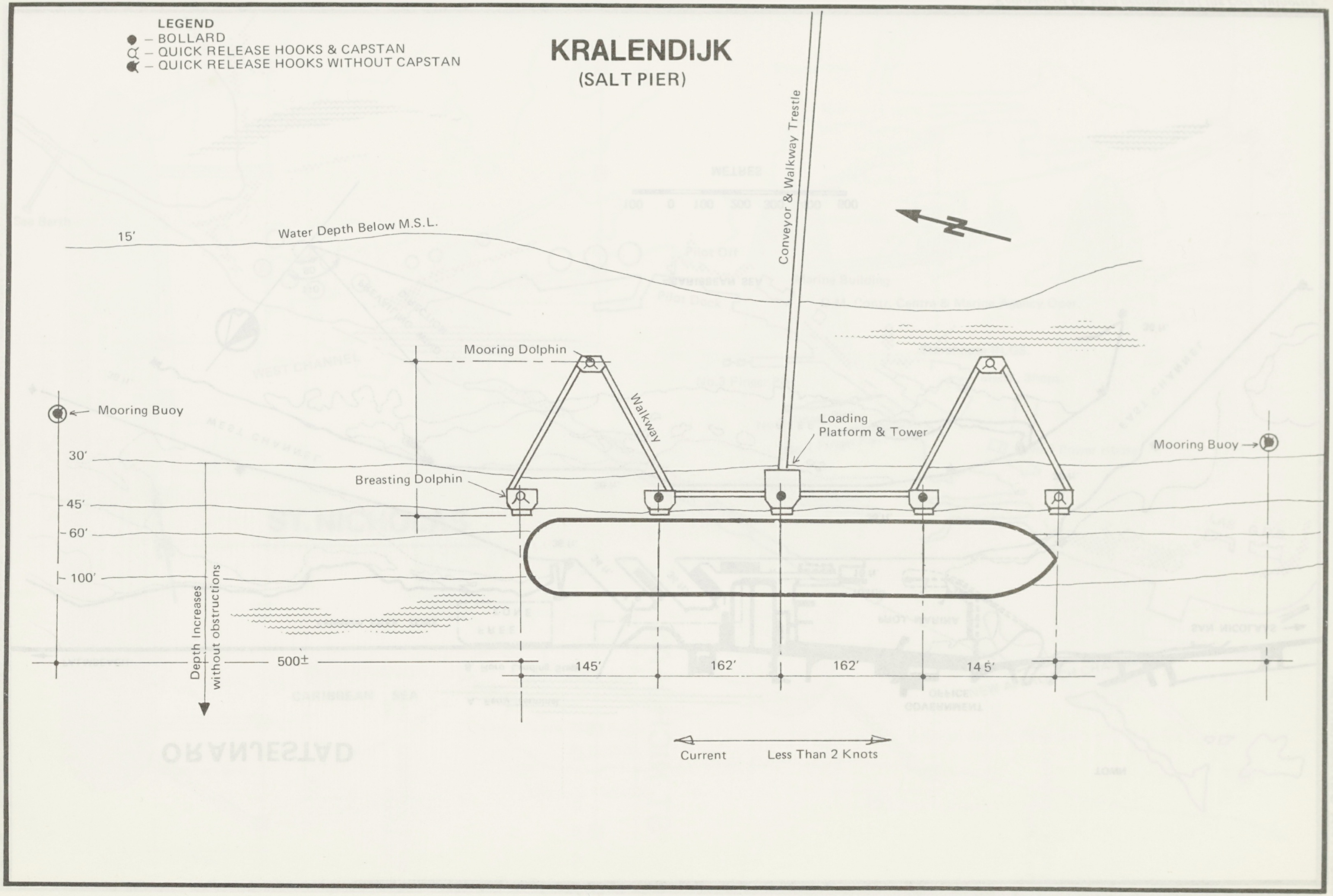

KRALENDIJK

(SALT PIER)

LEGEND
● – BOLLARD
– QUICK RELEASE HOOKS & CAPSTAN
– QUICK RELEASE HOOKS WITHOUT CAPSTAN
Conveyor & Walkway Trestle
15′
Water Depth Below M.S.L.
Mooring Dolphin
Walkway
Loading Platform & Tower
Mooring Buoy
Mooring Buoy
30′
Breasting Dolphin
45′
60′
100′
Depth Increases without obstructions
500±
145′
162′
162′
14 5′
Current
Less Than 2 Knots

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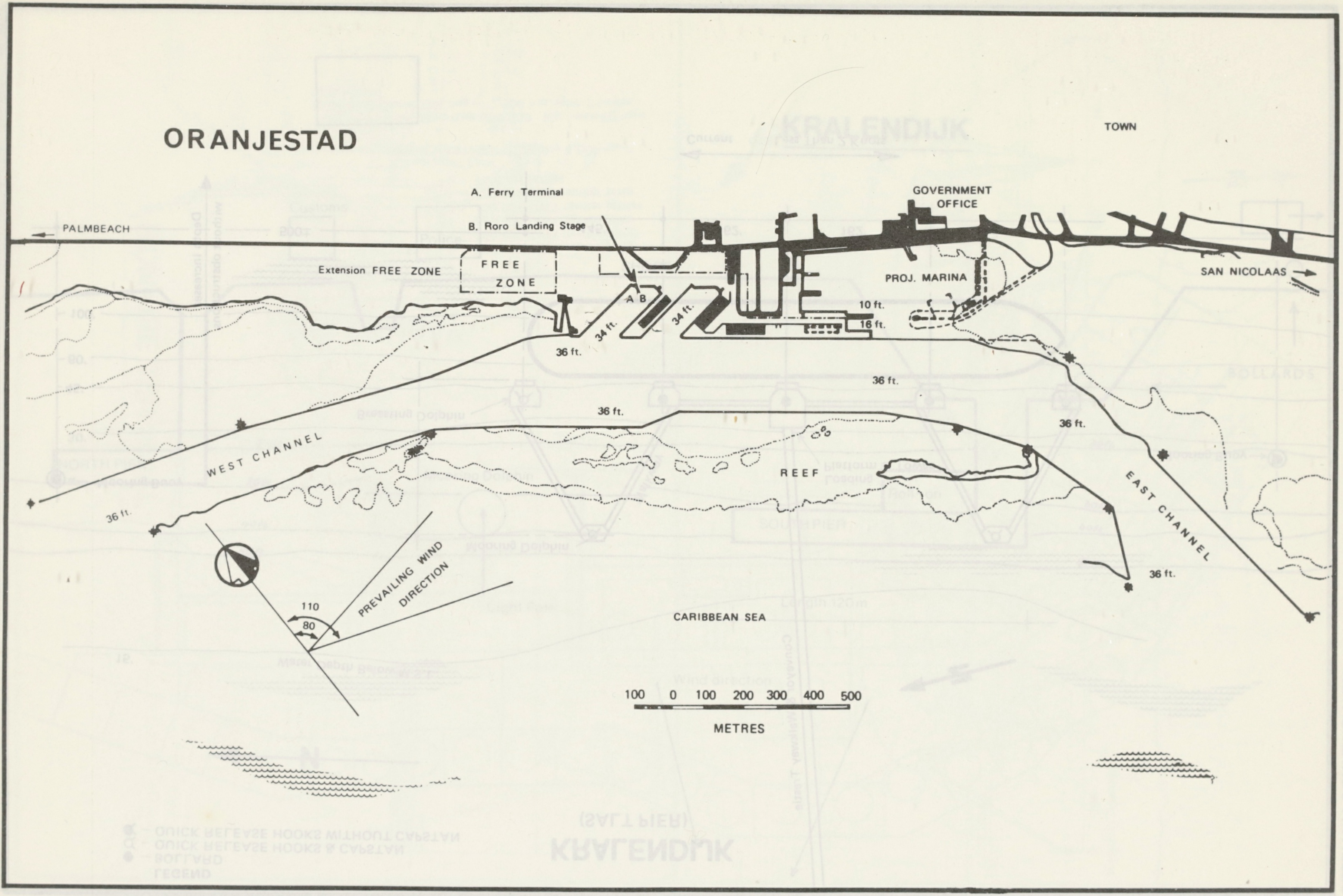
ORANJESTAD
A. Ferry Terminal
B. Roro Landing Stage
PALMBEACH
Extension FREE ZONE
FREE ZONE
A
B
34 ft.
34 ft.
36 ft.
10 ft.
16 ft.
GOVERNMENT OFFICE
TOWN
PROJ. MARINA
SAN NICOLAAS
36 ft.
36 ft.
36 ft.
WEST CHANNEL
36 ft.
REEF
EAST CHANNEL
36 ft.
PREVAILING WIND DIRECTION
110
80
CARIBBEAN SEA
100
0
100
200
300
400
500
METRES

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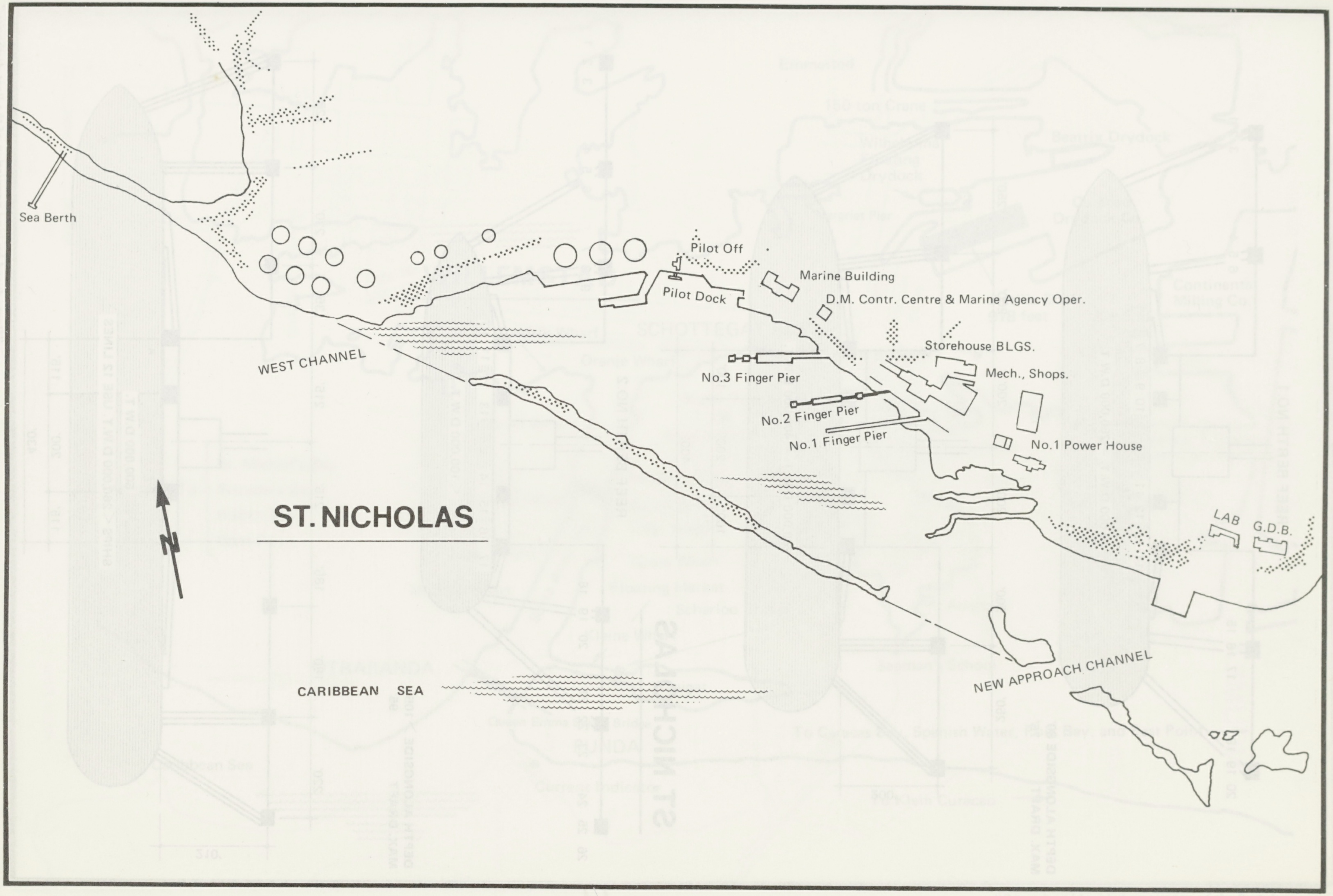

ST. NICHOLAS

Sea Berth
Pilot Off
Marine Building
Pilot Dock
D.M. Contr. Centre & Marine Agency Oper.
Storehouse BLGS.
Mech., Shops.
No.3 Finger Pier
No.2 Finger Pier
No.1 Finger Pier
No.1 Power House
WEST CHANNEL
LAB
G.D.B.
N
CARIBBEAN SEA
NEW APPROACH CHANNEL

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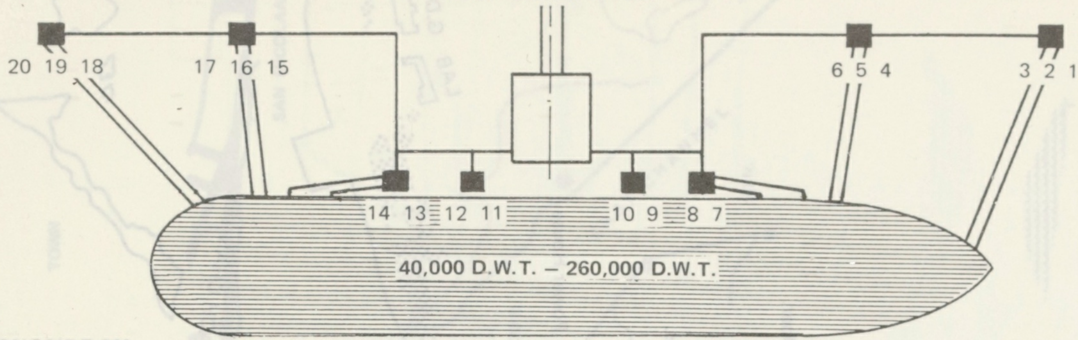
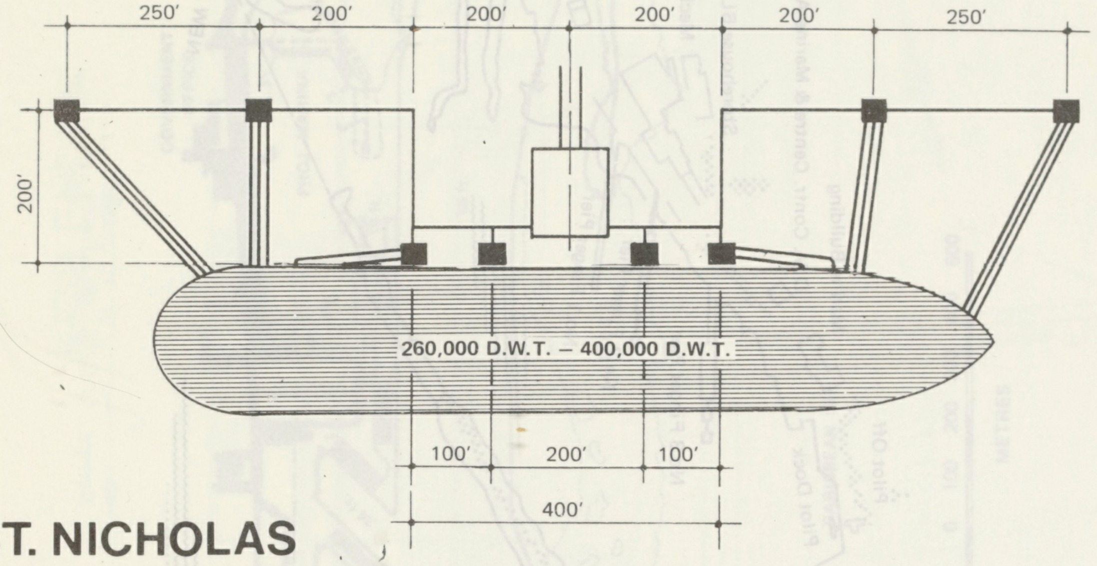
REEF BERTH NO.1

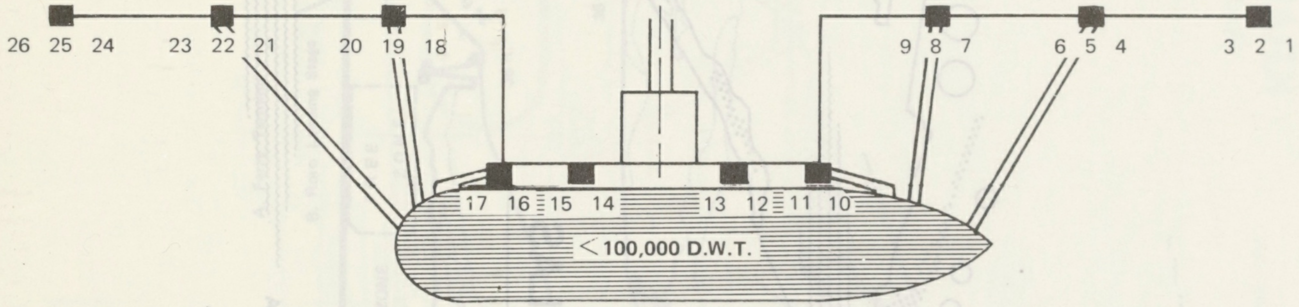

20 19 18
17 16 15
6 5 4
3 2 1
14 13 12 11
10 9 8 7
40,000 D.W.T. – 260,000 D.W.T.

DEPTH ALONGSIDE 80'
MAX. DRAFT 75'

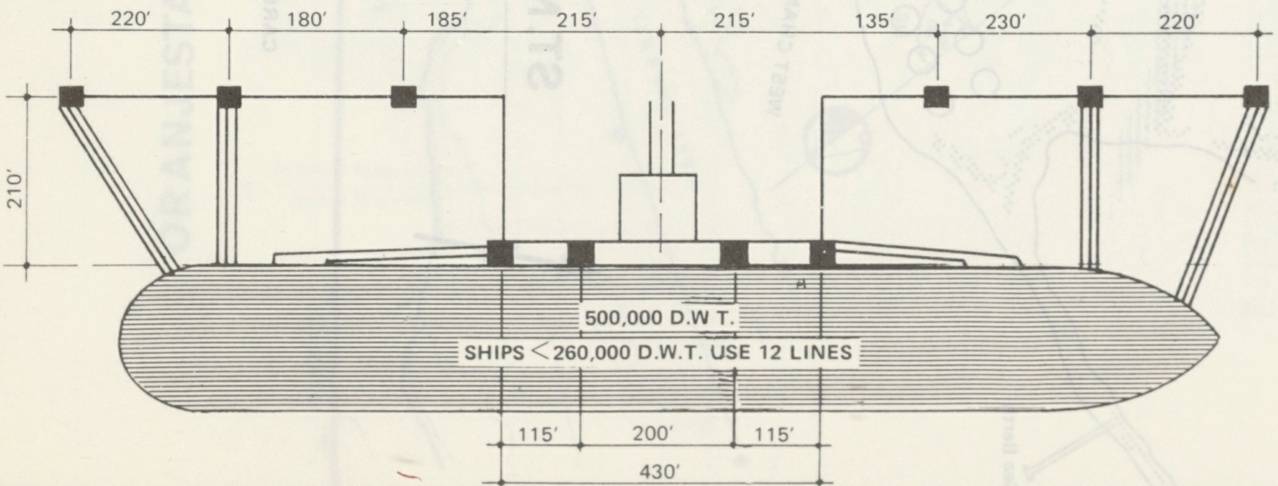

250'
200'
200'
200'
200'
250'
200'
260,000 D.W.T. – 400,000 D.W.T.
100'
200'
100'
400'

ST. NICHOLAS

REEF BERTH NO.2


26 25 24
23 22 21
20 19 18
9 8 7
6 5 4
3 2 1
17 16 15 14
13 12 11 10
< 100,000 D.W.T.

DEPTH ALONGSIDE > 105'
MAX. DRAFT 95'


220'
180'
185'
215'
215'
135'
230'
220'
210'
500,000 D.W T.
SHIPS < 260,000 D.W.T. USE 12 LINES
115'
200'
115'
430'

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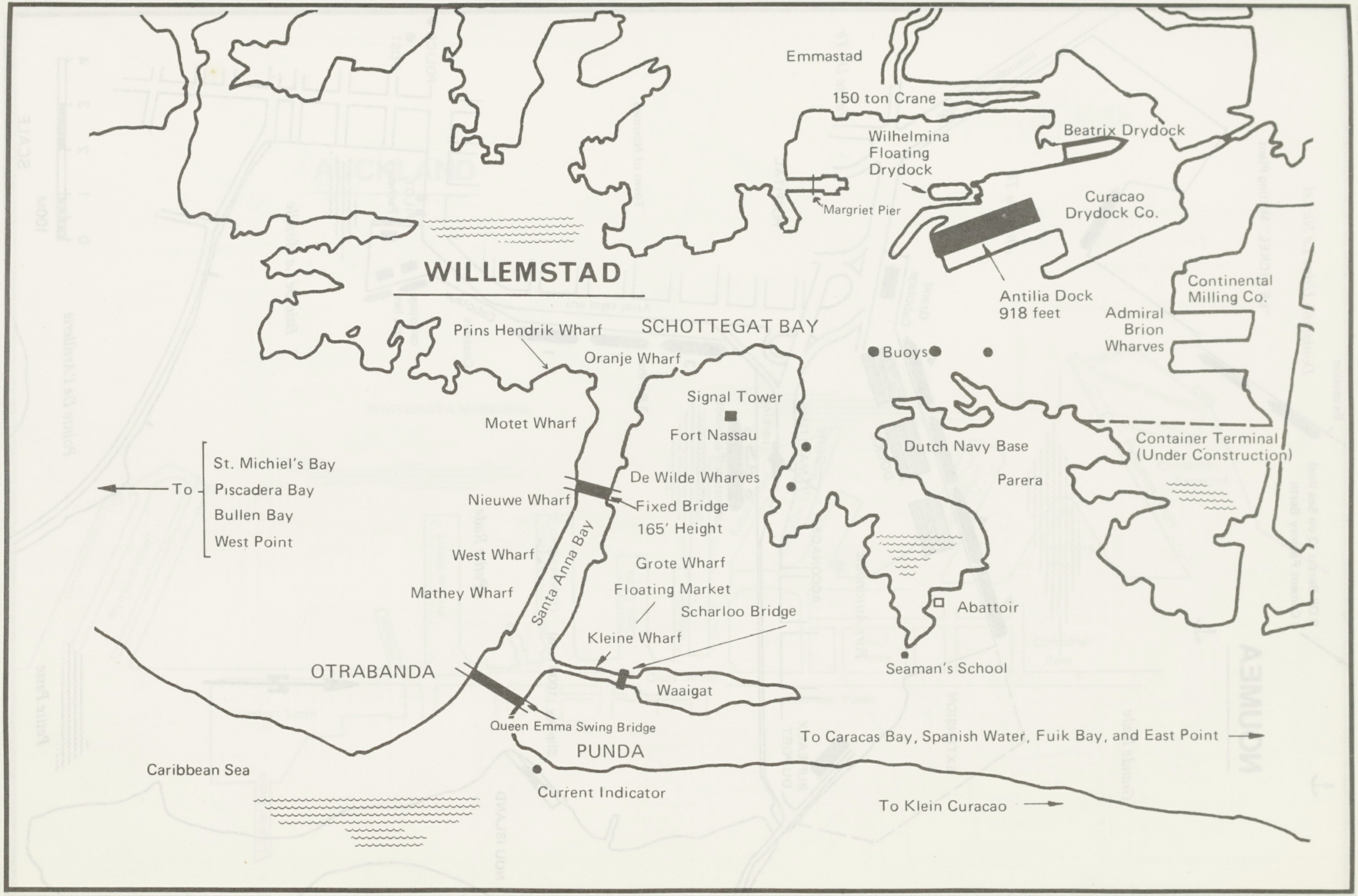
WILLEMSTAD
Emmastad
150 ton Crane
Beatrix Drydock
Wilhelmina Floating Drydock
Margriet Pier
Curacao Drydock Co.
Antilia Dock 918 feet
Continental Milling Co.
Admiral Brion Wharves
SCHOTTEGAT BAY
Prins Hendrik Wharf
Oranje Wharf
Buoys
Signal Tower
Fort Nassau
Motet Wharf
Dutch Navy Base
Container Terminal (Under Construction)
Parera
St. Michiel's Bay
To
Piscadera Bay
Bullen Bay
West Point
De Wilde Wharves
Nieuwe Wharf
Fixed Bridge 165' Height
West Wharf
Santa Anna Bay
Grote Wharf
Mathey Wharf
Floating Market
Scharloo Bridge
Abattoir
Kleine Wharf
Seaman's School
OTRABANDA
Waaigat
Queen Emma Swing Bridge
To Caracas Bay, Spanish Water, Fuik Bay, and East Point
PUNDA
Caribbean Sea
Current Indicator
To Klein Curacao

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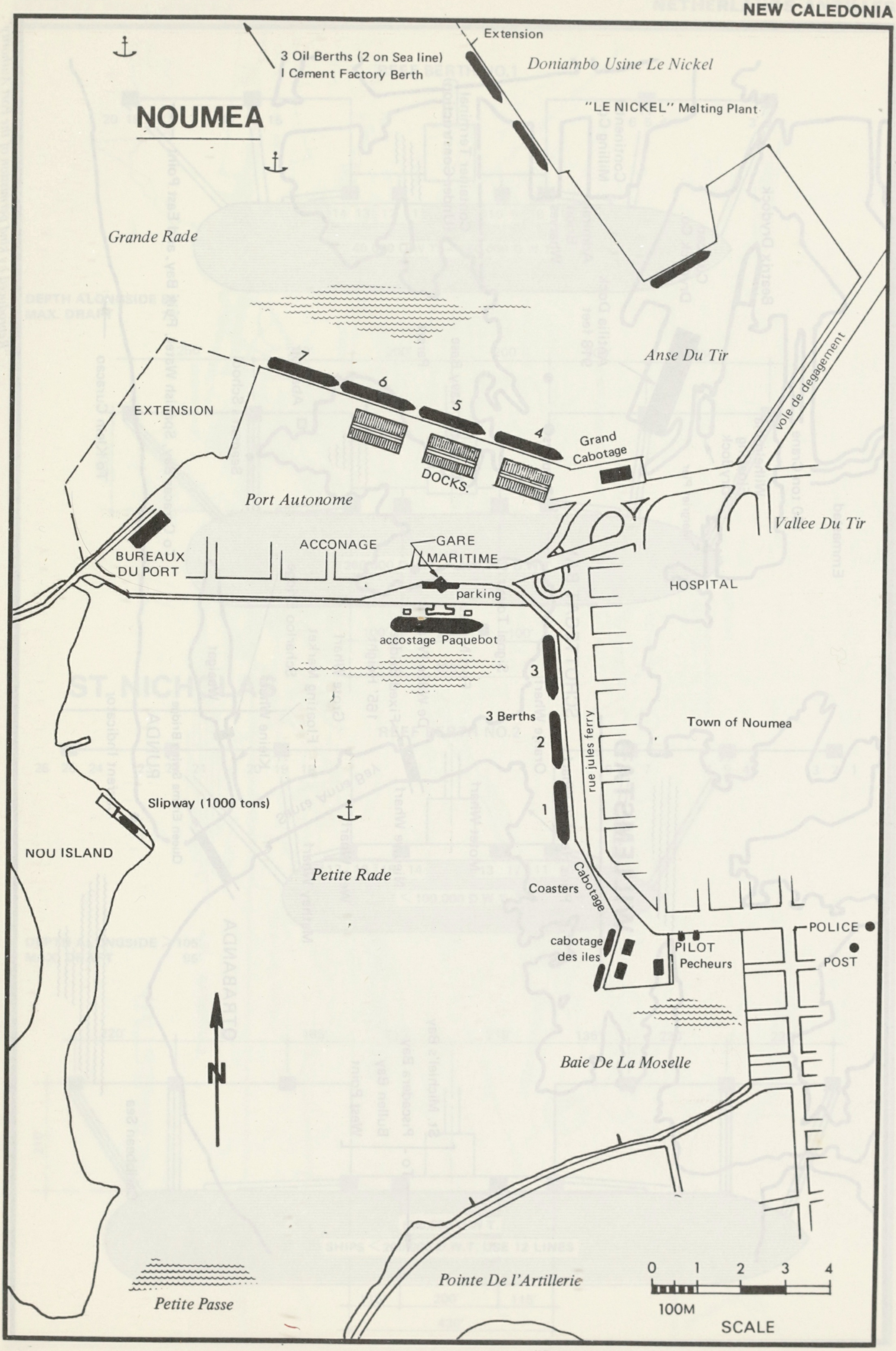
NOUMEA
3 Oil Berths (2 on Sea line)
I Cement Factory Berth
Extension
Doniambo Usine Le Nickel
"LE NICKEL" Melting Plant
Grande Rade
Anse Du Tir
vole de degagement
EXTENSION
7
6
5
4
Grand Cabotage
DOCKS.
Port Autonome
Vallee Du Tir
BUREAUX DU PORT
ACCONAGE
GARE MARITIME
parking
HOSPITAL
accostage Paquebot
3
3 Berths
2
1
rue jules ferry
Town of Noumea
Slipway (1000 tons)
NOU ISLAND
Petite Rade
Coasters
Cabotage
cabotage des iles
PILOT
Pecheurs
POLICE
POST
N
Baie De La Moselle
Pointe De l'Artillerie
Petite Passe
0
1
2
3
4
100M
SCALE

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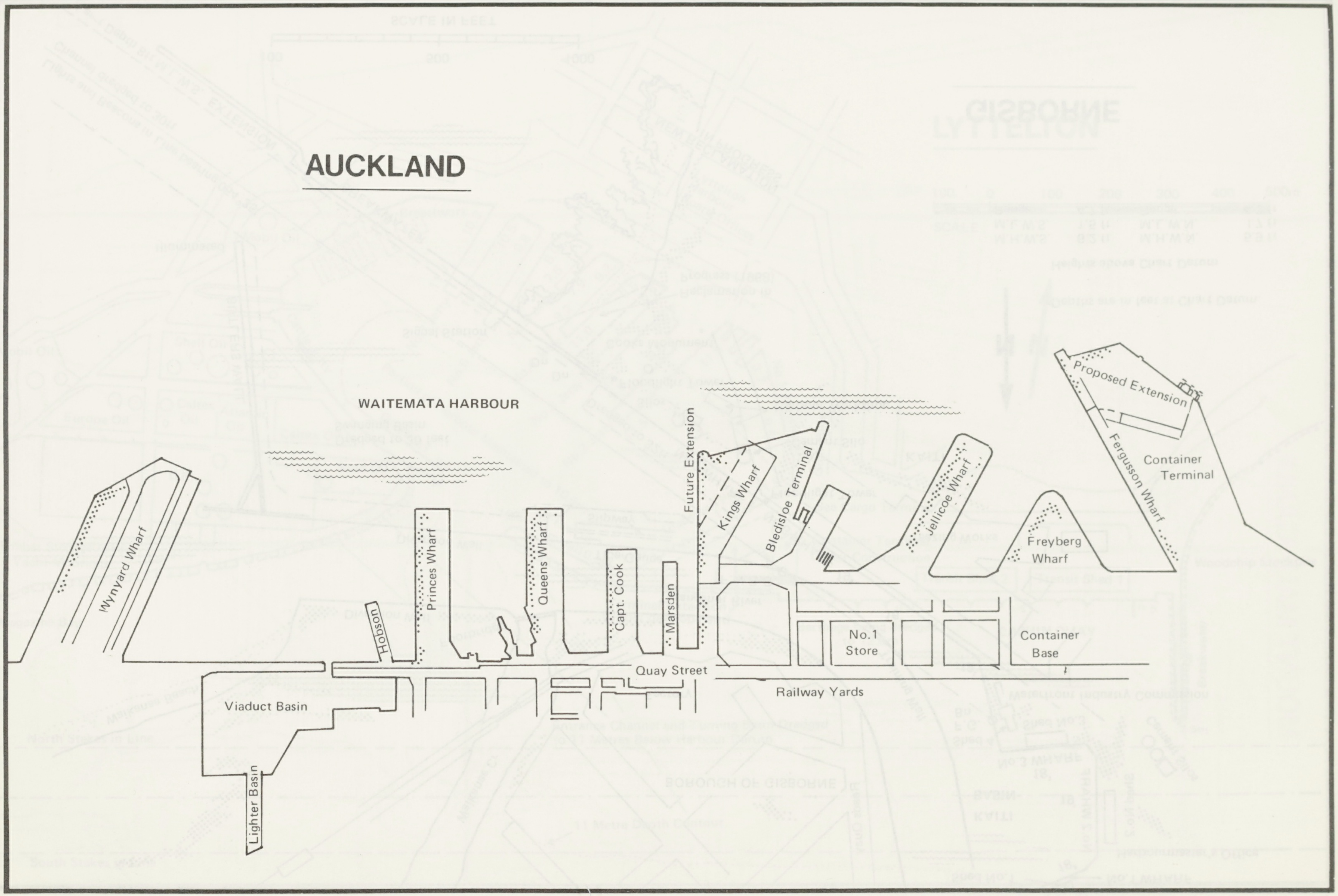
AUCKLAND


WAITEMATA HARBOUR
Wynyard Wharf
Lighter Basin
Viaduct Basin
Hobson
Princes Wharf
Queens Wharf
Capt. Cook
Marsden
Future Extension
Kings Wharf
Bledisloe Terminal
Jellicoe Wharf
Freyberg Wharf
Proposed Extension
Fergusson Wharf
Container Terminal
Container Base
No.1 Store
Quay Street
Railway Yards

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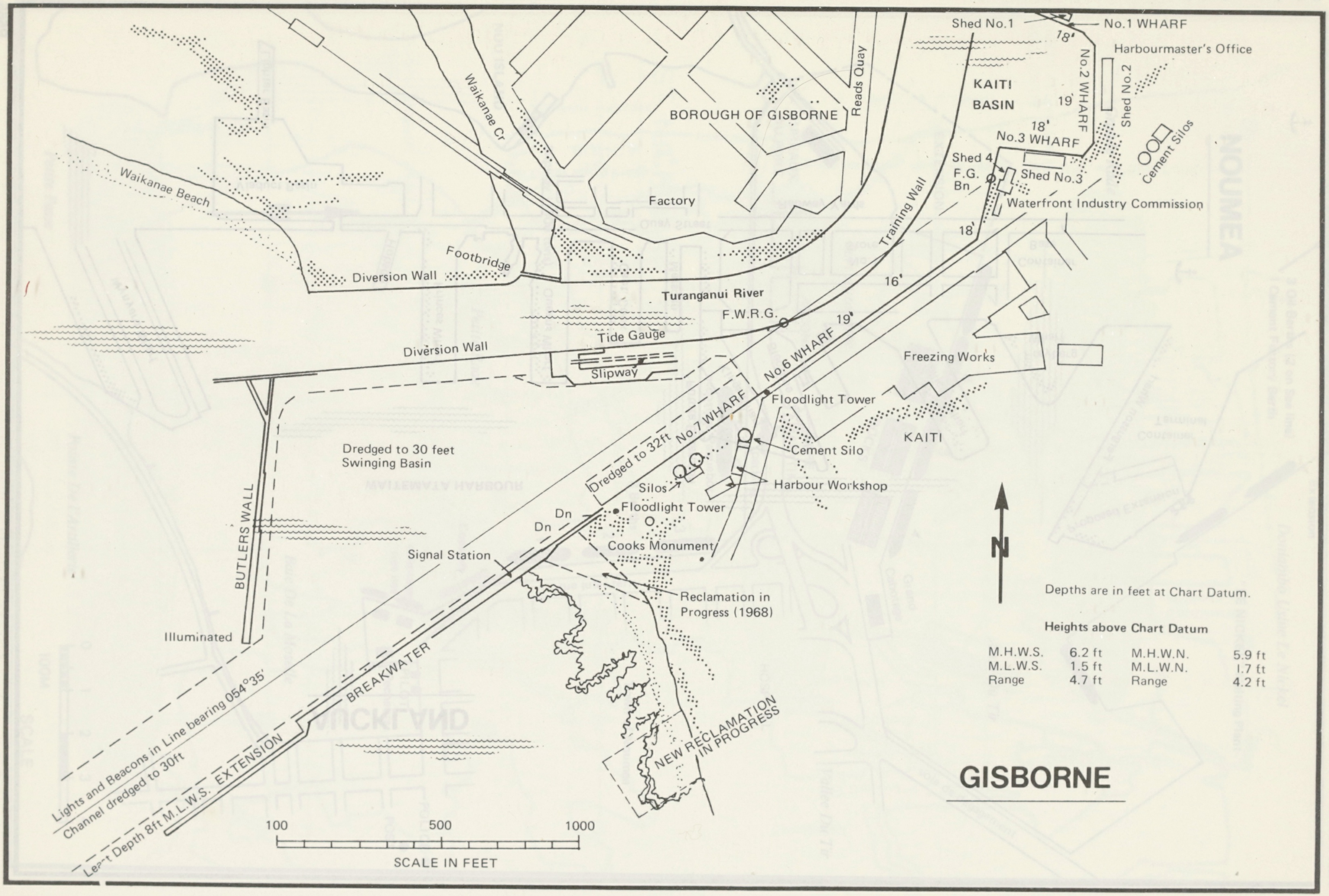
Shed No.1
No.1 WHARF
18'
Harbourmaster's Office
No.2 WHARF
Shed No.2
KAITI
BASIN
19'
18'
No.3 WHARF
Shed 4
F.G.
Bn
Shed No.3
Cement Silos
Waterfront Industry Commission
Reads Quay
BOROUGH OF GISBORNE
Waikanae Cr
Factory
Training Wall
18'
Waikanae Beach
Footbridge
Diversion Wall
Turanganui River
16'
F.W.R.G.
19'
Tide Gauge
Diversion Wall
Slipway
No.6 WHARF
Freezing Works
Floodlight Tower
No.7 WHARF
Dredged to 32ft
Dredged to 30 feet
Swinging Basin
Cement Silo
KAITI
Silos
Harbour Workshop
Floodlight Tower
Dn
Dn
Cooks Monument
Signal Station
BUTLERS WALL
Reclamation in
Progress (1968)
Illuminated
BREAKWATER
NEW RECLAMATION
IN PROGRESS
Lights and Beacons in Line bearing 054°35'
Channel dredged to 30ft
Least Depth 8ft M.L.W.S. EXTENSION
100
500
1000
SCALE IN FEET
N
GISBORNE

Depths are in feet at Chart Datum.

Heights above Chart Datum

M.H.W.S.	6.2 ft	M.H.W.N.	5.9 ft
M.L.W.S.	1.5 ft	M.L.W.N.	1.7 ft
Range	4.7 ft	Range	4.2 ft

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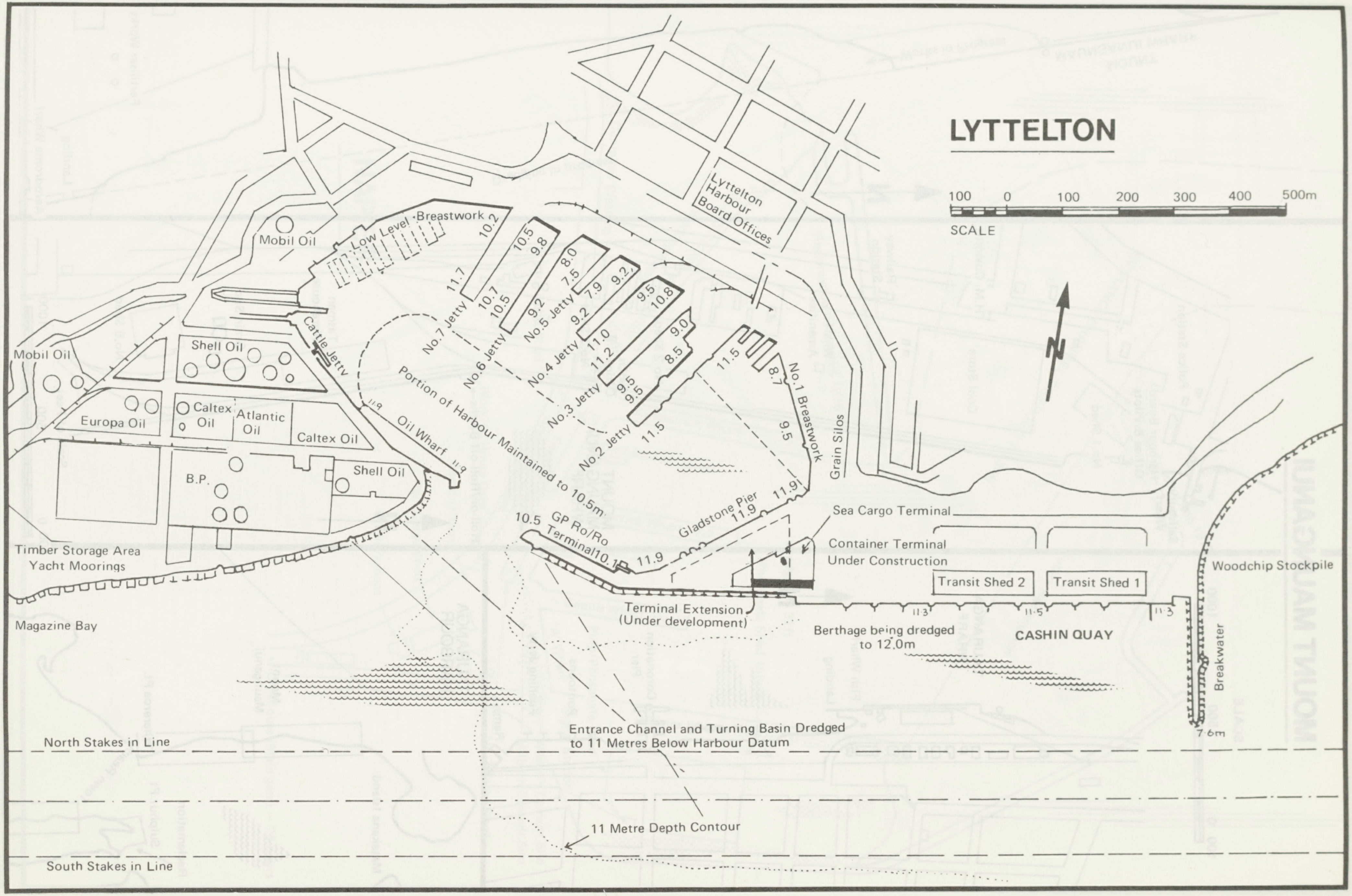
LYTTELTON
100 0 100 200 300 400 500m
SCALE
N
Lyttelton Harbour Board Offices
Mobil Oil
Low Level Breastwork
10.2
11.7
10.5
9.8
10.7
10.5
No.7 Jetty
No.6 Jetty
No.5 Jetty
9.2
8.0
7.5
7.9
9.2
9.2
No.4 Jetty
11.0
11.2
9.5
10.8
9.0
8.5
No.3 Jetty
9.5
9.5
No.2 Jetty
11.5
11.5
8.7
No.1 Breastwork
9.5
Grain Silos
Cattle Jetty
Mobil Oil
Shell Oil
Europa Oil
Caltex Oil
Atlantic Oil
Caltex Oil
Portion of Harbour Maintained to 10.5m
Oil Wharf
11.9
11.9
Shell Oil
B.P.
10.5
GP Ro/Ro Terminal
10.1
11.9
Gladstone Pier
11.9
11.9
Sea Cargo Terminal
Container Terminal Under Construction
Woodchip Stockpile
Transit Shed 2
Transit Shed 1
Timber Storage Area
Yacht Moorings
Terminal Extension (Under development)
11·3
11·5
11·3
Magazine Bay
Berthage being dredged to 12.0m
CASHIN QUAY
Breakwater
7·6m
Entrance Channel and Turning Basin Dredged to 11 Metres Below Harbour Datum
North Stakes in Line
11 Metre Depth Contour
South Stakes in Line

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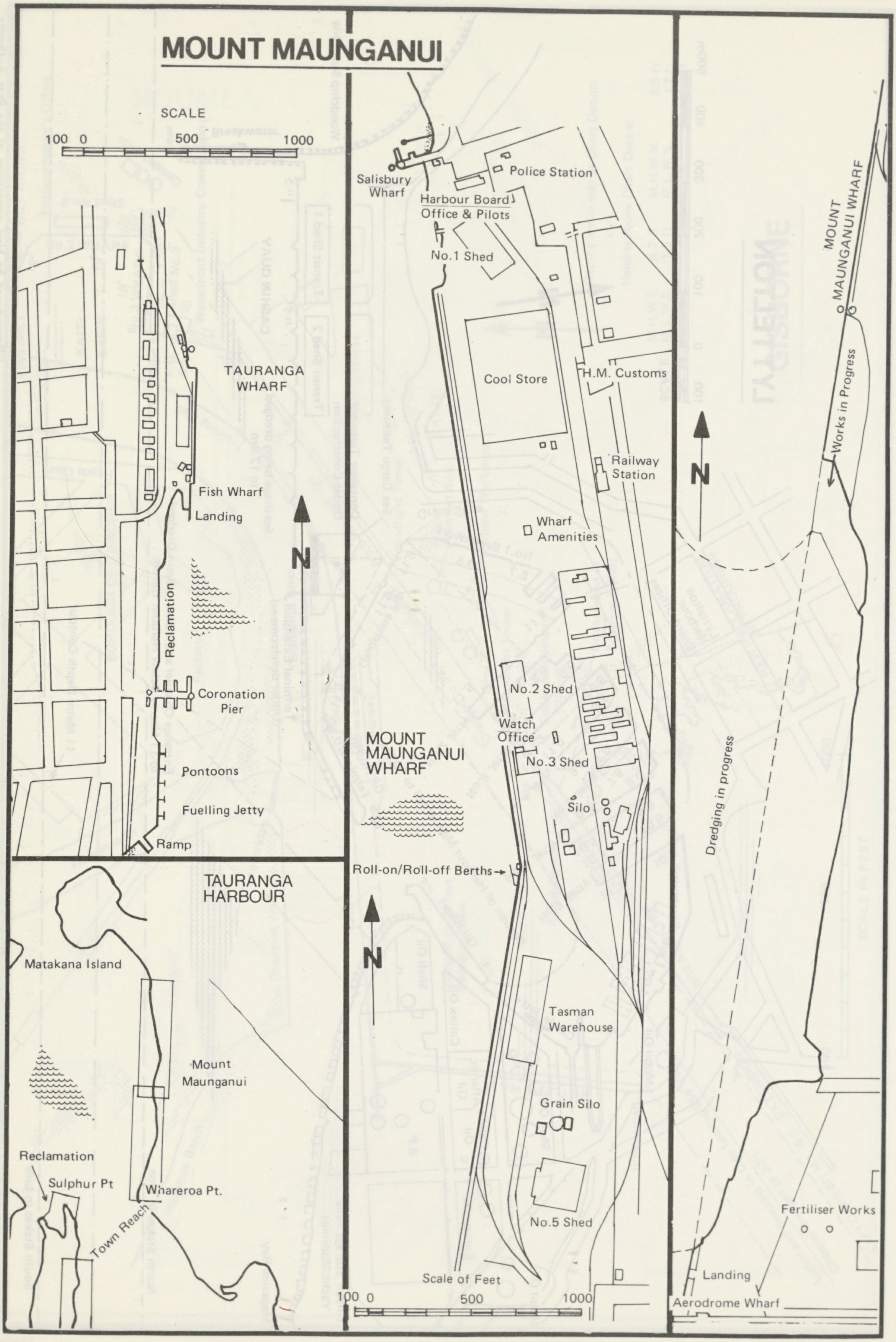
MOUNT MAUNGANUI


SCALE
100 0 500 1000
TAURANGA WHARF
Fish Wharf
Landing
Reclamation
Coronation Pier
Pontoons
Fuelling Jetty
Ramp
N
TAURANGA HARBOUR
Matakana Island
Mount Maunganui
Reclamation
Sulphur Pt
Whareroa Pt.
Town Reach
Salisbury Wharf
Police Station
Harbour Board Office & Pilots
No.1 Shed
Cool Store
H.M. Customs
Railway Station
Wharf Amenities
No.2 Shed
Watch Office
No.3 Shed
Silo
MOUNT MAUNGANUI WHARF
Roll-on/Roll-off Berths
Tasman Warehouse
Grain Silo
No.5 Shed
Scale of Feet
100 0 500 1000
MOUNT MAUNGANUI WHARF
Works in Progress
Dredging in progress
Fertiliser Works
Landing
Aerodrome Wharf

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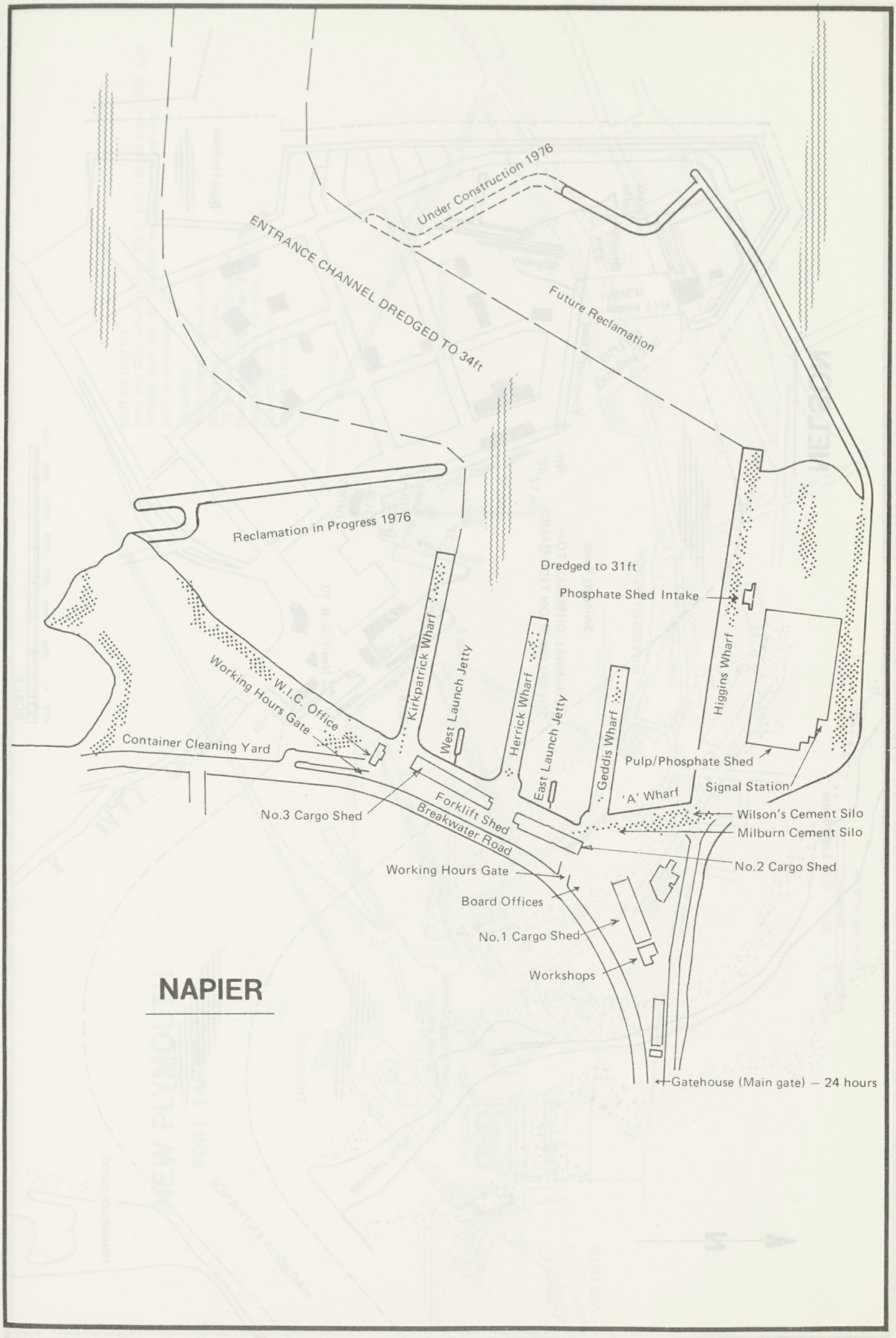
Under Construction 1976
ENTRANCE CHANNEL DREDGED TO 34ft
Future Reclamation
Reclamation in Progress 1976
Dredged to 31ft
Phosphate Shed Intake
Kirkpatrick Wharf
West Launch Jetty
Herrick Wharf
East Launch Jetty
Geddis Wharf
Higgins Wharf
W.I.C. Office
Working Hours Gate
Container Cleaning Yard
Pulp/Phosphate Shed
Signal Station
'A' Wharf
Wilson's Cement Silo
Milburn Cement Silo
No.3 Cargo Shed
Forklift Shed
Breakwater Road
No.2 Cargo Shed
Working Hours Gate
Board Offices
No.1 Cargo Shed
Workshops
NAPIER
Gatehouse (Main gate) — 24 hours

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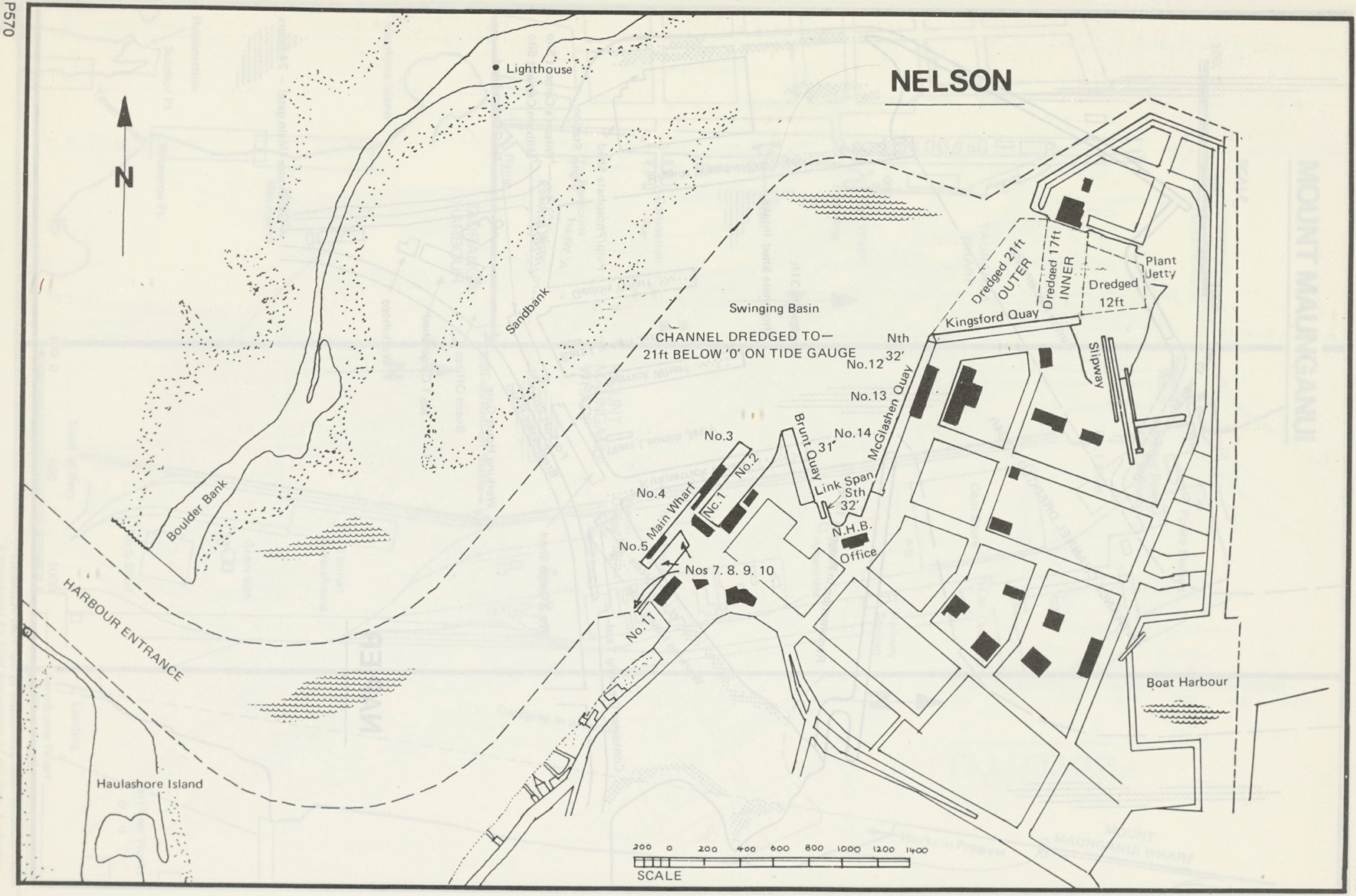
NELSON
N
Lighthouse
Sandbank
Boulder Bank
HARBOUR ENTRANCE
Haulashore Island
Swinging Basin
CHANNEL DREDGED TO—
21ft BELOW '0' ON TIDE GAUGE
Dredged 21ft OUTER
Dredged 17ft INNER
Dredged 12ft
Plant Jetty
Kingsford Quay
Slipway
Nth 32'
No.12
No.13
No.14
McGlashen Quay
Brunt Quay
31'
Link Span
Sth 32'
N.H.B. Office
No.3
No.2
No.1
No.4
Main Wharf
No.5
Nos 7. 8. 9. 10
No.11
Boat Harbour
200 0 200 400 600 800 1000 1200 1400
SCALE

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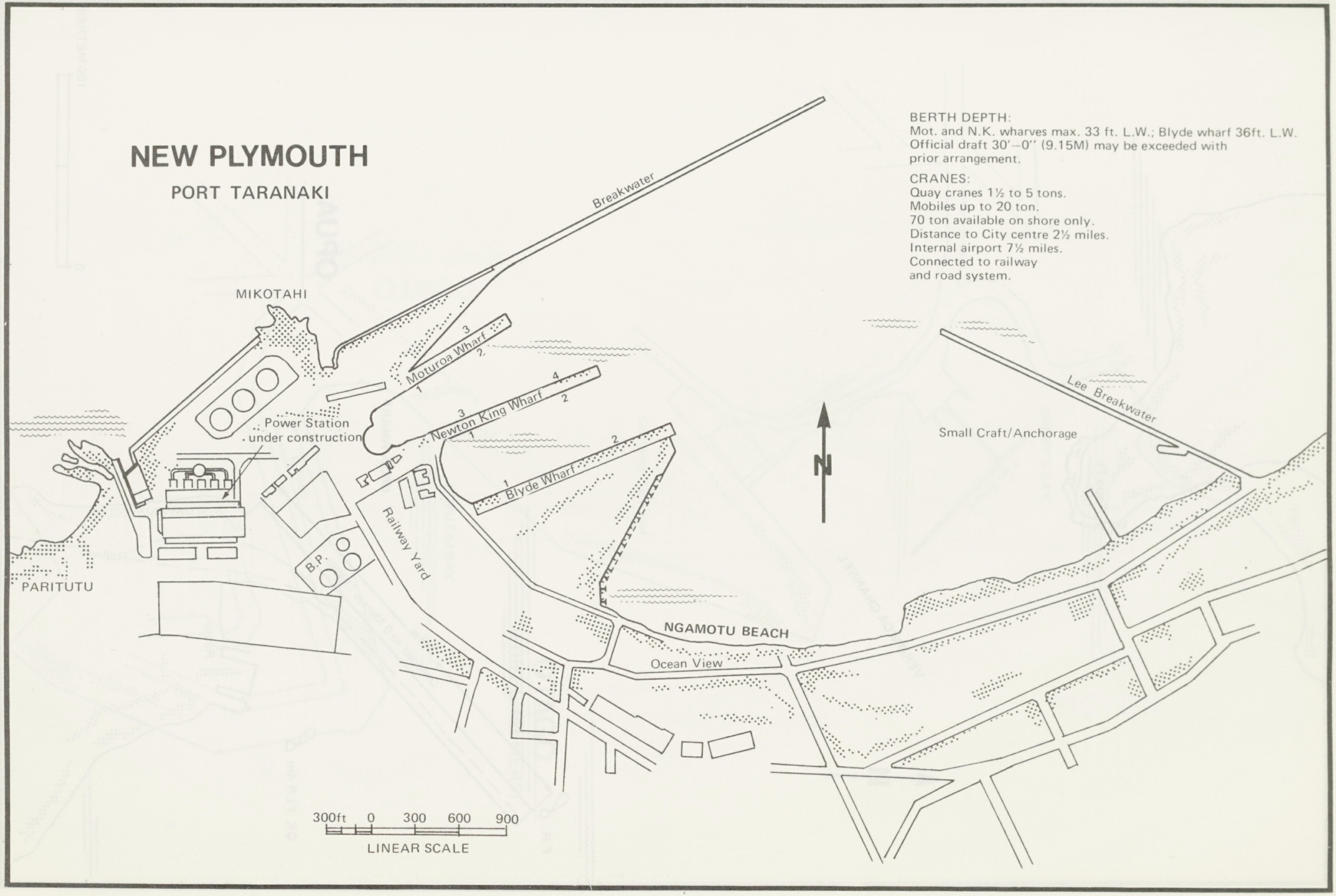
NEW PLYMOUTH

PORT TARANAKI


Breakwater
MIKOTAHI
3
Moturoa Wharf
2
1
4
3
Newton King Wharf
2
1
Power Station
under construction
2
1
Blyde Wharf
PARITUTU
B.P.
Railway Yard
N
Small Craft/Anchorage
Lee Breakwater
NGAMOTU BEACH
Ocean View
300ft 0 300 600 900
LINEAR SCALE

BERTH DEPTH:
Mot. and N.K. wharves max. 33 ft. L.W.; Blyde wharf 36ft. L.W.
Official draft 30′–0″ (9.15M) may be exceeded with
prior arrangement.

CRANES:
Quay cranes 1½ to 5 tons.
Mobiles up to 20 ton.
70 ton available on shore only.
Distance to City centre 2½ miles.
Internal airport 7½ miles.
Connected to railway
and road system.

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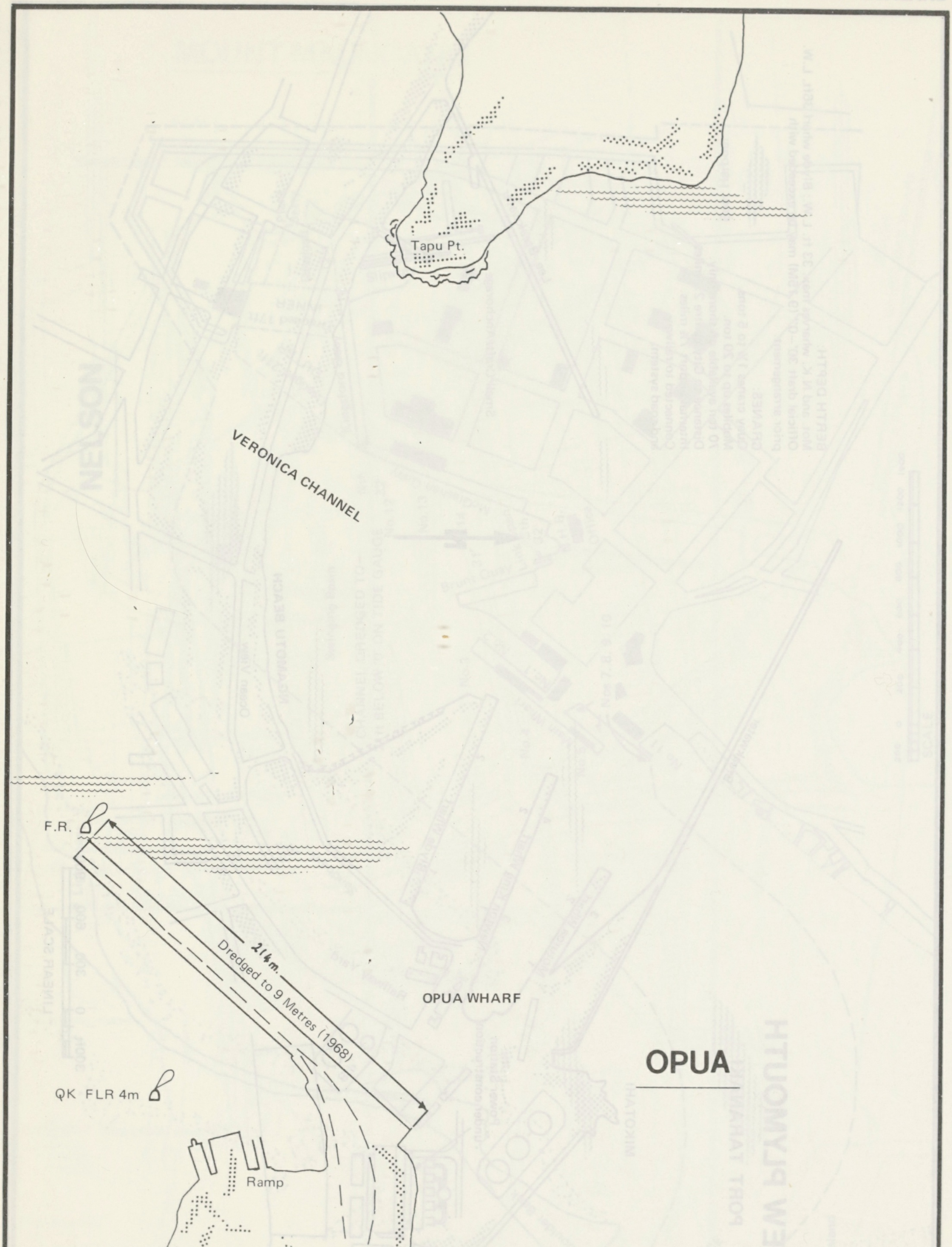
Tapu Pt.
VERONICA CHANNEL
F.R.
2¼m.
Dredged to 9 Metres (1968)
OPUA WHARF
OPUA
QK FLR 4m
Ramp
Railway
0
100 METRES

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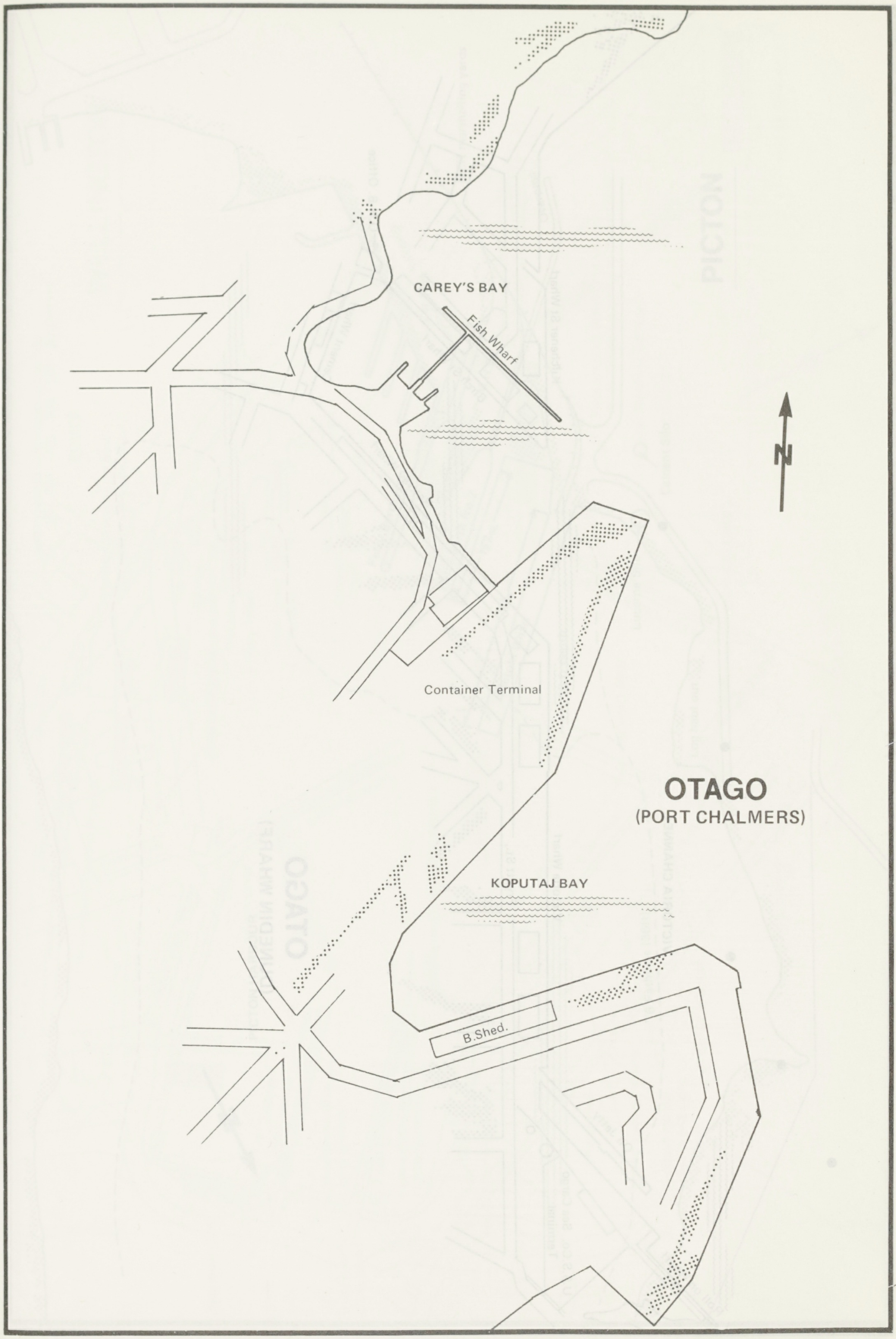
CAREY'S BAY
Fish Wharf
N
Container Terminal
OTAGO
(PORT CHALMERS)
KOPUTAJ BAY
B.Shed.

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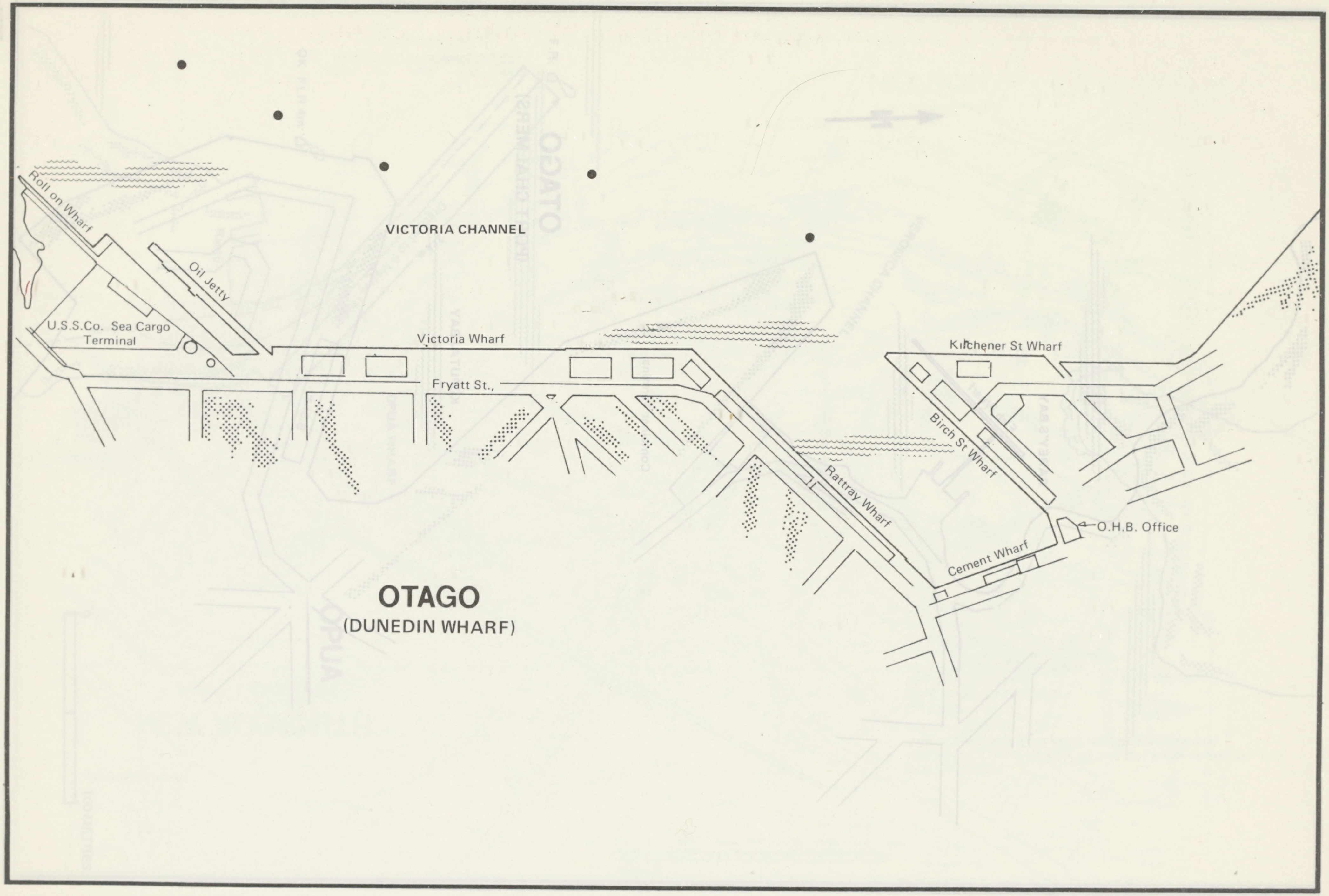
Roll on Wharf
Oil Jetty
VICTORIA CHANNEL
U.S.S.Co. Sea Cargo Terminal
Victoria Wharf
Fryatt St.,
Kitchener St Wharf
Birch St Wharf
Rattray Wharf
O.H.B. Office
Cement Wharf

OTAGO
(DUNEDIN WHARF)

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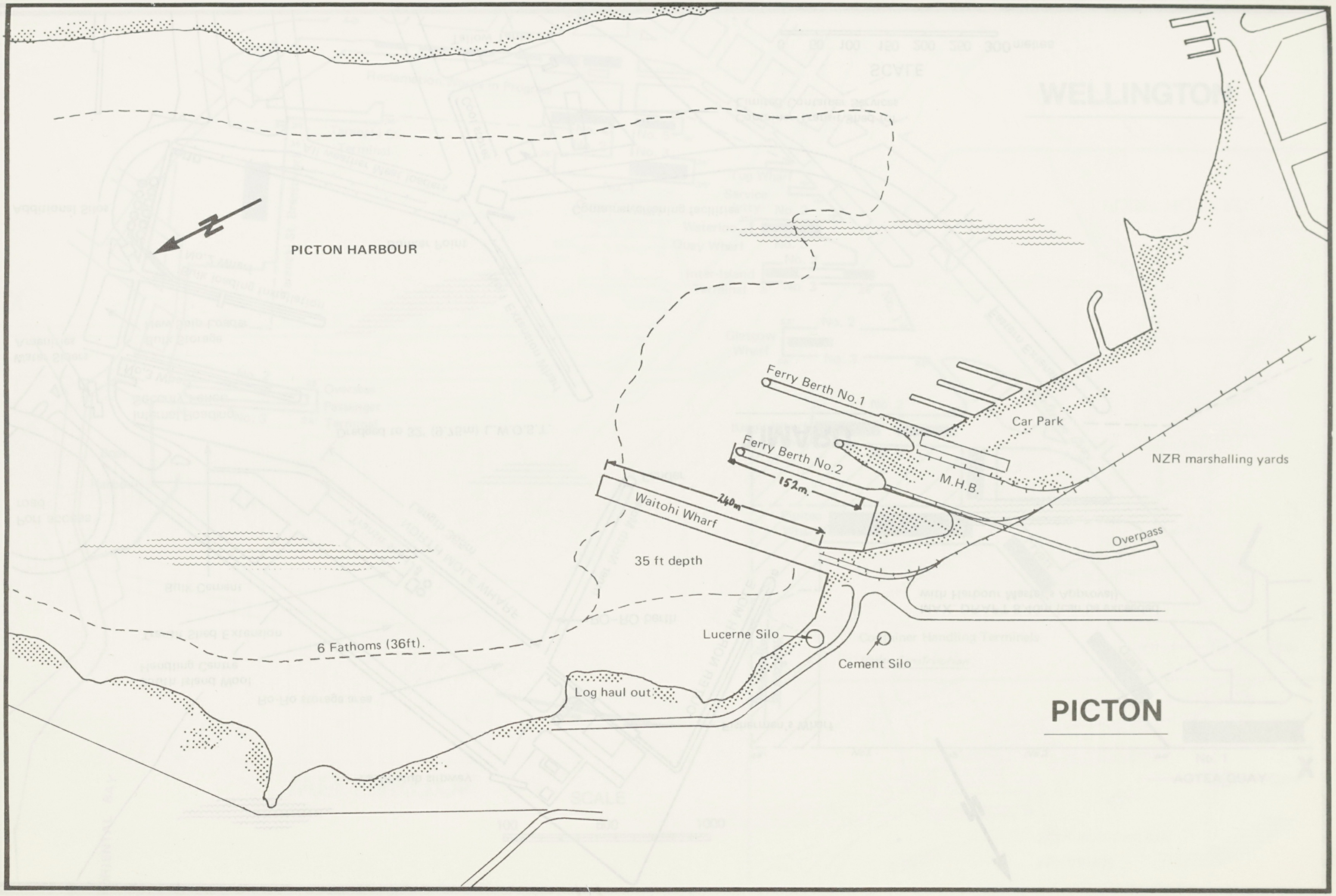
PICTON


N
PICTON HARBOUR
Ferry Berth No.1
Ferry Berth No.2
152m.
240m
Waitohi Wharf
Car Park
M.H.B.
NZR marshalling yards
Overpass
35 ft depth
6 Fathoms (36ft).
Lucerne Silo
Cement Silo
Log haul out

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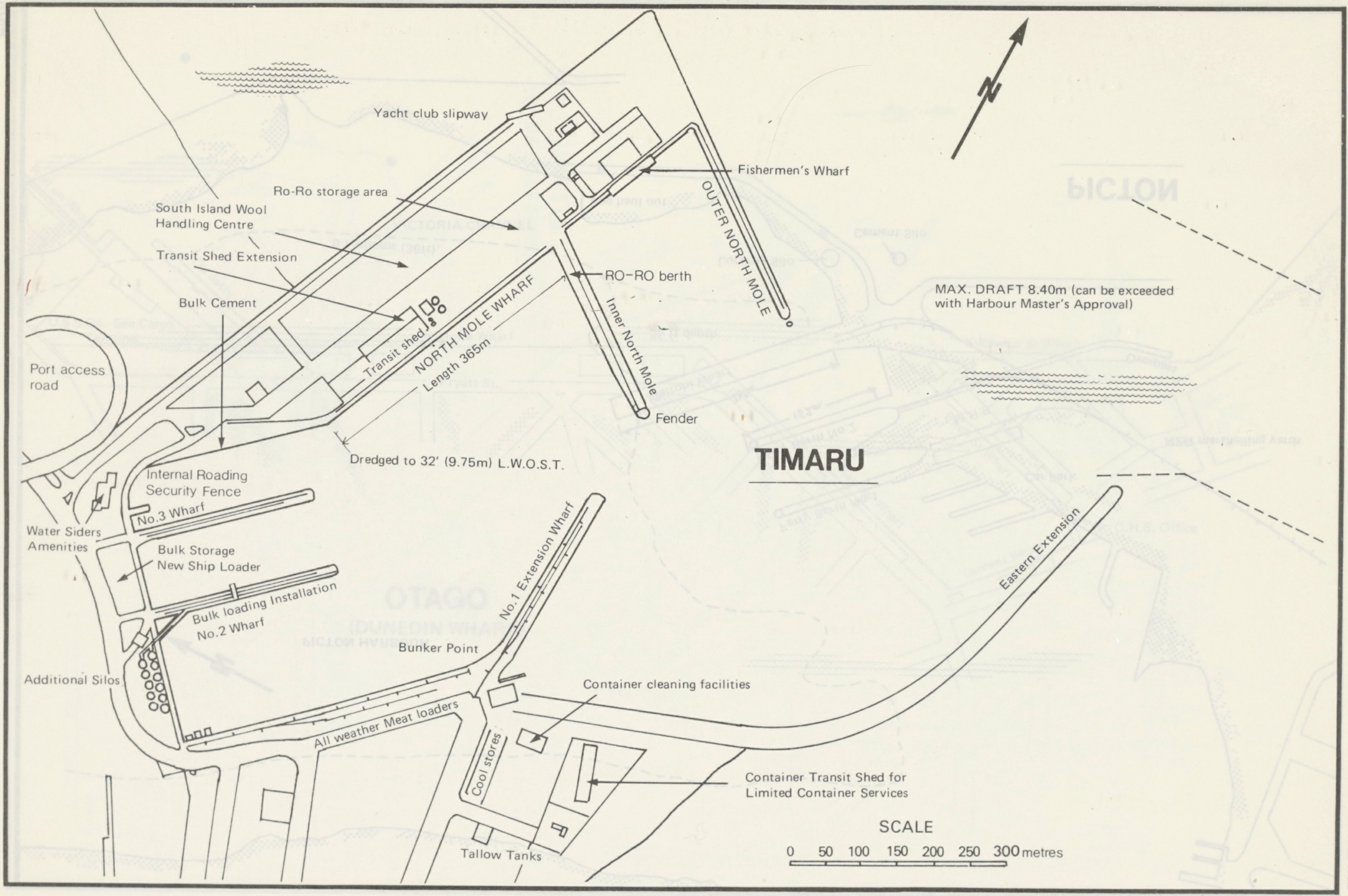
TIMARU
Yacht club slipway
Fishermen's Wharf
OUTER NORTH MOLE
Ro-Ro storage area
South Island Wool
Handling Centre
Transit Shed Extension
RO–RO berth
MAX. DRAFT 8.40m (can be exceeded
with Harbour Master's Approval)
Bulk Cement
Transit shed
NORTH MOLE WHARF
Length 365m
Inner North Mole
Port access
road
Fender
Dredged to 32′ (9.75m) L.W.O.S.T.
Internal Roading
Security Fence
No.3 Wharf
Water Siders
Amenities
Bulk Storage
New Ship Loader
No.1 Extension Wharf
Eastern Extension
Bulk loading Installation
No.2 Wharf
Bunker Point
Additional Silos
Container cleaning facilities
All weather Meat loaders
Cool stores
Container Transit Shed for
Limited Container Services
SCALE
0 50 100 150 200 250 300 metres
Tallow Tanks

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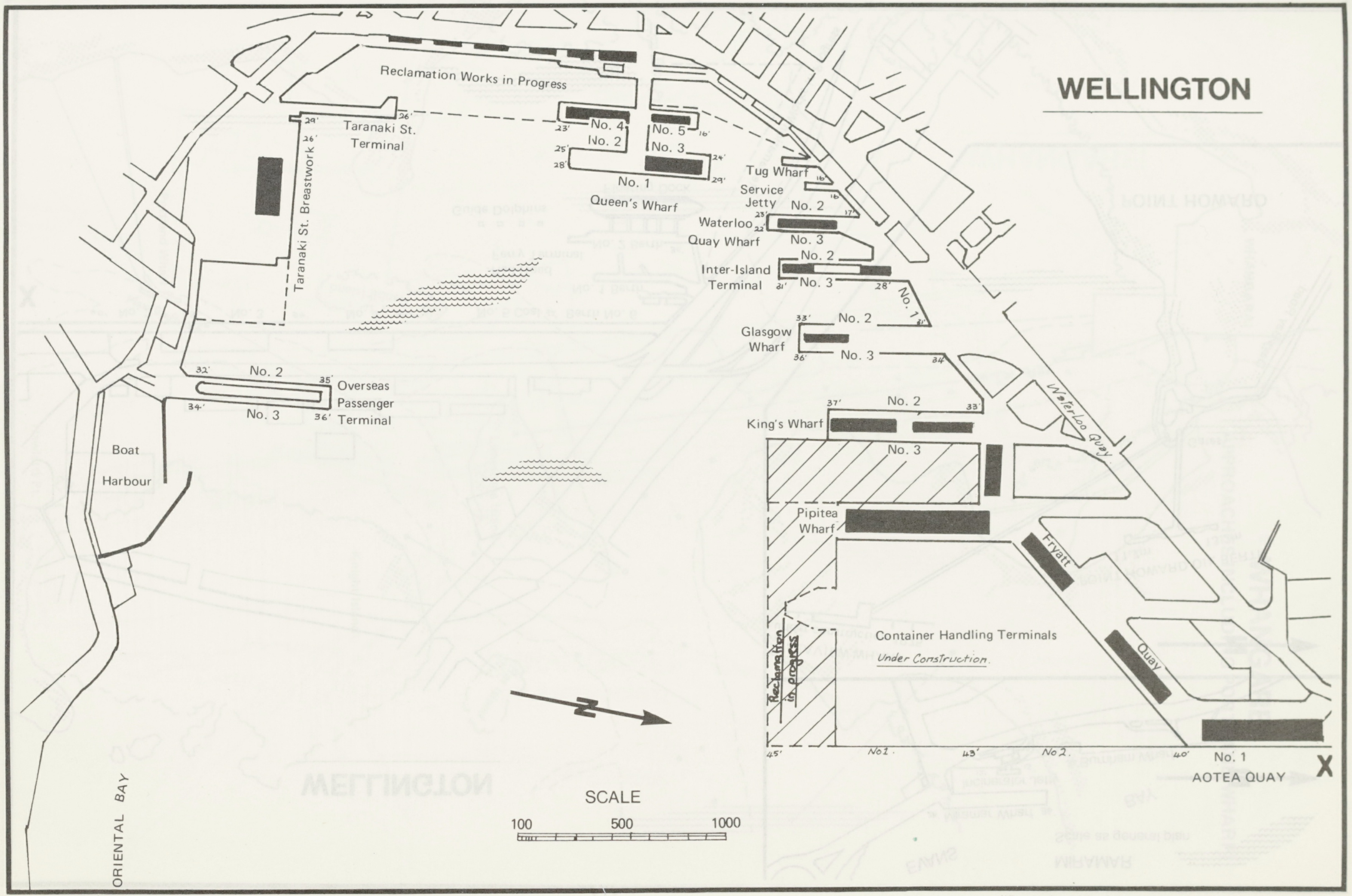
WELLINGTON


Reclamation Works in Progress
Taranaki St. Terminal
29'
26'
Taranaki St. Breastwork
23'
25'
28'
No. 4
No. 2
No. 5
No. 3
16'
24'
29'
No. 1
Queen's Wharf
Tug Wharf
16'
Service Jetty
16'
No. 2
23'
17'
Waterloo
22'
Quay Wharf
No. 3
No. 2
Inter-Island Terminal
21'
No. 3
28'
No. 1
31'
33'
No. 2
Glasgow Wharf
36'
No. 3
34
32'
No. 2
35'
Overseas Passenger Terminal
34'
No. 3
36'
37'
No. 2
33'
King's Wharf
No. 3
Waterloo Quay
Pipitea Wharf
Fryatt
Reclamation in progress
Container Handling Terminals
Under Construction.
Quay
45'
No1.
43'
No2.
40'
No. 1
AOTEA QUAY
X
X
Boat Harbour
ORIENTAL BAY
N
SCALE
100
500
1000

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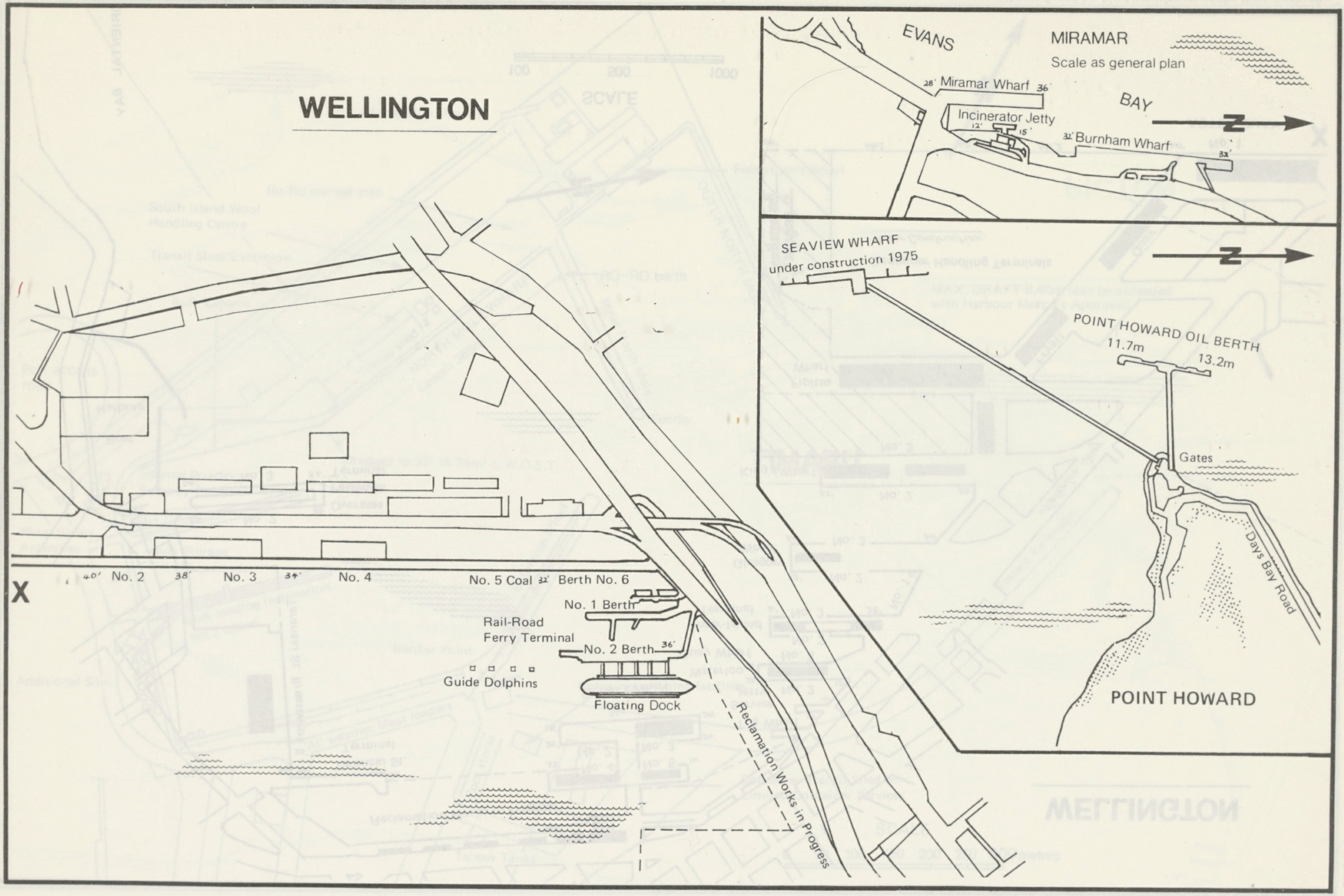
WELLINGTON
X
40'
No. 2
38'
No. 3
34'
No. 4
No. 5 Coal
32'
Berth No. 6
No. 1 Berth
Rail-Road
Ferry Terminal
No. 2 Berth
36'
Guide Dolphins
Floating Dock
Reclamation Works in Progress
EVANS
BAY
MIRAMAR
Scale as general plan
28'
Miramar Wharf
36'
Incinerator Jetty
12'
15'
32'
Burnham Wharf
32'
N
SEAVIEW WHARF
under construction 1975
N
POINT HOWARD OIL BERTH
11.7m
13.2m
Gates
Days Bay Road
POINT HOWARD

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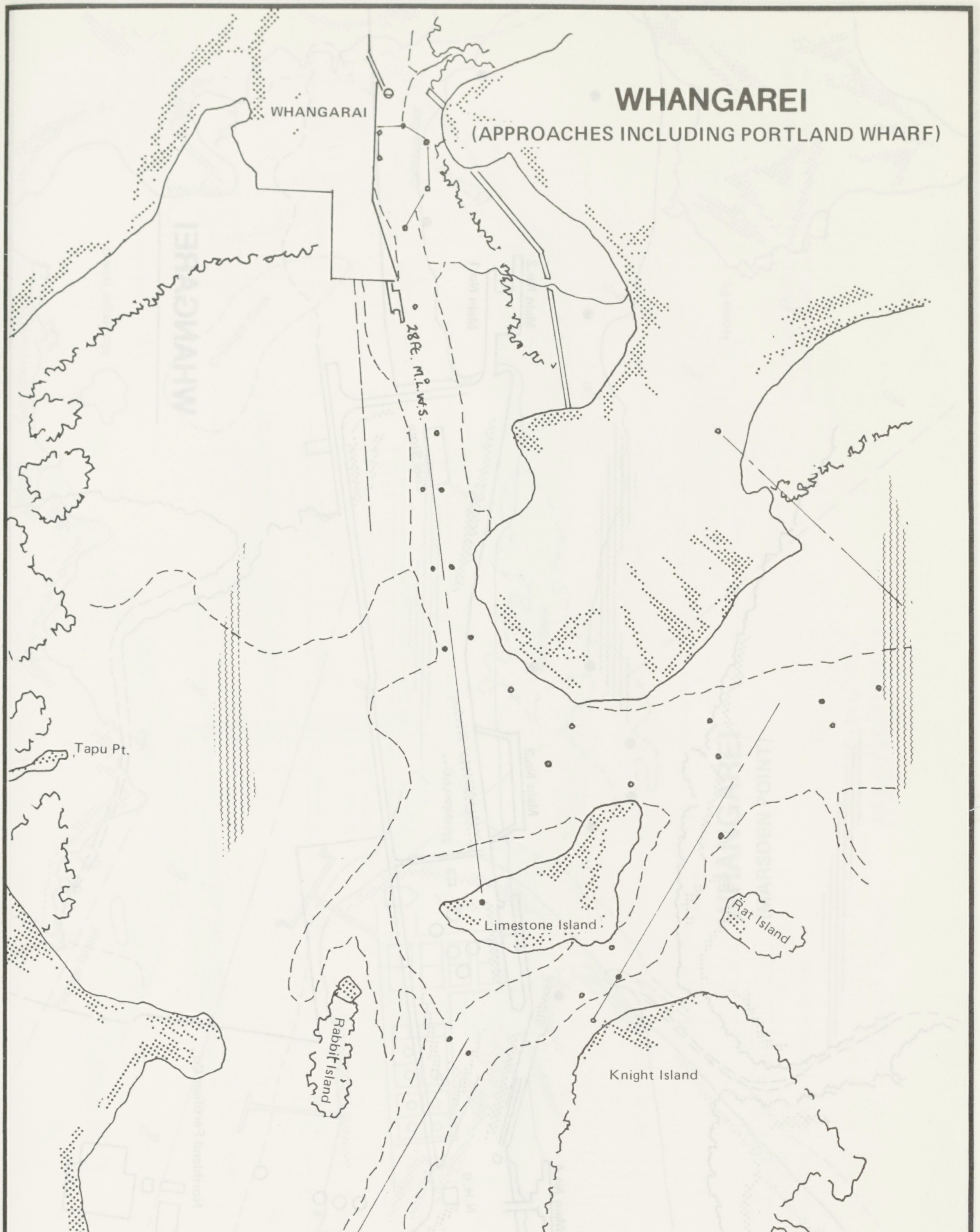
WHANGAREI
(APPROACHES INCLUDING PORTLAND WHARF)


WHANGARAI
28ft. M.L.W.S.
Tapu Pt.
Limestone Island
Rat Island
Rabbit Island
Knight Island
Portland Wharf
Max. Draft 18'6"
Hawletts Pt.

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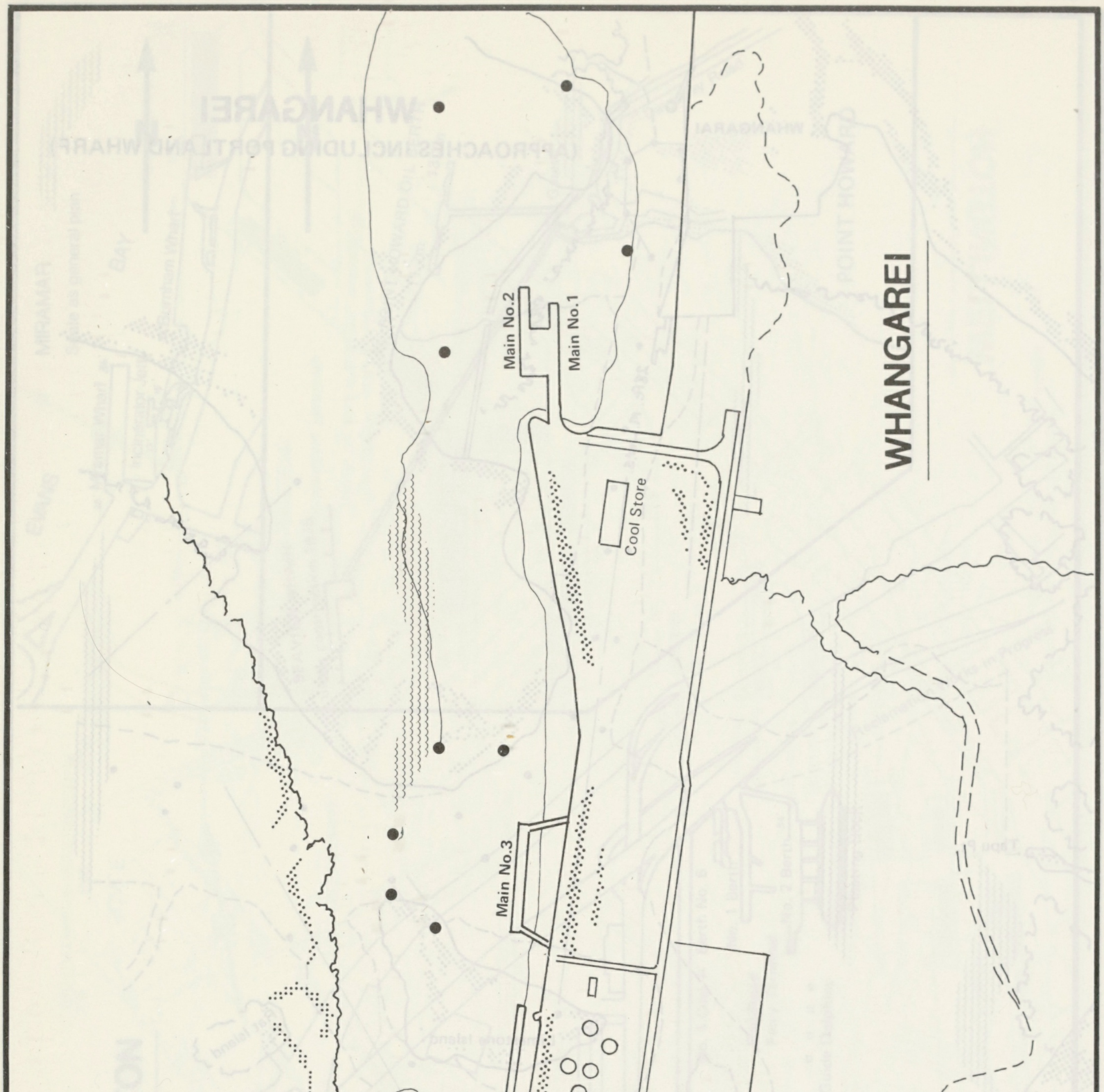
WHANGAREI
Main No.2
Main No.1
Cool Store
Main No.3
Slipway
Main No.4
N.H.B
W.E.Co.
Northland Fertiliser Co.
North Channel's Front Lead

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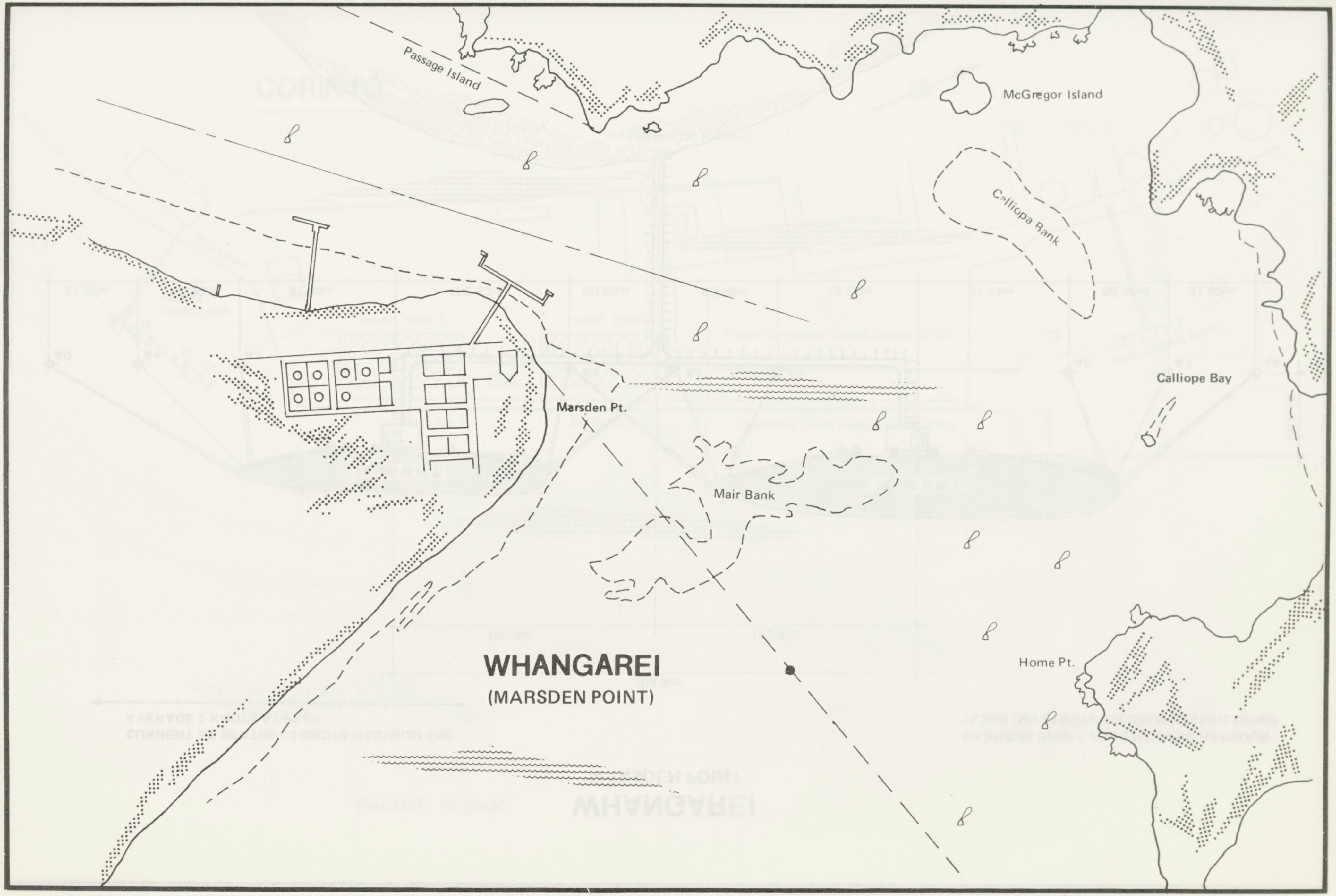

WHANGAREI
(MARSDEN POINT)

Passage Island
McGregor Island
Calliopa Bank
Calliope Bay
Marsden Pt.
Mair Bank
Home Pt.

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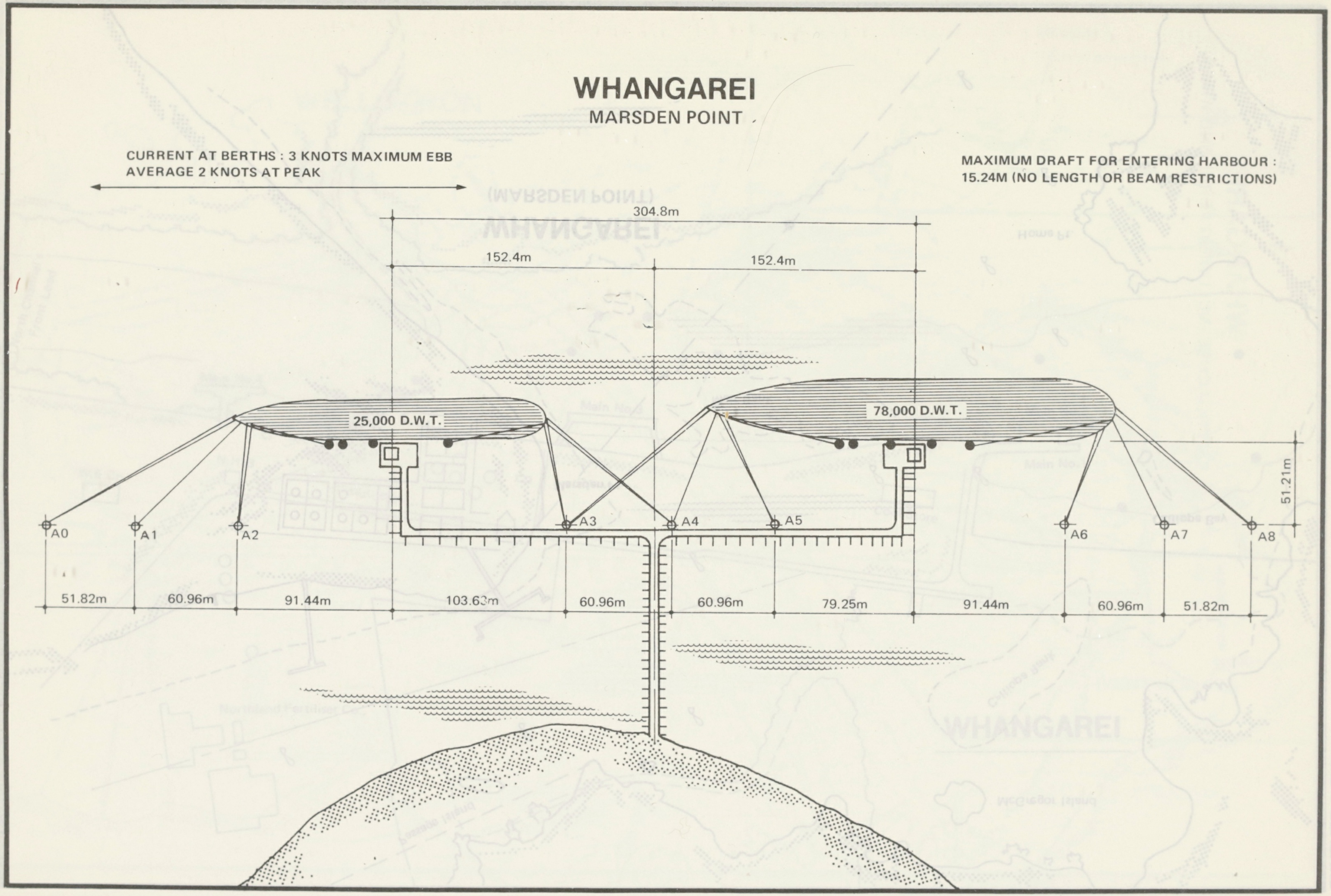
WHANGAREI

MARSDEN POINT

CURRENT AT BERTHS : 3 KNOTS MAXIMUM EBB
AVERAGE 2 KNOTS AT PEAK

MAXIMUM DRAFT FOR ENTERING HARBOUR :
15.24M (NO LENGTH OR BEAM RESTRICTIONS)


304.8m
152.4m
152.4m
25,000 D.W.T.
78,000 D.W.T.
51.21m
A0
A1
A2
A3
A4
A5
A6
A7
A8
51.82m
60.96m
91.44m
103.63m
60.96m
60.96m
79.25m
91.44m
60.96m
51.82m

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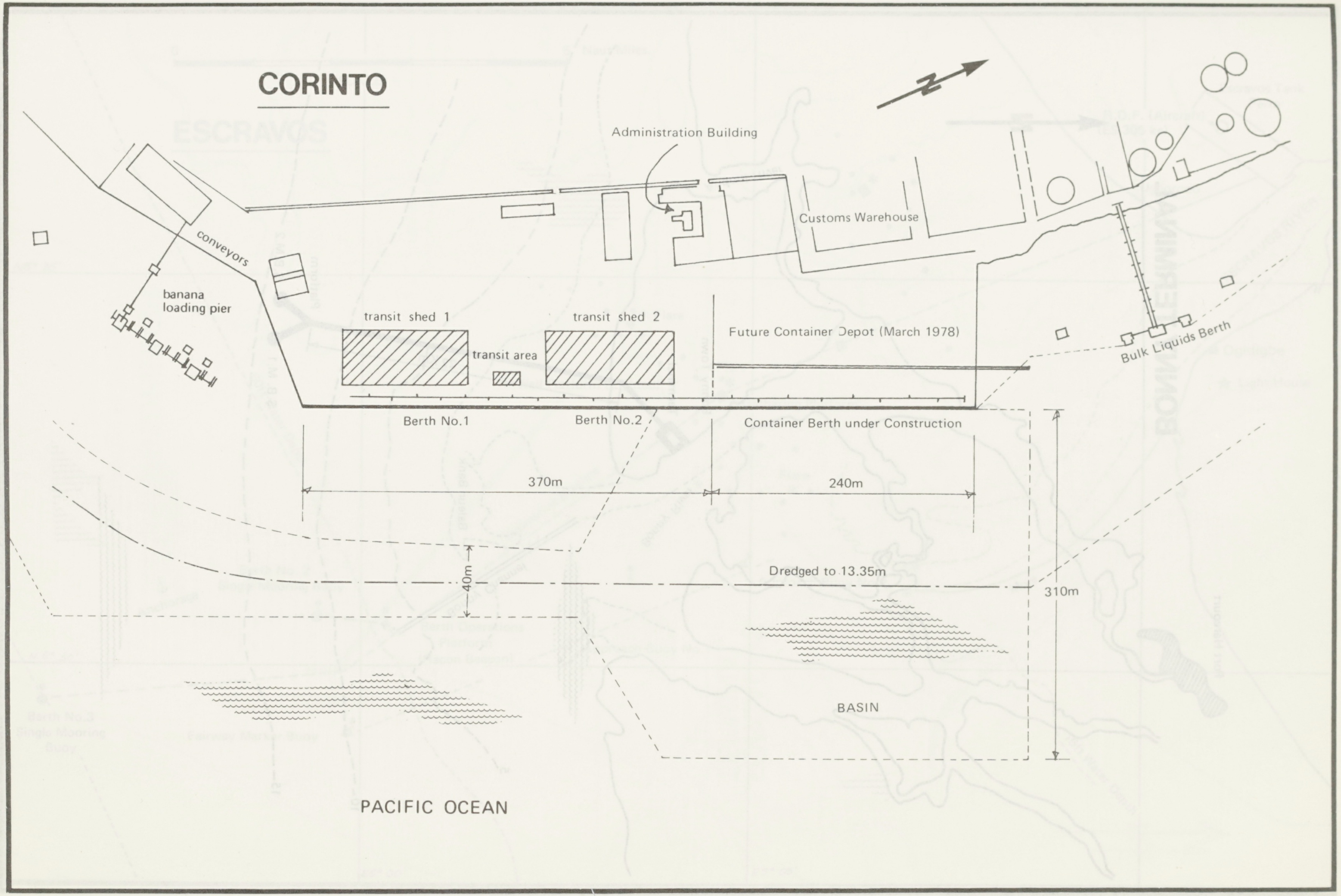
CORINTO


Administration Building
Customs Warehouse
conveyors
banana loading pier
transit shed 1
transit shed 2
transit area
Future Container Depot (March 1978)
Bulk Liquids Berth
Berth No.1
Berth No.2
Container Berth under Construction
370m
240m
40m
310m
Dredged to 13.35m
BASIN
PACIFIC OCEAN

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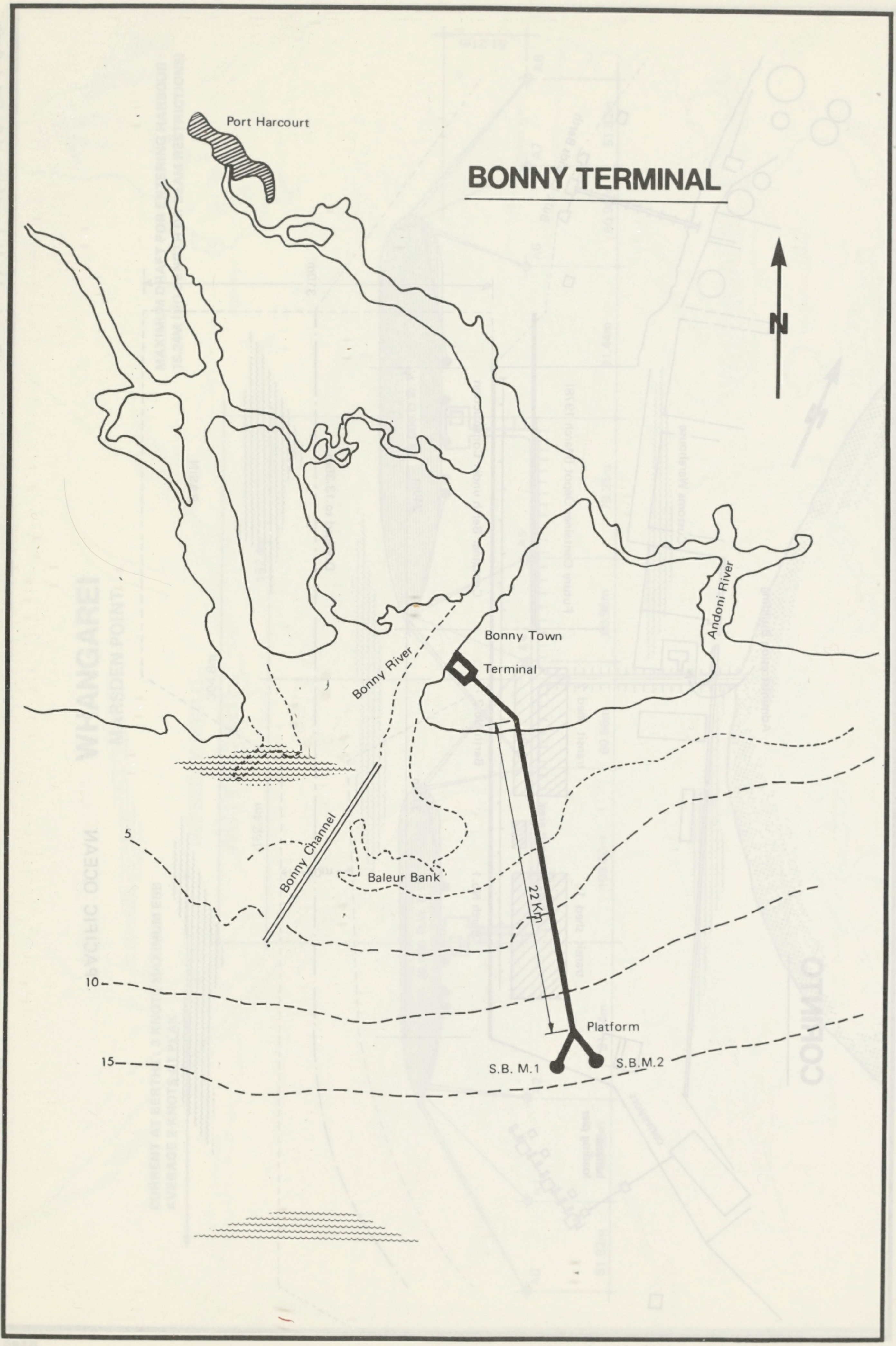
BONNY TERMINAL


Port Harcourt
N
Bonny Town
Terminal
Bonny River
Andoni River
Bonny Channel
Baleur Bank
22 Km
Platform
S.B. M.1
S.B.M.2
5
10
15

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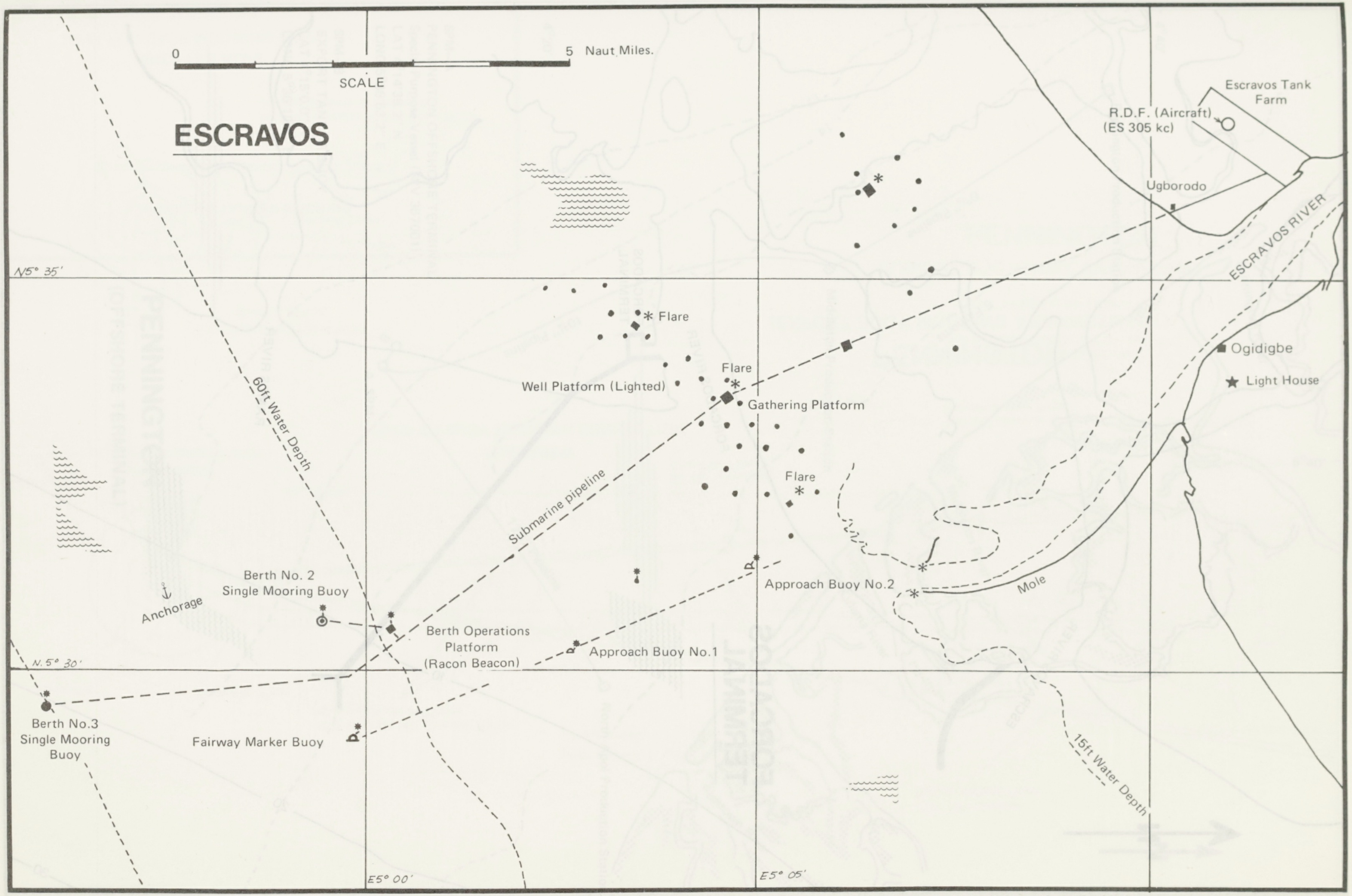
0
5 Naut Miles.
SCALE
ESCRAVOS
Escravos Tank Farm
R.D.F. (Aircraft)
(ES 305 kc)
Ugborodo
ESCRAVOS RIVER
N5° 35'
Flare
Flare
Well Platform (Lighted)
Gathering Platform
Ogidigbe
Light House
60ft Water Depth
Submarine pipeline
Flare
Approach Buoy No.2
Mole
Berth No. 2
Single Mooring Buoy
Anchorage
Berth Operations
Platform
(Racon Beacon)
Approach Buoy No.1
N. 5° 30'
Berth No.3
Single Mooring
Buoy
Fairway Marker Buoy
15ft Water Depth
E5° 00'
E5° 05'

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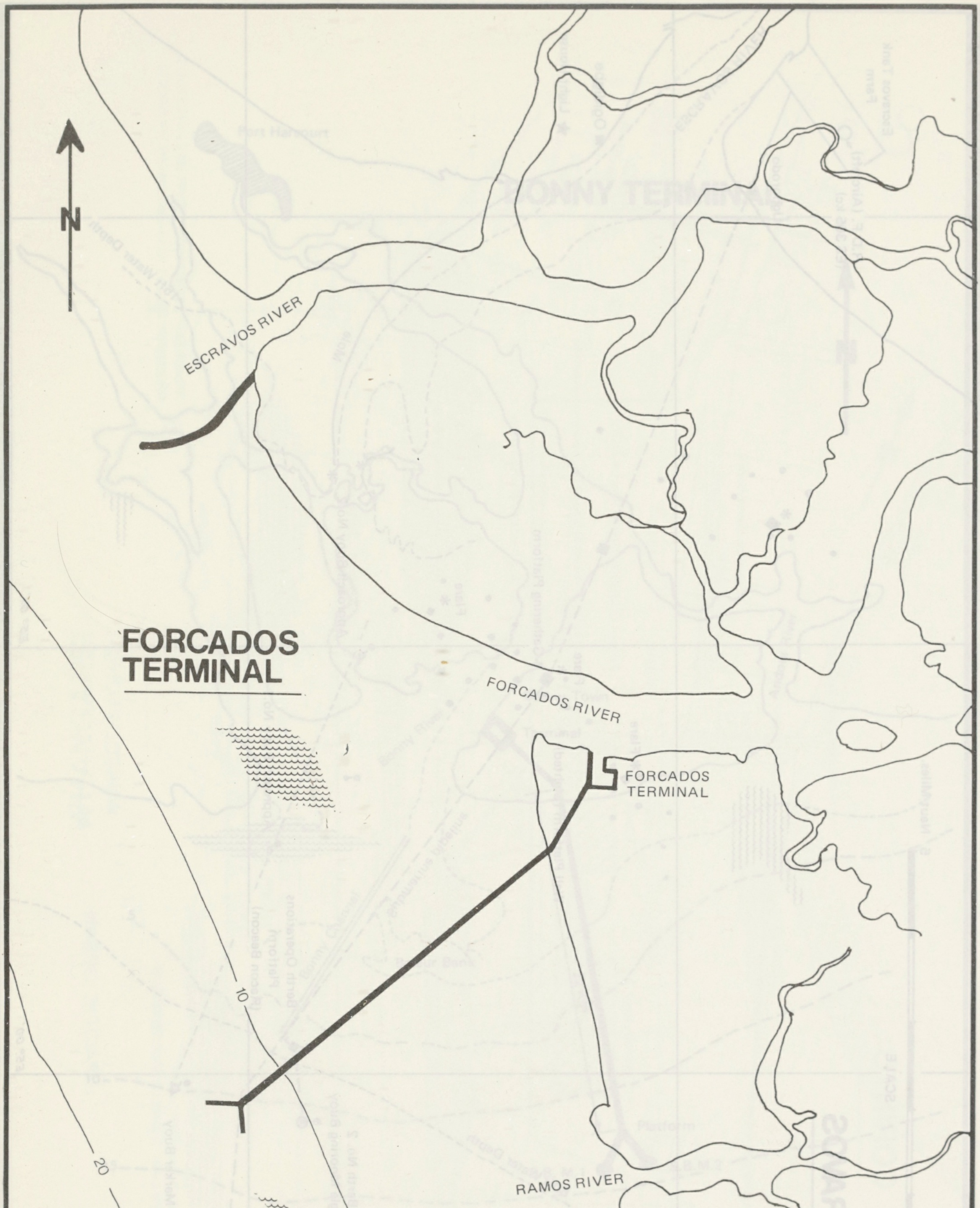
N
ESCRAVOS RIVER
FORCADOS
TERMINAL
FORCADOS RIVER
FORCADOS
TERMINAL
10
20
30
RAMOS RIVER

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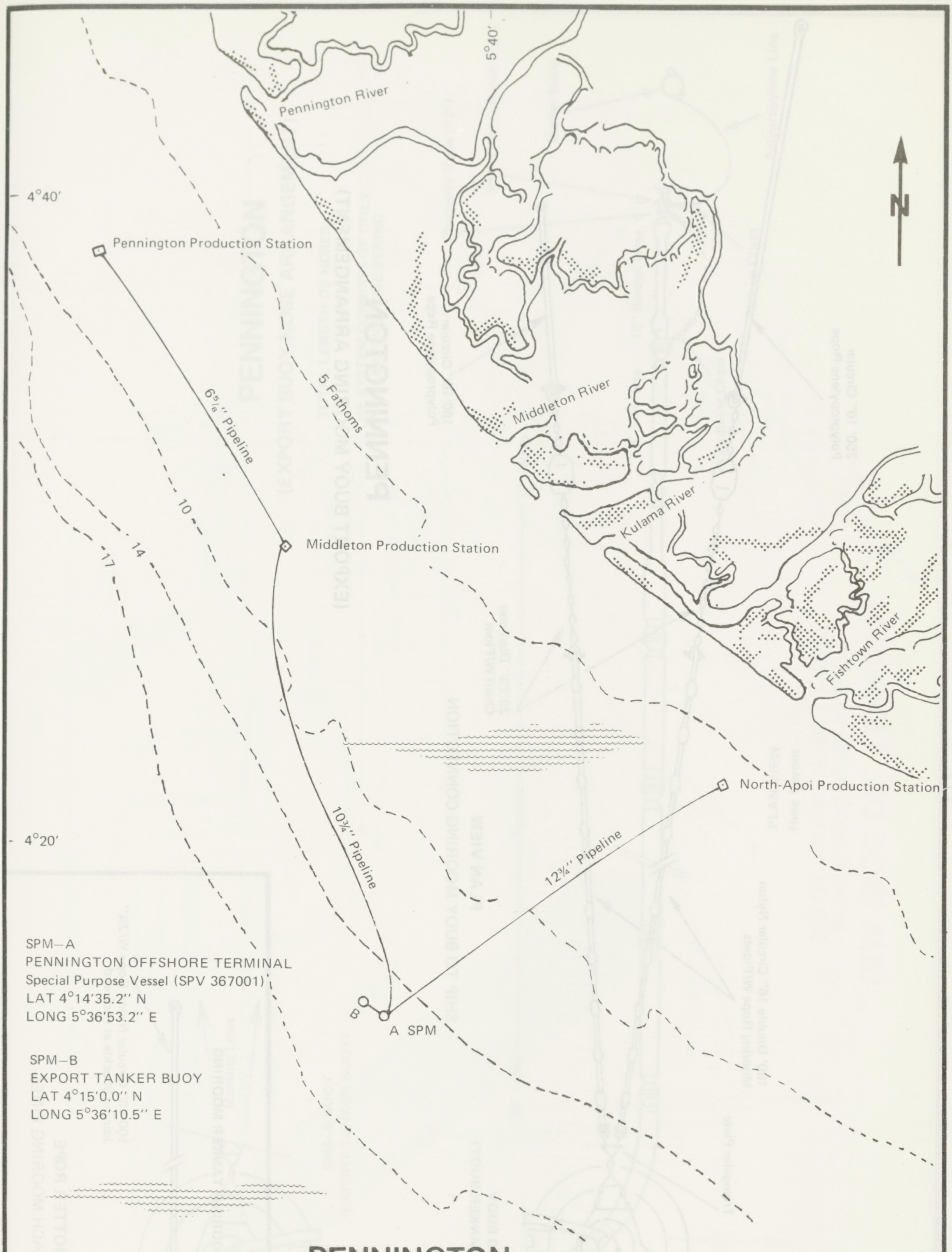
5°40′
4°40′
4°20′
N
Pennington River
Middleton River
Kulama River
Fishtown River
Pennington Production Station
Middleton Production Station
North-Apoi Production Station
6⅝″ Pipeline
10¾″ Pipeline
12¾″ Pipeline
5 Fathoms
10
14
17
B
A SPM

SPM–A
PENNINGTON OFFSHORE TERMINAL
Special Purpose Vessel (SPV 367001)
LAT 4°14′35.2″ N
LONG 5°36′53.2″ E

SPM–B
EXPORT TANKER BUOY
LAT 4°15′0.0″ N
LONG 5°36′10.5″ E

PENNINGTON

(OFFSHORE TERMINAL)

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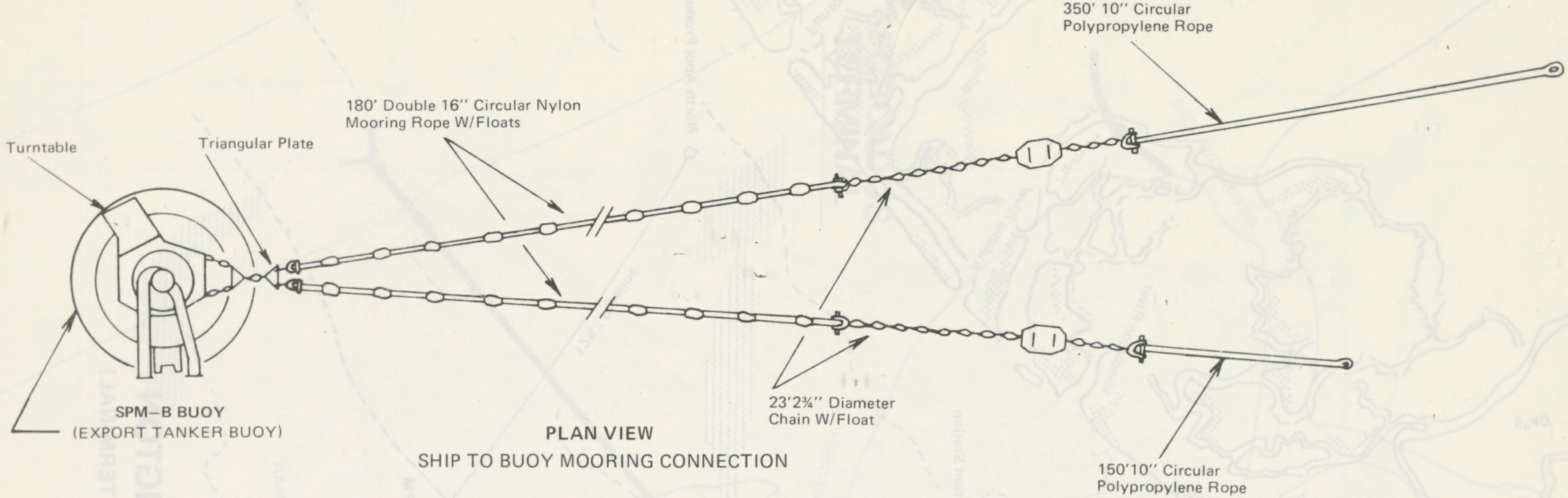
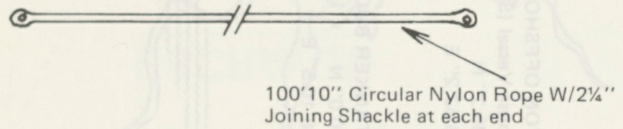

350' 10" Circular
Polypropylene Rope
180' Double 16" Circular Nylon
Mooring Rope W/Floats
Turntable
Triangular Plate
23'2¾" Diameter
Chain W/Float
150'10" Circular
Polypropylene Rope
SPM–B BUOY
(EXPORT TANKER BUOY)

PLAN VIEW
SHIP TO BUOY MOORING CONNECTION

PENNINGTON
(EXPORT BUOY MOORING ARRANGEMENT)

DURING TANKER MOORING


100'10" Circular Nylon Rope W/2¼"
Joining Shackle at each end

SNOTTER ROPE
(ONE FOR EACH MOORING LINE)

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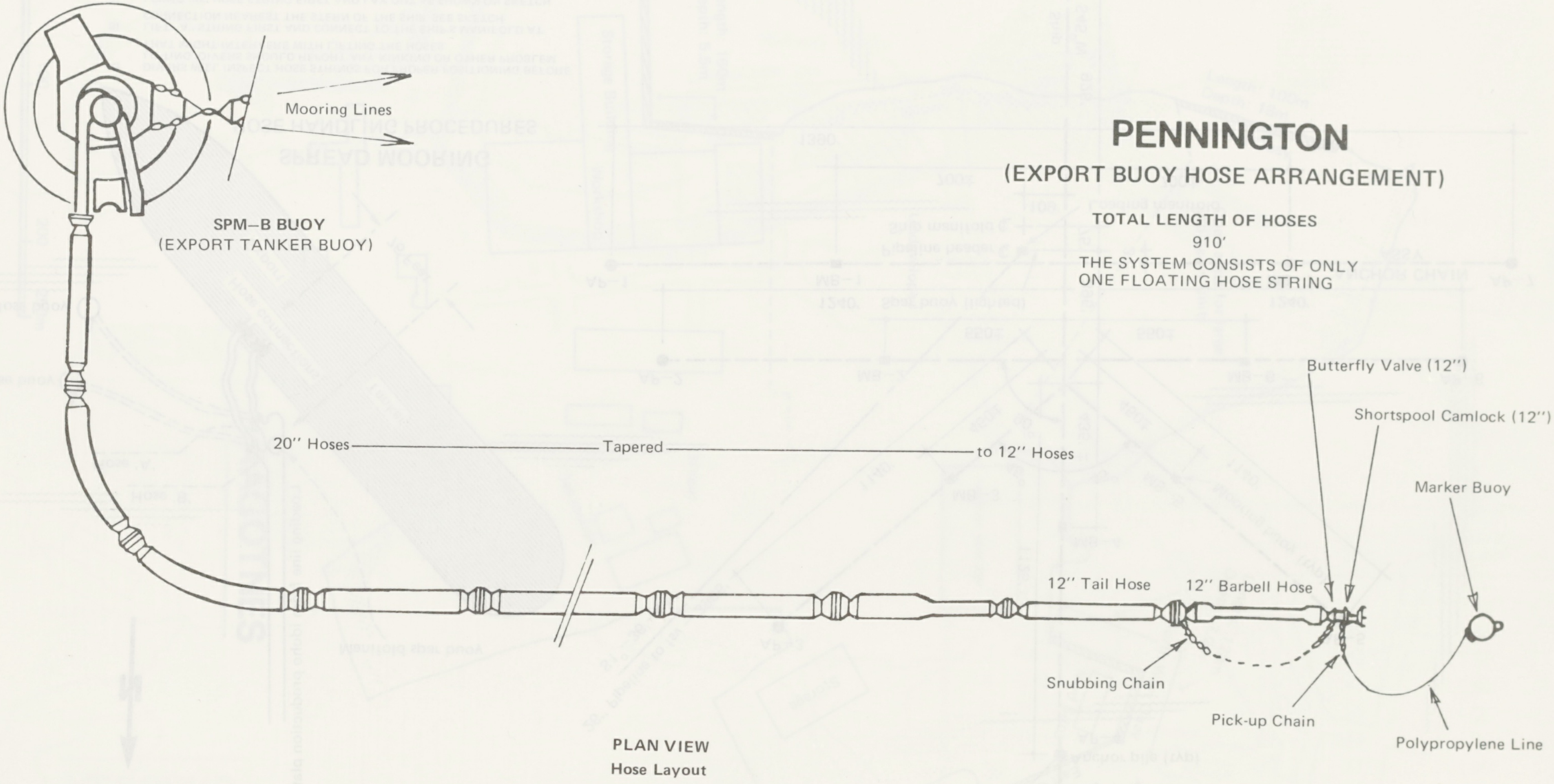
PENNINGTON

(EXPORT BUOY HOSE ARRANGEMENT)

TOTAL LENGTH OF HOSES
910′
THE SYSTEM CONSISTS OF ONLY
ONE FLOATING HOSE STRING


Mooring Lines
SPM–B BUOY
(EXPORT TANKER BUOY)
20″ Hoses
Tapered
to 12″ Hoses
Butterfly Valve (12″)
Shortspool Camlock (12″)
Marker Buoy
12″ Tail Hose
12″ Barbell Hose
Snubbing Chain
Pick-up Chain
Polypropylene Line

PLAN VIEW
Hose Layout

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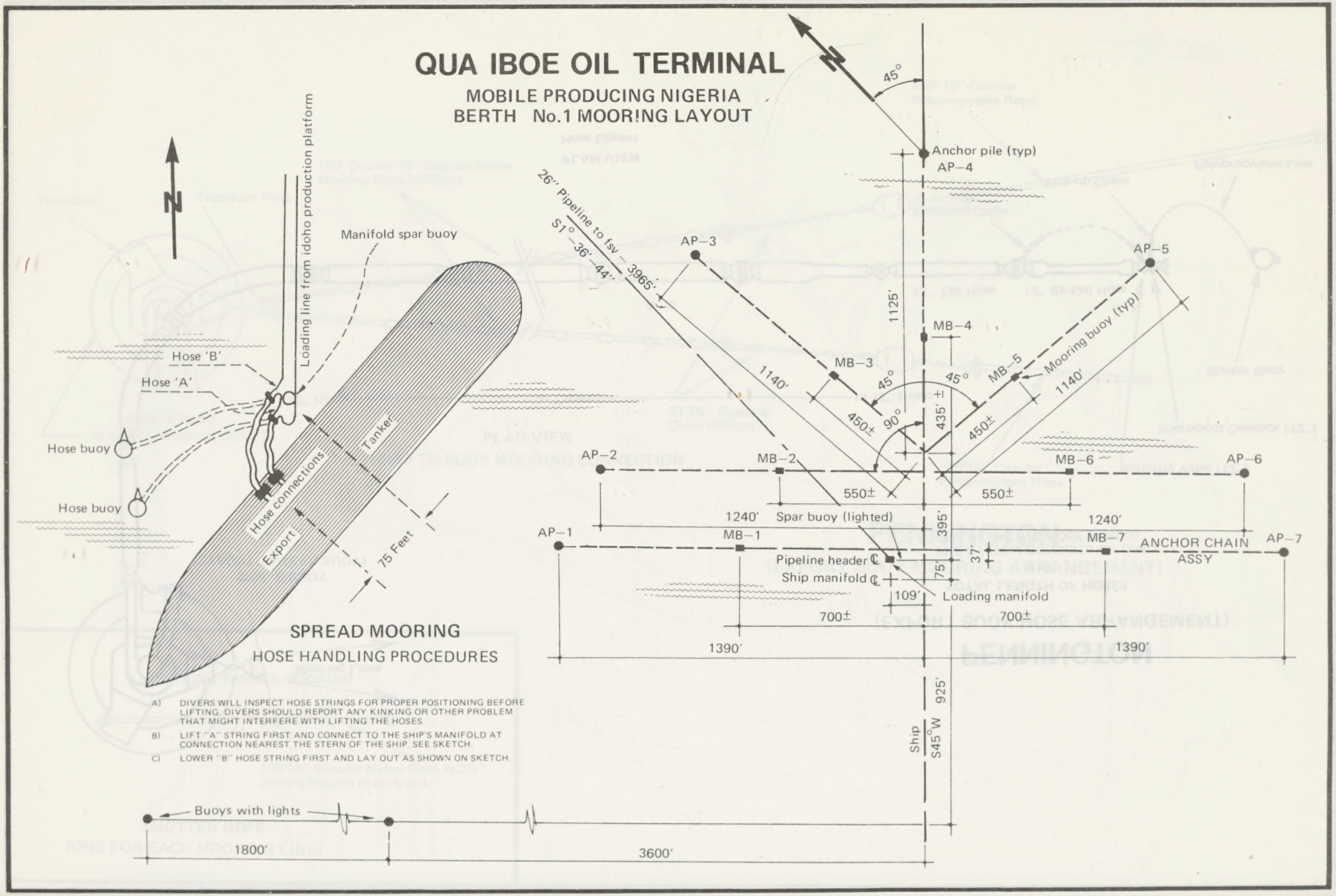
QUA IBOE OIL TERMINAL

MOBILE PRODUCING NIGERIA
BERTH No.1 MOORING LAYOUT


N
Loading line from idoho production platform
Manifold spar buoy
Hose 'B'
Hose 'A'
Hose buoy
Hose buoy
Hose connections
Tanker
Export
75 Feet
26'' Pipeline to fsv
S1° –36' 44''
3965'
AP–3
AP–4
Anchor pile (typ)
AP–5
1125'
MB–4
MB–3
MB–5
Mooring buoy (typ)
1140'
1140'
45°
45°
45°
90°
435' ±
450±
450±
AP–2
MB–2
MB–6
AP–6
550±
550±
1240'
Spar buoy (lighted)
1240'
395'
AP–1
MB–1
MB–7
ANCHOR CHAIN ASSY
AP–7
37'
Pipeline header ℄
Ship manifold ℄
75'
109'
Loading manifold
700±
700±
1390'
1390'
925'
Ship
S45°W
Buoys with lights
1800'
3600'

SPREAD MOORING

HOSE HANDLING PROCEDURES

A) DIVERS WILL INSPECT HOSE STRINGS FOR PROPER POSITIONING BEFORE LIFTING. DIVERS SHOULD REPORT ANY KINKING OR OTHER PROBLEM THAT MIGHT INTERFERE WITH LIFTING THE HOSES.

B) LIFT "A" STRING FIRST AND CONNECT TO THE SHIP'S MANIFOLD AT CONNECTION NEAREST THE STERN OF THE SHIP. SEE SKETCH.

C) LOWER "B" HOSE STRING FIRST AND LAY OUT AS SHOWN ON SKETCH.

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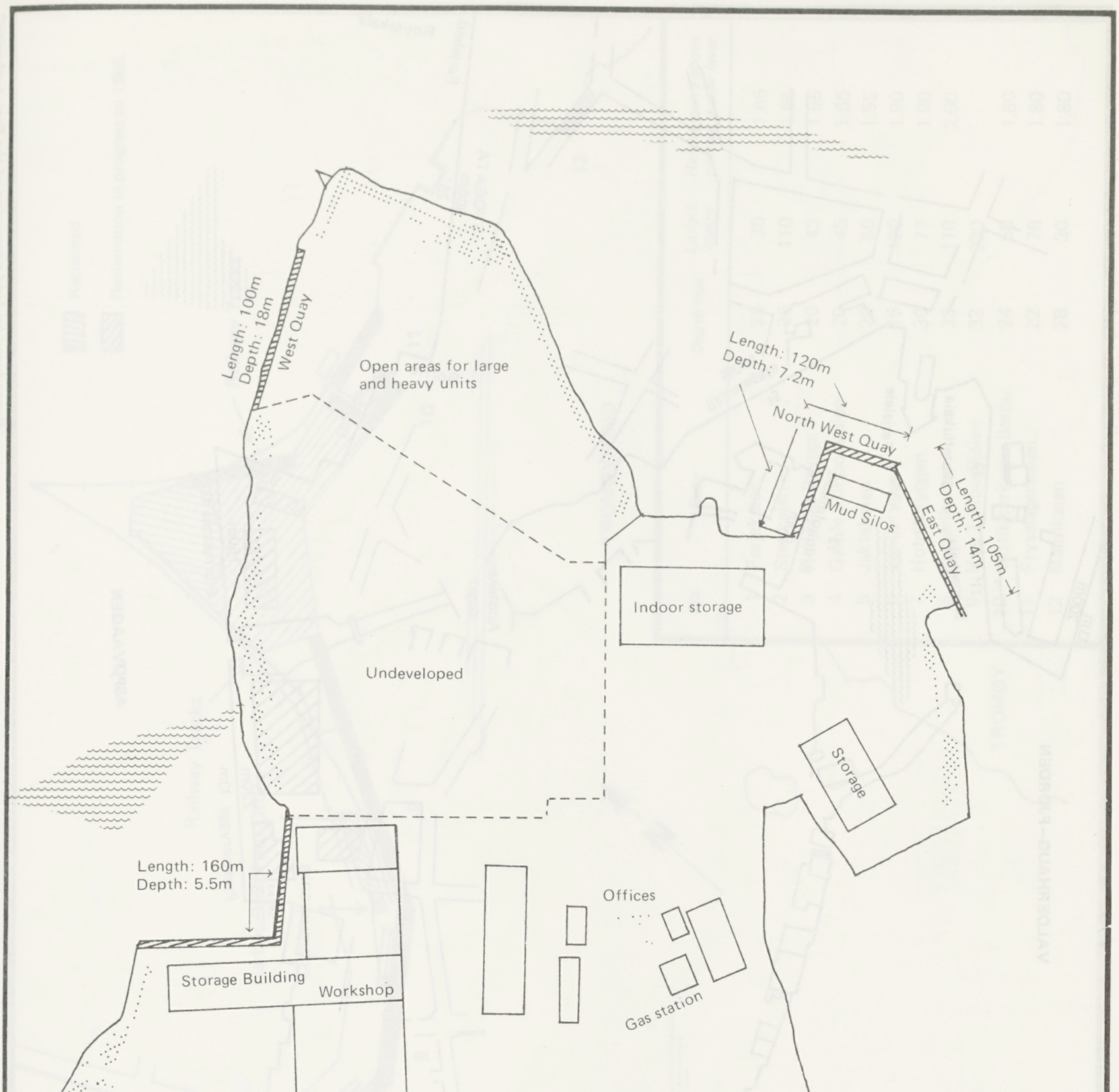
Length: 100m
Depth: 18m
West Quay
Open areas for large and heavy units
Length: 120m
Depth: 7.2m
North West Quay
Mud Silos
Length: 105m
Depth: 14m
East Quay
Indoor storage
Undeveloped
Storage
Length: 160m
Depth: 5.5m
Offices
Storage Building
Workshop
Gas station
0
100
200
250m

AAGOTNES

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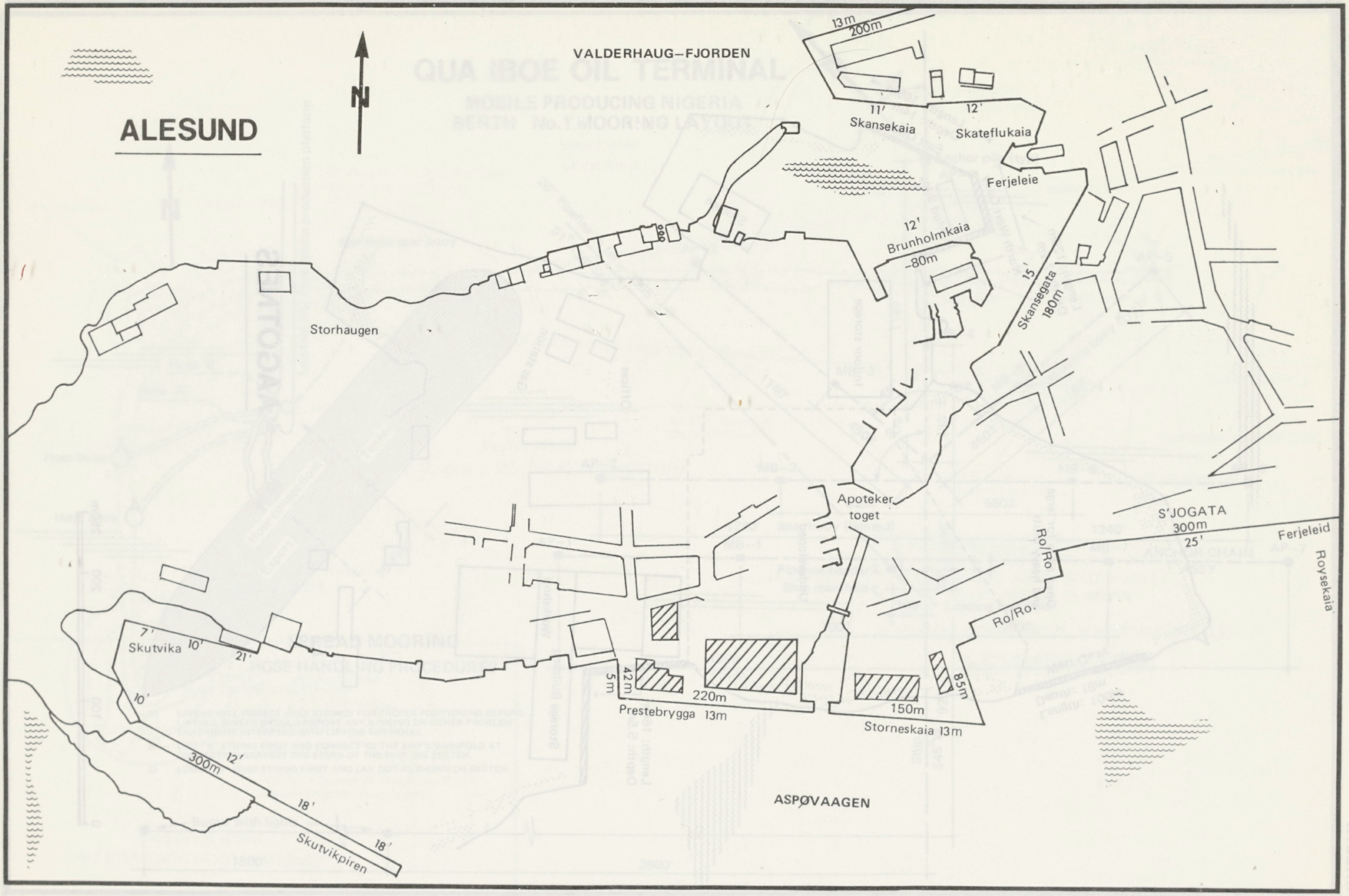
ALESUND
N
VALDERHAUG–FJORDEN
13m
200m
11'
12'
Skansekaia
Skateflukaia
Ferjeleie
12'
Brunholmkaia
80m
15'
Skansegata
180m
Storhaugen
Apoteker
toget
S'JOGATA
300m
25'
Ferjeleid
Roysekaia
Ro/Ro
Ro/Ro.
85m
150m
Storneskaia 13m
220m
Prestebrygga 13m
42m
5m
7'
10'
21'
Skutvika
10'
300m
12'
18'
18'
Skutvikpiren
ASPØVAAGEN

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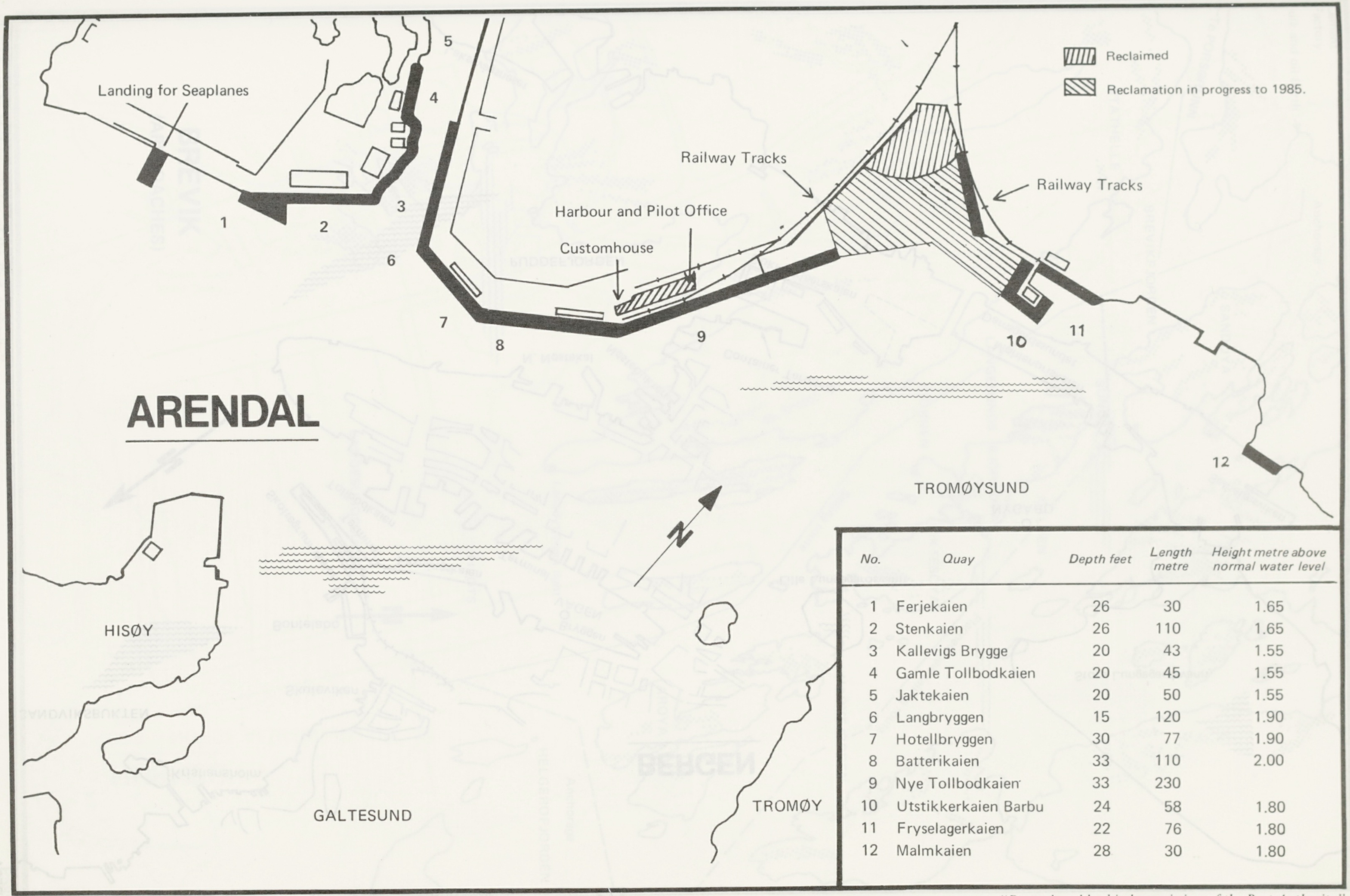
Reclaimed
Reclamation in progress to 1985.
Landing for Seaplanes
Railway Tracks
Railway Tracks
Harbour and Pilot Office
Customhouse
1
2
3
4
5
6
7
8
9
10
11
12
ARENDAL
TROMØYSUND
HISØY
GALTESUND
TROMØY
N

No.	Quay	Depth feet	Length metre	Height metre above normal water level
1	Ferjekaien	26	30	1.65
2	Stenkaien	26	110	1.65
3	Kallevigs Brygge	20	43	1.55
4	Gamle Tollbodkaien	20	45	1.55
5	Jaktekaien	20	50	1.55
6	Langbryggen	15	120	1.90
7	Hotellbryggen	30	77	1.90
8	Batterikaien	33	110	2.00
9	Nye Tollbodkaien	33	230	
10	Utstikkerkaien Barbu	24	58	1.80
11	Fryselagerkaien	22	76	1.80
12	Malmkaien	28	30	1.80

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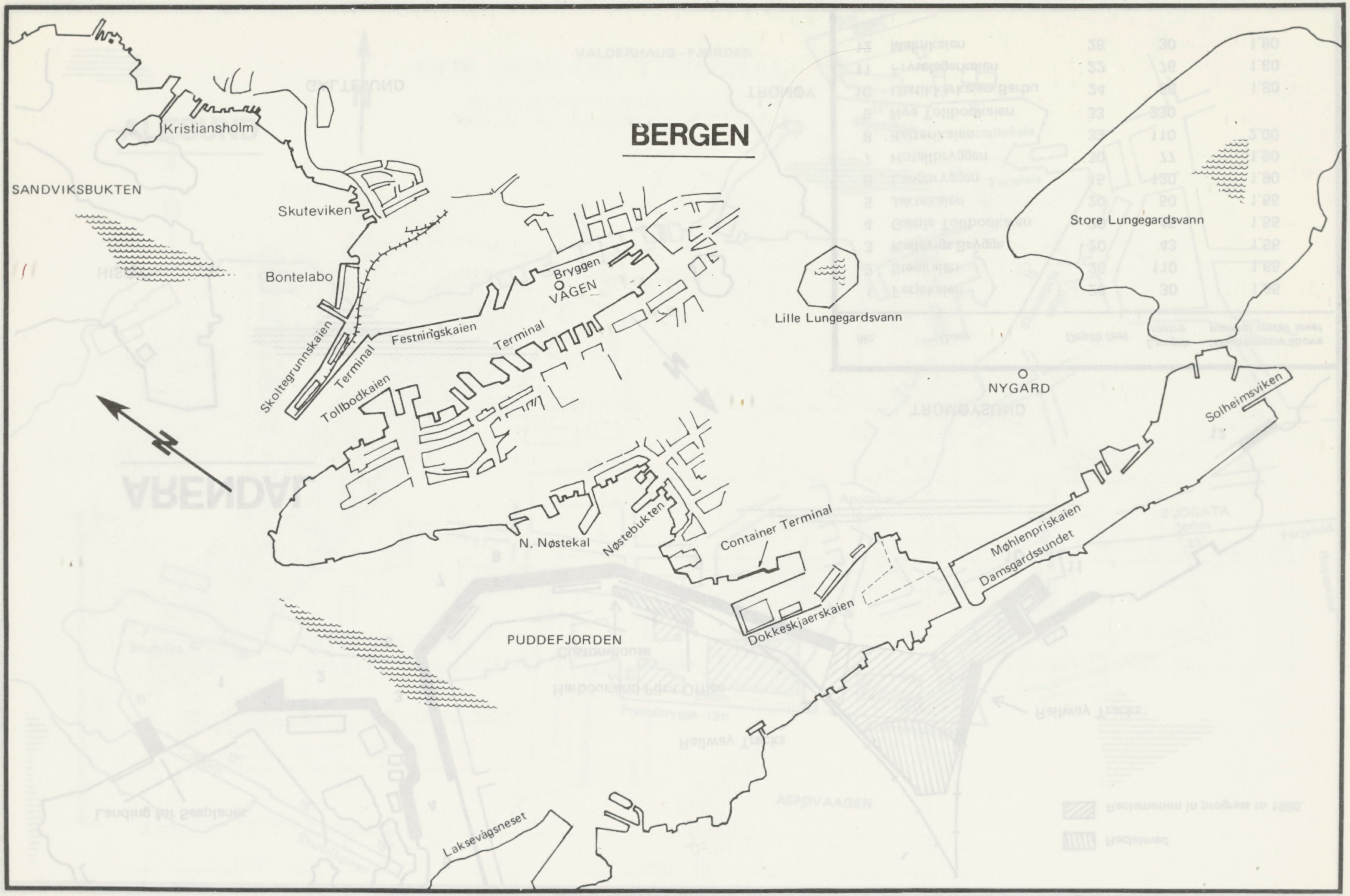
BERGEN
Kristiansholm
SANDVIKSBUKTEN
Skuteviken
Bontelabo
Skoltegrunnskaien
Terminal
Tollbodkaien
Festningskaien
Terminal
Bryggen
VÅGEN
Lille Lungegardsvann
Store Lungegardsvann
NYGÅRD
Solheimsviken
N. Nøstekal
Nøstebukten
Container Terminal
Møhlenpriskaien
Damsgardssundet
Dokkeskjaerskaien
PUDDEFJORDEN
Laksevågsneset
N

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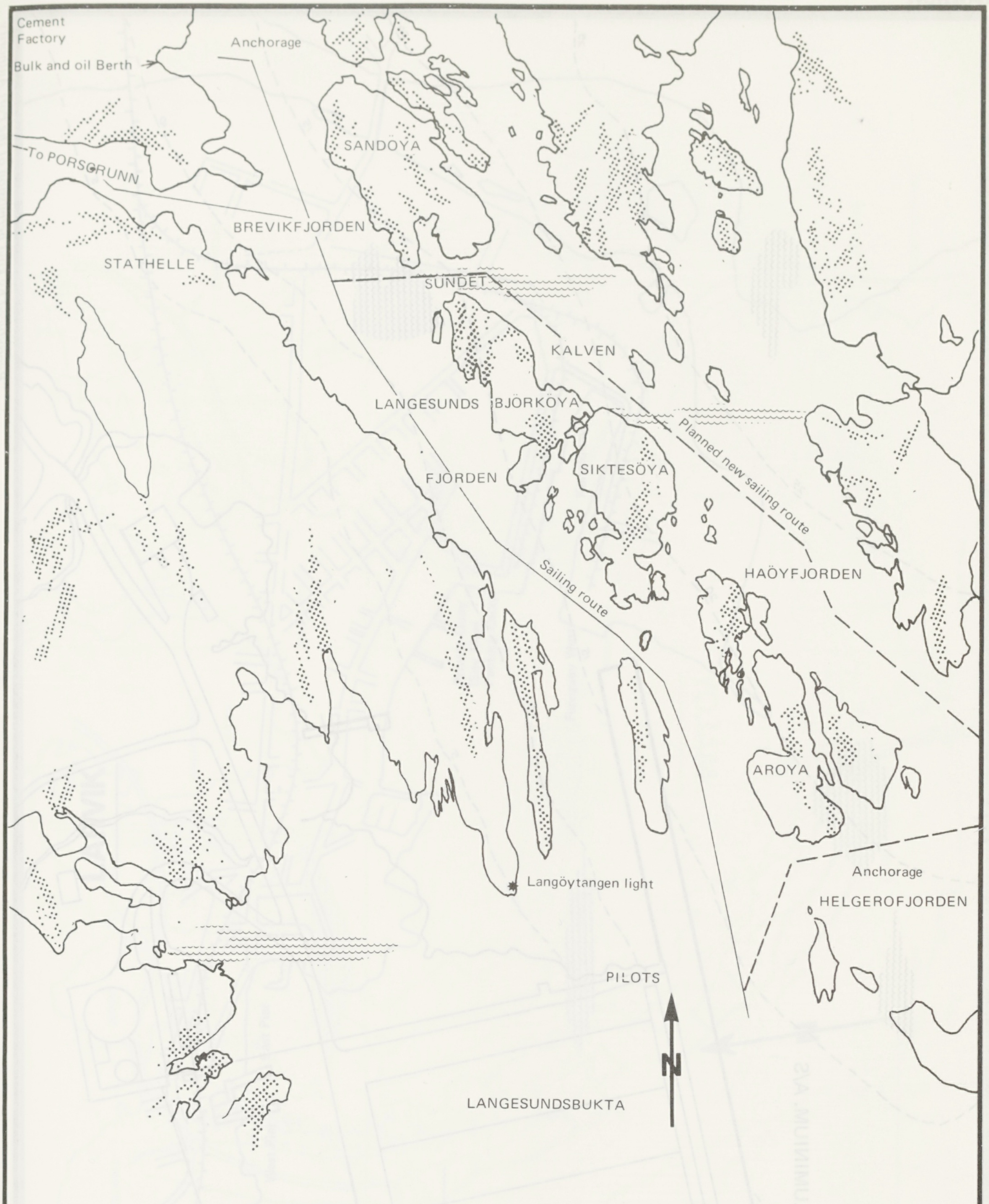
Cement
Factory
Bulk and oil Berth
Anchorage
To PORSGRUNN
SANDOYA
BREVIKFJORDEN
STATHELLE
SUNDET
KALVEN
LANGESUNDS
BJÖRKÖYA
FJORDEN
SIKTESÖYA
Planned new sailing route
Sailing route
HAÖYFJORDEN
AROYA
Langöytangen light
Anchorage
HELGEROFJORDEN
PILOTS
N
LANGESUNDSBUKTA

BREVIK
(APPROACHES)

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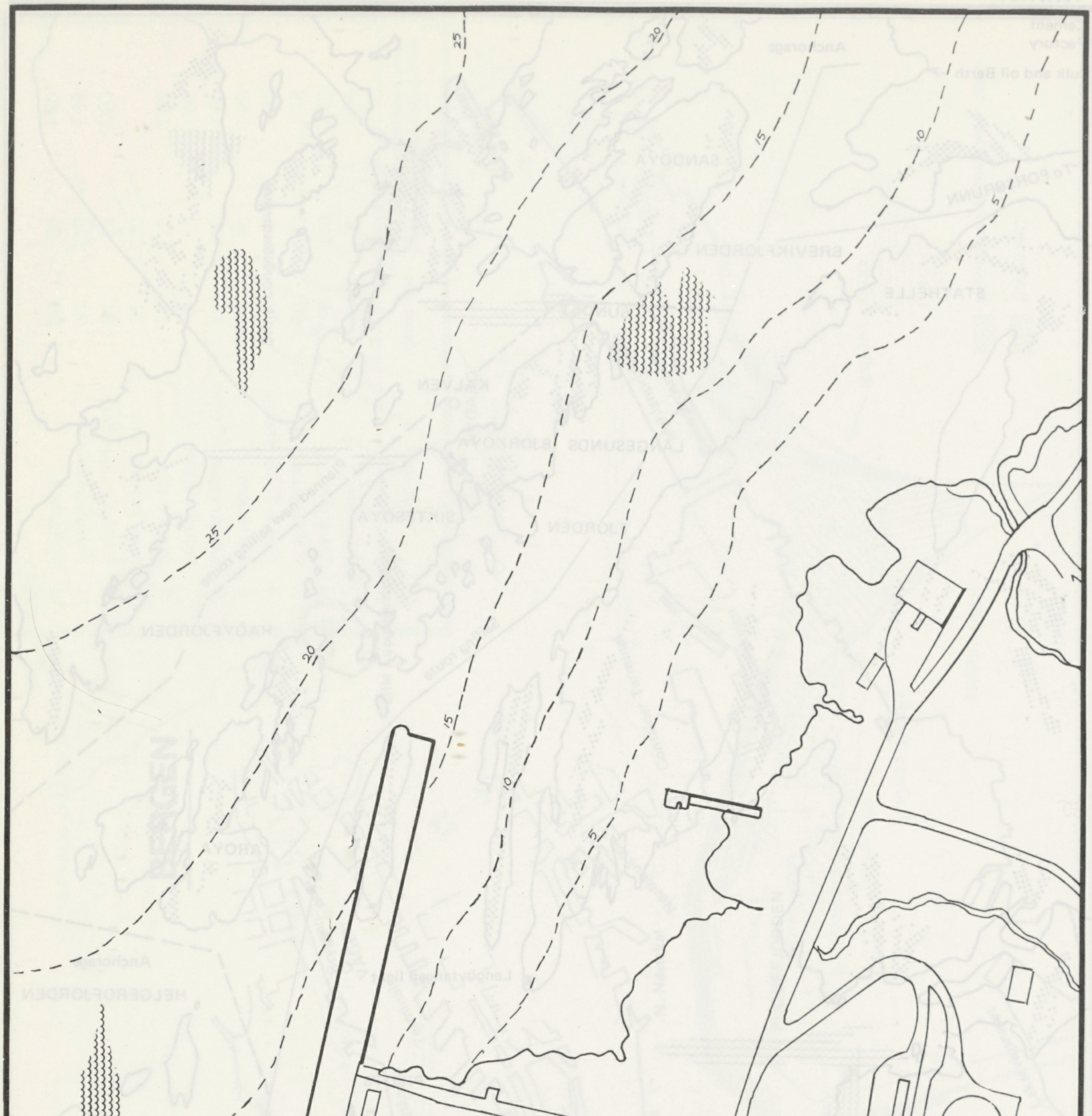

HUSNES

SOR – NORGE ALUMINIUM. A/S

25
20
15
10
5
25
20
15
10
5
11.0
10.6
10.9

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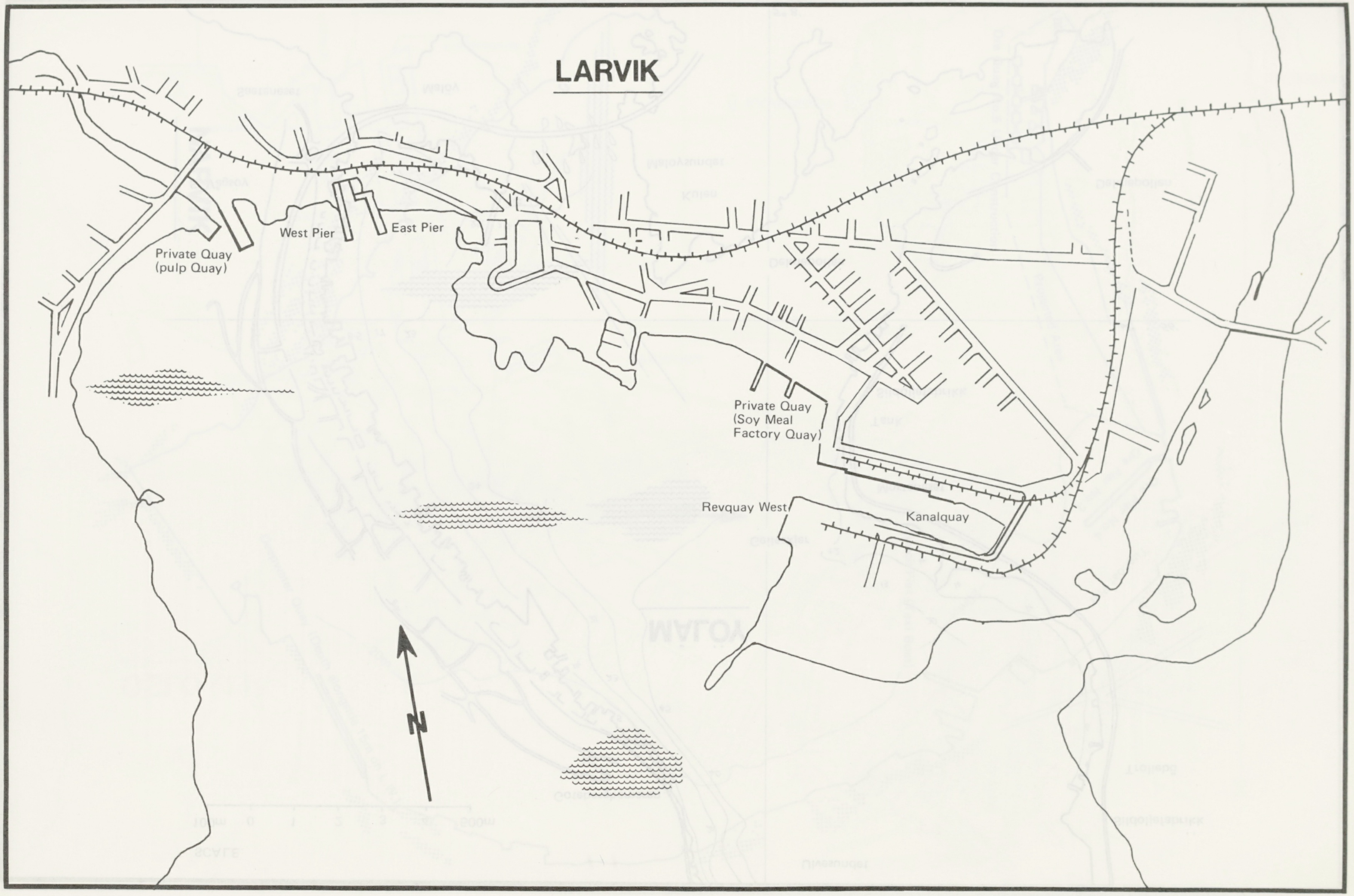
LARVIK


LARVIK
Private Quay
(pulp Quay)
West Pier
East Pier
Private Quay
(Soy Meal
Factory Quay)
Revquay West
Kanalquay
N

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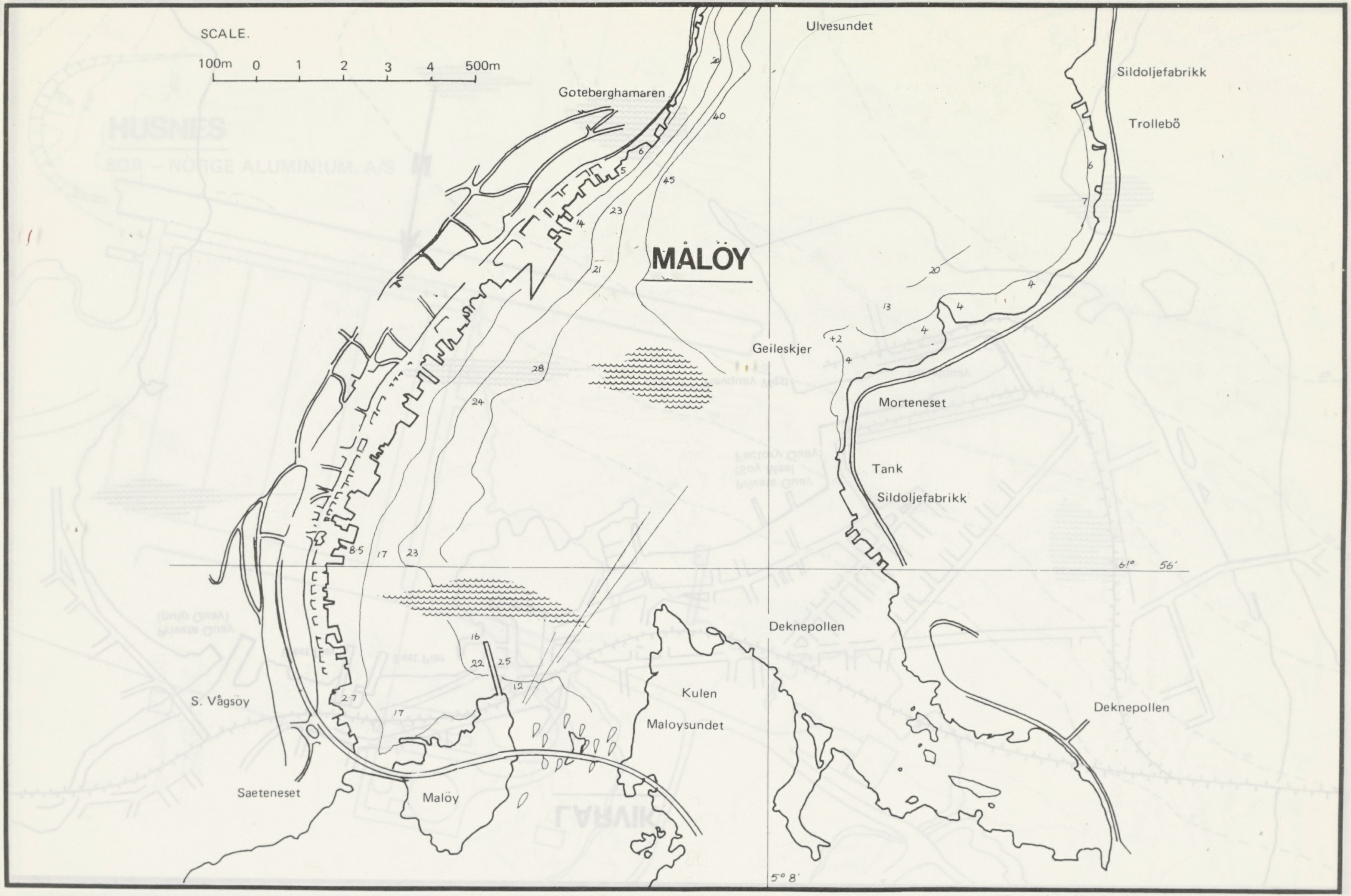
MÅLÖY
SCALE.
100m 0 1 2 3 4 500m
Goteberghamaren
Ulvesundet
Sildoljefabrikk
Trollebö
Geileskjer
Morteneset
Tank
Sildoljefabrikk
61° 56′
Deknepollen
Kulen
Maloysundet
S. Vågsöy
Saeteneset
Malöy
Deknepollen
5° 8′
20
40
6
5
45
23
14
21
28
24
8·5
17
23
16
22
25
12
27
17
6
7
20
4
13
4
4
+2
4

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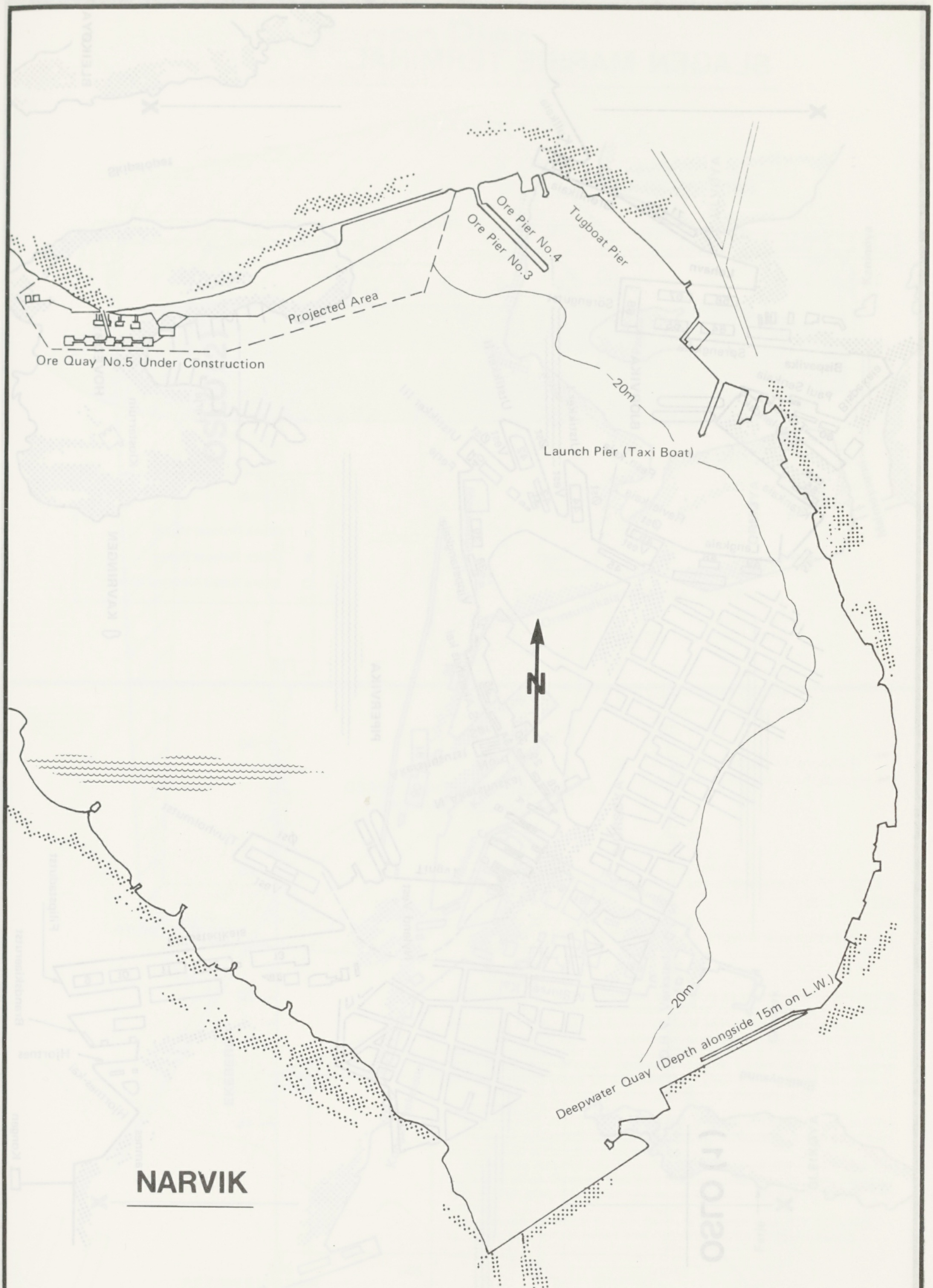
Ore Pier No.4
Tugboat Pier
Ore Pier No.3
Projected Area
Ore Quay No.5 Under Construction
-20m
Launch Pier (Taxi Boat)
N
-20m
Deepwater Quay (Depth alongside 15m on L.W.)
NARVIK

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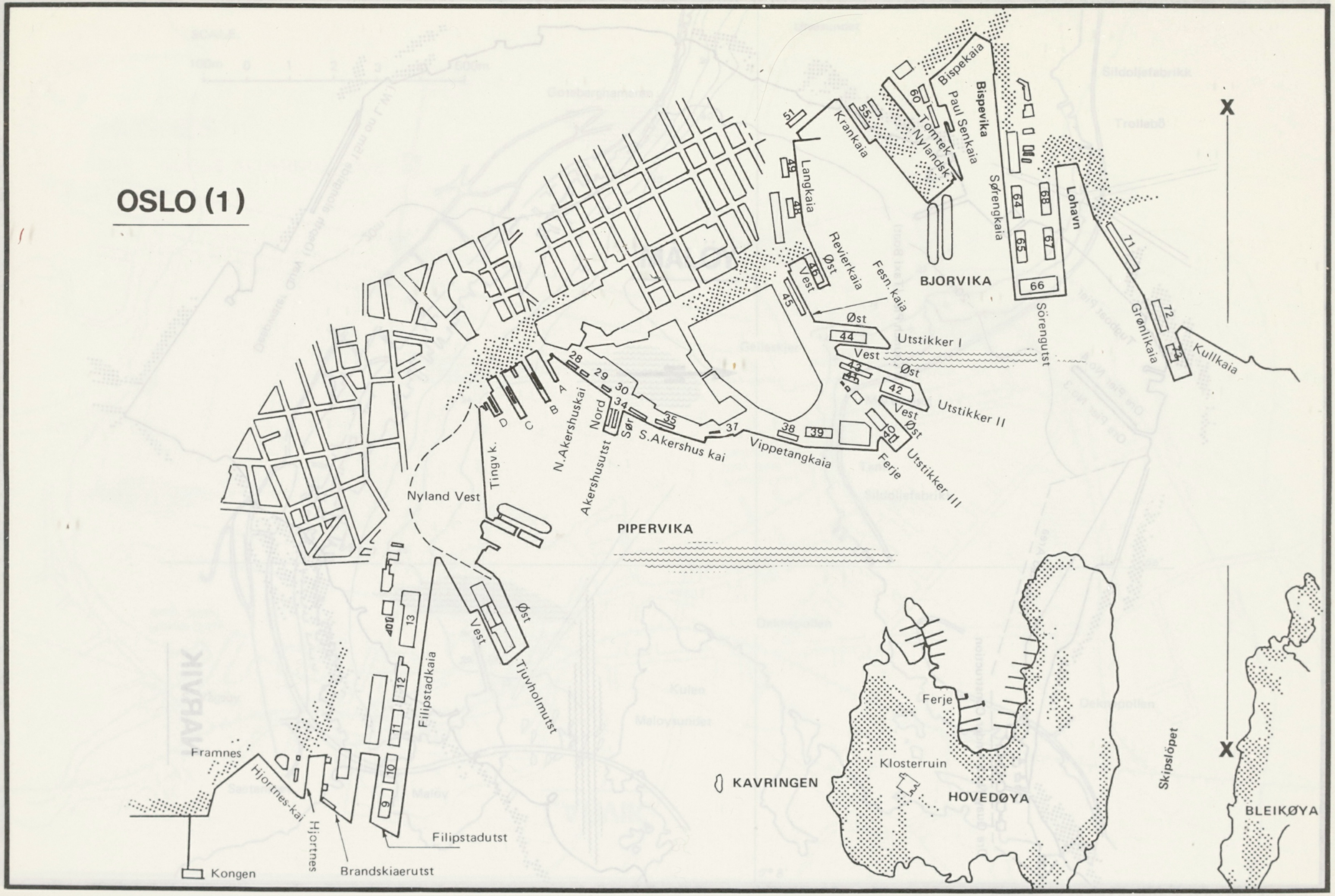
OSLO (1)


Bispekaia
Bispevika
Paul Senkaia
60
Tomtek.
Nylandsk.
55
51
Krankaia
Langkaia
49
48
Søfrengkaia
64
65
68
67
Lohavn
66
71
Revierkaia
Øst
Vest
46
45
Fesn. kaia
BJORVIKA
Sörengutst
Grønlikaia
72
73
Kullkaia
Øst
44
Utstikker I
Vest
43
Øst
41
42
Vest
Utstikker II
Øst
40
Utstikker III
Ferje
38
39
Vippetangkaia
37
35
S. Akershus kai
Sør
34
Nord
30
29
28
A
B
C
D
N. Akershuskai
Akershusutst
Tingv k.
Nyland Vest
PIPERVIKA
Øst
Vest
Tjuvholmutst
13
12
11
10
9
Filipstadkaia
Filipstadutst
Framnes
Hjortnes-kai
Hjortnes
Brandskiaerutst
Kongen
KAVRINGEN
Ferje
Klosterruin
HOVEDØYA
Skipslöpet
X
X
BLEIKØYA

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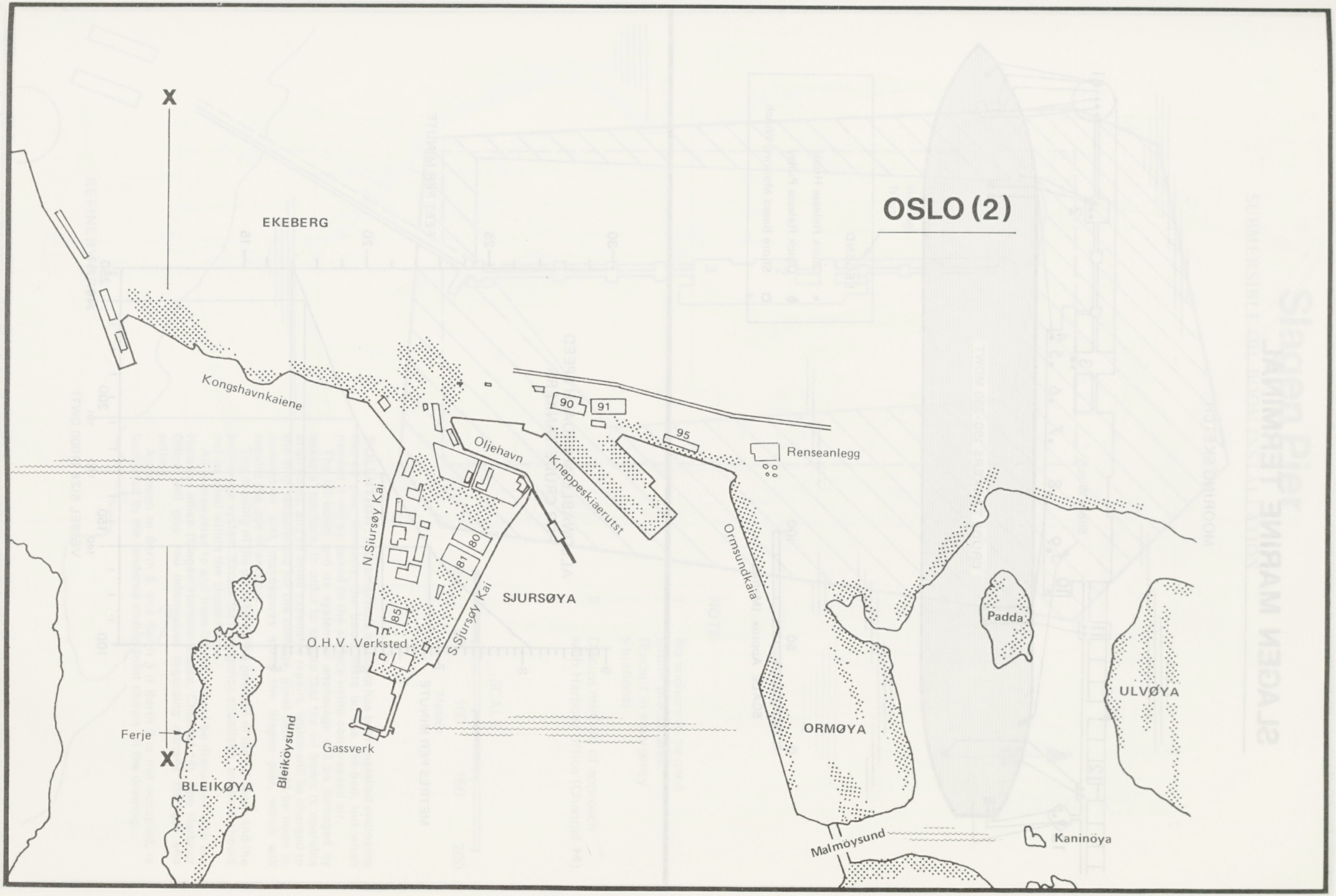
OSLO (2)


X
EKEBERG
Kongshavnkaiene
Oljehavn
Kneppeskiaerutst
90
91
95
Renseanlegg
N.Siursøy Kai
80
81
85
SJURSØYA
S.Sjursøy Kai
O.H.V. Verksted
Gassverk
Ferje
X
BLEIKØYA
Bleikøysund
Ormsundkaia
ORMØYA
Padda
ULVØYA
Malmöysund
Kaninoya

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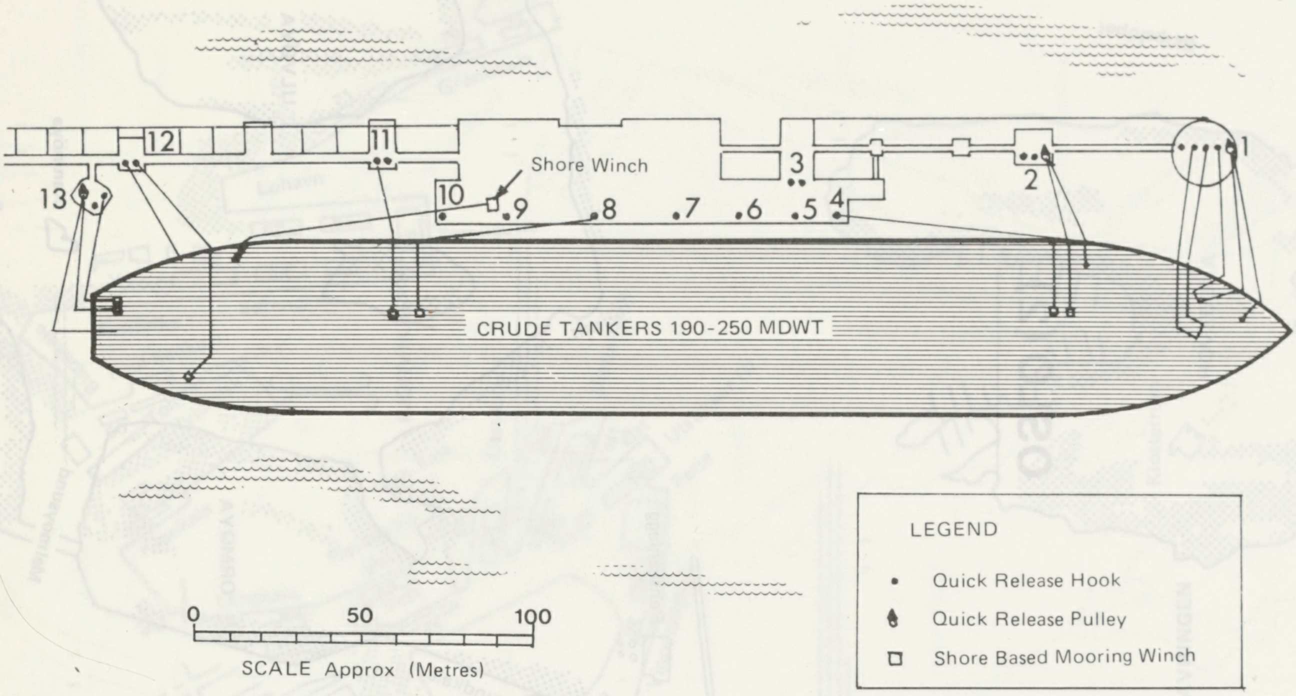
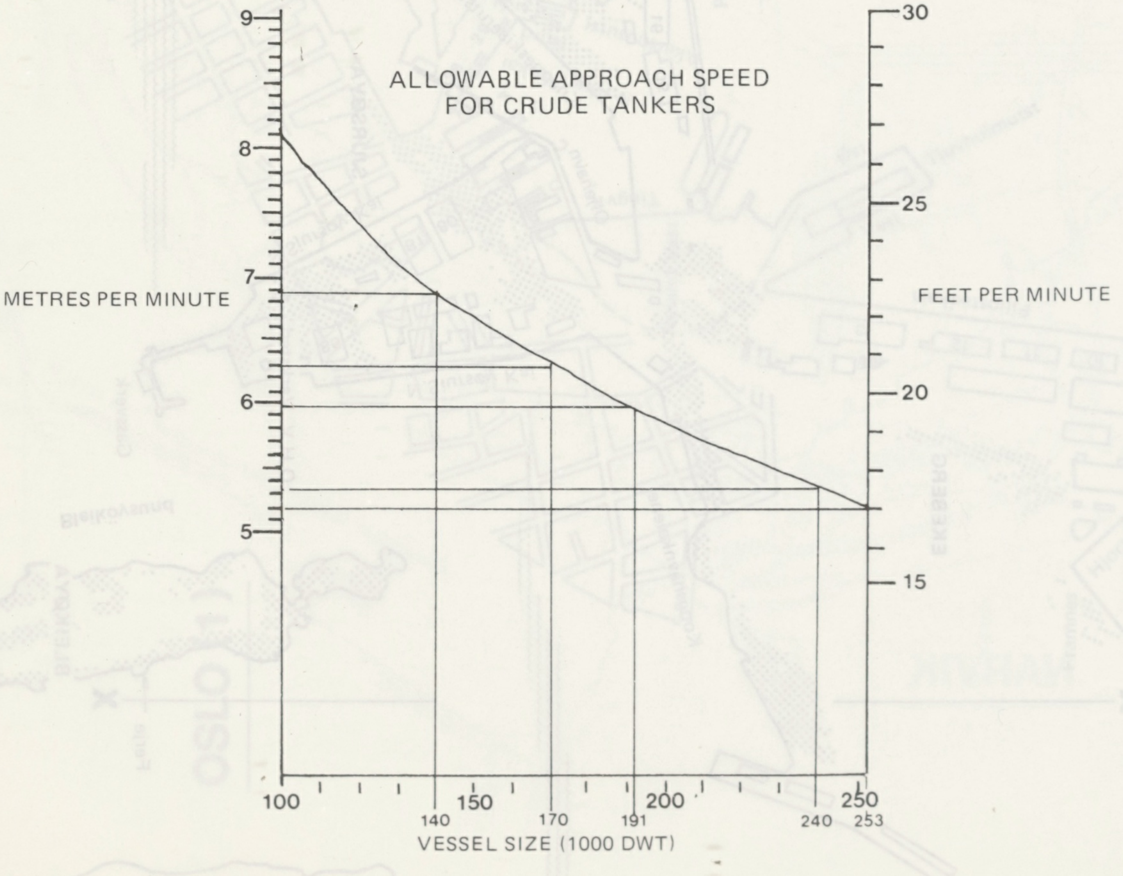
SLAGEN MARINE TERMINAL

MOORING SKETCH


12
11
13
10
Shore Winch
9
8
7
6
5
4
3
2
1
CRUDE TANKERS 190-250 MDWT
0
50
100
SCALE Approx (Metres)
LEGEND
• Quick Release Hook
Quick Release Pulley
□ Shore Based Mooring Winch

ALLOWABLE APPROACH SPEED FOR CRUDE TANKERS



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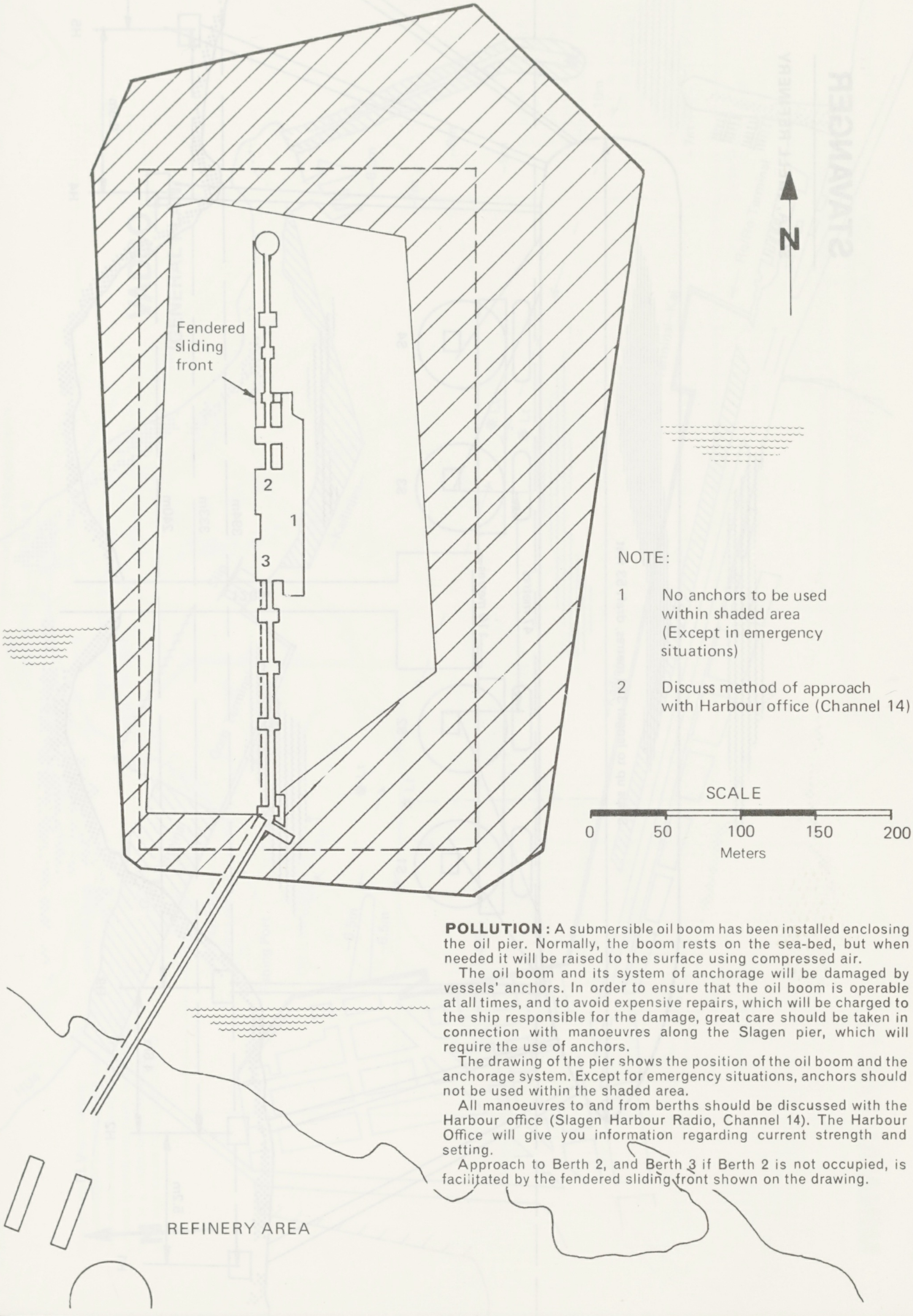
Slagen Pier

SUBMERSIBLE OIL BOOM INSTALLATION



NOTE:

1 No anchors to be used within shaded area (Except in emergency situations)

2 Discuss method of approach with Harbour office (Channel 14)

POLLUTION : A submersible oil boom has been installed enclosing the oil pier. Normally, the boom rests on the sea-bed, but when needed it will be raised to the surface using compressed air.

The oil boom and its system of anchorage will be damaged by vessels' anchors. In order to ensure that the oil boom is operable at all times, and to avoid expensive repairs, which will be charged to the ship responsible for the damage, great care should be taken in connection with manoeuvres along the Slagen pier, which will require the use of anchors.

The drawing of the pier shows the position of the oil boom and the anchorage system. Except for emergency situations, anchors should not be used within the shaded area.

All manoeuvres to and from berths should be discussed with the Harbour office (Slagen Harbour Radio, Channel 14). The Harbour Office will give you information regarding current strength and setting.

Approach to Berth 2, and Berth 3 if Berth 2 is not occupied, is facilitated by the fendered sliding front shown on the drawing.

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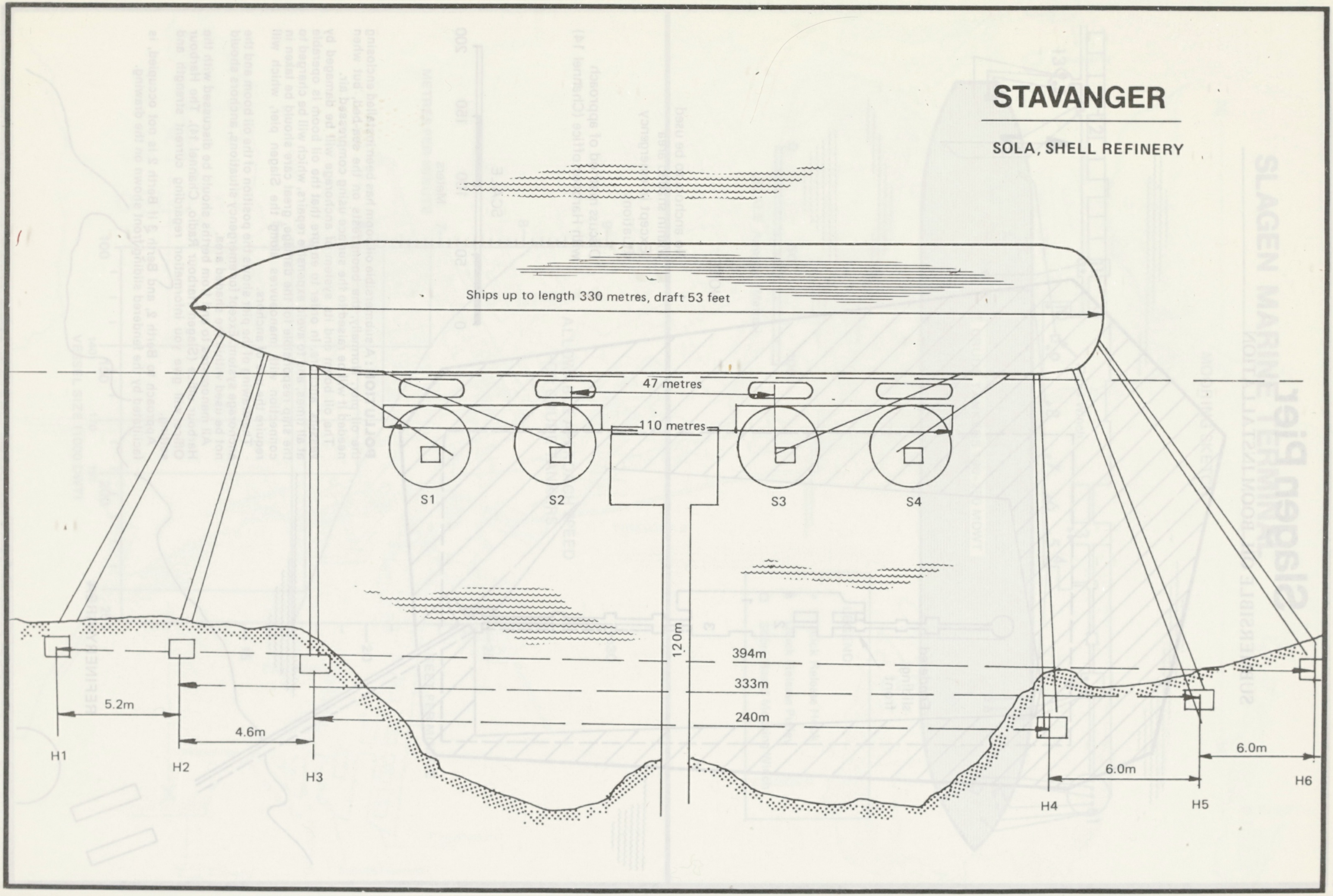
STAVANGER

SOLA, SHELL REFINERY


Ships up to length 330 metres, draft 53 feet
47 metres
110 metres
S1
S2
S3
S4
120m
394m
333m
240m
5.2m
4.6m
H1
H2
H3
6.0m
6.0m
H4
H5
H6

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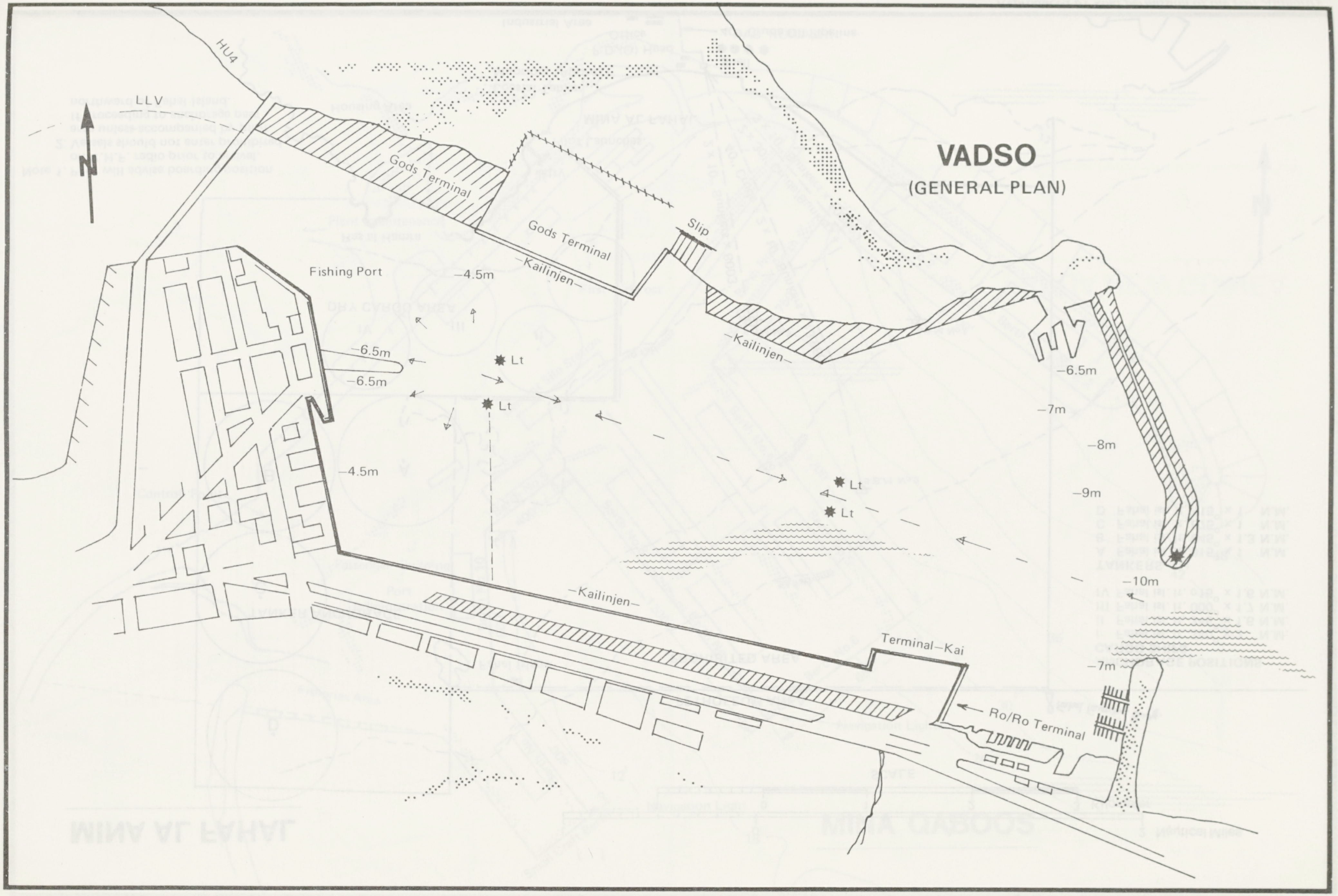

VADSO

(GENERAL PLAN)

HU4
LLV
N
Gods Terminal
Gods Terminal
Slip
–Kailinjen–
Fishing Port
–4.5m
–6.5m
–6.5m
Lt
Lt
–4.5m
–Kailinjen–
Lt
Lt
–6.5m
–7m
–8m
–9m
–10m
–7m
–Kailinjen–
Terminal–Kai
Ro/Ro Terminal

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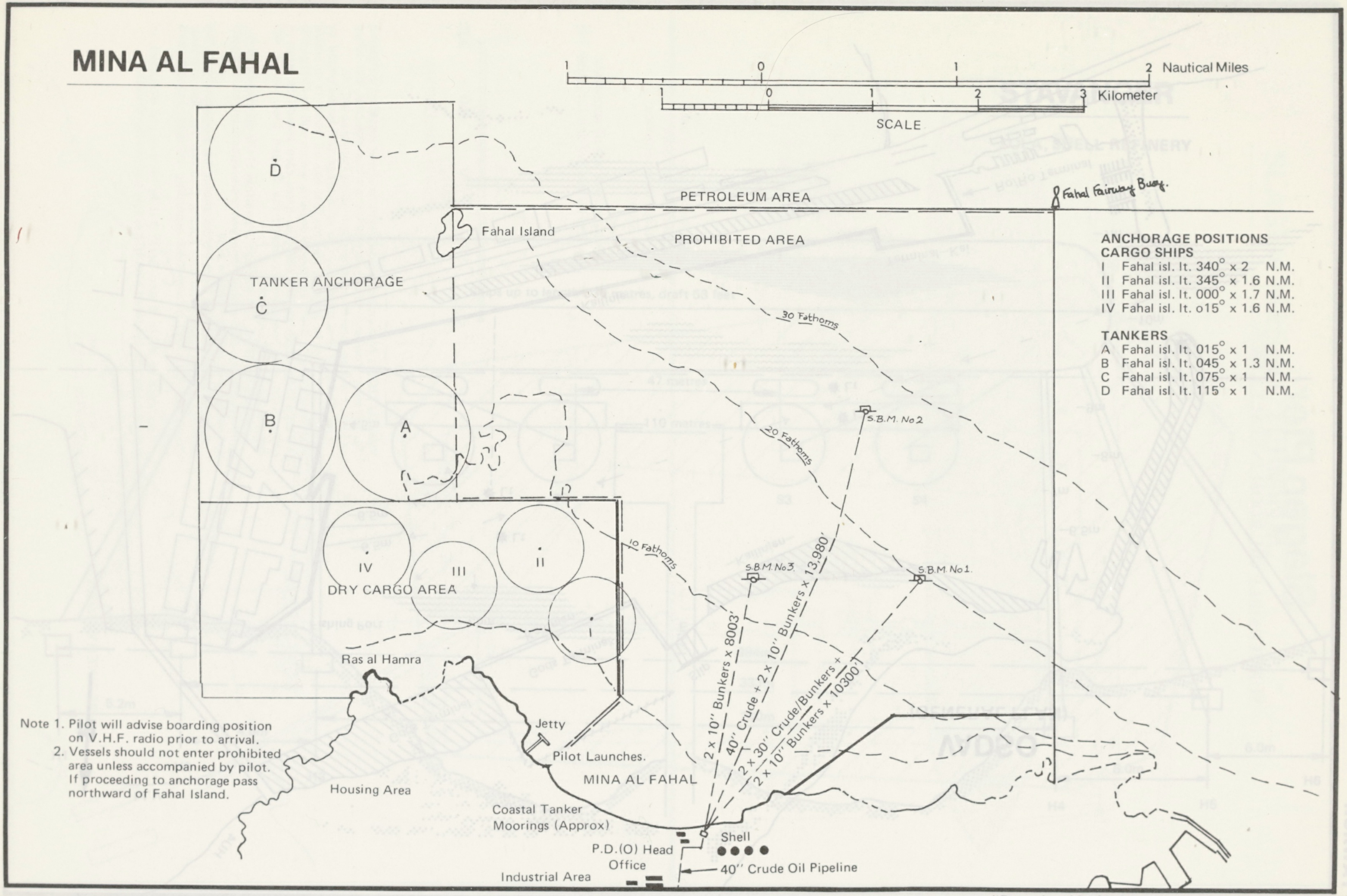
MINA AL FAHAL


1
0
1
2 Nautical Miles
1
0
1
2
3 Kilometer
SCALE
PETROLEUM AREA
Fahal Fairway Buoy.
Fahal Island
PROHIBITED AREA
TANKER ANCHORAGE
D
C
B
A
30 Fathoms
S.B.M. No 2
20 Fathoms
10 Fathoms
S.B.M. No 3
S.B.M. No 1.
IV
III
II
DRY CARGO AREA
2 x 10" Bunkers x 8003'
40" Crude + 2 x 10" Bunkers x 13,980'
2 x 30" Crude/Bunkers + 2 x 10" Bunkers x 10300'
Ras al Hamra
Jetty
Pilot Launches.
MINA AL FAHAL
Housing Area
Coastal Tanker Moorings (Approx)
Shell
P.D.(O) Head Office
40" Crude Oil Pipeline
Industrial Area

ANCHORAGE POSITIONS
CARGO SHIPS

I	Fahal isl. lt. 340° x 2	N.M.
II	Fahal isl. lt. 345° x 1.6	N.M.
III	Fahal isl. lt. 000° x 1.7	N.M.
IV	Fahal isl. lt. 015° x 1.6	N.M.

TANKERS

A	Fahal isl. lt. 015° x 1	N.M.
B	Fahal isl. lt. 045° x 1.3	N.M.
C	Fahal isl. lt. 075° x 1	N.M.
D	Fahal isl. lt. 115° x 1	N.M.

Note 1. Pilot will advise boarding position on V.H.F. radio prior to arrival.
2. Vessels should not enter prohibited area unless accompanied by pilot. If proceeding to anchorage pass northward of Fahal Island.

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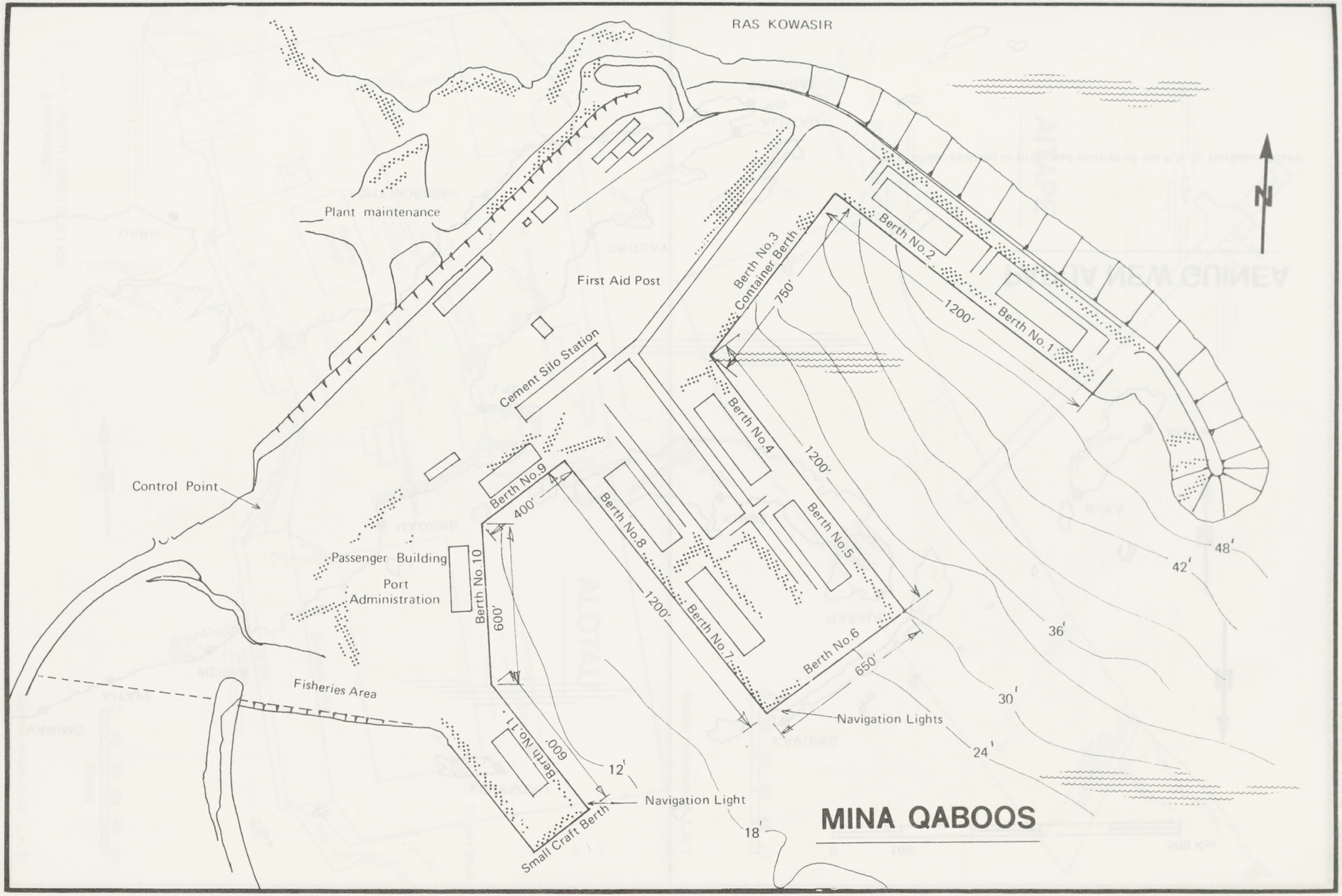
RAS KOWASIR
N
Plant maintenance
First Aid Post
Cement Silo Station
Berth No.3 Container Berth
750'
Berth No.2
Berth No.1
1200'
Berth No.4
1200'
Berth No.5
Berth No.9
400'
Berth No.8
1200'
Berth No.7
Berth No.6
650'
Control Point
Passenger Building
Port Administration
Berth No.10
600'
Fisheries Area
Berth No.11
600'
Small Craft Berth
Navigation Light
Navigation Lights
12'
18'
24'
30'
36'
42'
48'

MINA QABOOS

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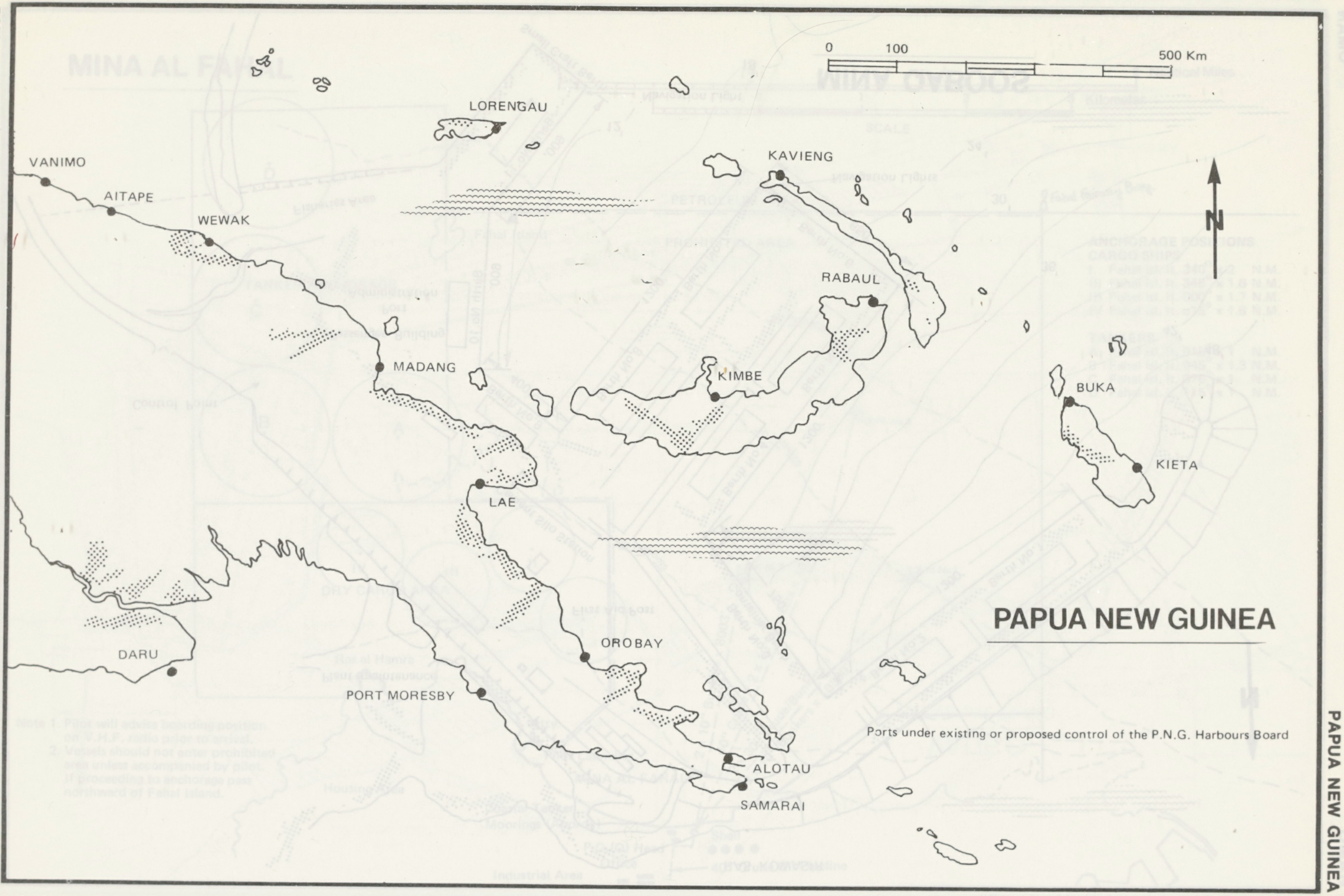
0
100
500 Km
N
VANIMO
AITAPE
WEWAK
LORENGAU
KAVIENG
RABAUL
KIMBE
MADANG
LAE
BUKA
KIETA
DARU
OROBAY
PORT MORESBY
ALOTAU
SAMARAI

PAPUA NEW GUINEA

Ports under existing or proposed control of the P.N.G. Harbours Board

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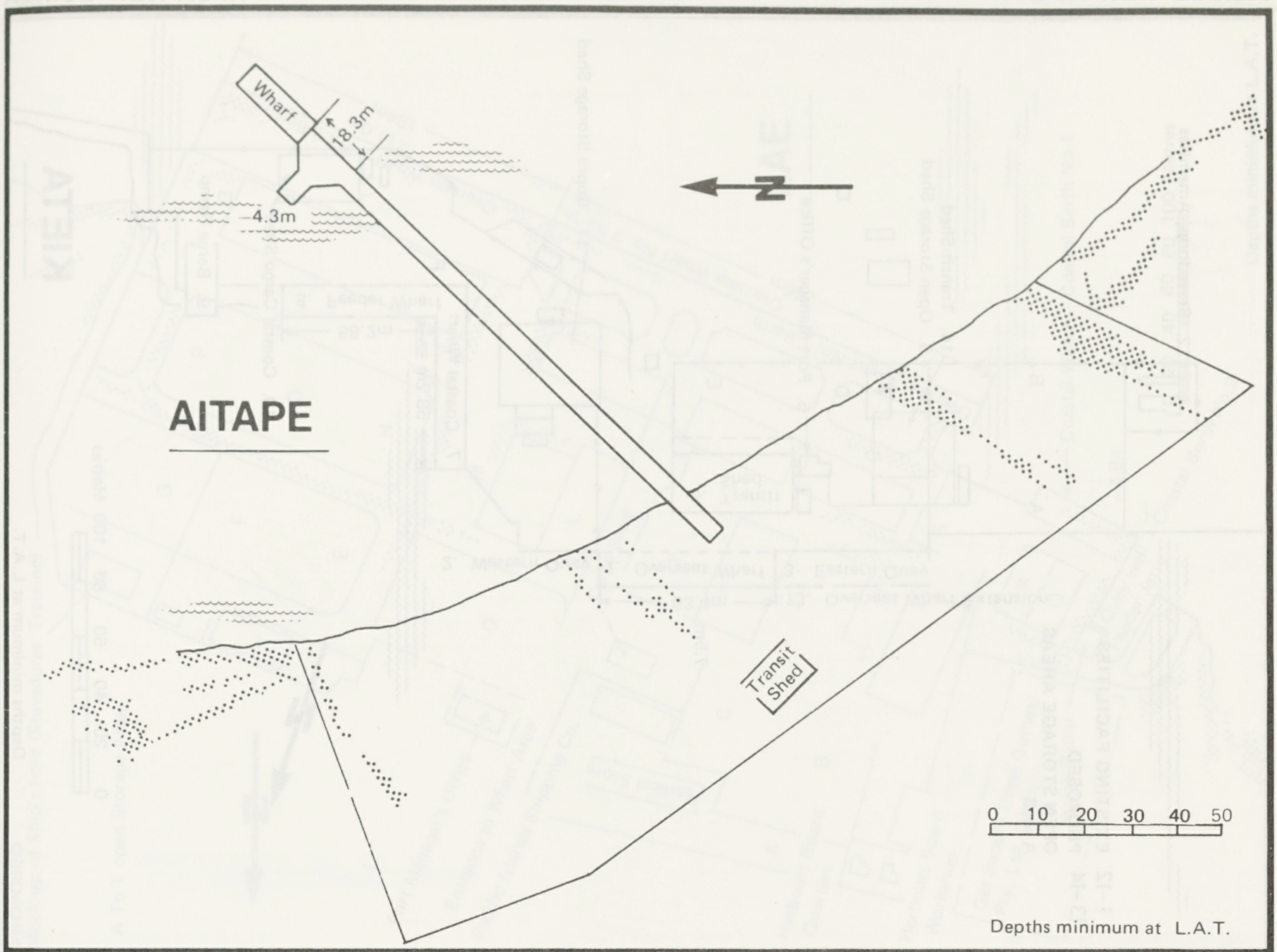
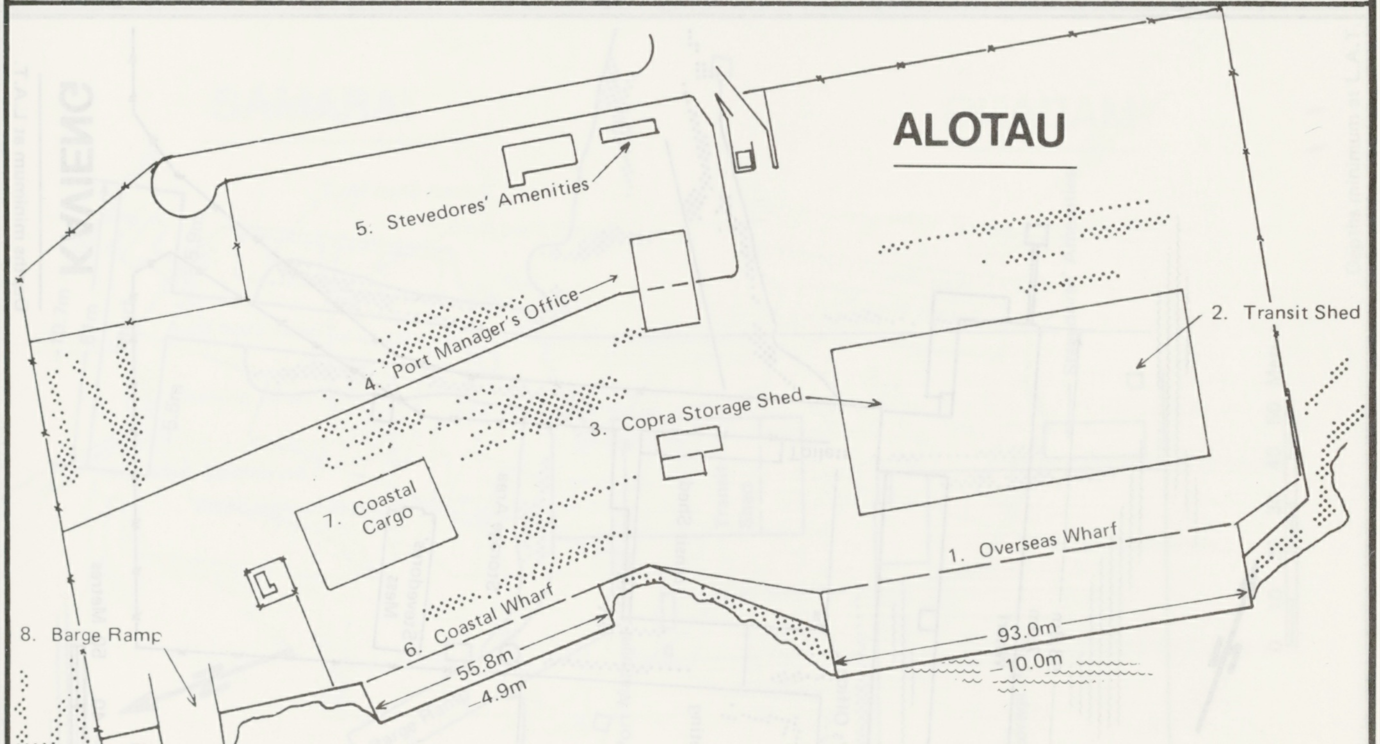

AITAPE
Wharf
18.3m
−4.3m
Transit Shed
N
0 10 20 30 40 50
Depths minimum at L.A.T.


ALOTAU
5. Stevedores' Amenities
4. Port Manager's Office
3. Copra Storage Shed
2. Transit Shed
7. Coastal Cargo
1. Overseas Wharf
6. Coastal Wharf
8. Barge Ramp
55.8m
−4.9m
93.0m
−10.0m
N
0 10 20 30 40 50
Metres
1–7. UNDER CONSTRUCTION
8 PROPOSED
Depths minimum at L.A.T.

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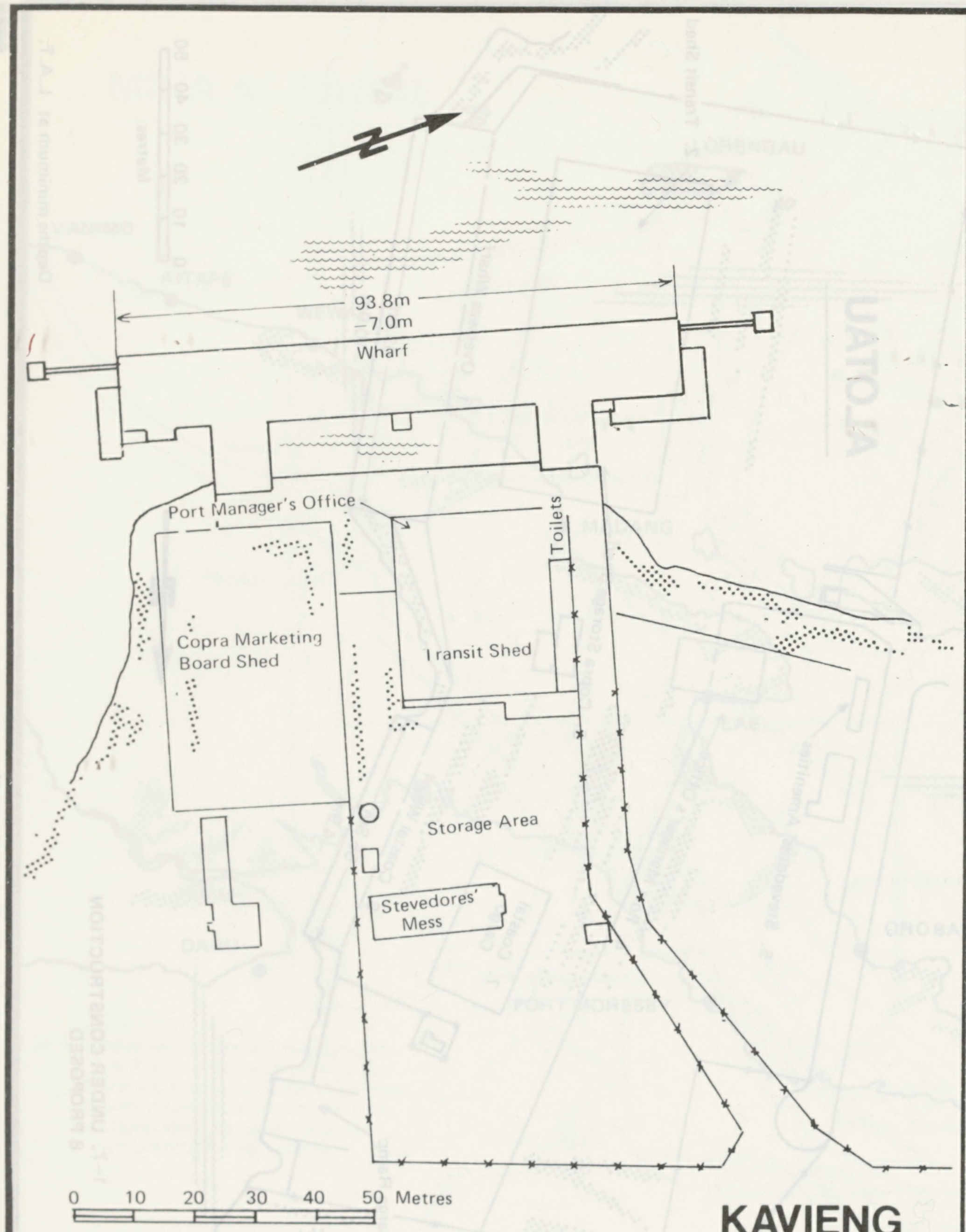
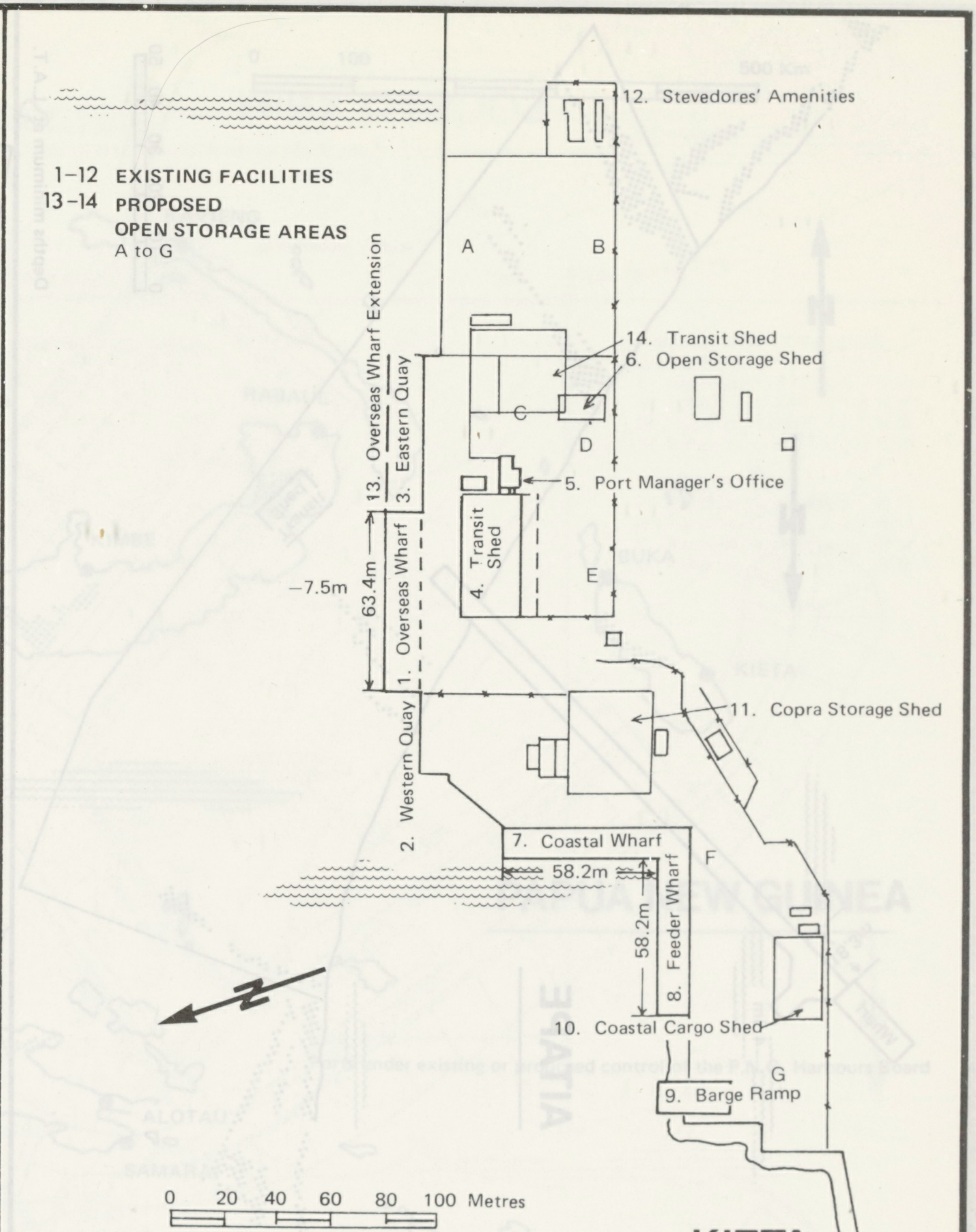

93.8m
7.0m
Wharf
Port Manager's Office
Toilets
Copra Marketing Board Shed
Transit Shed
Storage Area
Stevedores' Mess
0 10 20 30 40 50 Metres

KAVIENG

Depths minimum at L.A.T.


1–12 EXISTING FACILITIES
13–14 PROPOSED
OPEN STORAGE AREAS
A to G
12. Stevedores' Amenities
A
B
14. Transit Shed
6. Open Storage Shed
C
D
5. Port Manager's Office
13. Overseas Wharf Extension
3. Eastern Quay
4. Transit Shed
E
63.4m
−7.5m
1. Overseas Wharf
11. Copra Storage Shed
2. Western Quay
7. Coastal Wharf
58.2m
F
58.2m
8. Feeder Wharf
10. Coastal Cargo Shed
G
9. Barge Ramp
0 20 40 60 80 100 Metres

KIETA

Depths minimum at L.A.T.

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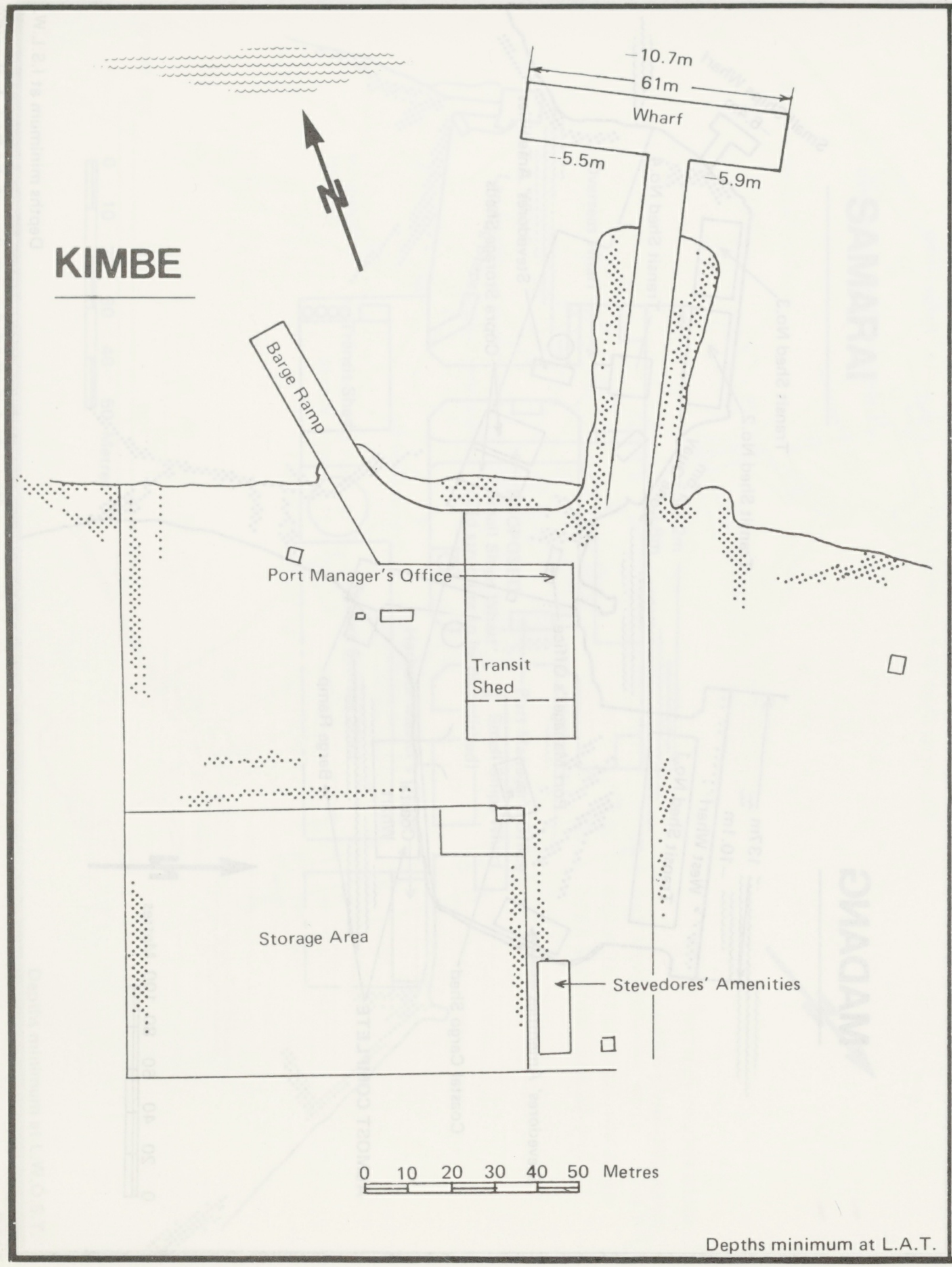
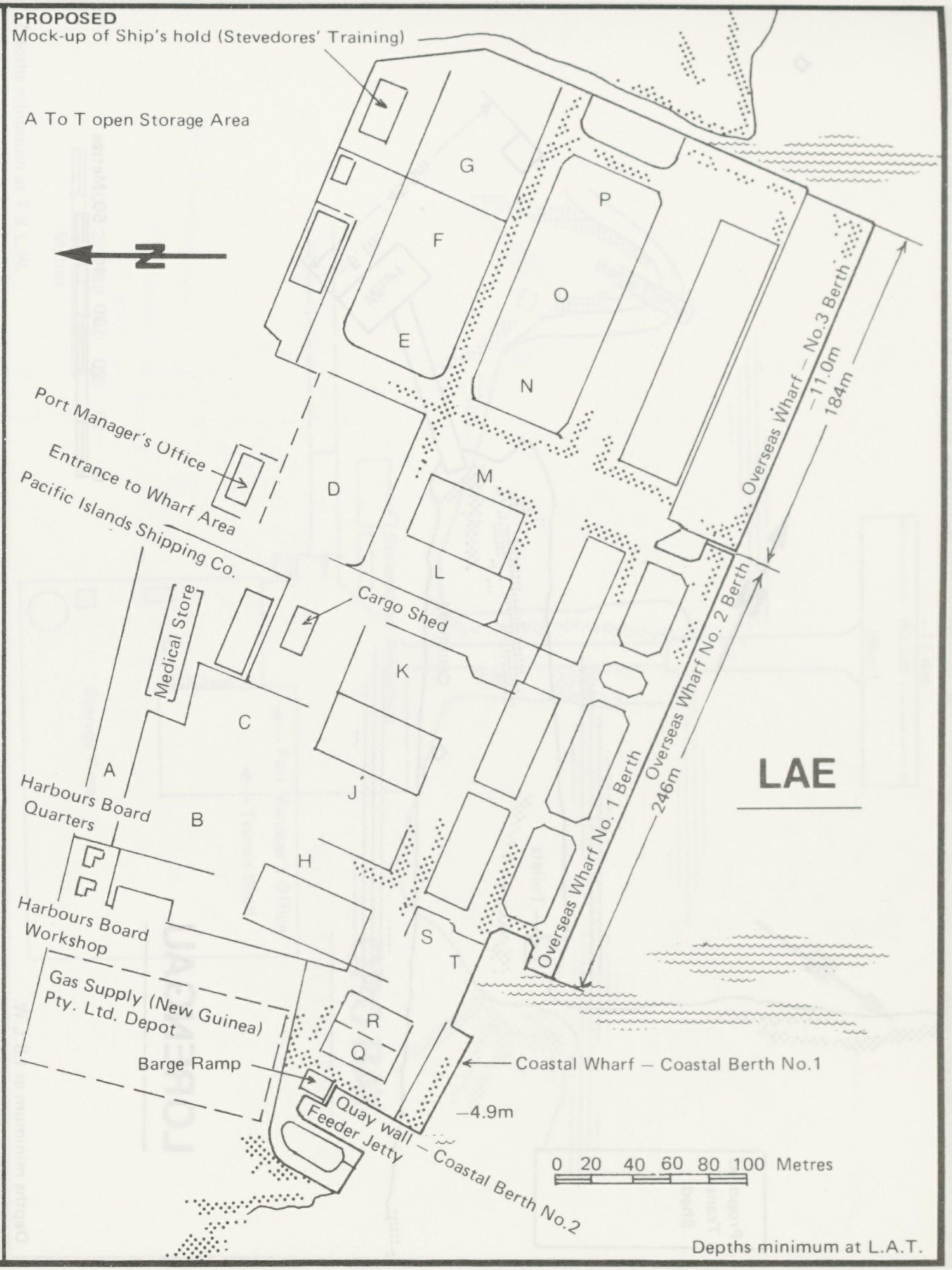

KIMBE
N
−10.7m
61m
Wharf
−5.5m
−5.9m
Barge Ramp
Port Manager's Office
Transit Shed
Storage Area
Stevedores' Amenities
0 10 20 30 40 50 Metres
Depths minimum at L.A.T.


PROPOSED
Mock-up of Ship's hold (Stevedores' Training)
A To T open Storage Area
N
A
B
C
D
E
F
G
H
J
K
L
M
N
O
P
Q
R
S
T
Port Manager's Office
Entrance to Wharf Area
Pacific Islands Shipping Co.
Medical Store
Cargo Shed
Harbours Board Quarters
Harbours Board Workshop
Gas Supply (New Guinea) Pty. Ltd. Depot
Barge Ramp
Quay wall
Feeder Jetty
Coastal Berth No.2
−4.9m
Coastal Wharf – Coastal Berth No.1
Overseas Wharf No. 1 Berth
Overseas Wharf No. 2 Berth
246m
Overseas Wharf – No.3 Berth
−11.0m
184m
LAE
0 20 40 60 80 100 Metres
Depths minimum at L.A.T.

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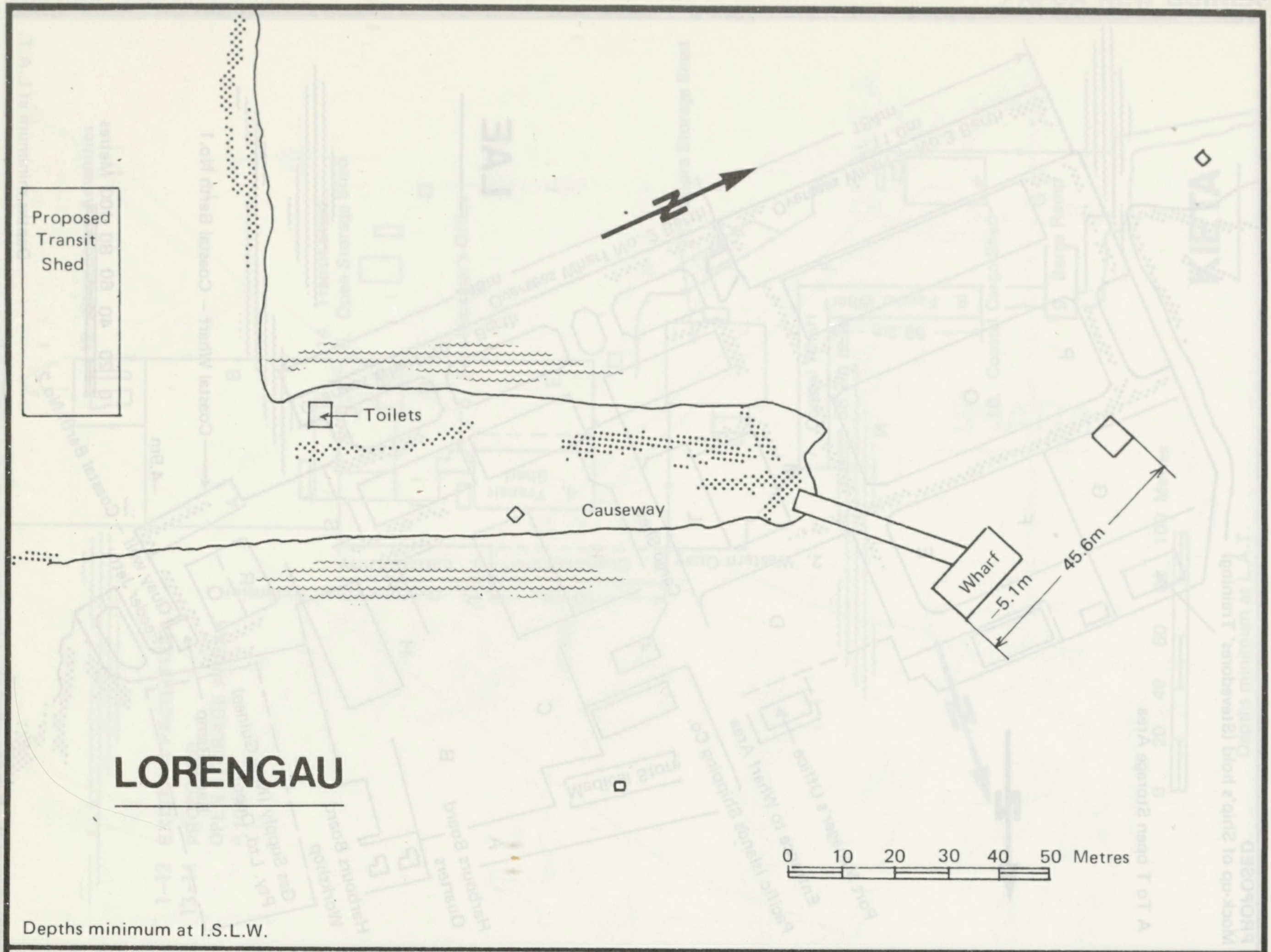
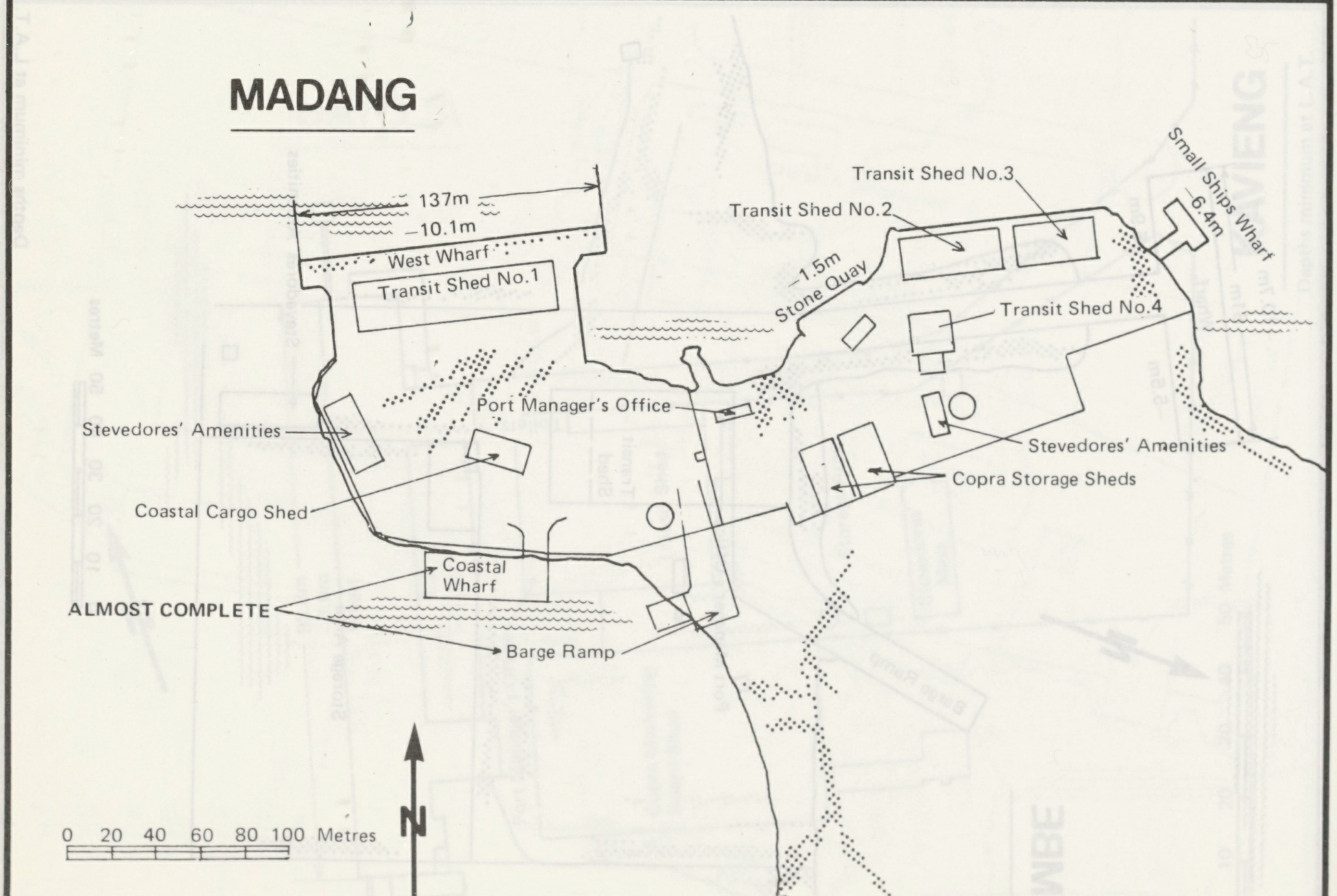
LORENGAU


Proposed Transit Shed
Toilets
Causeway
Wharf
−5.1m
45.6m
N
0 10 20 30 40 50 Metres

Depths minimum at I.S.L.W.

MADANG


137m
−10.1m
West Wharf
Transit Shed No.1
Transit Shed No.2
Transit Shed No.3
Small Ships Wharf
−6.4m
−1.5m
Stone Quay
Transit Shed No.4
Port Manager's Office
Stevedores' Amenities
Stevedores' Amenities
Coastal Cargo Shed
Copra Storage Sheds
Coastal Wharf
ALMOST COMPLETE
Barge Ramp
N
0 20 40 60 80 100 Metres

Depths minimum at I.S.L.W.

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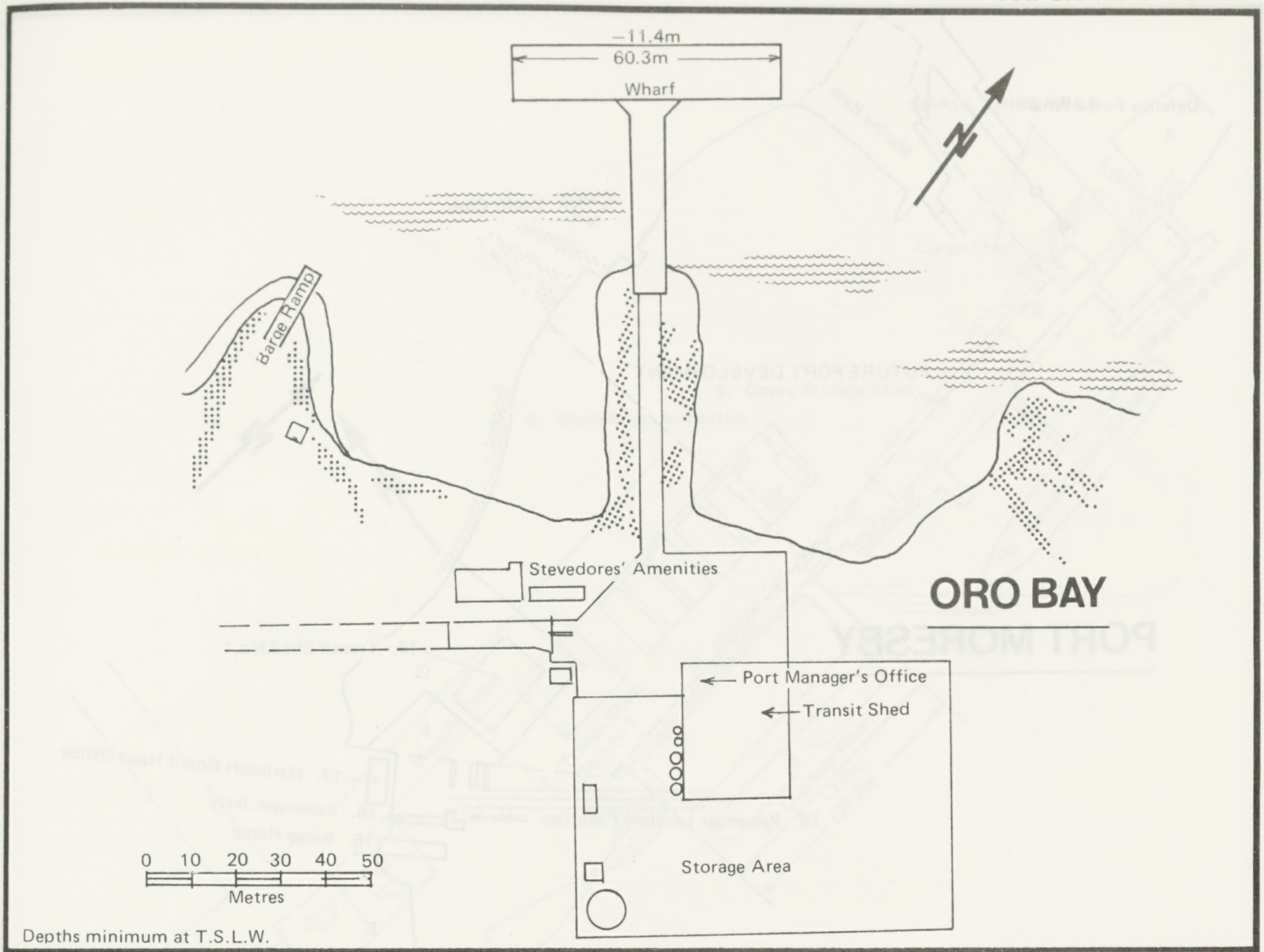
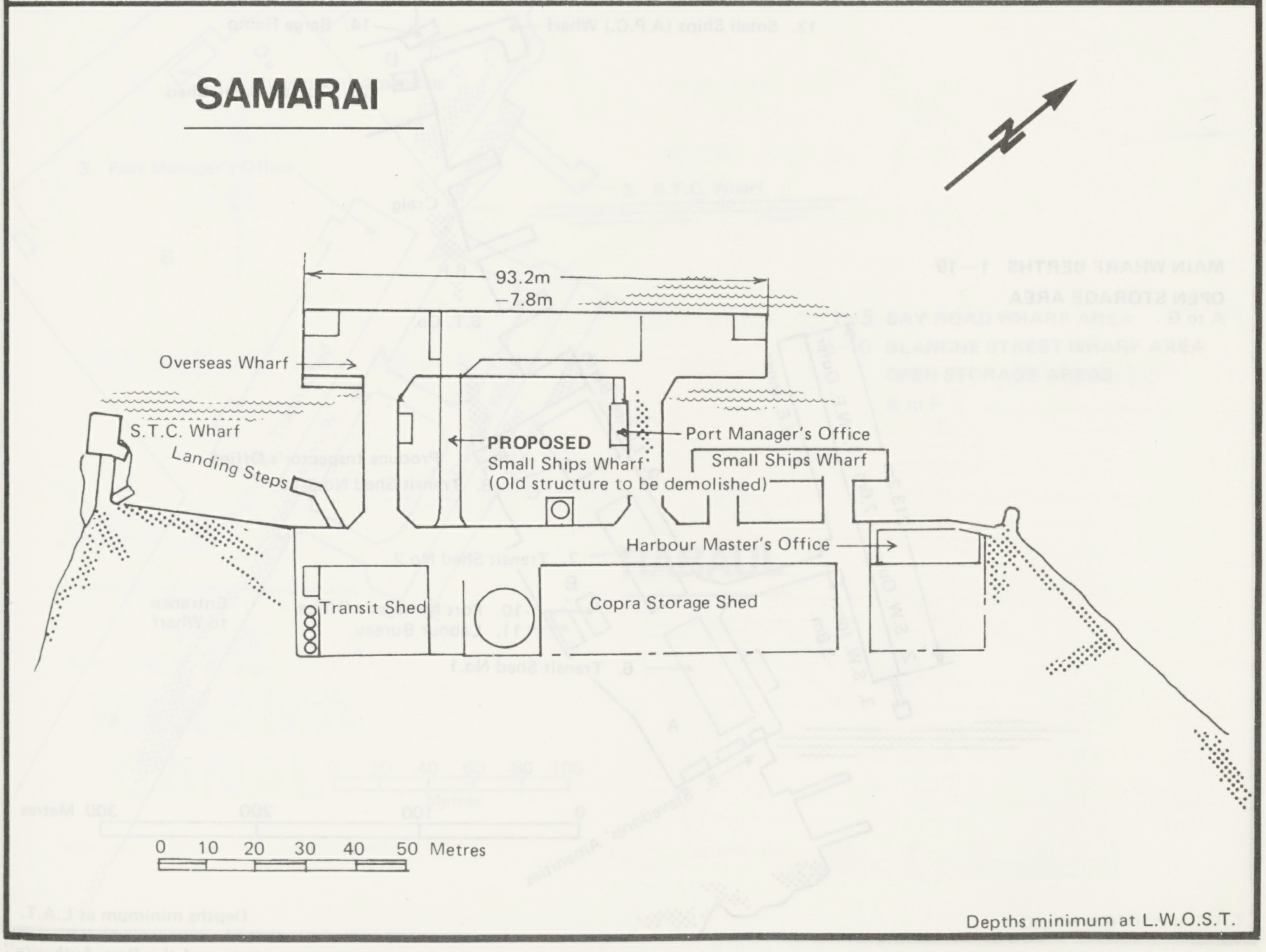
ORO BAY


−11.4m
60.3m
Wharf
Barge Ramp
Stevedores' Amenities
Port Manager's Office
Transit Shed
Storage Area
0 10 20 30 40 50
Metres

Depths minimum at T.S.L.W.

SAMARAI


93.2m
−7.8m
Overseas Wharf
S.T.C. Wharf
Landing Steps
PROPOSED
Small Ships Wharf
(Old structure to be demolished)
Port Manager's Office
Small Ships Wharf
Harbour Master's Office
Transit Shed
Copra Storage Shed
0 10 20 30 40 50 Metres

Depths minimum at L.W.O.S.T.

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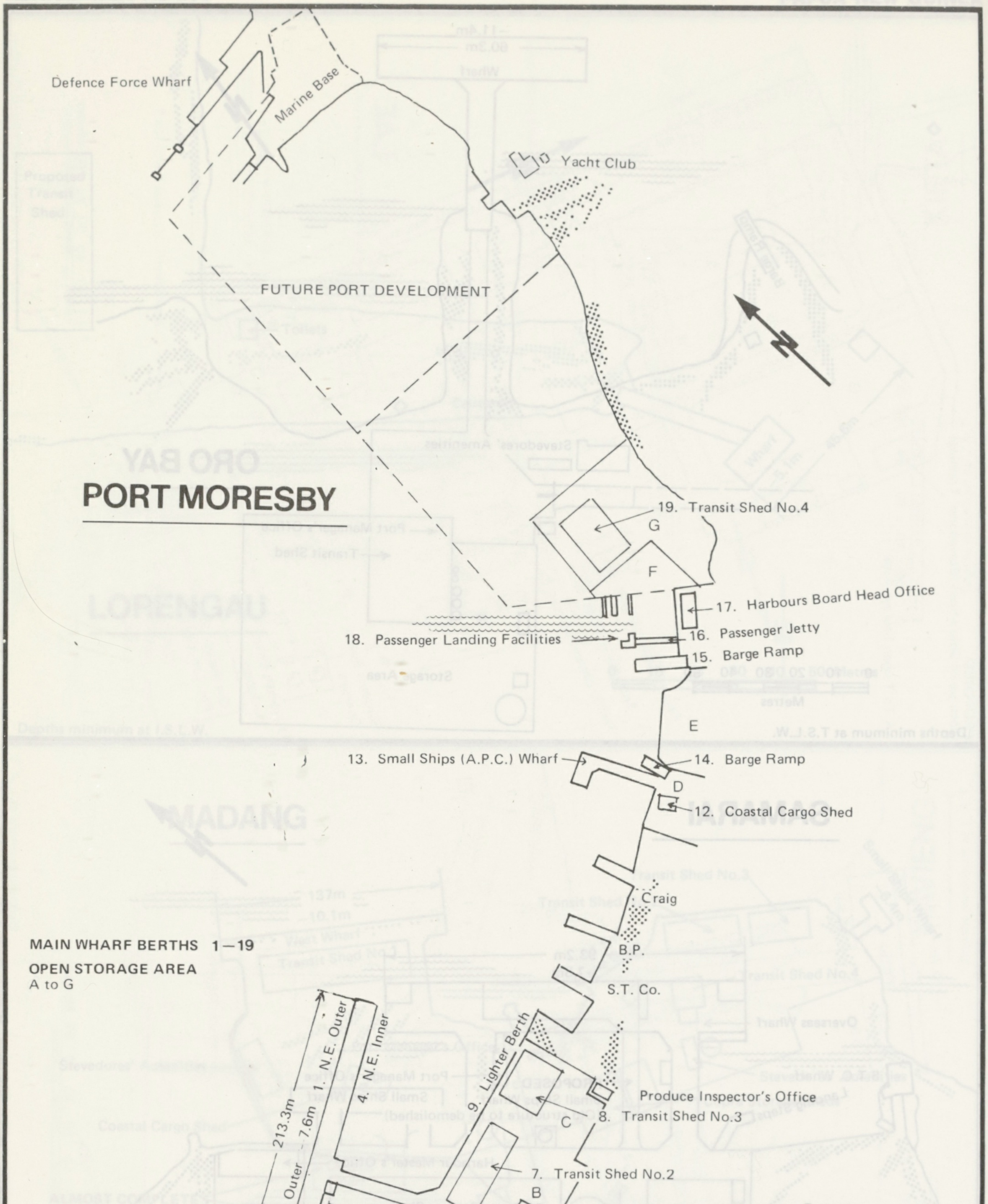
PORT MORESBY


Defence Force Wharf
Marine Base
Yacht Club
FUTURE PORT DEVELOPMENT
19. Transit Shed No.4
G
F
17. Harbours Board Head Office
18. Passenger Landing Facilities
16. Passenger Jetty
15. Barge Ramp
E
13. Small Ships (A.P.C.) Wharf
14. Barge Ramp
D
12. Coastal Cargo Shed
Craig
B.P.
S.T. Co.
MAIN WHARF BERTHS 1—19
OPEN STORAGE AREA
A to G
213.3m
7.6m
1. N.E. Outer
4. N.E. Inner
9. Lighter Berth
Produce Inspector's Office
8. Transit Shed No.3
C
7. Transit Shed No.2
B
10. Port Manager's Office
11. Labour Bureau
Entrance to Wharf
2. S.W. Outer
3. S.W. Inner
-3.8m
6. Transit Shed No.1
A
5. Stevedores' Amenities
0
100
200
300 Metres
Depths minimum at L.A.T.

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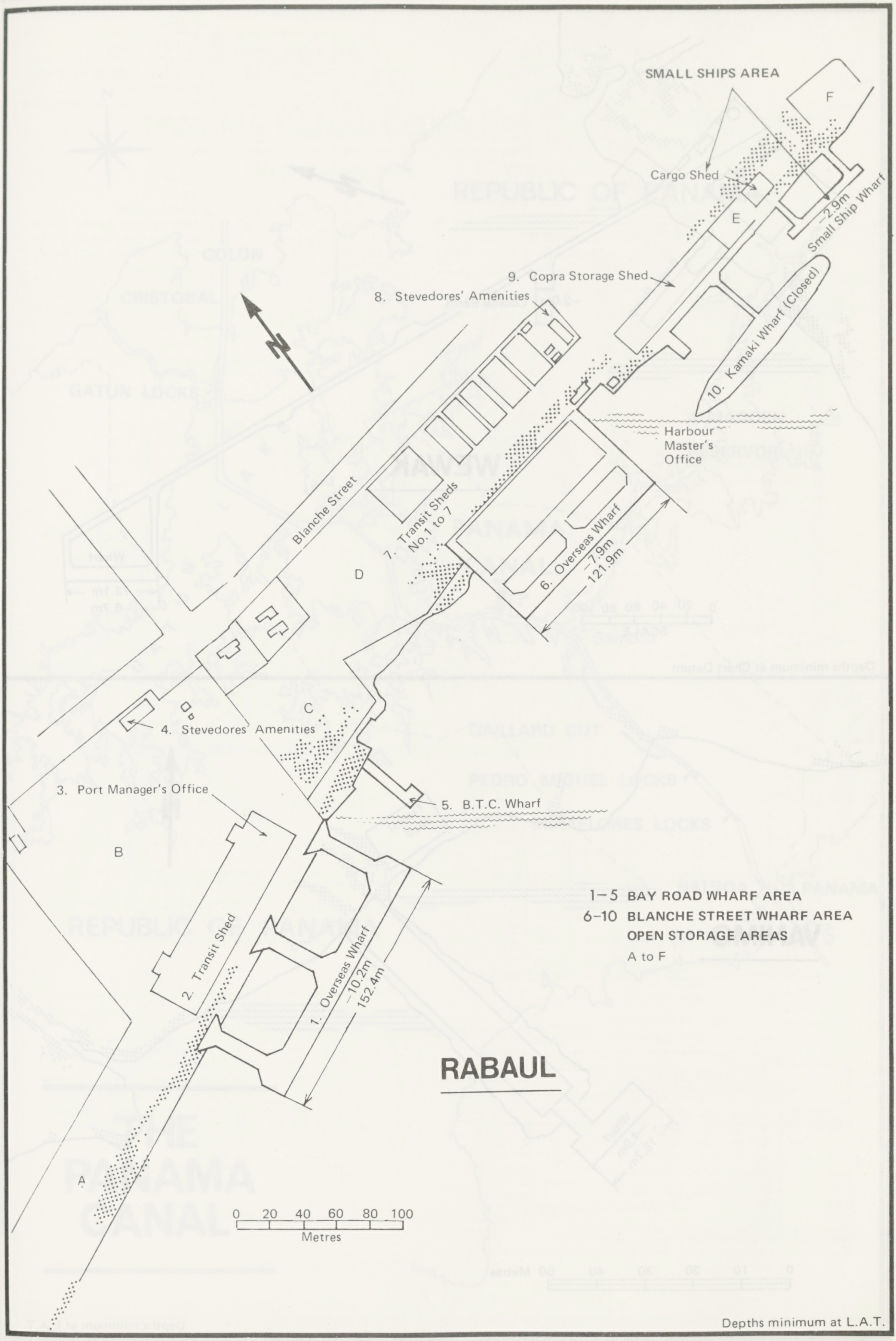
SMALL SHIPS AREA
F
Cargo Shed
E
–2.9m
Small Ship Wharf
9. Copra Storage Shed
8. Stevedores' Amenities
10. Kamaki Wharf (Closed)
N
Harbour Master's Office
Blanche Street
7. Transit Sheds No.1 to 7
D
6. Overseas Wharf
–7.9m
121.9m
C
4. Stevedores' Amenities
3. Port Manager's Office
5. B.T.C. Wharf
B
2. Transit Shed
1. Overseas Wharf
–10.2m
152.4m
1–5 BAY ROAD WHARF AREA
6–10 BLANCHE STREET WHARF AREA
OPEN STORAGE AREAS
A to F
RABAUL
A
0 20 40 60 80 100
Metres

Depths minimum at L.A.T.

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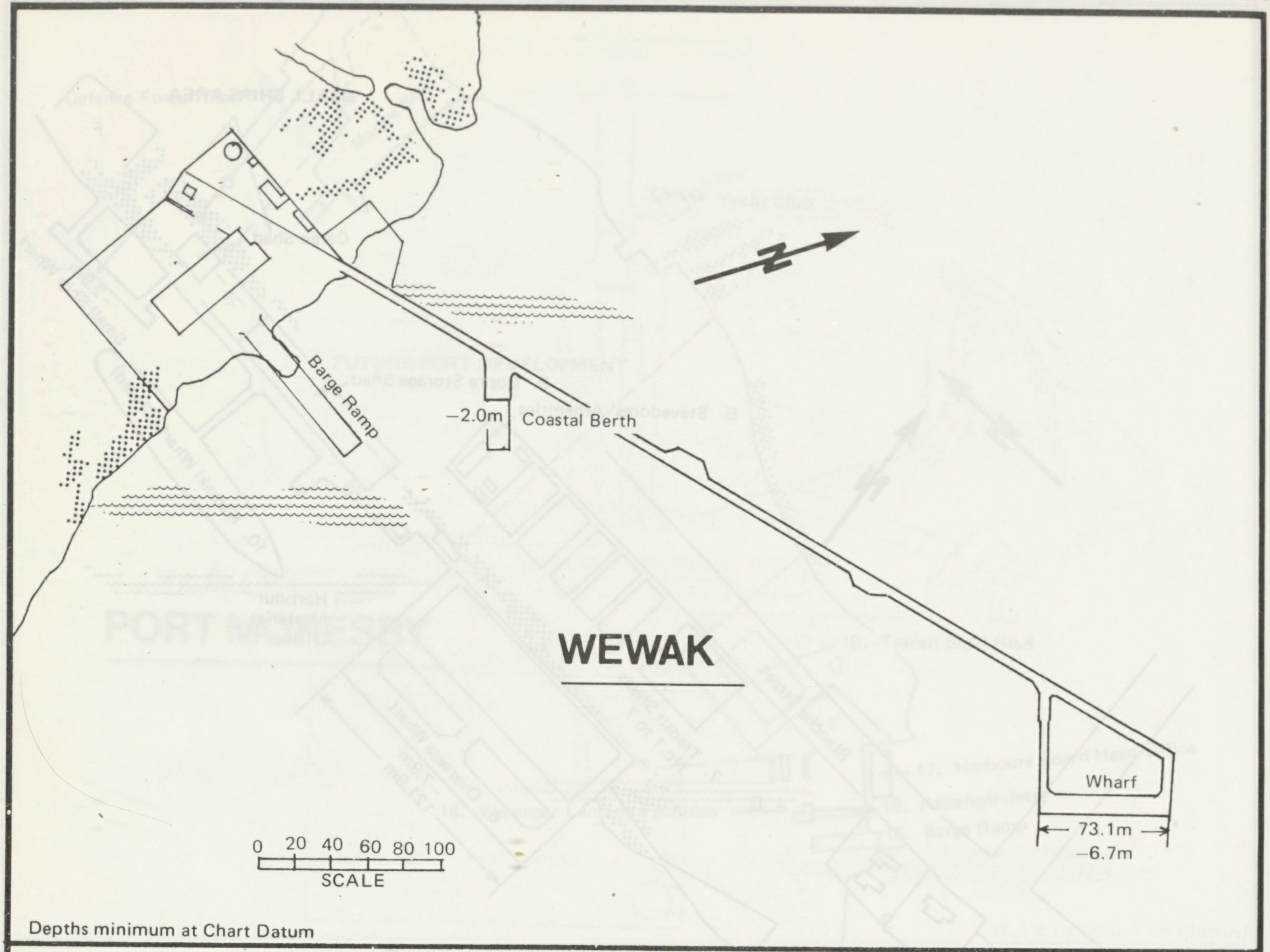
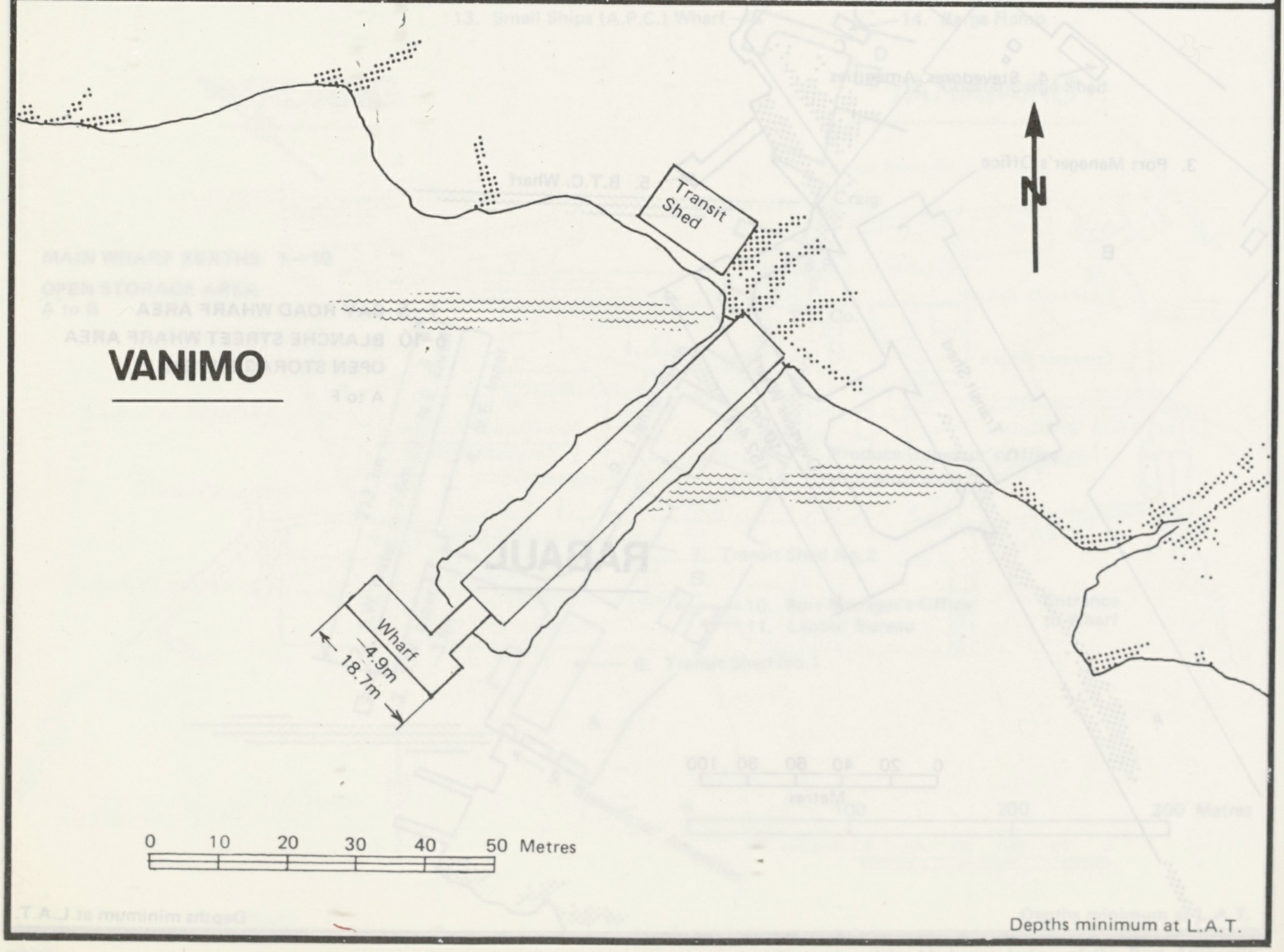

N
Barge Ramp
−2.0m
Coastal Berth
WEWAK
Wharf
73.1m
−6.7m
0 20 40 60 80 100
SCALE
Depths minimum at Chart Datum


Transit Shed
N
VANIMO
Wharf
−4.9m
18.7m
0 10 20 30 40 50 Metres
Depths minimum at L.A.T.

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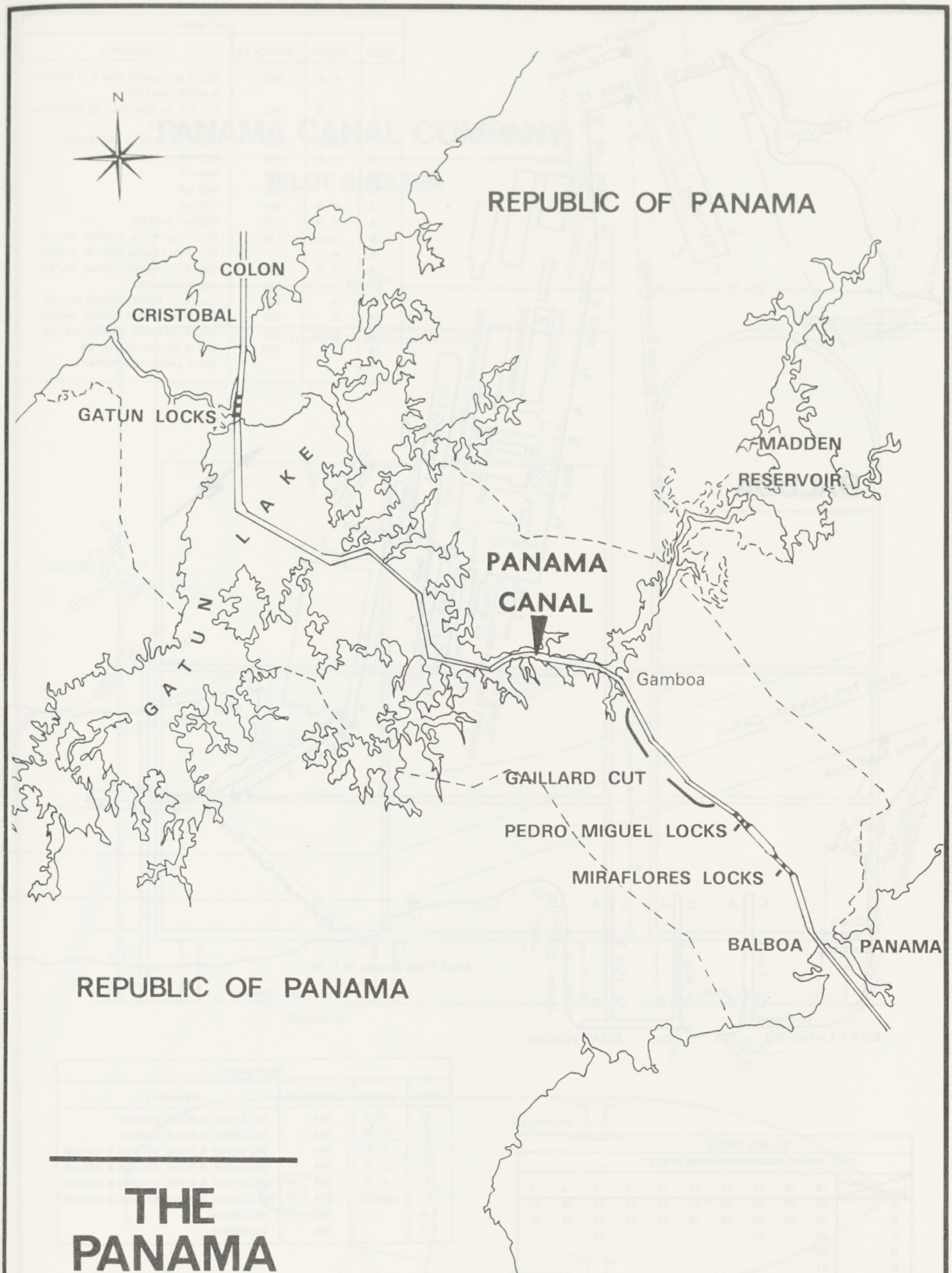
N
REPUBLIC OF PANAMA
COLON
CRISTOBAL
GATUN LOCKS
GATUN LAKE
PANAMA CANAL
MADDEN RESERVOIR
Gamboa
GAILLARD CUT
PEDRO MIGUEL LOCKS
MIRAFLORES LOCKS
BALBOA
PANAMA
REPUBLIC OF PANAMA

THE PANAMA CANAL

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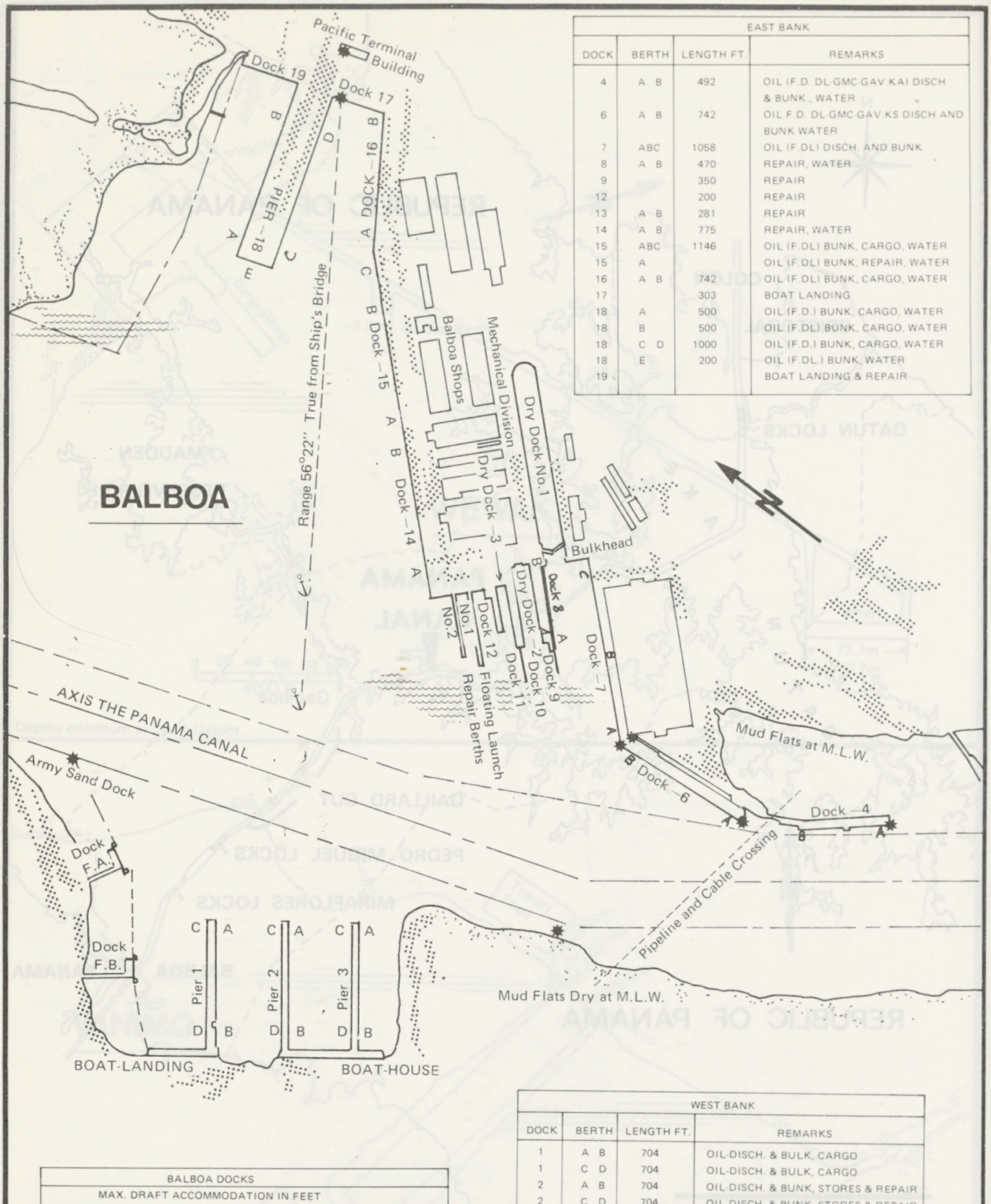
BALBOA
Pacific Terminal Building
Dock 19
Dock 17
PIER – 18
A
B
C
D
E
DOCK – 16
Dock – 15
Dock – 14
Range 56°22' True from Ship's Bridge
Balboa Shops
Mechanical Division
Dry Dock No.1
Dry Dock – 3
Dry Dock – 2
No.1
No.2
Dock 12
Dock 8
Dock 9
Dock 10
Dock 11
Floating Launch Repair Berths
Bulkhead
Dock – 7
Dock – 6
Dock – 4
Mud Flats at M.L.W.
AXIS THE PANAMA CANAL
Army Sand Dock
Dock F.A.
Dock F.B.
Pier 1
Pier 2
Pier 3
BOAT-LANDING
BOAT-HOUSE
Pipeline and Cable Crossing
Mud Flats Dry at M.L.W.
SCALE
0
500
1000
1500
2000

EAST BANK			
DOCK	BERTH	LENGTH FT.	REMARKS
4	A B	492	OIL (F.D. DL-GMC-GAV.KA) DISCH & BUNK., WATER
6	A B	742	OIL F.D. DL-GMC-GAV.KS DISCH AND BUNK WATER
7	ABC	1058	OIL (F.DL) DISCH AND BUNK
8	A B	470	REPAIR, WATER
9		350	REPAIR
12		200	REPAIR
13	A B	281	REPAIR
14	A B	775	REPAIR, WATER
15	ABC	1146	OIL (F.DL) BUNK, CARGO, WATER
15	A		OIL (F.DL) BUNK, REPAIR, WATER
16	A B	742	OIL (F.DL) BUNK, CARGO, WATER
17		303	BOAT LANDING
18	A	500	OIL (F.D.) BUNK, CARGO, WATER
18	B	500	OIL (F.DL) BUNK, CARGO, WATER
18	C D	1000	OIL (F.D.) BUNK, CARGO, WATER
18	E	200	OIL (F.DL.) BUNK, WATER
19			BOAT LANDING & REPAIR

WEST BANK			
DOCK	BERTH	LENGTH FT.	REMARKS
1	A B	704	OIL-DISCH. & BULK, CARGO
1	C D	704	OIL-DISCH. & BULK, CARGO
2	A B	704	OIL-DISCH. & BUNK, STORES & REPAIR
2	C D	704	OIL-DISCH. & BUNK, STORES & REPAIR
3	A B	704	OIL-DISCH. & BUNK, STORES & REPAIR
3	C D	704	OIL-DISCH. & BUNK, STORES & REPAIR
F.A.		166	OIL-DISCH
F.B.		166	OIL-DISCH.

BALBOA DOCKS

MAX. DRAFT ACCOMMODATION IN FEET

BERTH \ DOCK	18	16	15	14	13	12	8	7	6	4
A	39	38	40	36	13	15	26	34	36	30
B	35	38	40	36	15	15	26	34	36	30
C	40		40					34		
D	40									
E	31									
A-B	36									
C-D	40									

NOTE: ALL DEPTHS OUTSIDE OF FLOATING DOCK CAMELS

Minimum Depth Inner Harbour 40 feet below Mean Low Water Springs

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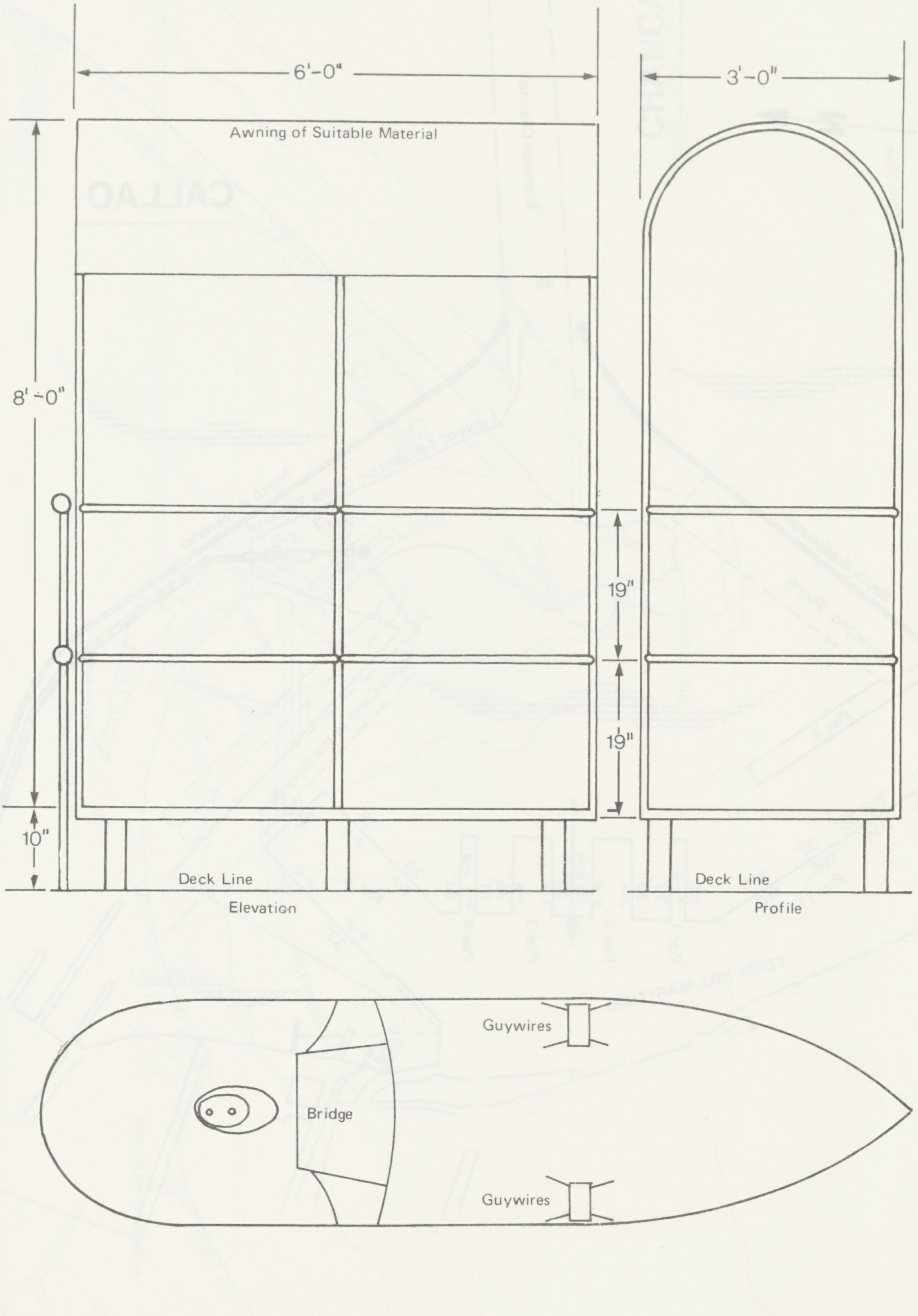
PANAMA CANAL COMPANY

PILOT SHELTER


6'-0"
3'-0"
Awning of Suitable Material
8'-0"
19"
19"
10"
Deck Line
Elevation
Deck Line
Profile
Guywires
Bridge
Guywires

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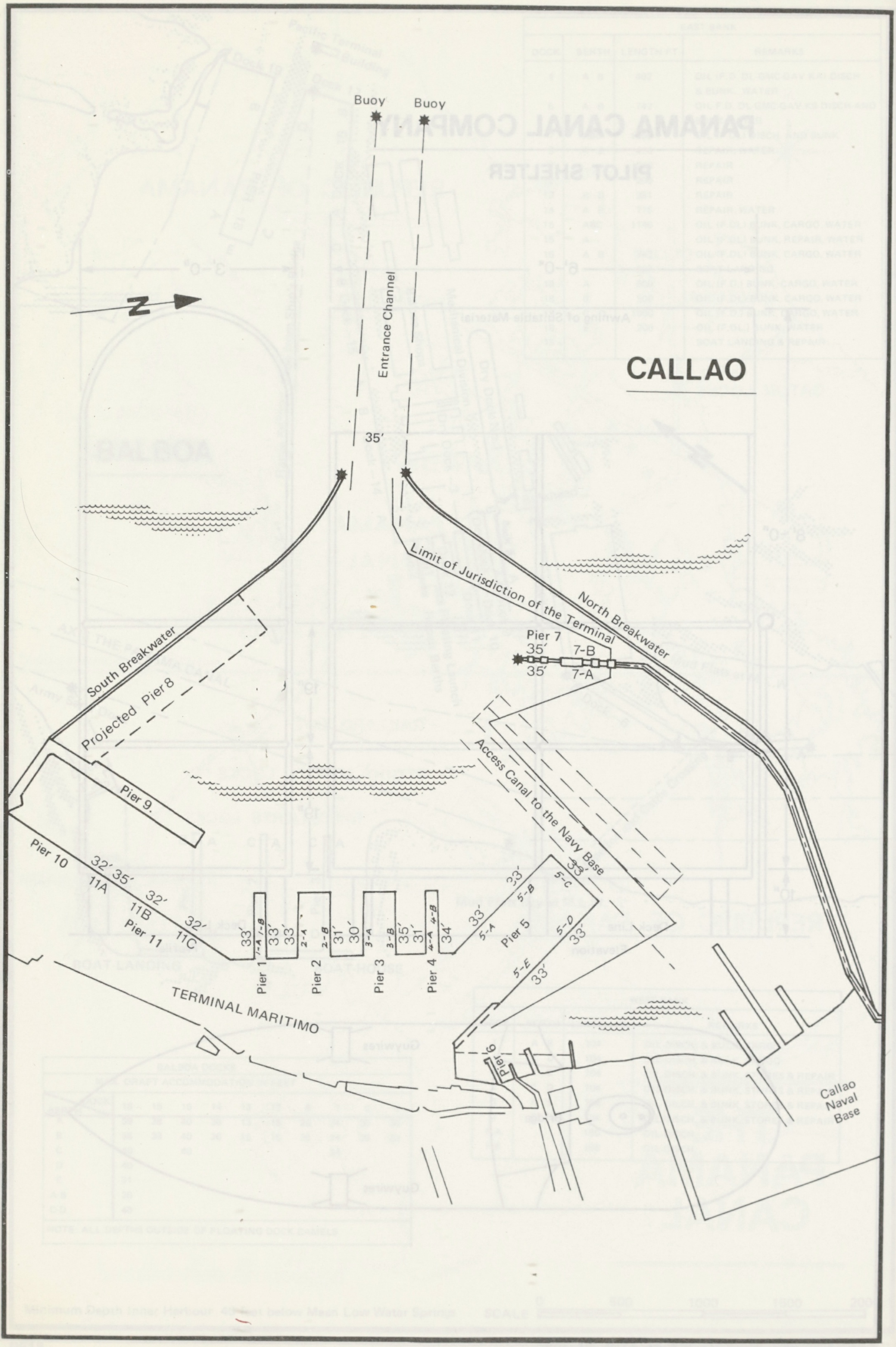
CALLAO
N
Buoy
Buoy
Entrance Channel
35′
South Breakwater
Projected Pier 8
Limit of Jurisdiction of the Terminal
North Breakwater
Pier 7
35′
7-B
35′
7-A
Access Canal to the Navy Base
Pier 9.
Pier 10
32′ 35′
11A
32′
11B
Pier 11
32′
11C
33′
1-A
1-B
33′
33′
2-A
2-B
31′
30′
3-A
3-B
35′
31′
4-A
4-B
34′
33′
5-A
Pier 5
5-B
33′
5-C
33′
5-D
33′
5-E
33′
Pier 1
Pier 2
Pier 3
Pier 4
TERMINAL MARITIMO
Pier 6
Callao Naval Base

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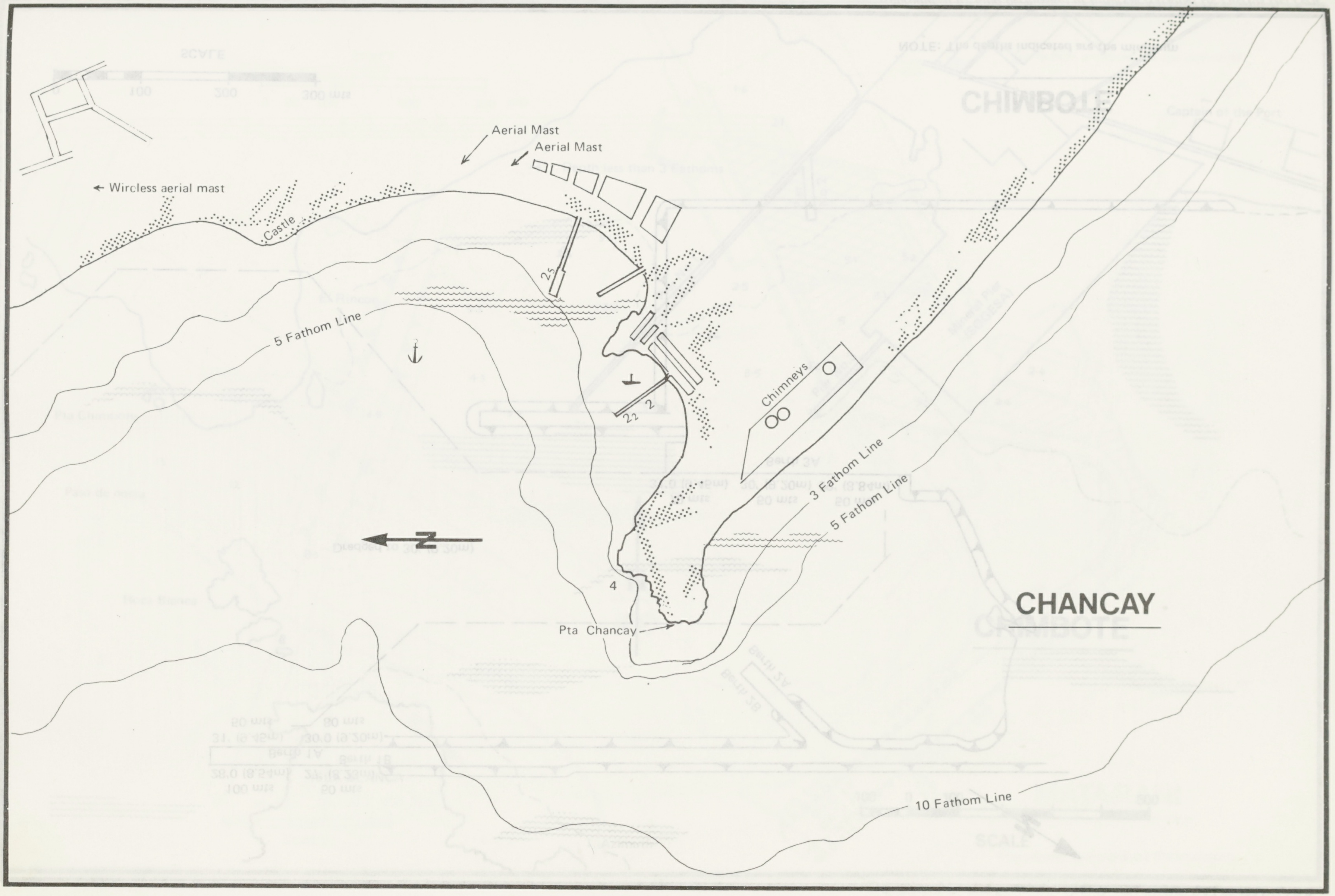
CHANCAY
Aerial Mast
Aerial Mast
Wircless aerial mast
Castle
25
5 Fathom Line
Chimneys
2
22
3 Fathom Line
5 Fathom Line
4
Pta Chancay
10 Fathom Line
N

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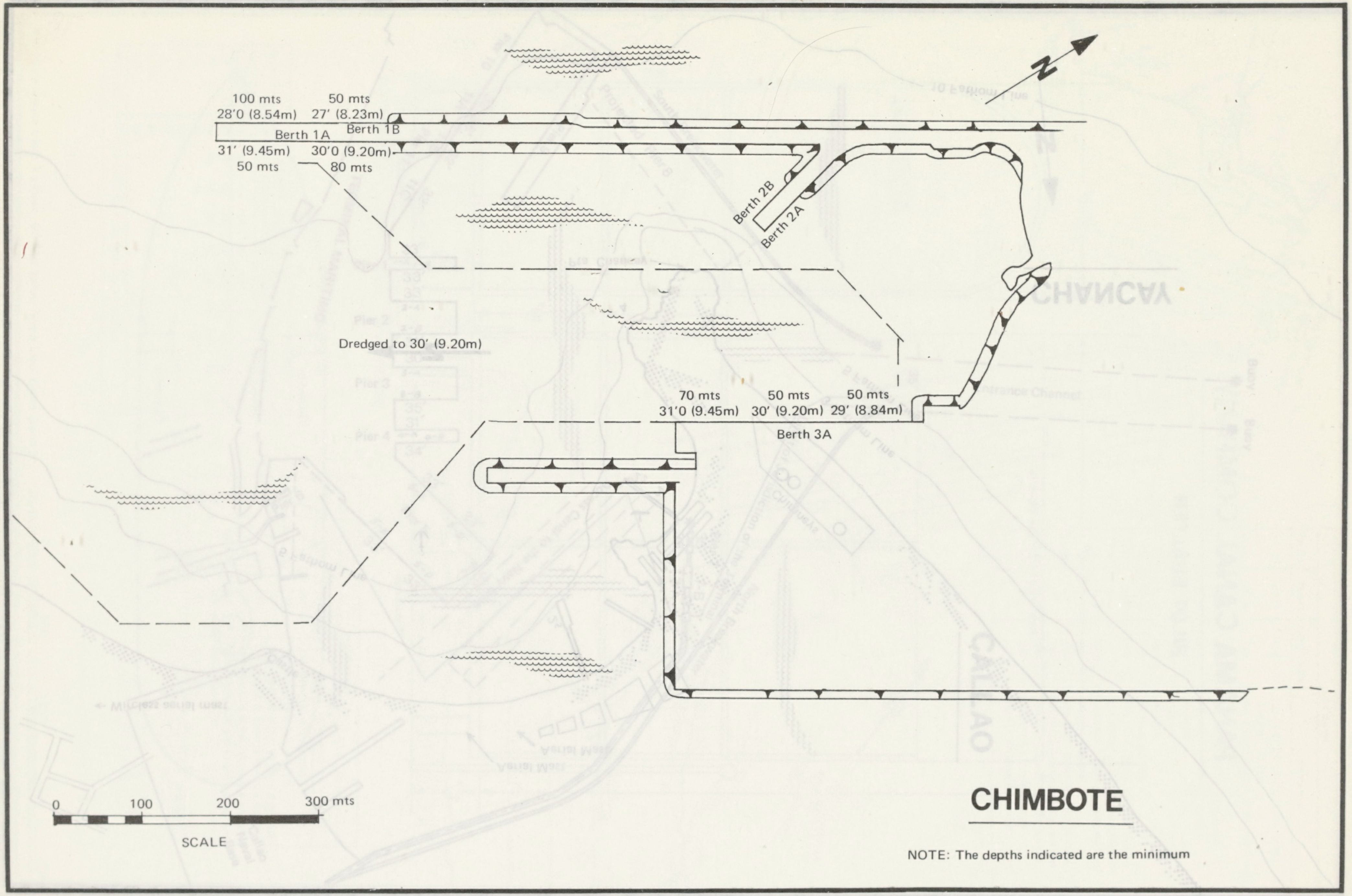
N
100 mts
28'0 (8.54m)
50 mts
27' (8.23m)
Berth 1B
Berth 1A
31' (9.45m)
30'0 (9.20m)
50 mts
80 mts
Berth 2B
Berth 2A
Dredged to 30' (9.20m)
70 mts
31'0 (9.45m)
50 mts
30' (9.20m)
50 mts
29' (8.84m)
Berth 3A
0
100
200
300 mts
SCALE

CHIMBOTE

NOTE: The depths indicated are the minimum

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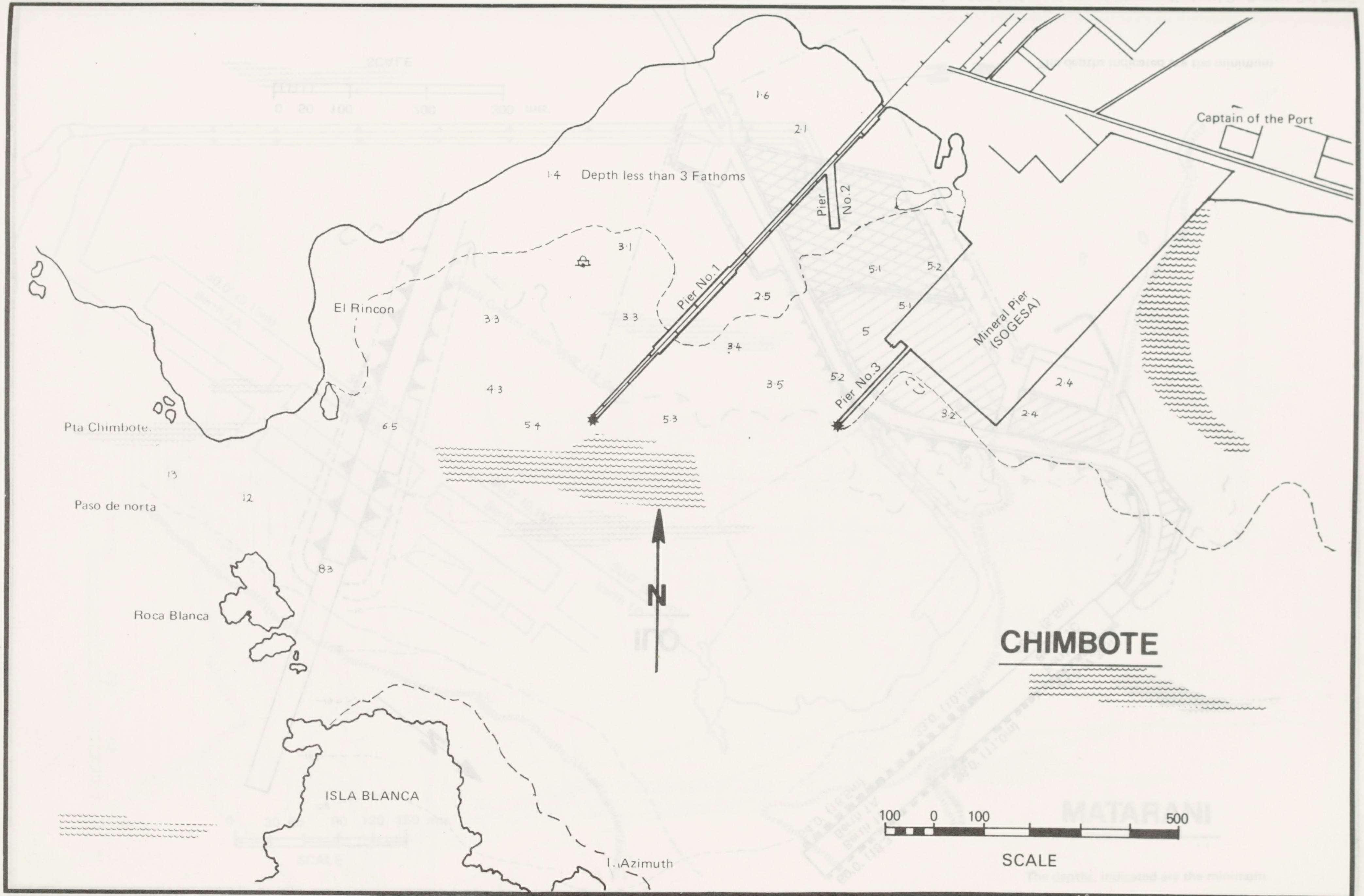
Captain of the Port
1·6
2·1
1·4
Depth less than 3 Fathoms
Pier No.2
3·1
Pier No.1
5·1
5·2
2·5
El Rincon
3·3
3·3
5·1
Mineral Pier (SOGESA)
5
3·4
Pier No.3
5·2
4·3
3·5
2·4
Pta Chimbote
6·5
5·4
5·3
3·2
2·4
13
Paso de norta
12
N
8·3
Roca Blanca
CHIMBOTE
ISLA BLANCA
100
0
100
500
SCALE
I. Azimuth

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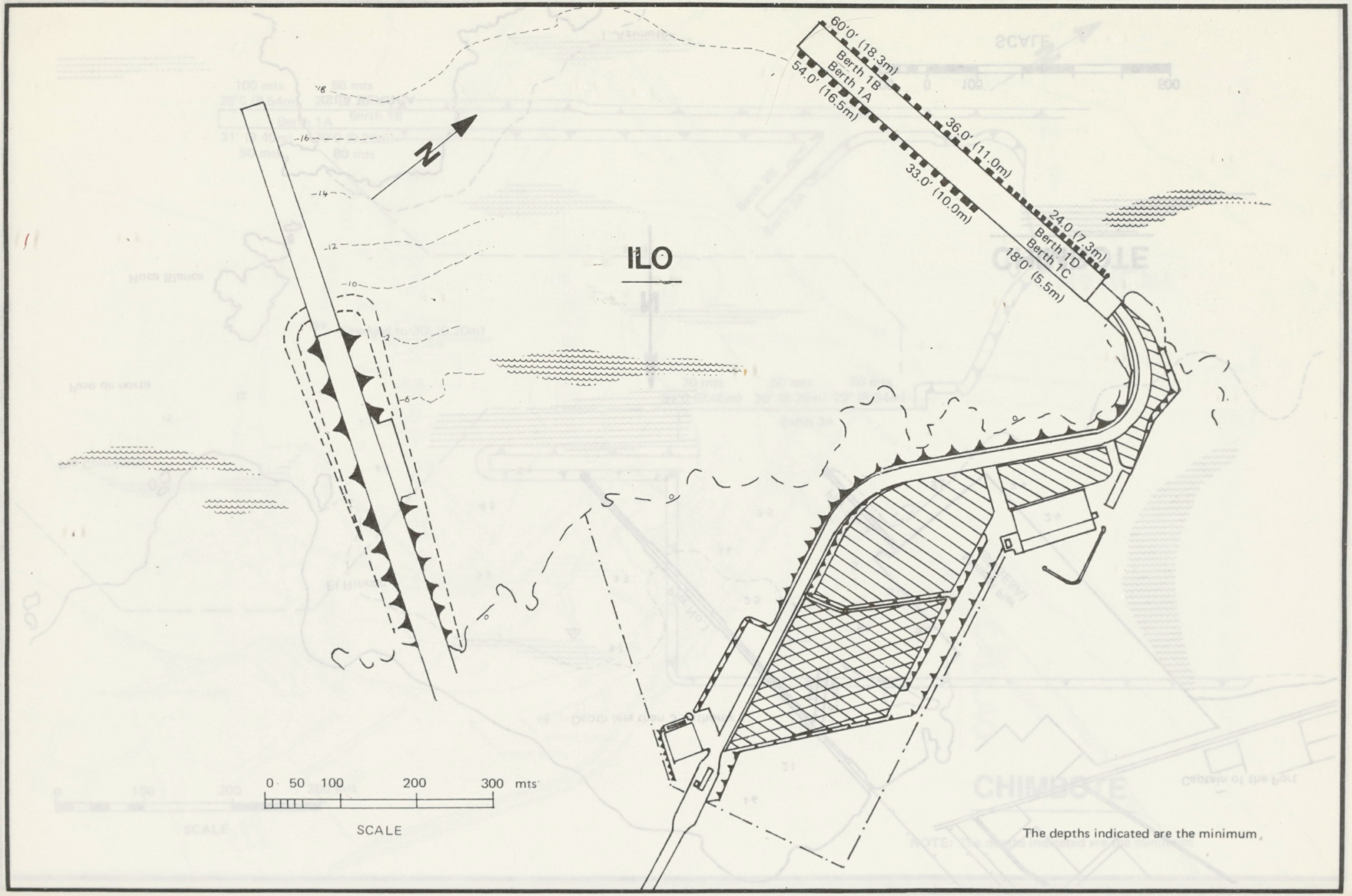
ILO
N
60'0' (18.3m)
Berth 1B
Berth 1A
54.0' (16.5m)
36.0' (11.0m)
33.0' (10.0m)
24.0 (7.3m)
Berth 1D
Berth 1C
18'0' (5.5m)
-18
-16
-14
-12
-10
-2
-6
0 50 100 200 300 mts
SCALE

The depths indicated are the minimum.

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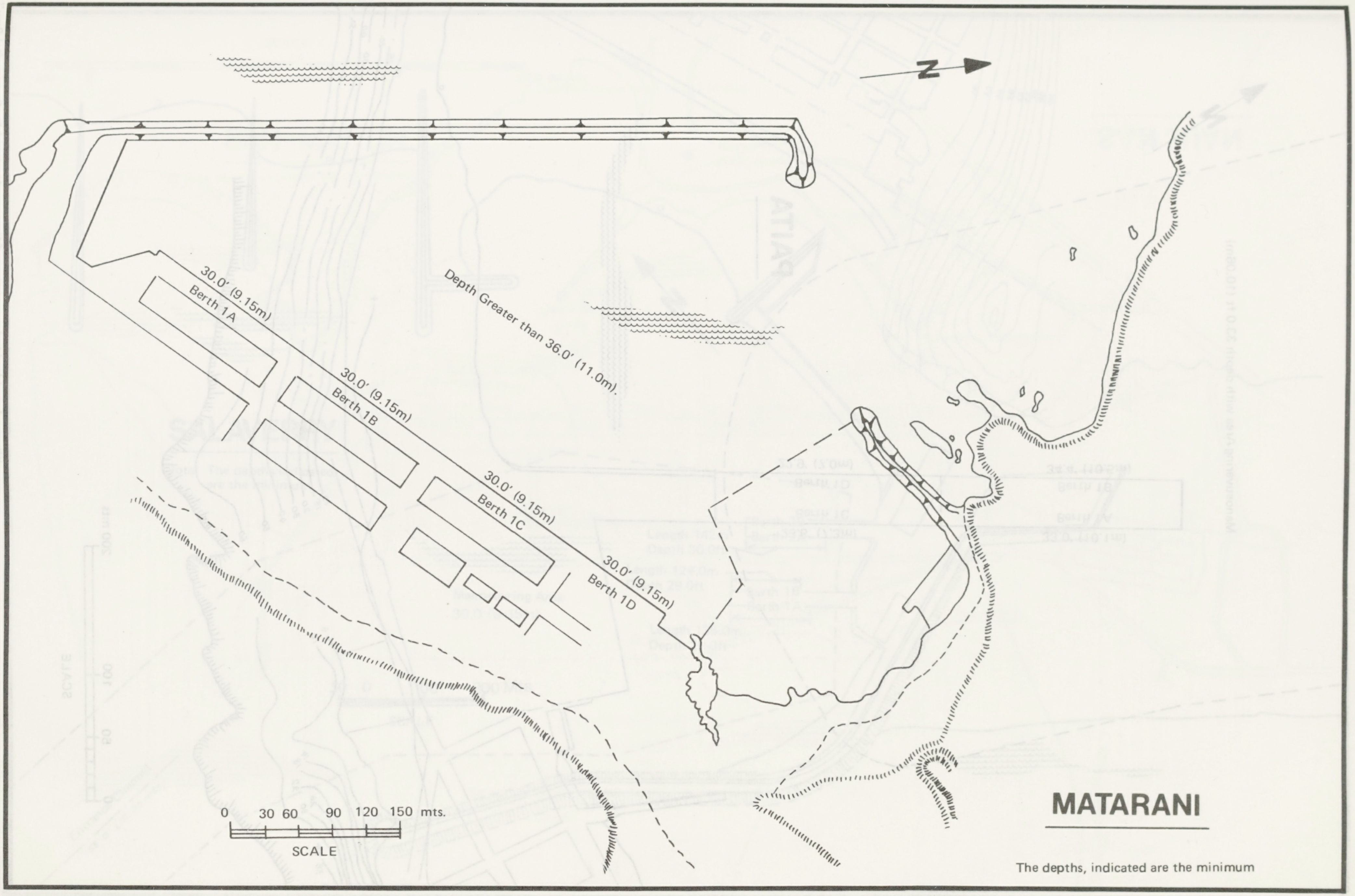
N
30.0′ (9.15m)
Berth 1A
30.0′ (9.15m)
Berth 1B
30.0′ (9.15m)
Berth 1C
30.0′ (9.15m)
Berth 1D
Depth Greater than 36.0′ (11.0m).
0
30
60
90
120
150 mts.
SCALE

MATARANI

The depths, indicated are the minimum

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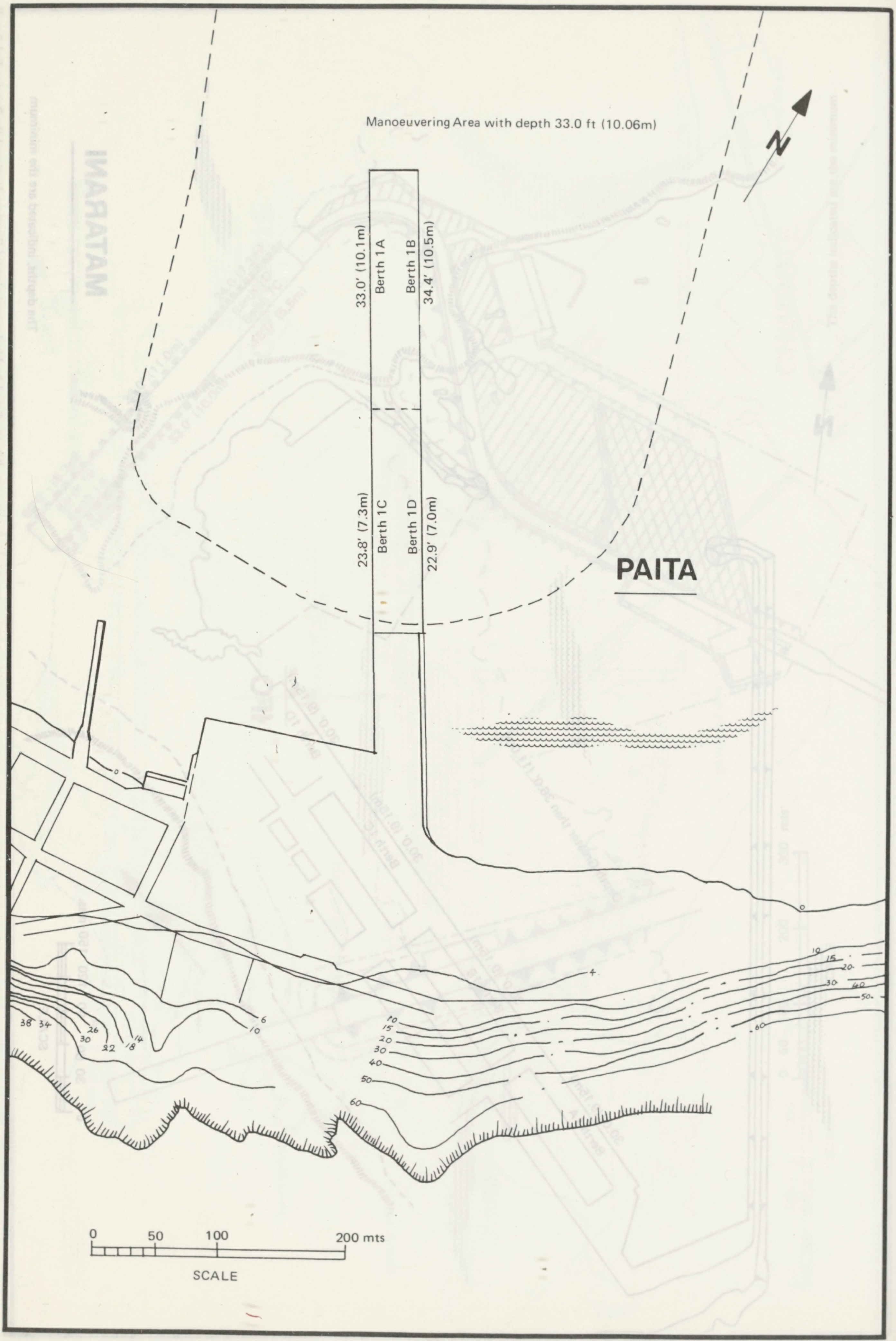
Manoeuvering Area with depth 33.0 ft (10.06m)
N
33.0' (10.1m)
Berth 1A
Berth 1B
34.4' (10.5m)
23.8' (7.3m)
Berth 1C
Berth 1D
22.9' (7.0m)
PAITA
0
4
6
10
14
15
18
20
22
26
30
34
38
40
50
60
0 50 100 200 mts
SCALE

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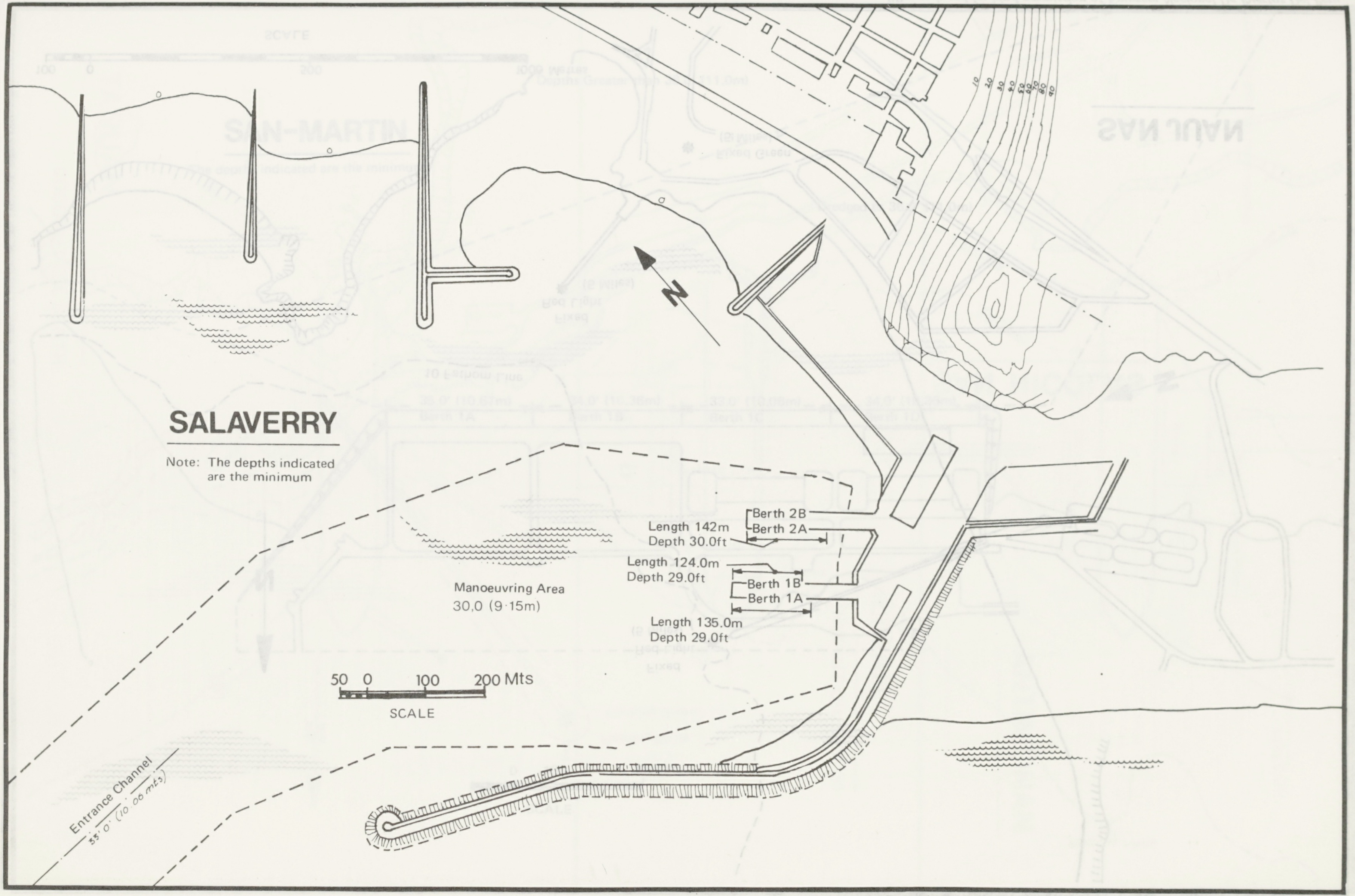

SALAVERRY

Note: The depths indicated are the minimum

N
10
20
30
40
50
60
70
80
90
Berth 2B
Berth 2A
Length 142m
Depth 30.0ft
Length 124.0m
Depth 29.0ft
Berth 1B
Berth 1A
Length 135.0m
Depth 29.0ft
Manoeuvring Area
30,0 (9·15m)
50 0 100 200 Mts
SCALE
Entrance Channel
33' 0' (10.06 mts)

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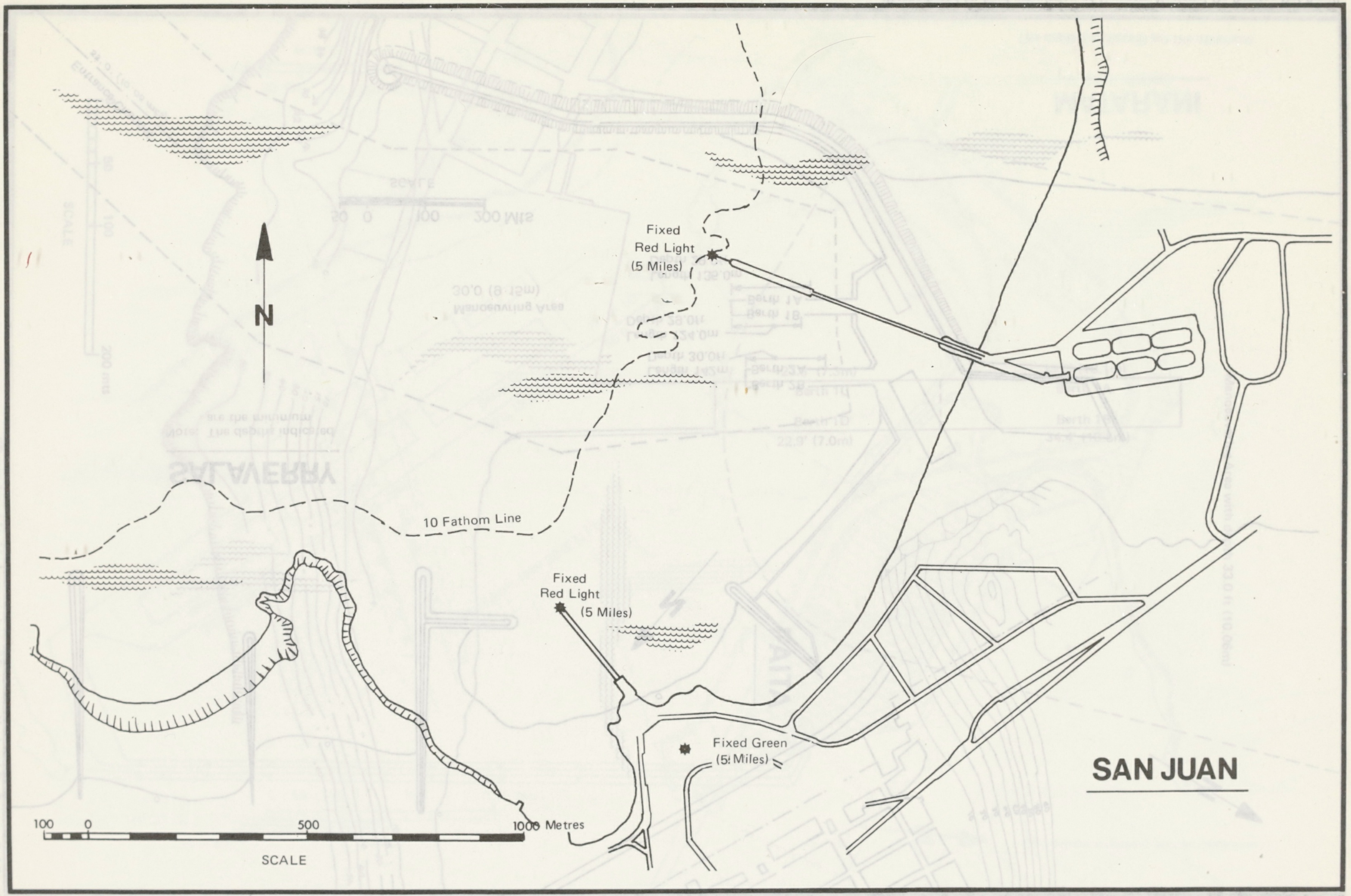
SAN JUAN
N
Fixed
Red Light
(5 Miles)
Fixed
Red Light
(5 Miles)
Fixed Green
(5! Miles)
10 Fathom Line
100
0
500
1000 Metres
SCALE

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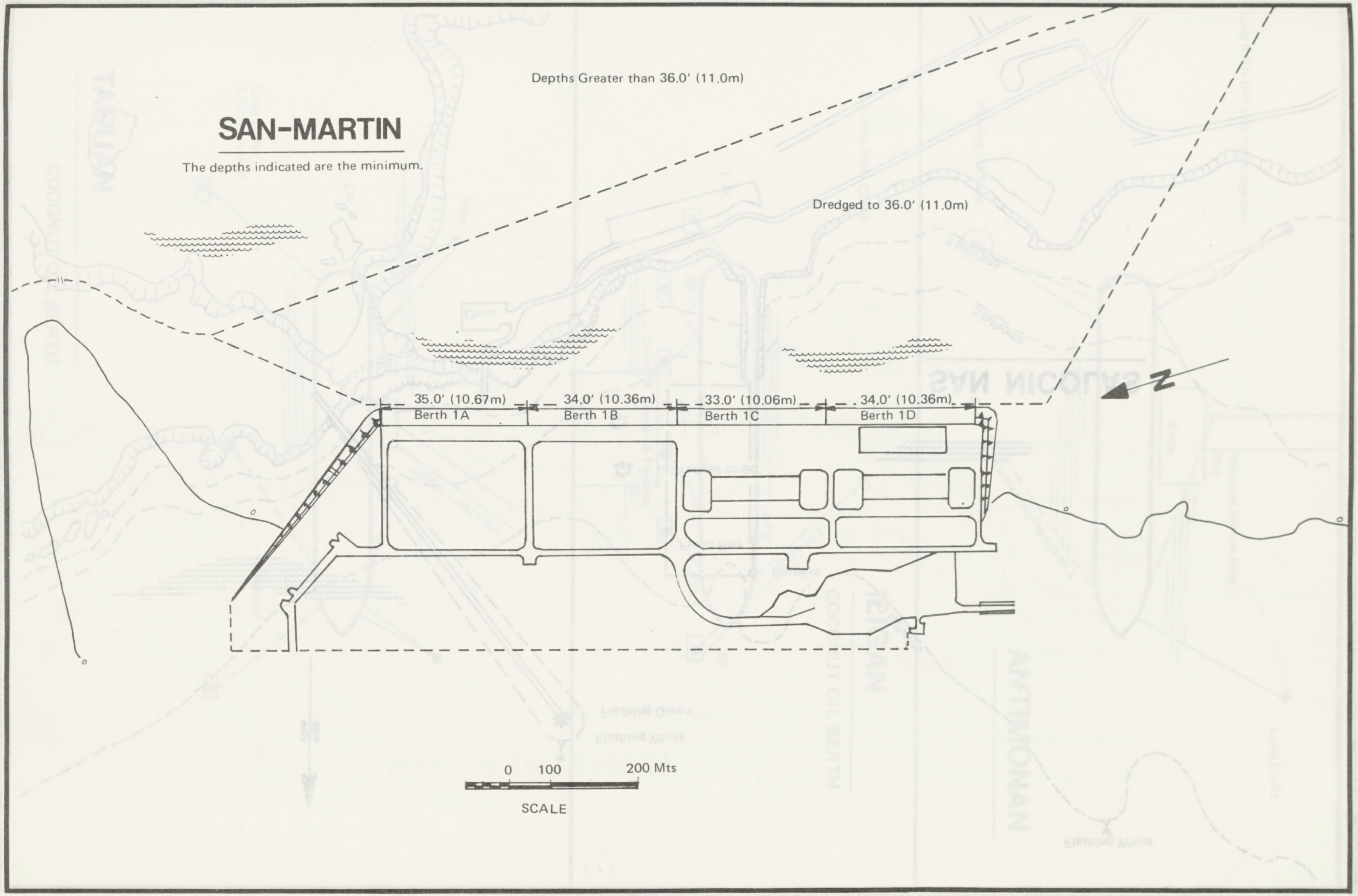
SAN-MARTIN

The depths indicated are the minimum.


Depths Greater than 36.0′ (11.0m)
Dredged to 36.0′ (11.0m)
35.0′ (10.67m)
Berth 1A
34.0′ (10.36m)
Berth 1B
33.0′ (10.06m)
Berth 1C
34.0′ (10.36m)
Berth 1D
N
0
100
200 Mts
SCALE

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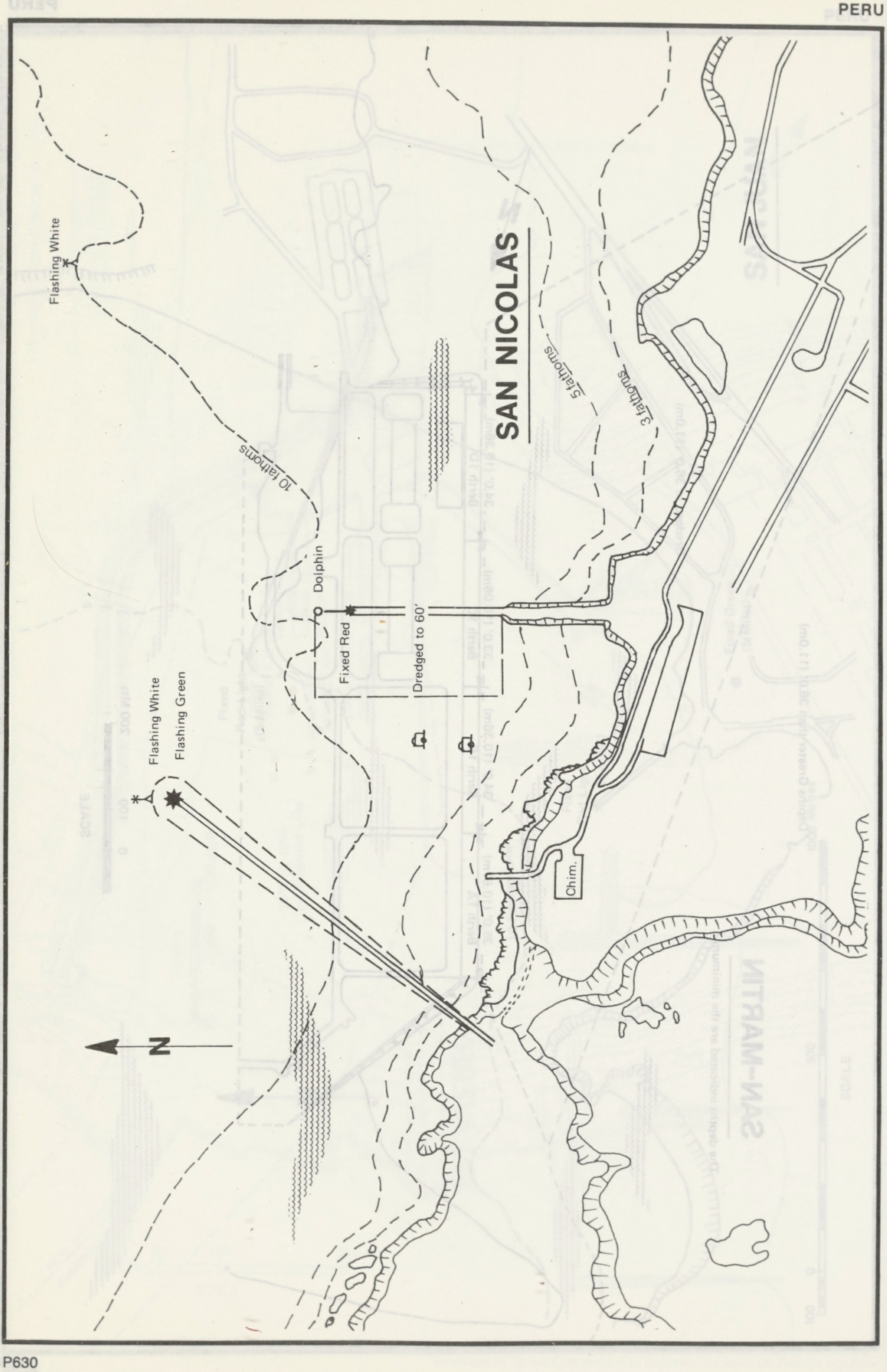
SAN NICOLAS
N
Flashing White
10 fathoms
5 fathoms
3 fathoms
Dolphin
Fixed Red
Dredged to 60'
Flashing White
Flashing Green
Chim.

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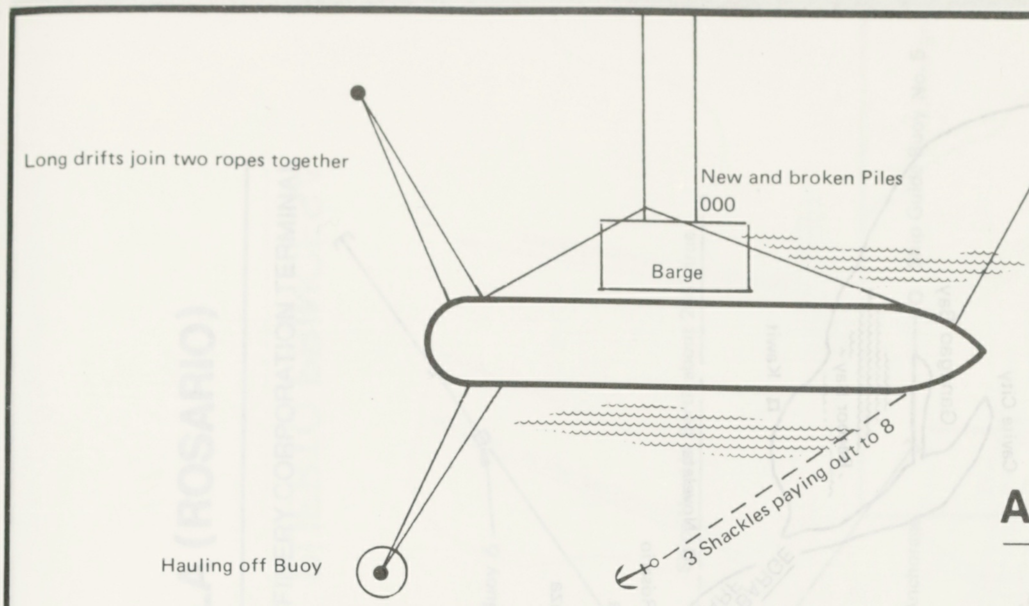
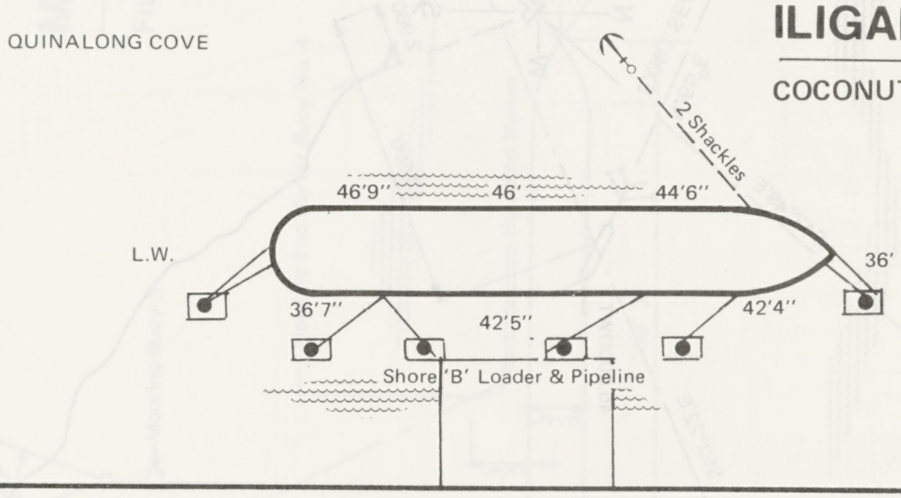
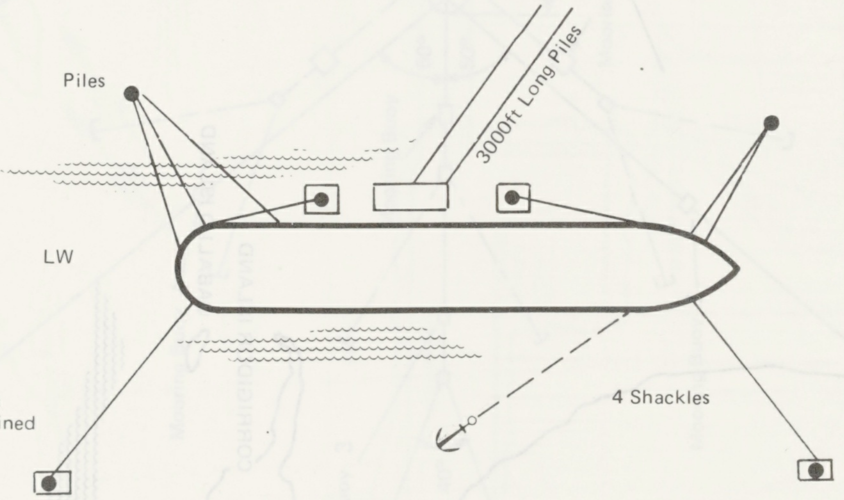

Long drifts join two ropes together
New and broken Piles
000
Long Drifts
Barge
3 Shackles paying out to 8
Hauling off Buoy

ANTIMONAN

ILIGAN

COCONUT OIL BERTH


QUINALONG COVE
2 Shackles
46'9"
46'
44'6"
L.W.
36'
36'7"
42'5"
42'4"
Shore 'B' Loader & Pipeline


Piles
3000ft Long Piles
LW
Long Drifts
2 Ropes Joined
4 Shackles

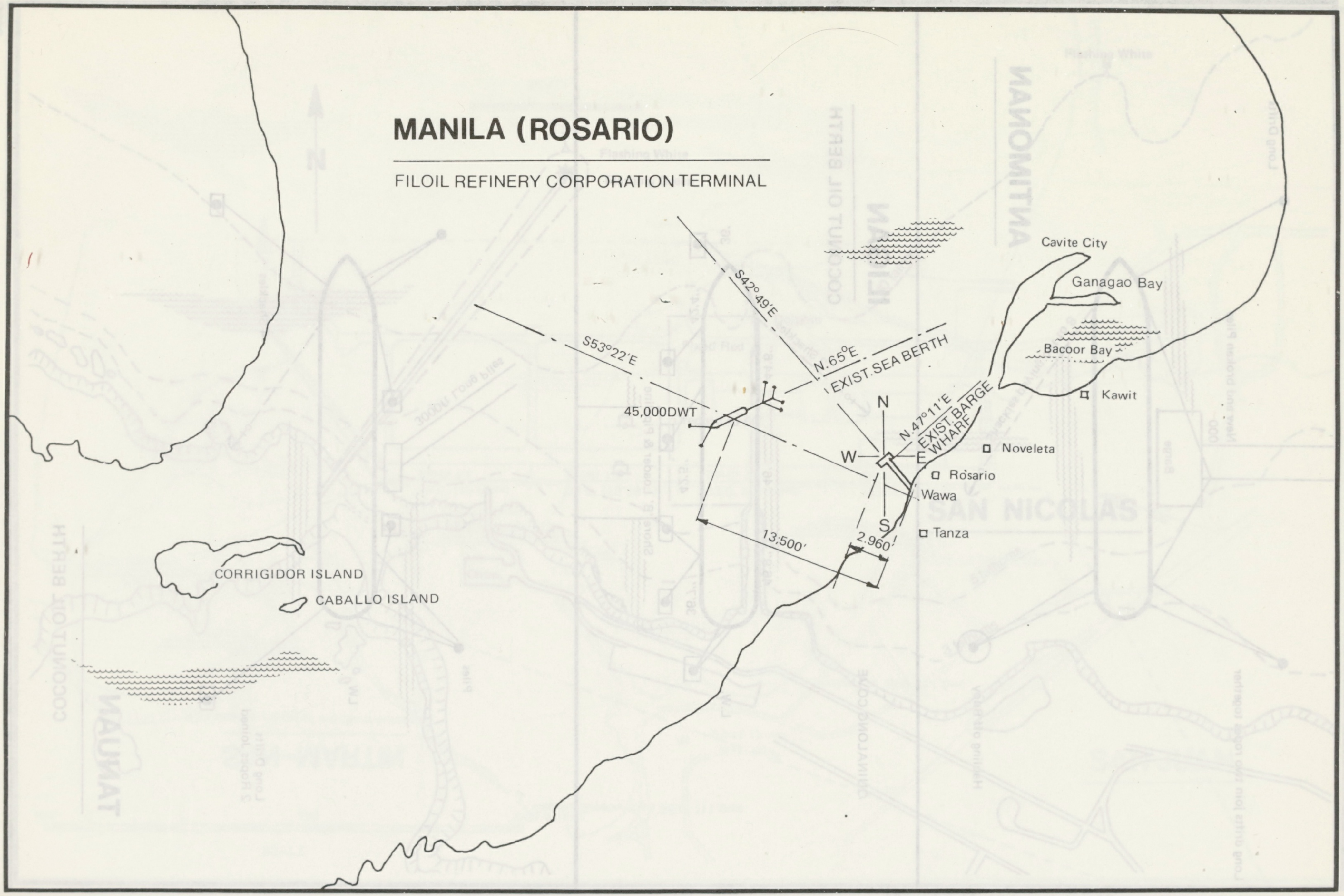
TANUAN

COCONUT OIL BERTH

"Plan supplied by Ship's Master"

MANILA (ROSARIO)

FILOIL REFINERY CORPORATION TERMINAL


S42°49'E
S53°22'E
N.65°E
EXIST. SEA BERTH
45,000DWT
N.47°11'E
EXIST. BARGE WHARF
N
W
E
S
Cavite City
Ganagao Bay
Bacoor Bay
Kawit
Noveleta
Rosario
Wawa
Tanza
13,500'
2,960'
CORRIGIDOR ISLAND
CABALLO ISLAND

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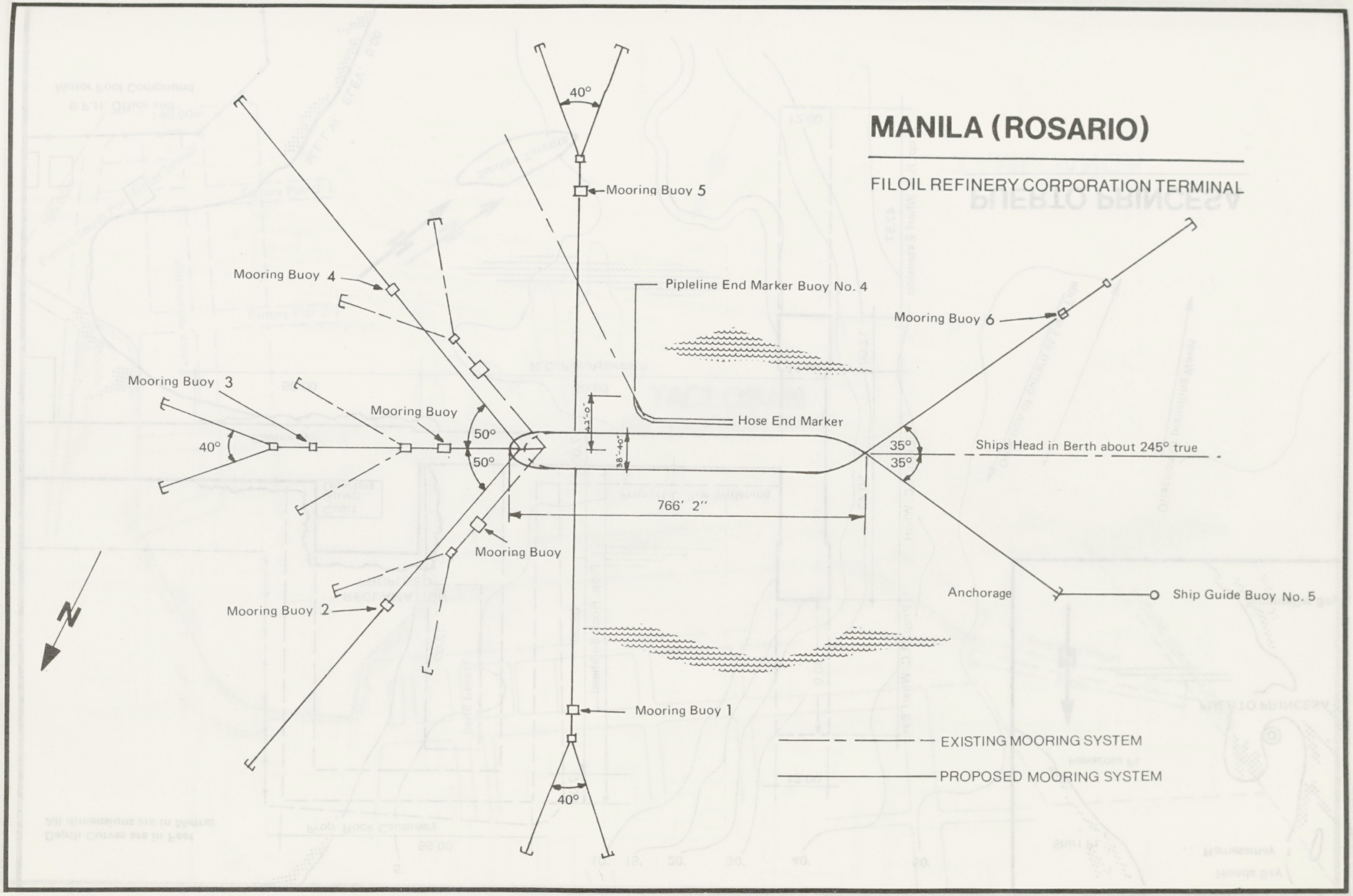
MANILA (ROSARIO)

FILOIL REFINERY CORPORATION TERMINAL


40°
Mooring Buoy 5
Pipleline End Marker Buoy No. 4
Mooring Buoy 4
Mooring Buoy 6
Mooring Buoy 3
Mooring Buoy
50°
50°
40°
42'-0"
38'-40"
Hose End Marker
35°
35°
Ships Head in Berth about 245° true
766' 2"
Mooring Buoy
N
Mooring Buoy 2
Anchorage
Ship Guide Buoy No. 5
Mooring Buoy 1
EXISTING MOORING SYSTEM
PROPOSED MOORING SYSTEM
40°

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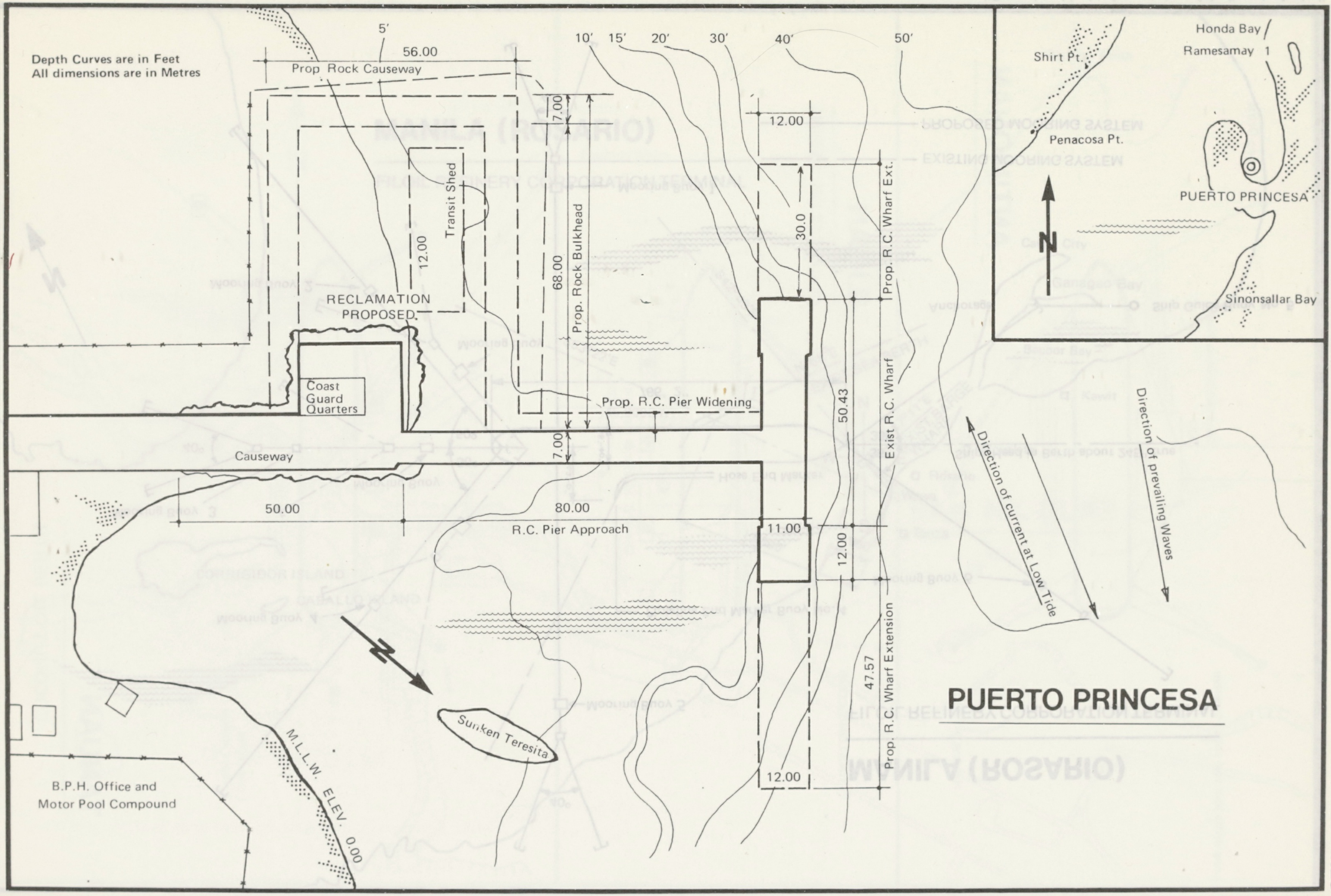
Depth Curves are in Feet
All dimensions are in Metres
5'
10'
15'
20'
30'
40'
50'
56.00
Prop Rock Causeway
7.00
68.00
Prop. Rock Bulkhead
Transit Shed
12.00
RECLAMATION PROPOSED
Coast Guard Quarters
Prop. R.C. Pier Widening
7.00
Causeway
50.00
80.00
R.C. Pier Approach
12.00
30.0
Prop. R.C. Wharf Ext.
50.43
Exist R.C. Wharf
11.00
12.00
47.57
Prop. R.C. Wharf Extension
12.00
Direction of current at Low Tide
Direction of prevailing Waves
N
Sunken Teresita
M.L.L.W. ELEV. 0.00
B.P.H. Office and Motor Pool Compound
PUERTO PRINCESA
Shirt Pt.
Honda Bay
Ramesamay 1
Penacosa Pt.
PUERTO PRINCESA
N
Sinonsallar Bay

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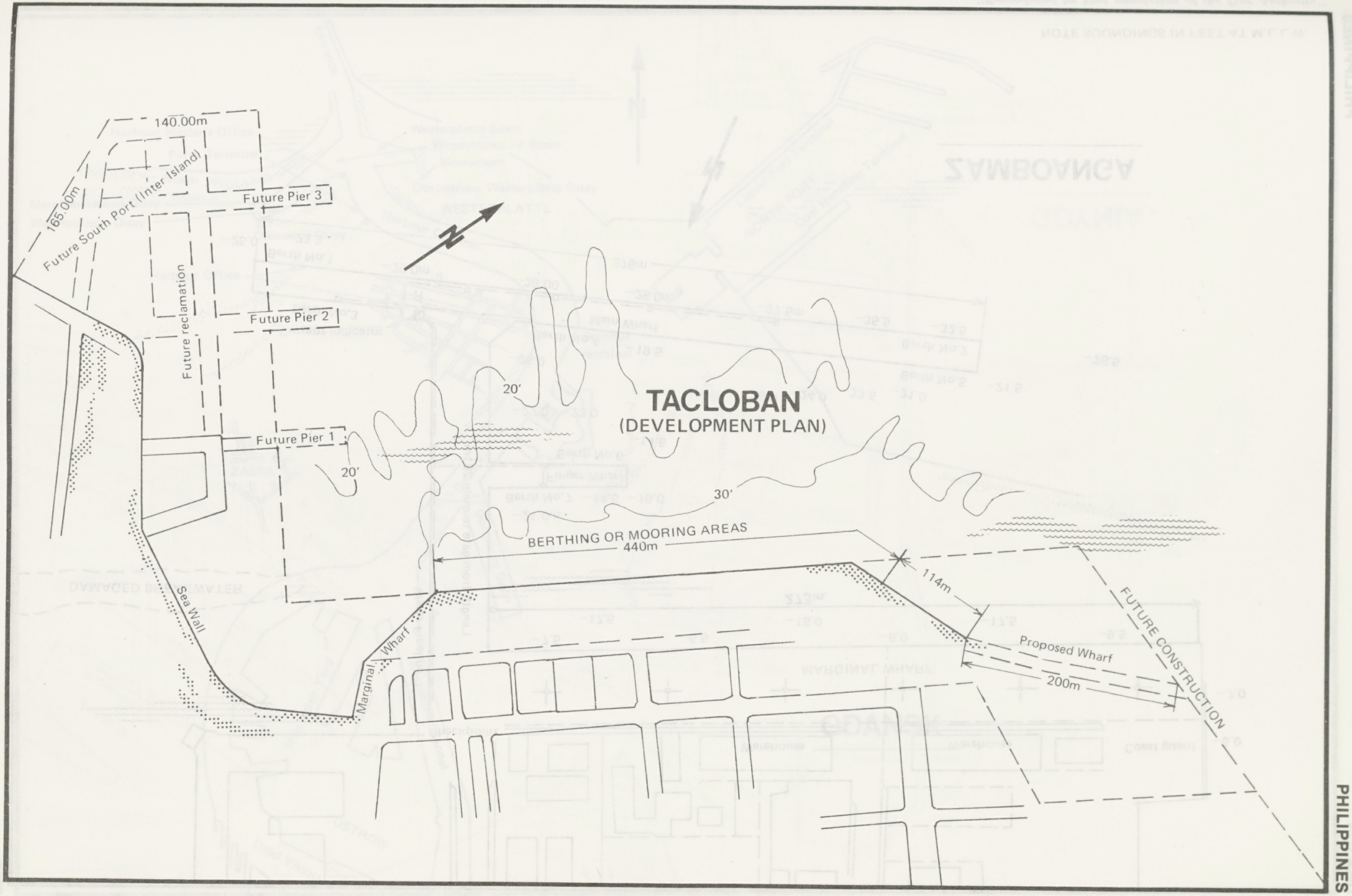

TACLOBAN
(DEVELOPMENT PLAN)

140.00m
165.00m
Future South Port (Inter Island)
Future Pier 3
Future reclamation
Future Pier 2
Future Pier 1
20'
20'
30'
BERTHING OR MOORING AREAS
440m
114m
Sea Wall
Marginal Wharf
Proposed Wharf
200m
FUTURE CONSTRUCTION

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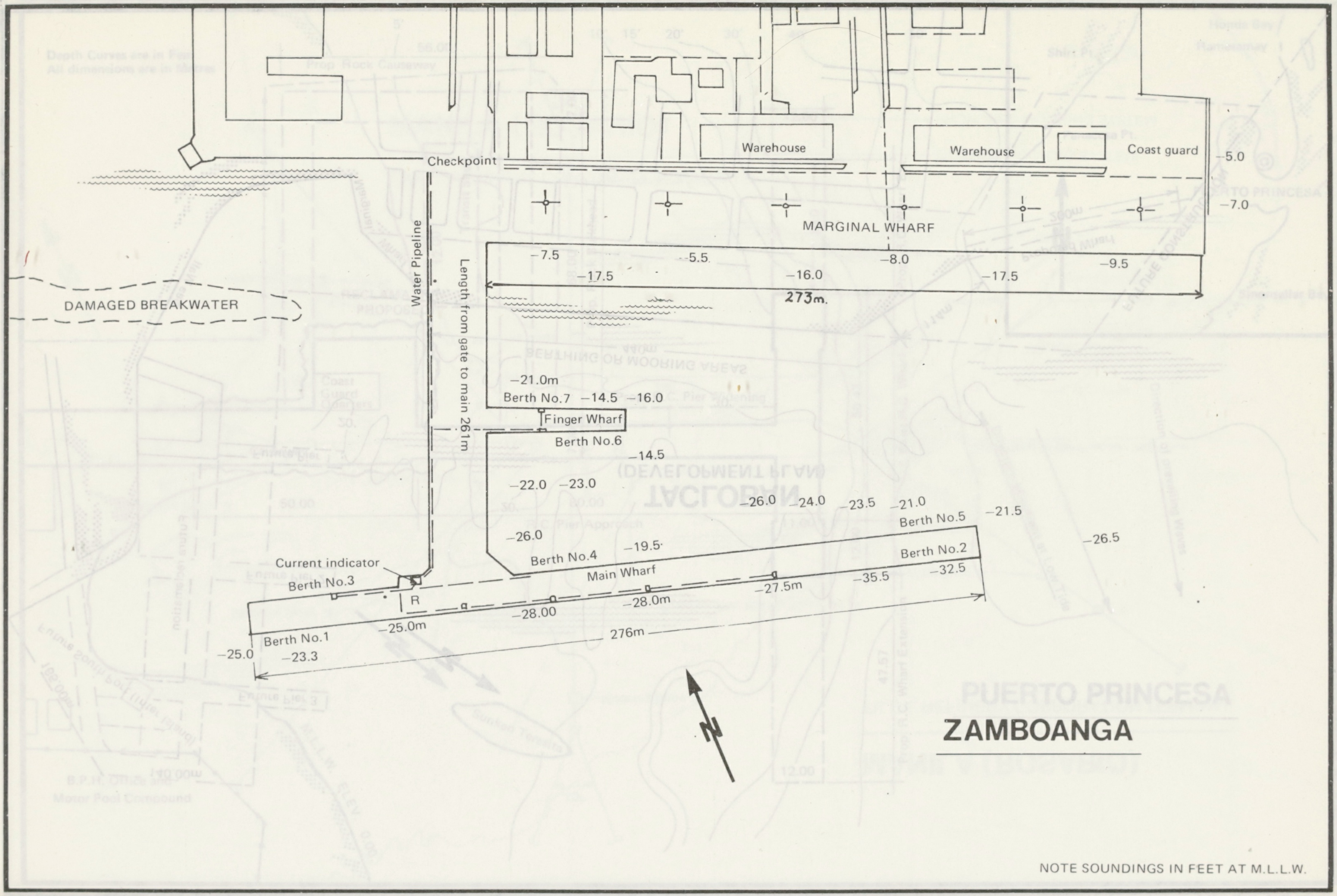
Checkpoint
Warehouse
Warehouse
Coast guard
−5.0
−7.0
MARGINAL WHARF
−7.5
−5.5
−8.0
−9.5
−17.5
−16.0
−17.5
273m.
DAMAGED BREAKWATER
Water Pipeline
Length from gate to main 261m
−21.0m
Berth No.7
−14.5
−16.0
Finger Wharf
Berth No.6
−14.5
−22.0
−23.0
−26.0
−24.0
−23.5
−21.0
Berth No.5
−21.5
−26.5
−26.0
−19.5
Berth No.4
Berth No.2
Current indicator
Main Wharf
−32.5
−35.5
Berth No.3
−27.5m
−28.0m
R
−28.00
−25.0m
Berth No.1
276m
−25.0
−23.3
N

ZAMBOANGA

NOTE SOUNDINGS IN FEET AT M.L.L.W.

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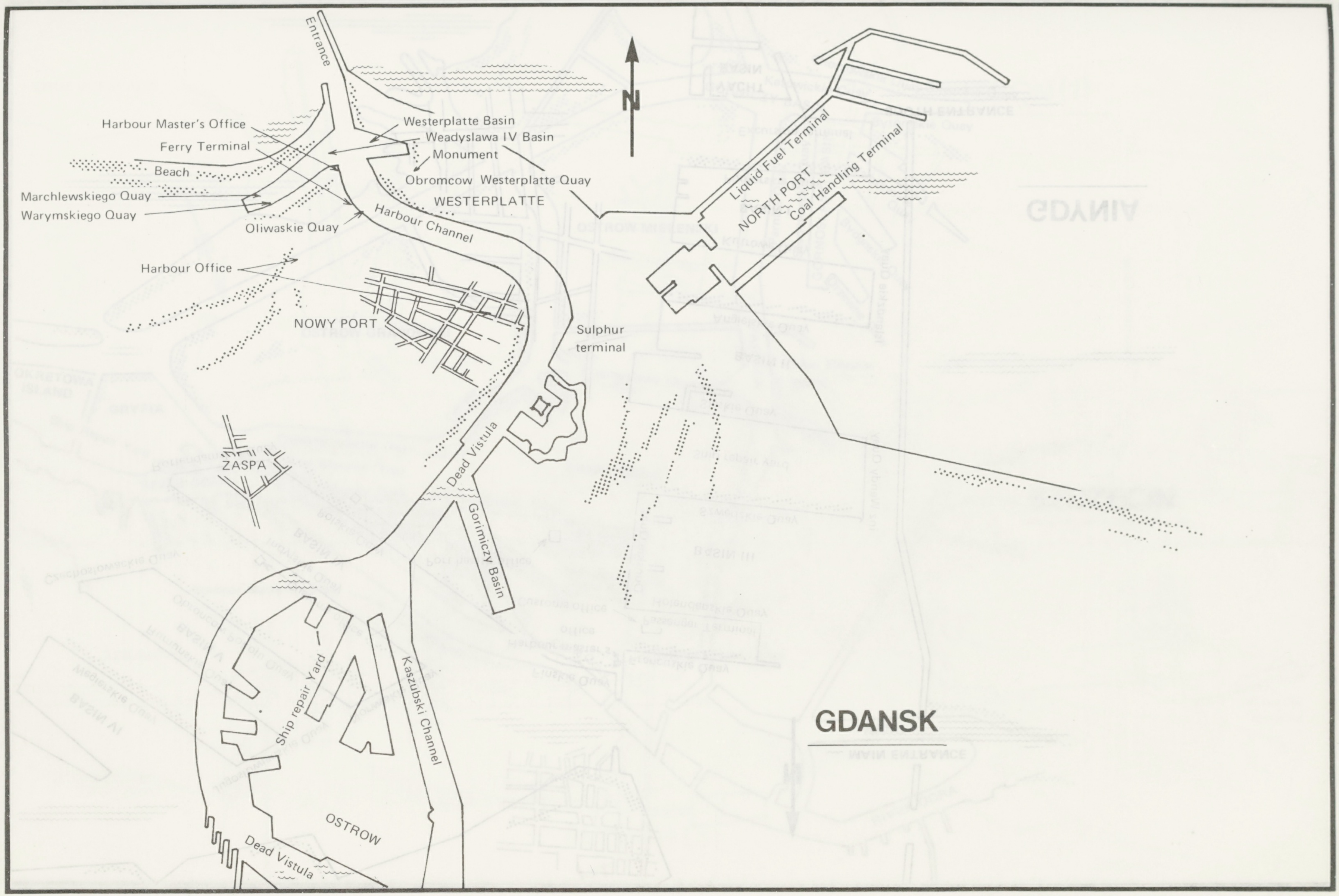
Entrance
Harbour Master's Office
Ferry Terminal
Beach
Marchlewskiego Quay
Warymskiego Quay
Oliwaskie Quay
Westerplatte Basin
Weadyslawa IV Basin
Monument
Obromcow Westerplatte Quay
WESTERPLATTE
Harbour Channel
N
Liquid Fuel Terminal
NORTH PORT
Coal Handling Terminal
Harbour Office
NOWY PORT
Sulphur terminal
ZASPA
Dead Vistula
Gorimicza Basin
Ship repair Yard
Kaszubski Channel
OSTROW
Dead Vistula
GDANSK

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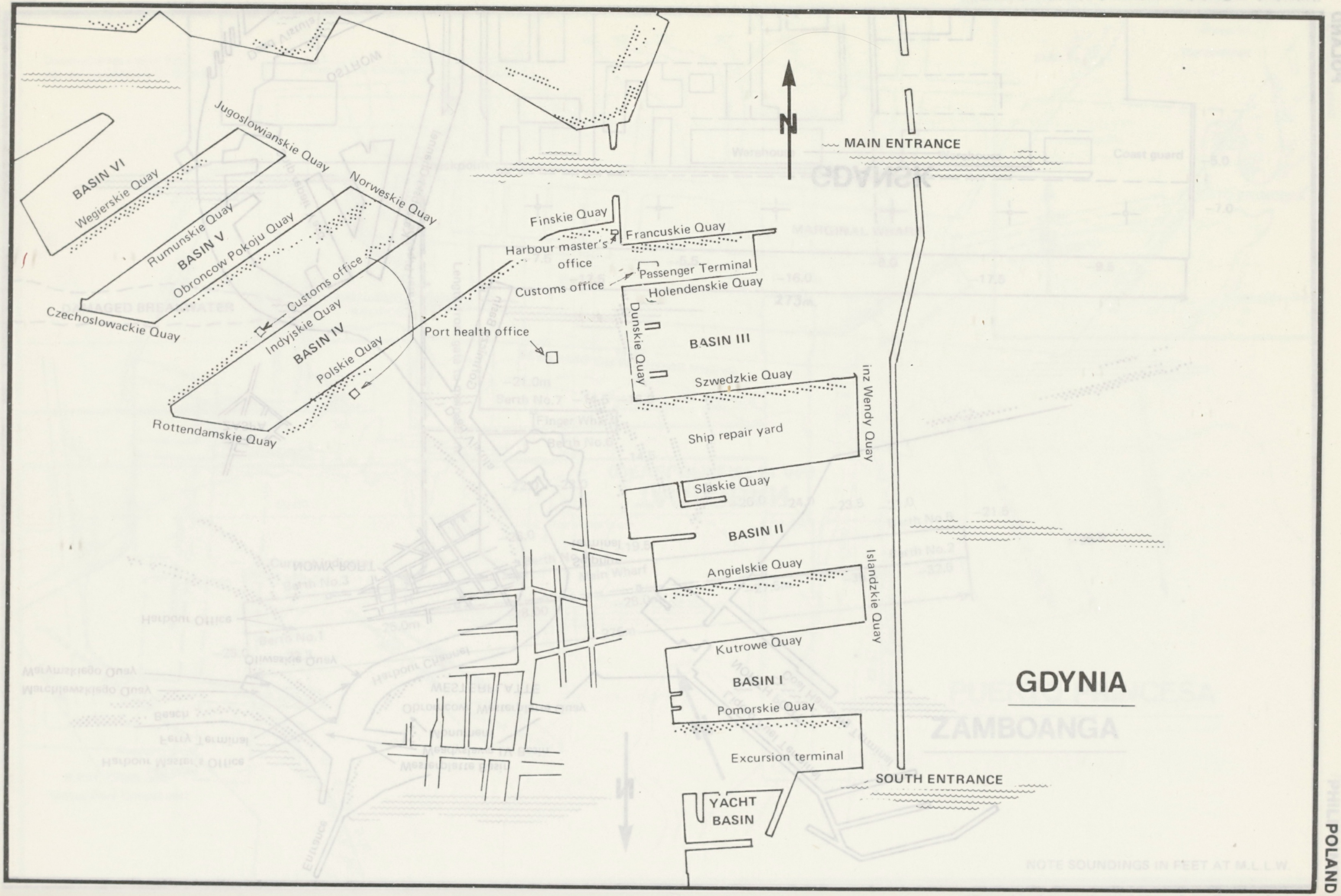
GDYNIA


N
MAIN ENTRANCE
Jugoslowianskie Quay
Norweskie Quay
BASIN VI
Wegierskie Quay
Rumunskie Quay
BASIN V
Obroncow Pokoju Quay
Czechoslowackie Quay
Customs office
Indyjskie Quay
BASIN IV
Polskie Quay
Rottendamskie Quay
Finskie Quay
Francuskie Quay
Harbour master's office
Customs office
Passenger Terminal
Holendenskie Quay
Port health office
Dunskie Quay
BASIN III
Szwedzkie Quay
inz Wendy Quay
Ship repair yard
Slaskie Quay
BASIN II
Angielskie Quay
Islandzkie Quay
Kutrowe Quay
BASIN I
Pomorskie Quay
Excursion terminal
SOUTH ENTRANCE
YACHT BASIN

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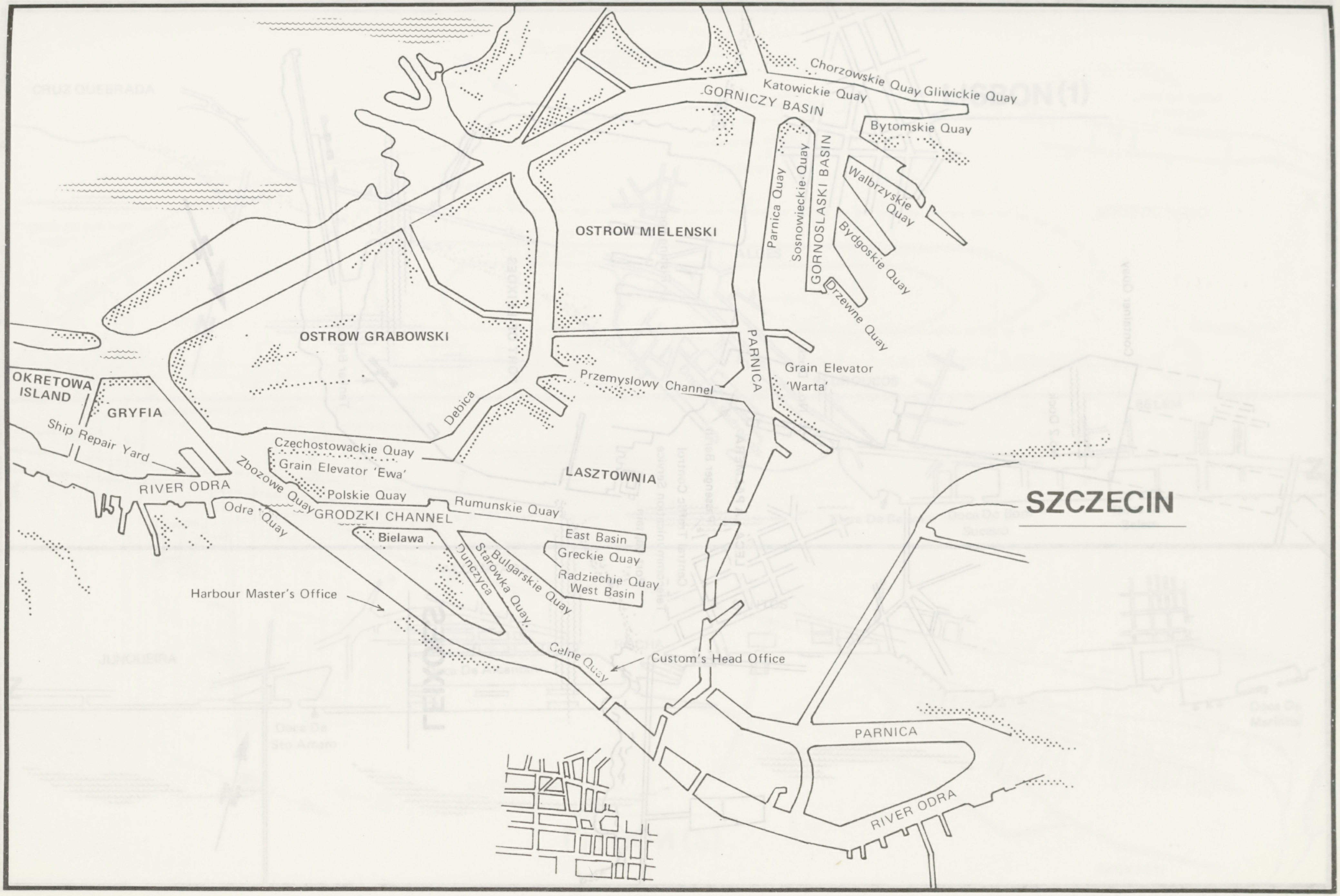
Chorzowskie Quay
Gliwickie Quay
Katowickie Quay
GORNICZY BASIN
Bytomskie Quay
Walbrzyskie Quay
Parnica Quay
Sosnowieckie Quay
GORNOSLASKI BASIN
Bydgoskie Quay
Drzewne Quay
OSTROW MIELENSKI
OSTROW GRABOWSKI
PARNICA
Grain Elevator 'Warta'
Przemyslowy Channel
OKRETOWA ISLAND
GRYFIA
Debica
Ship Repair Yard
Czechostowackie Quay
Grain Elevator 'Ewa'
Polskie Quay
LASZTOWNIA
RIVER ODRA
Zbozowe Quay
Odra Quay
GRODZKI CHANNEL
Rumunskie Quay
SZCZECIN
Bielawa
East Basin
Greckie Quay
Radziechie Quay
West Basin
Bulgarskie Quay
Starowka Quay
Dunczyca
Harbour Master's Office
Celne Quay
Custom's Head Office
PARNICA
RIVER ODRA

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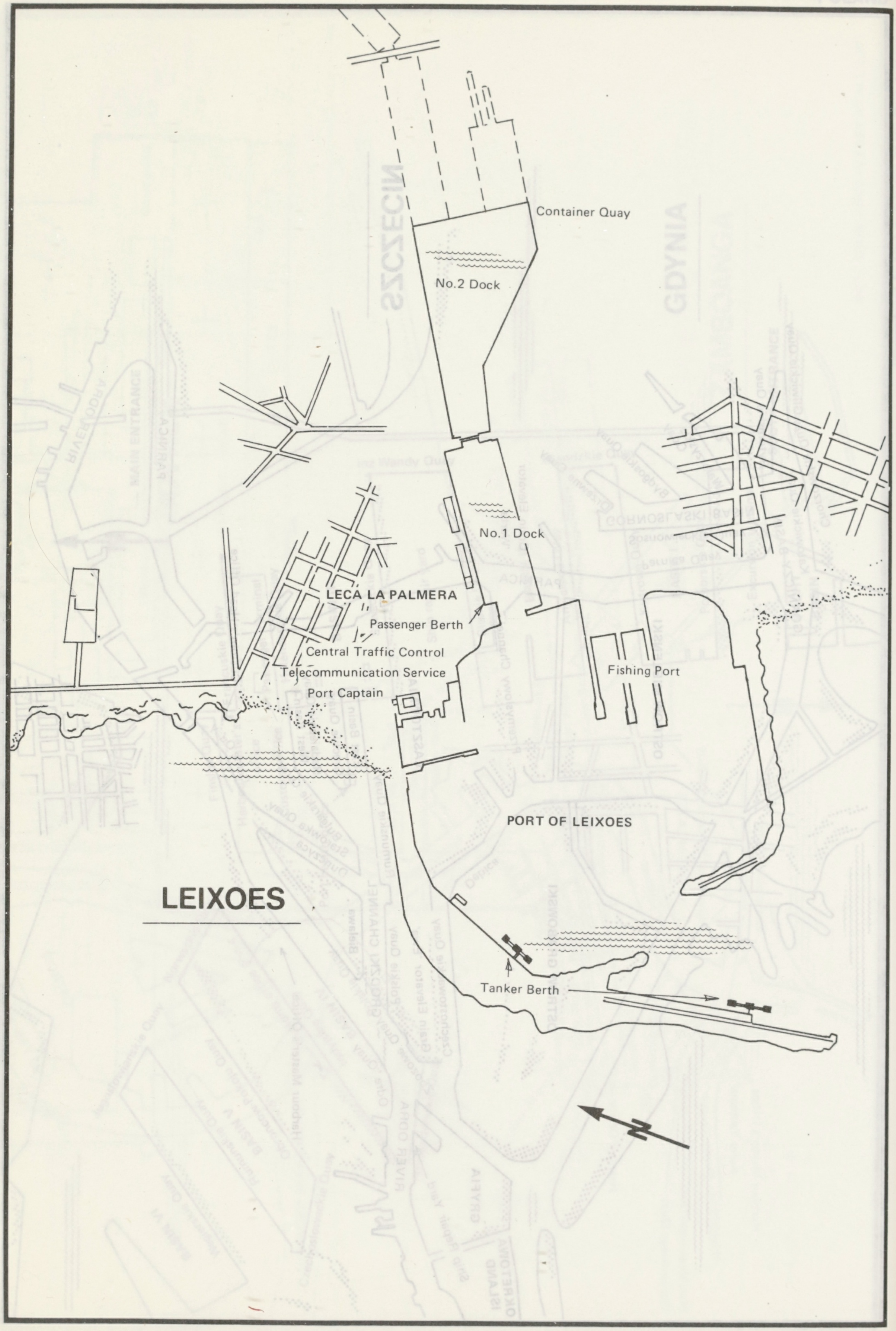
Container Quay
No.2 Dock
No.1 Dock
LECA LA PALMERA
Passenger Berth
Central Traffic Control
Telecommunication Service
Port Captain
Fishing Port
PORT OF LEIXOES
LEIXOES
Tanker Berth
N

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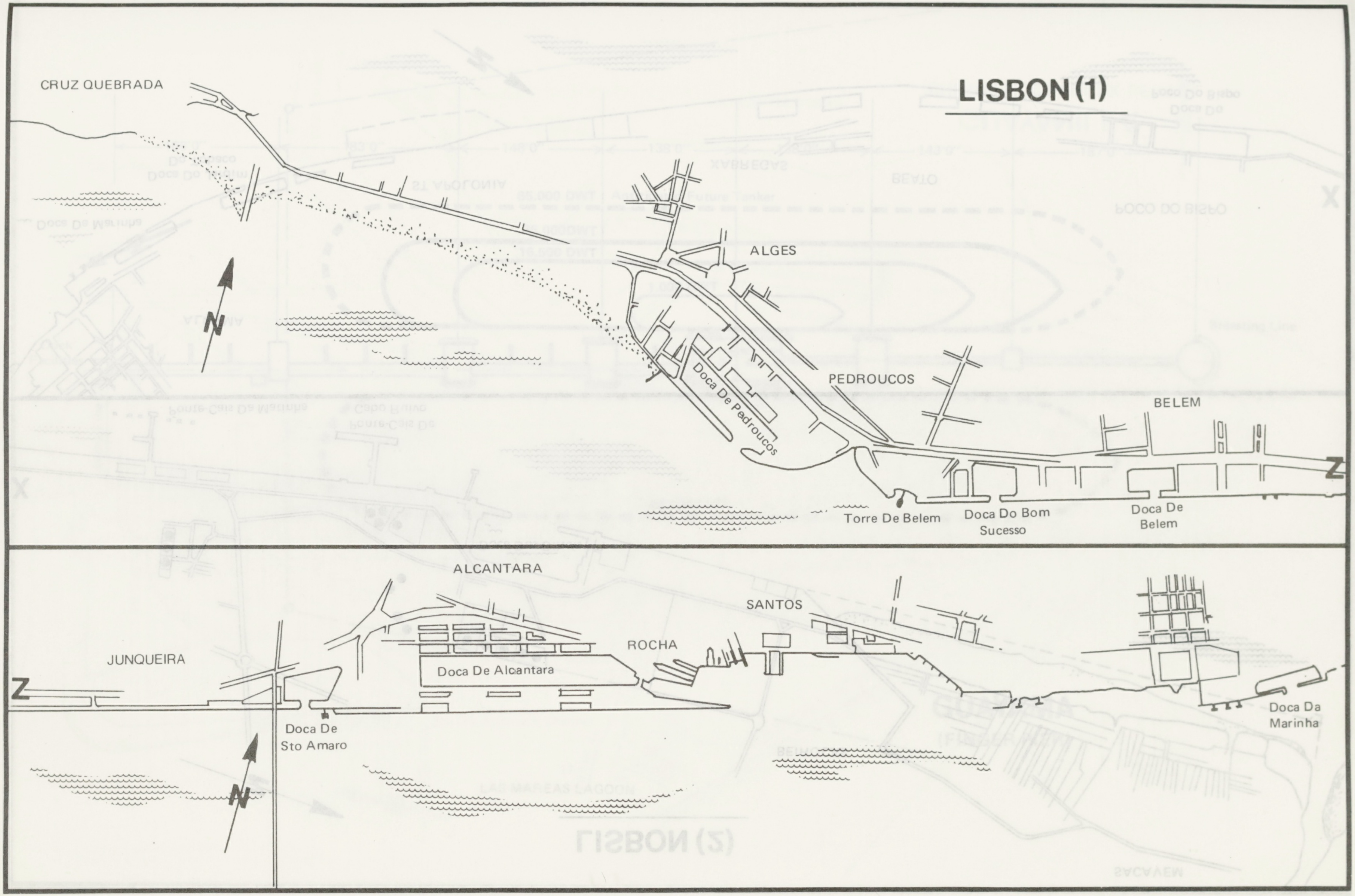
LISBON (1)
CRUZ QUEBRADA
ALGES
PEDROUCOS
Doca De Pedroucos
BELEM
Torre De Belem
Doca Do Bom Sucesso
Doca De Belem
Z
N
ALCANTARA
SANTOS
ROCHA
JUNQUEIRA
Doca De Alcantara
Doca De Sto Amaro
Doca Da Marinha
Z
N

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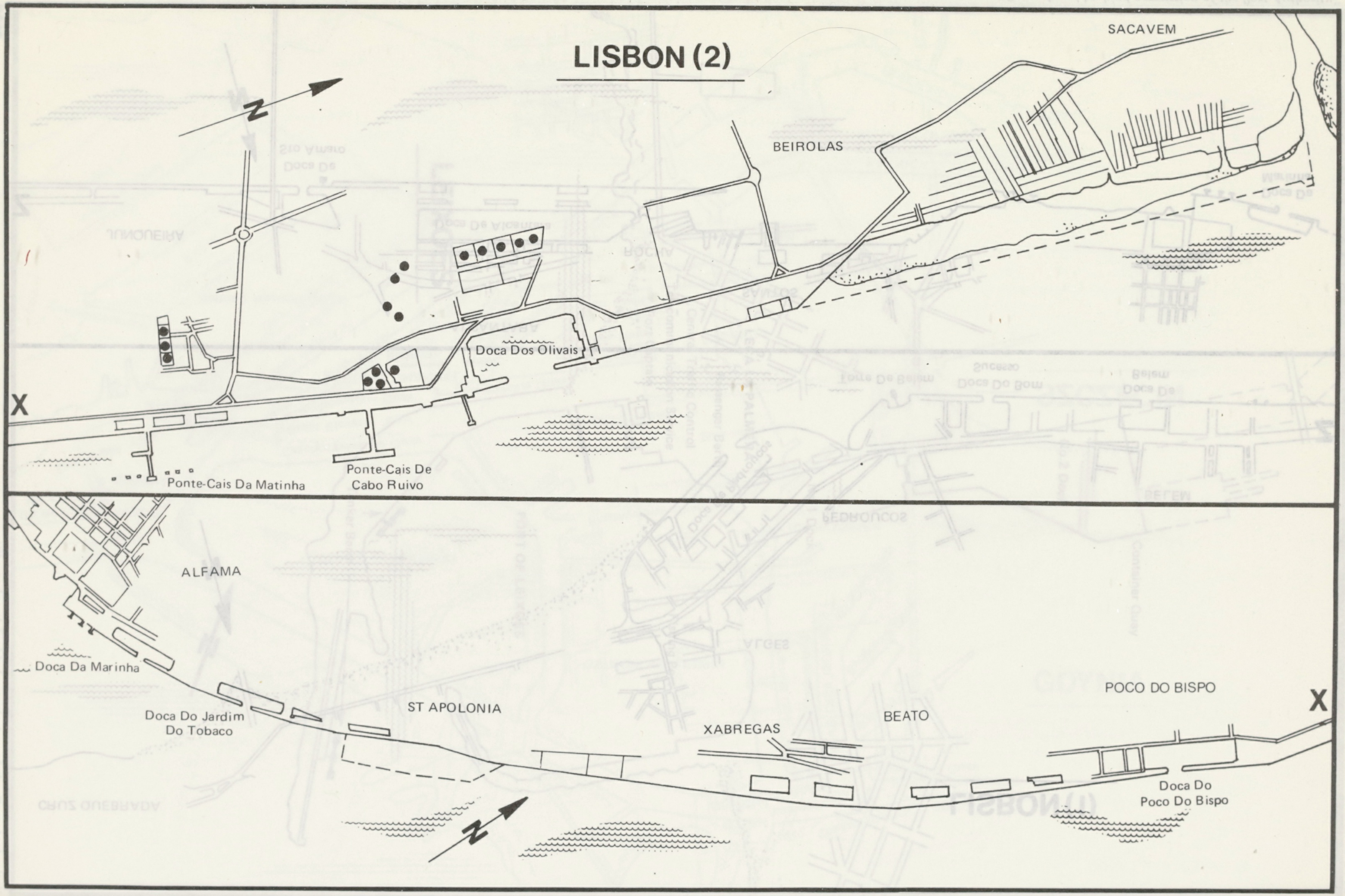
LISBON (2)


SACAVEM
N
BEIROLAS
Doca Dos Olivais
X
Ponte-Cais Da Matinha
Ponte-Cais De Cabo Ruivo
ALFAMA
Doca Da Marinha
Doca Do Jardim Do Tobaco
ST APOLONIA
XABREGAS
BEATO
POCO DO BISPO
X
Doca Do Poco Do Bispo
N

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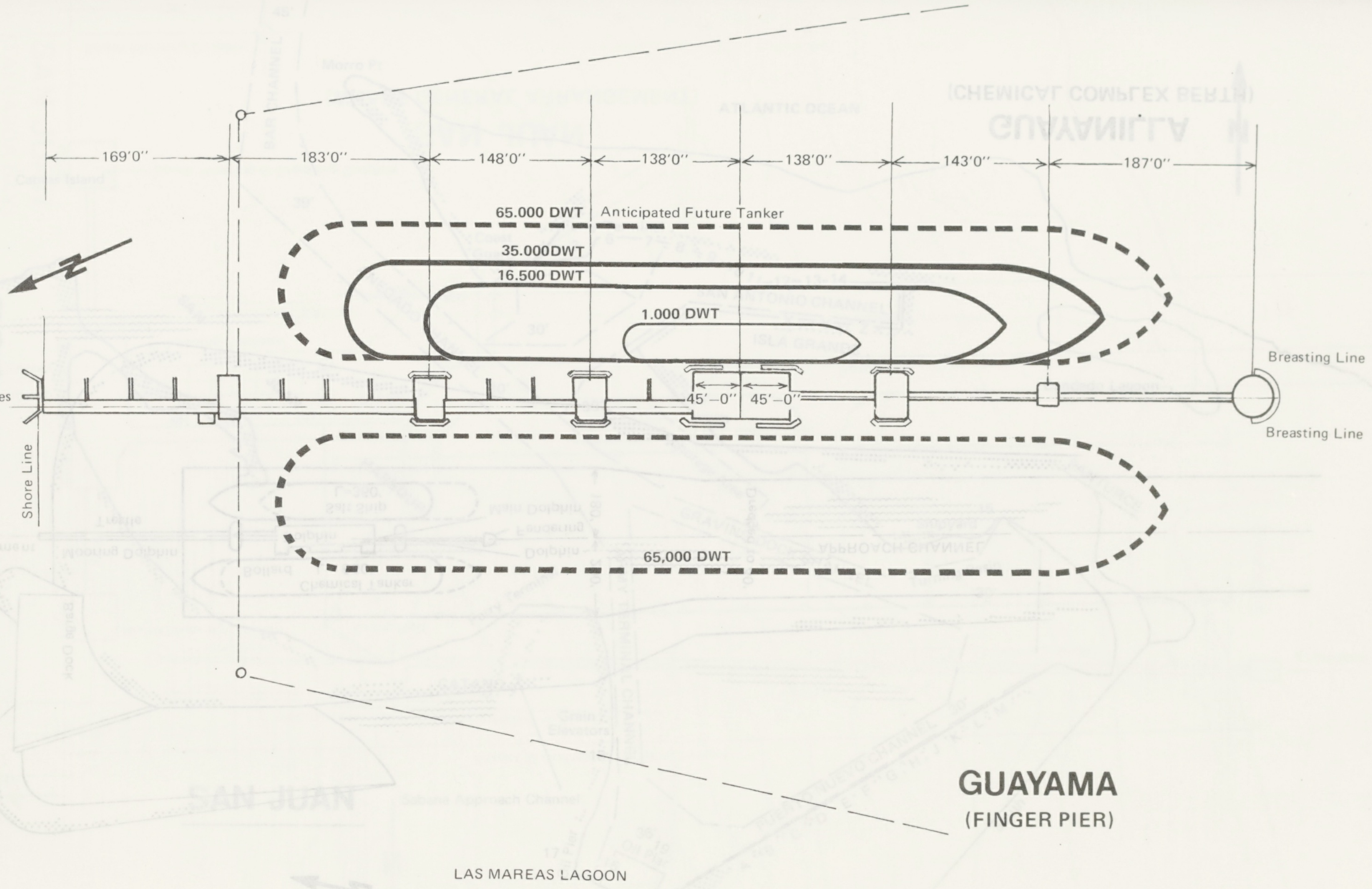
169'0"
183'0"
148'0"
138'0"
138'0"
143'0"
187'0"
65.000 DWT Anticipated Future Tanker
35.000DWT
16.500 DWT
1.000 DWT
Dock Facilities
45'–0"
45'–0"
Breasting Line
Breasting Line
Shore Line
65,000 DWT
LAS MAREAS LAGOON

GUAYAMA

(FINGER PIER)

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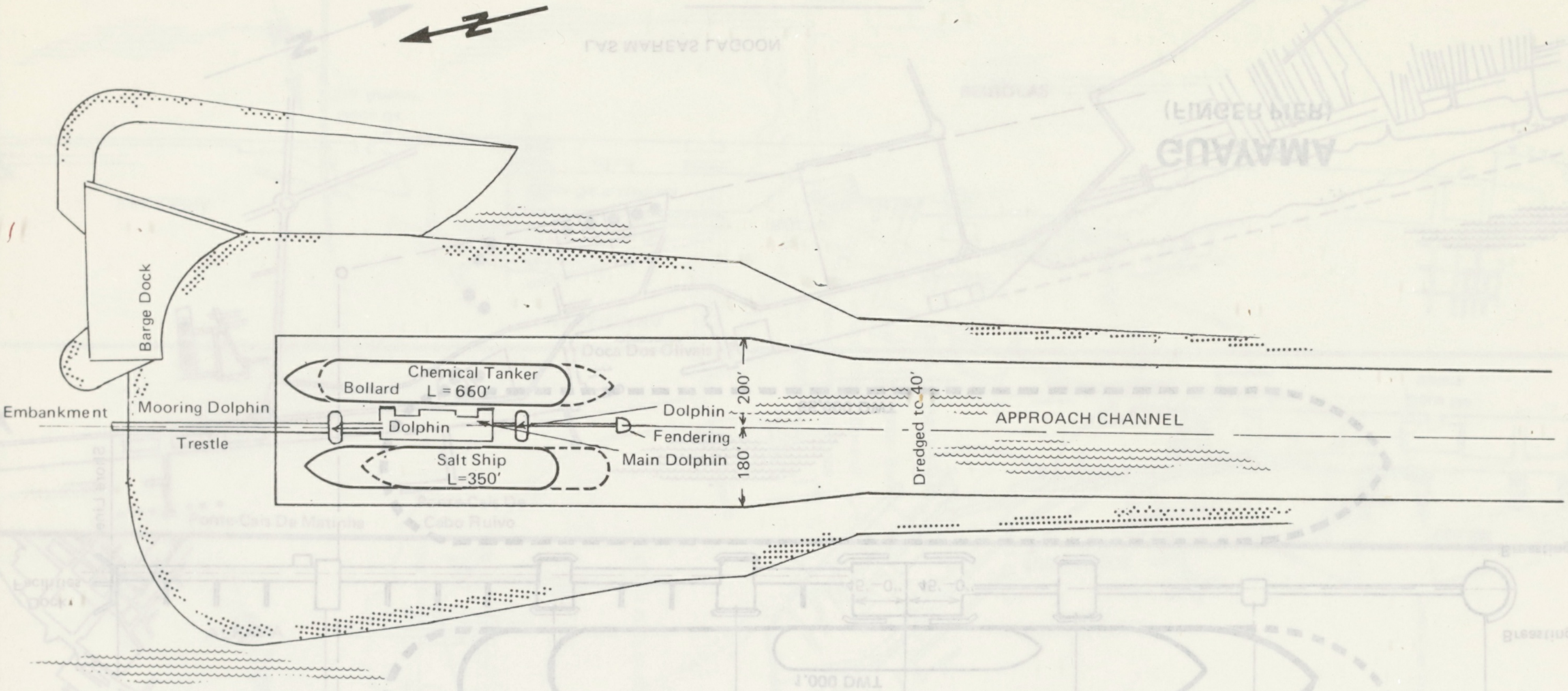
N
Barge Dock
Embankment
Mooring Dolphin
Trestle
Bollard
Chemical Tanker
L = 660'
Dolphin
Salt Ship
L=350'
Dolphin
Fendering
Main Dolphin
200'
180'
Dredged to 40'
APPROACH CHANNEL

GUAYANILLA

(CHEMICAL COMPLEX BERTH)

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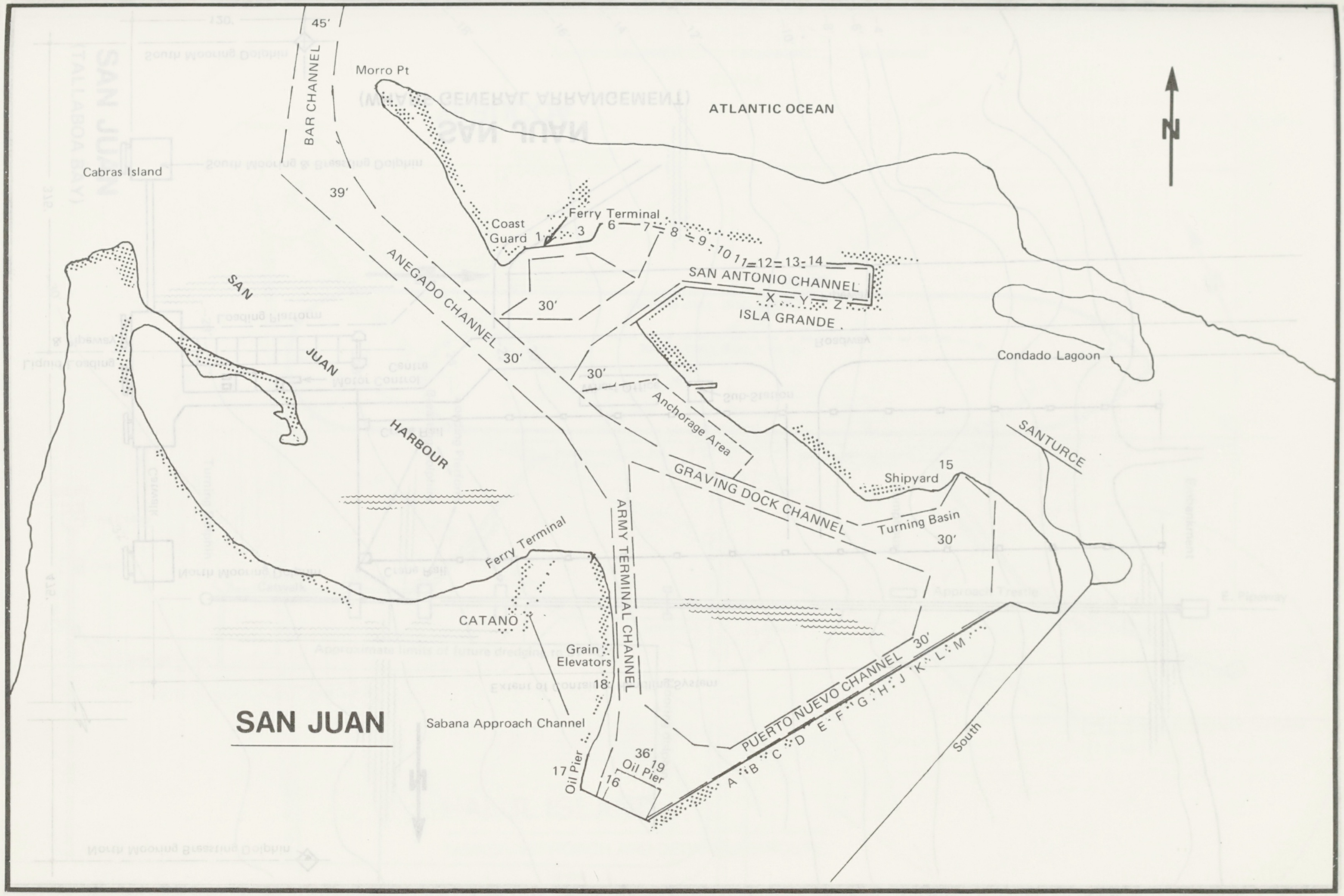
45′
BAR CHANNEL
Morro Pt
ATLANTIC OCEAN
Cabras Island
39′
Coast Guard
1
Ferry Terminal
3
6
7
8
9
10
11
12
13
14
SAN ANTONIO CHANNEL
X
Y
Z
ISLA GRANDE
ANEGADO CHANNEL
30′
SAN
JUAN
HARBOUR
30′
30′
Anchorage Area
Condado Lagoon
SANTURCE
15
Shipyard
GRAVING DOCK CHANNEL
Turning Basin
30′
ARMY TERMINAL CHANNEL
Ferry Terminal
CATANO
Grain Elevators
18
Sabana Approach Channel
PUERTO NUEVO CHANNEL
30′
A
B
C
D
E
F
G
H
J
K
L
M
South
36′
19
Oil Pier
16
17
Oil Pier
N

SAN JUAN

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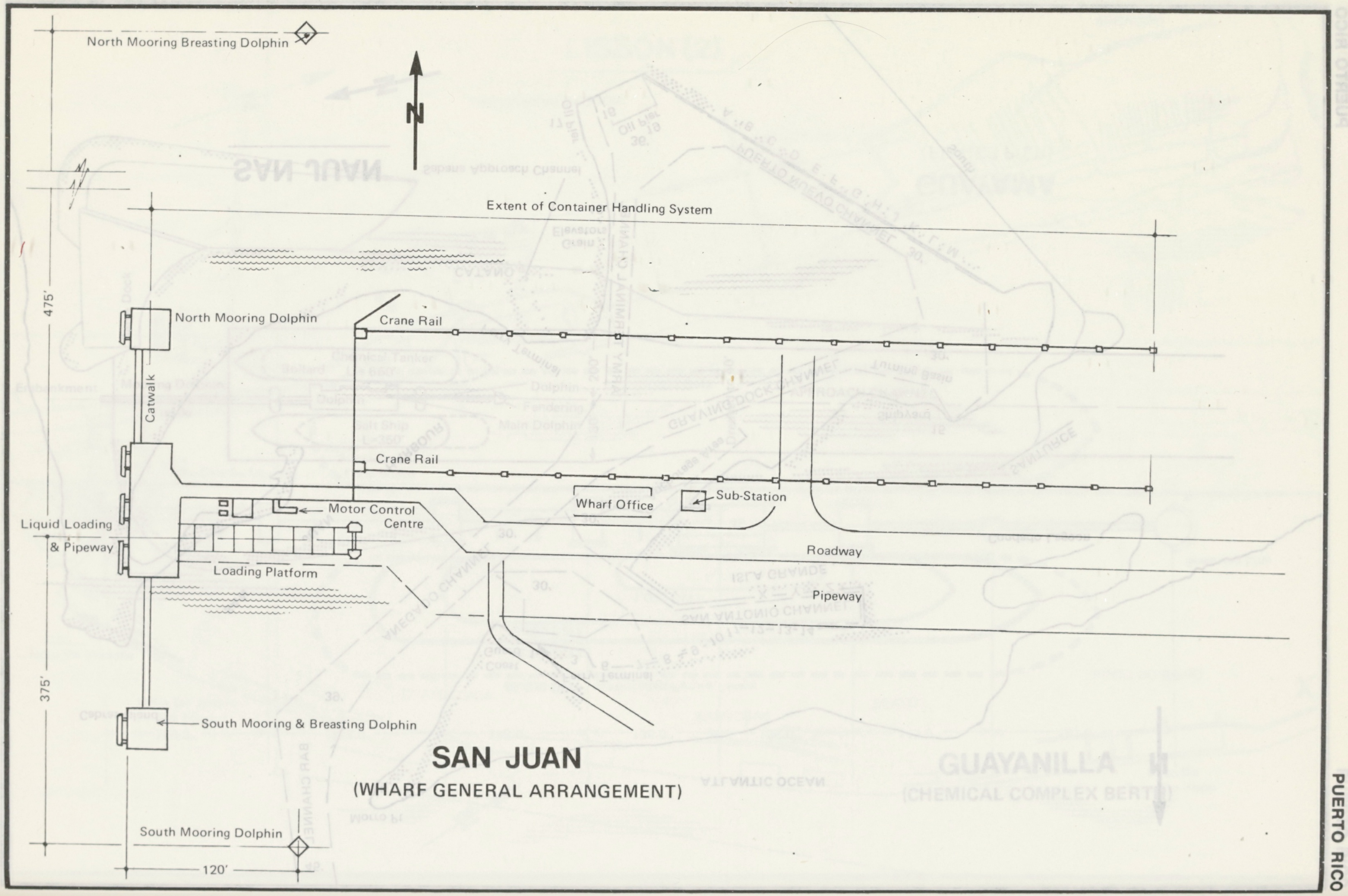
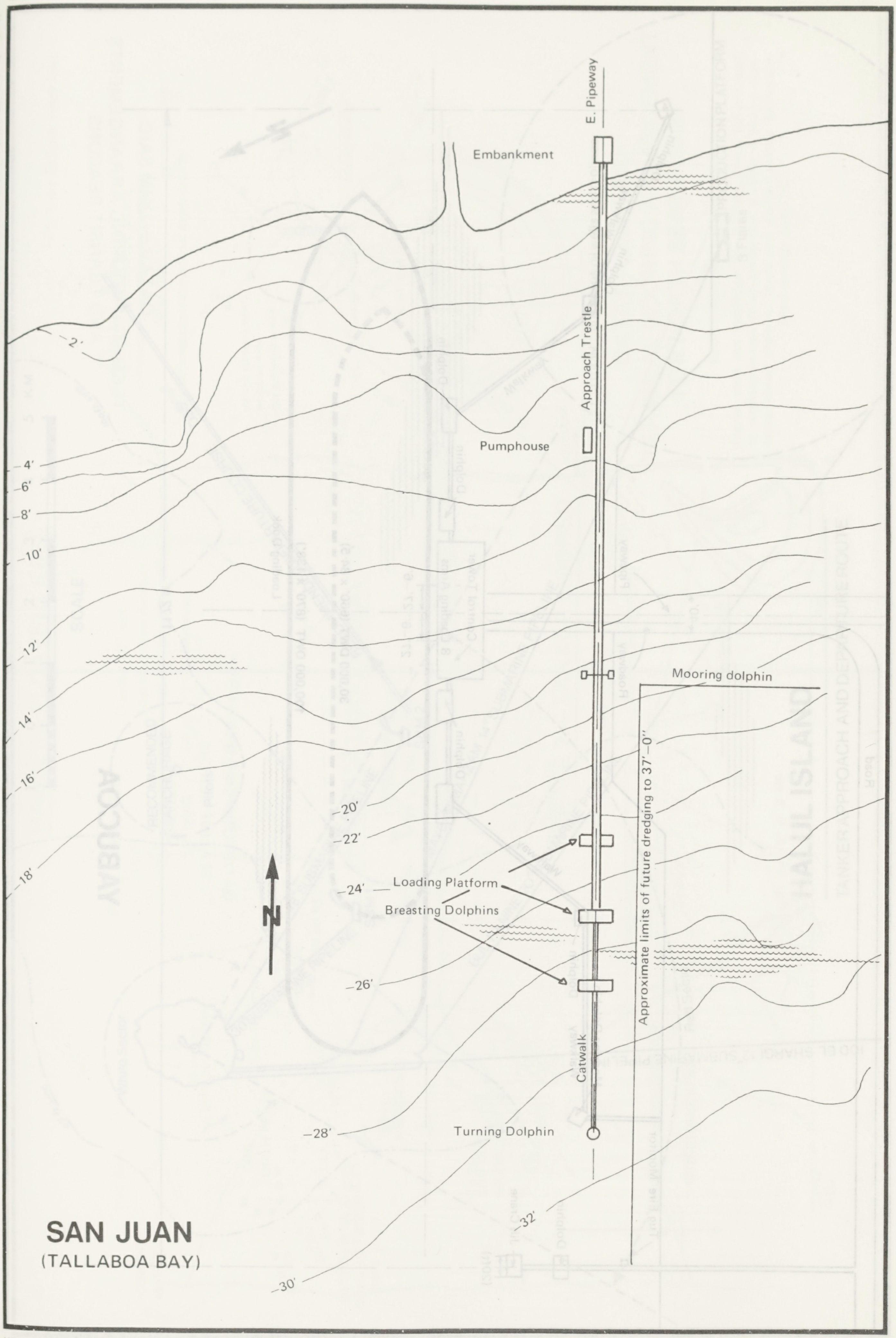

North Mooring Breasting Dolphin
N
Extent of Container Handling System
475'
North Mooring Dolphin
Crane Rail
Catwalk
Crane Rail
Wharf Office
Sub-Station
Motor Control Centre
Liquid Loading & Pipeway
Loading Platform
Roadway
Pipeway
375'
South Mooring & Breasting Dolphin
South Mooring Dolphin
120'

SAN JUAN

(WHARF GENERAL ARRANGEMENT)


E. Pipeway
Embankment
Approach Trestle
Pumphouse
Mooring dolphin
Approximate limits of future dredging to 37'–0"
Loading Platform
Breasting Dolphins
Catwalk
Turning Dolphin
N
–2'
–4'
–6'
–8'
–10'
–12'
–14'
–16'
–18'
–20'
–22'
–24'
–26'
–28'
–30'
–32'

SAN JUAN
(TALLABOA BAY)

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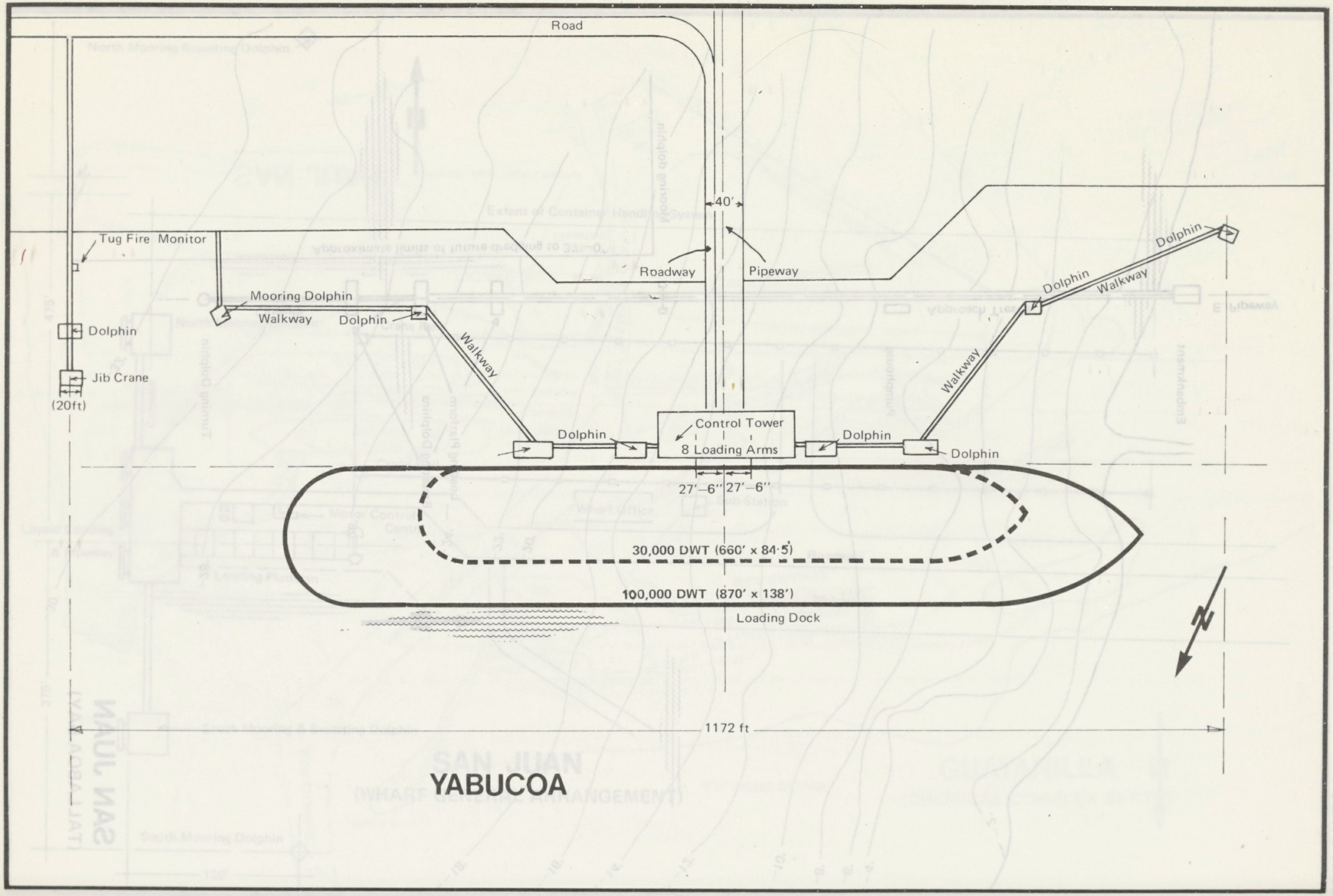
Road
40′
Tug Fire Monitor
Roadway
Pipeway
Mooring Dolphin
Walkway
Dolphin
Dolphin
Walkway
Dolphin
Walkway
Dolphin
Jib Crane
(20ft)
Walkway
Dolphin
Walkway
Control Tower
8 Loading Arms
Dolphin
Dolphin
Dolphin
27′–6″
27′–6″
30,000 DWT (660′ x 84·5)
100,000 DWT (870′ x 138′)
Loading Dock
1172 ft
N

YABUCOA

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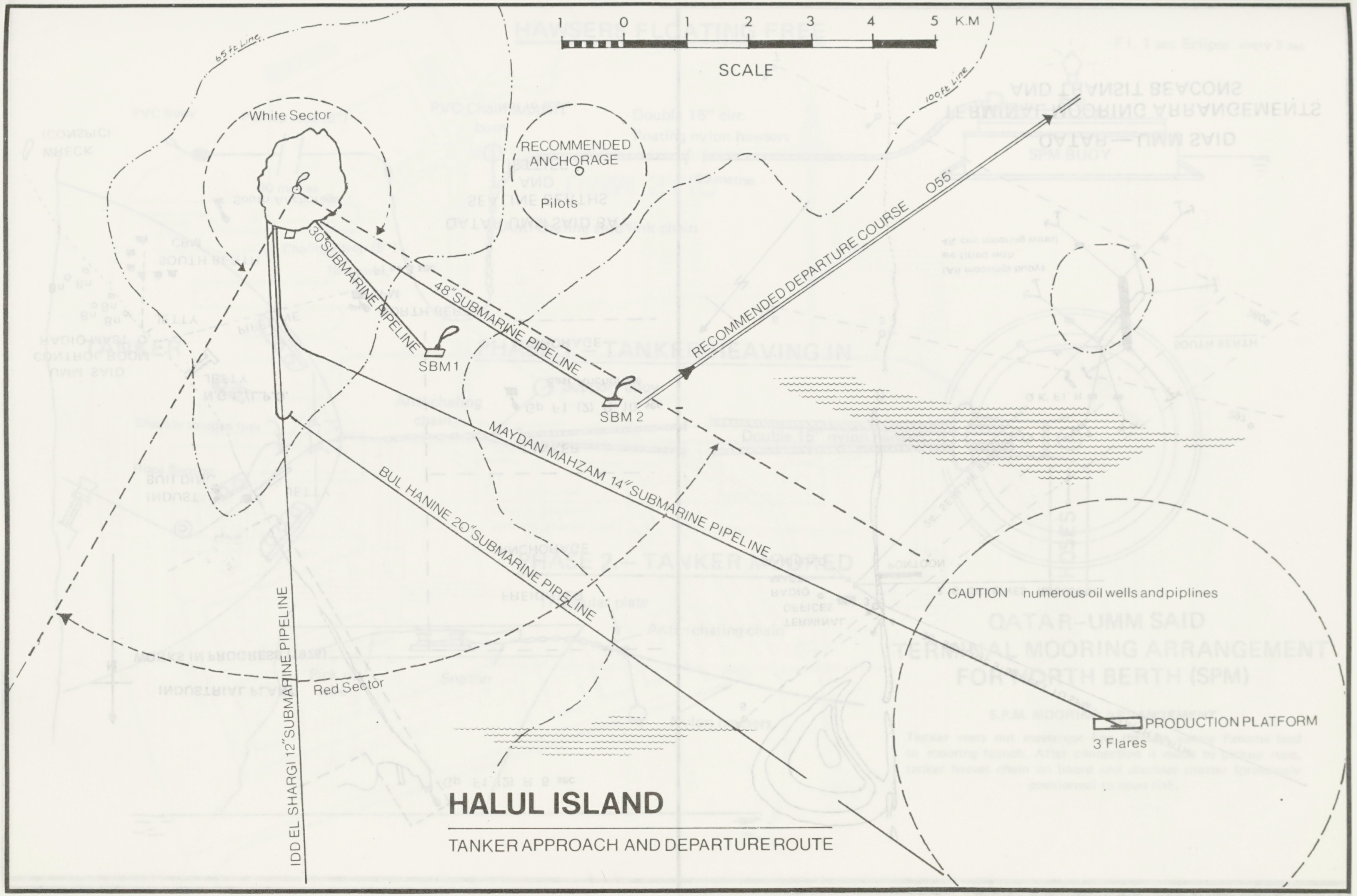
1 0 1 2 3 4 5 K.M
SCALE
65 ft Line
100 ft Line
White Sector
RECOMMENDED ANCHORAGE
Pilots
30" SUBMARINE PIPELINE
48" SUBMARINE PIPELINE
RECOMMENDED DEPARTURE COURSE 055°
SBM 1
SBM 2
MAYDAN MAHZAM 14" SUBMARINE PIPELINE
BUL HANINE 20" SUBMARINE PIPELINE
IDD EL SHARGI 12" SUBMARINE PIPELINE
Red Sector
CAUTION numerous oil wells and piplines
PRODUCTION PLATFORM
3 Flares

HALUL ISLAND

TANKER APPROACH AND DEPARTURE ROUTE

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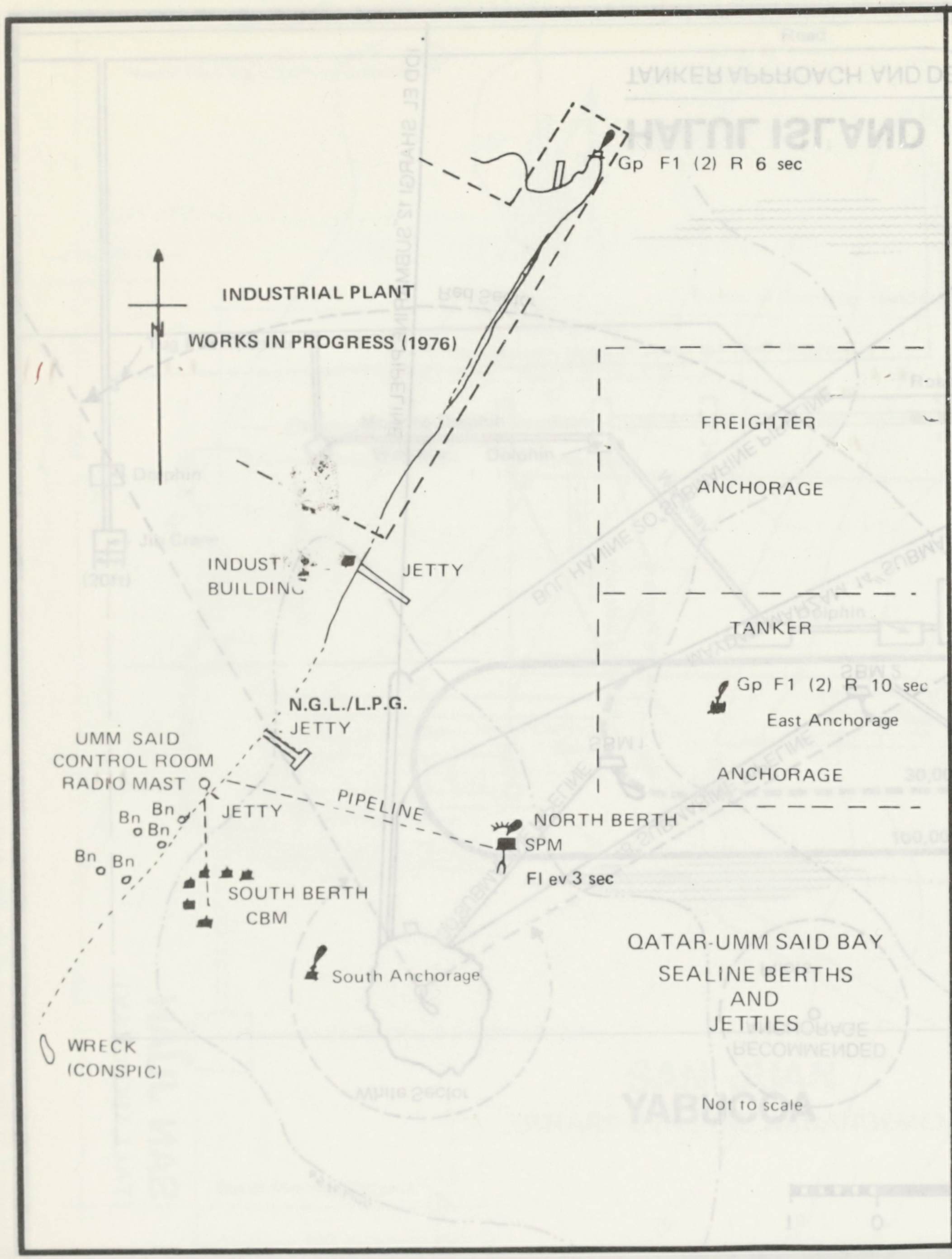
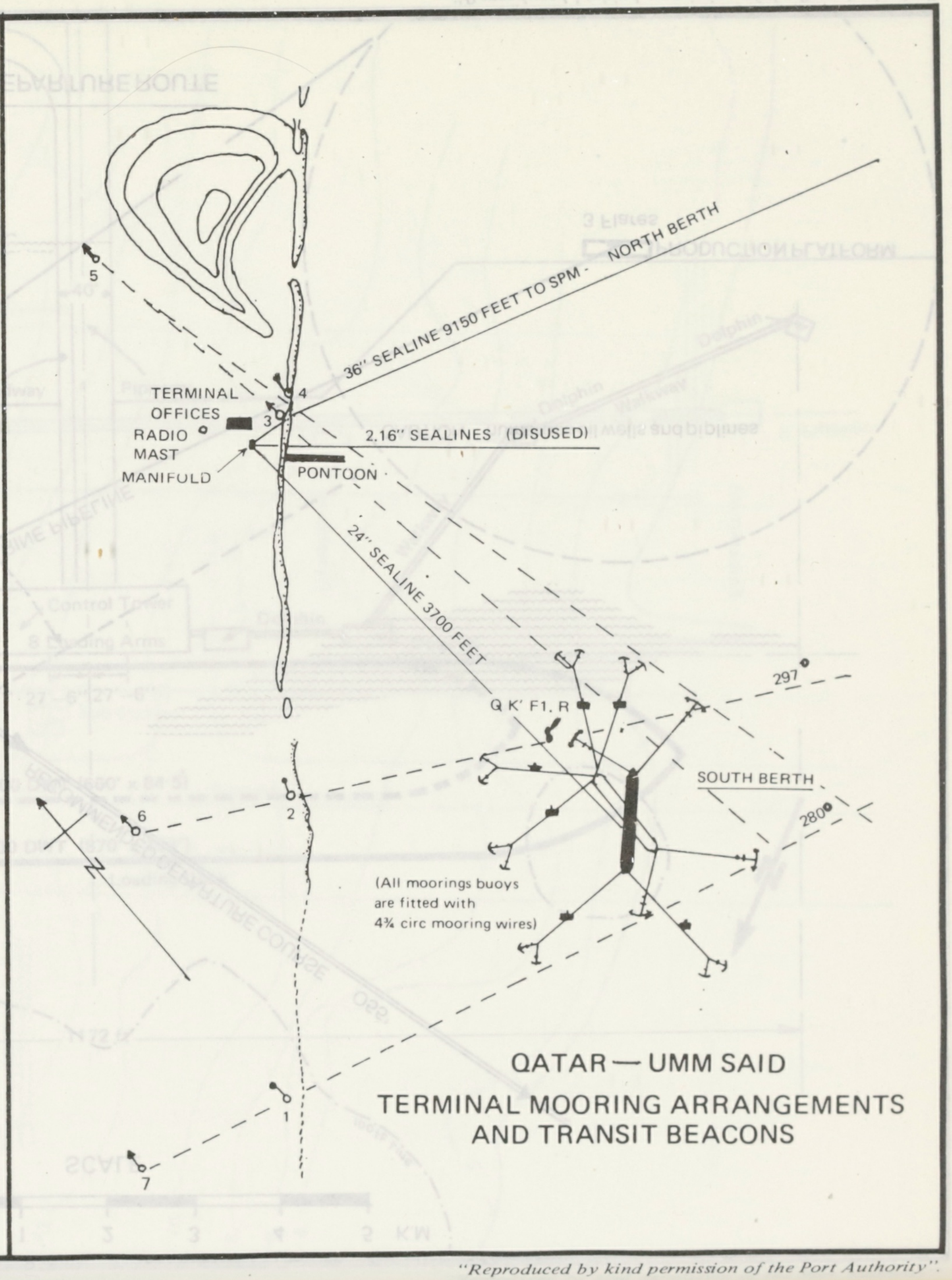


QATAR-UMM SAID BAY
SEALINE BERTHS
AND
JETTIES

Not to scale

Gp F1 (2) R 6 sec
INDUSTRIAL PLANT
N
WORKS IN PROGRESS (1976)
FREIGHTER
ANCHORAGE
INDUSTRIAL BUILDING
JETTY
TANKER
Gp F1 (2) R 10 sec
East Anchorage
ANCHORAGE
N.G.L./L.P.G. JETTY
UMM SAID CONTROL ROOM RADIO MAST
Bn
Bn
Bn
Bn
Bn
Bn
JETTY
PIPELINE
NORTH BERTH
SPM
Fl ev 3 sec
SOUTH BERTH
CBM
South Anchorage
WRECK (CONSPIC)



QATAR — UMM SAID
TERMINAL MOORING ARRANGEMENTS
AND TRANSIT BEACONS

5
TERMINAL OFFICES
RADIO MAST
MANIFOLD
4
3
36" SEALINE 9150 FEET TO SPM - NORTH BERTH
2,16" SEALINES (DISUSED)
PONTOON
24" SEALINE 3700 FEET
297°
Q K' F1. R
SOUTH BERTH
280°
6
2
(All moorings buoys are fitted with 4¾ circ mooring wires)
1
7

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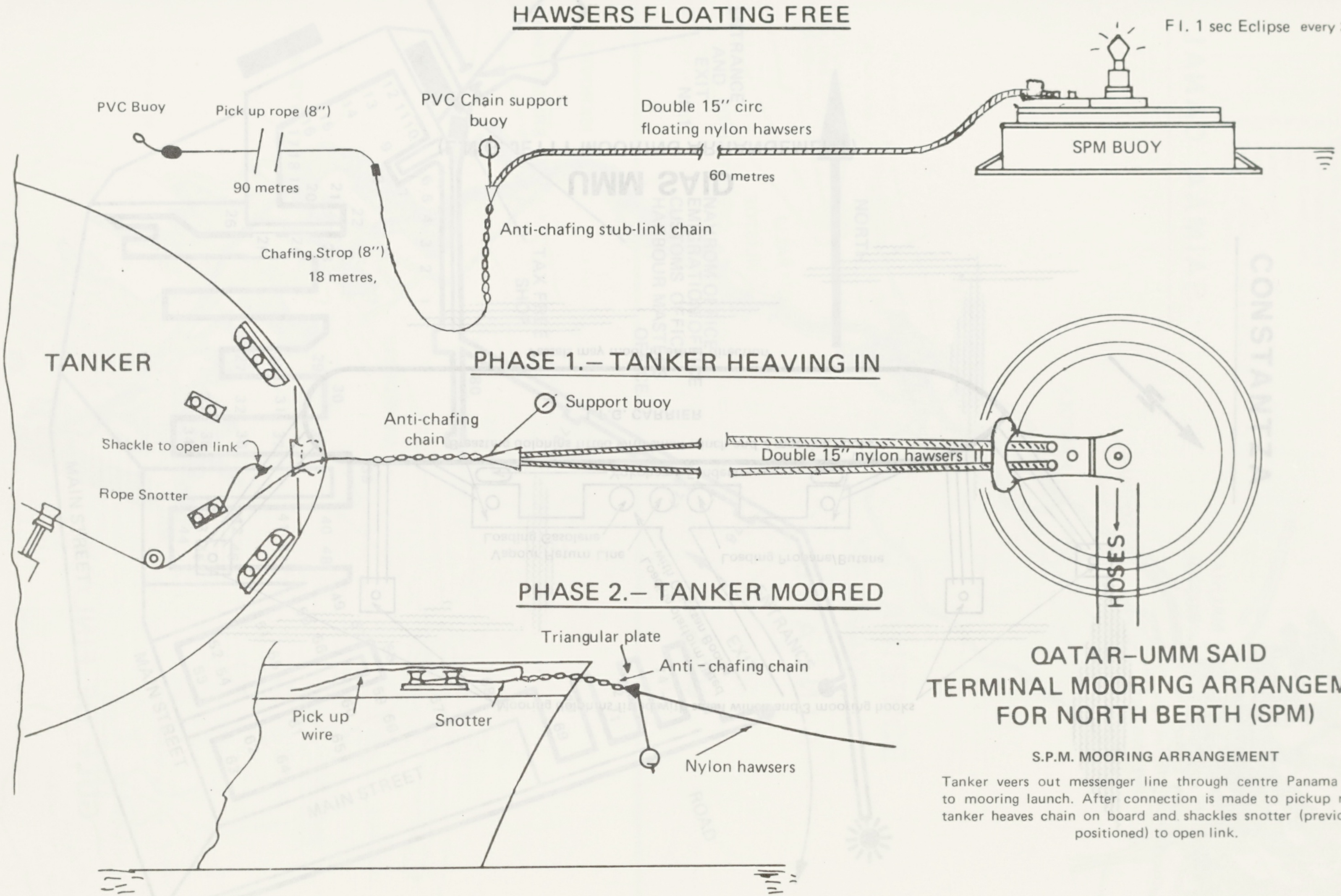
HAWSERS FLOATING FREE
Fl. 1 sec Eclipse every 3 sec
PVC Buoy
Pick up rope (8")
90 metres
PVC Chain support buoy
Double 15" circ floating nylon hawsers
60 metres
SPM BUOY
Anti-chafing stub-link chain
Chafing Strop (8")
18 metres,
TANKER
PHASE 1.– TANKER HEAVING IN
Support buoy
Anti-chafing chain
Shackle to open link
Rope Snotter
Double 15" nylon hawsers
HOSES
PHASE 2.– TANKER MOORED
Triangular plate
Anti – chafing chain
Pick up wire
Snotter
Nylon hawsers

QATAR–UMM SAID TERMINAL MOORING ARRANGEMENT FOR NORTH BERTH (SPM)

S.P.M. MOORING ARRANGEMENT

Tanker veers out messenger line through centre Panama lead to mooring launch. After connection is made to pickup rope, tanker heaves chain on board and shackles snotter (previously positioned) to open link.

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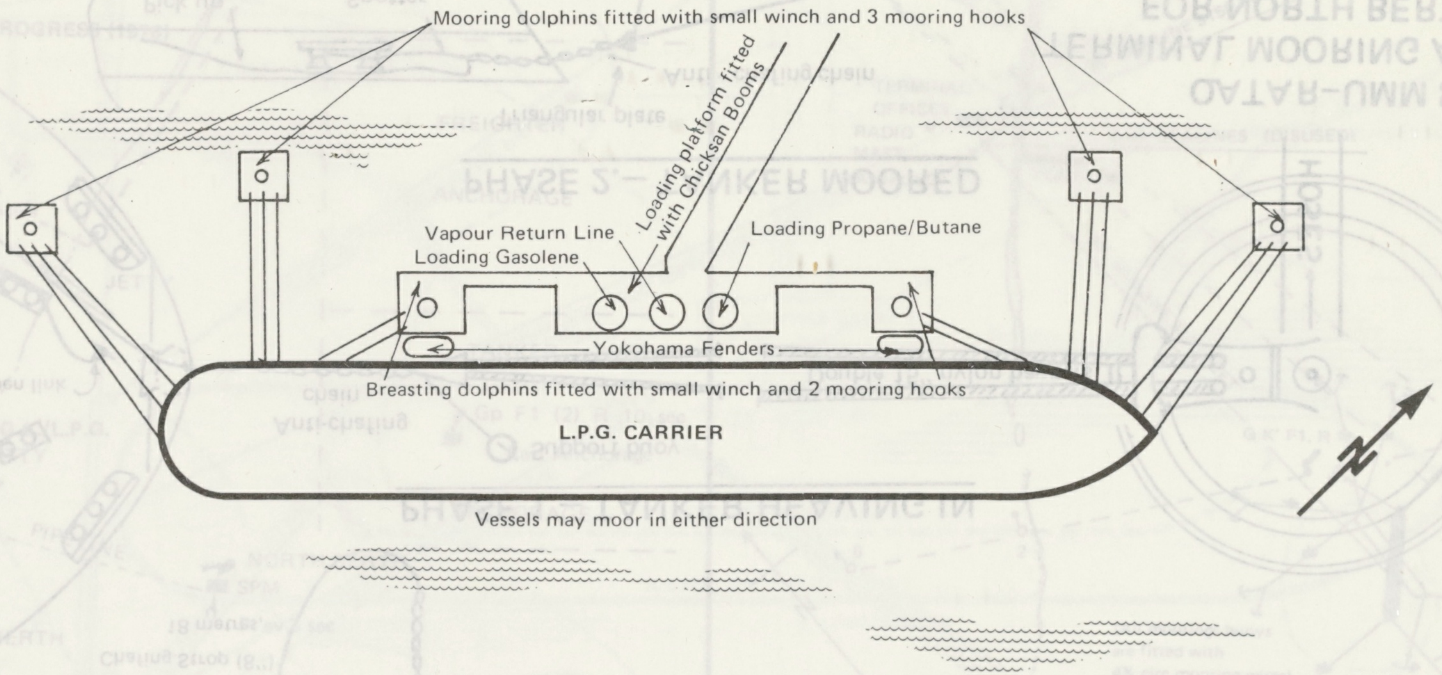
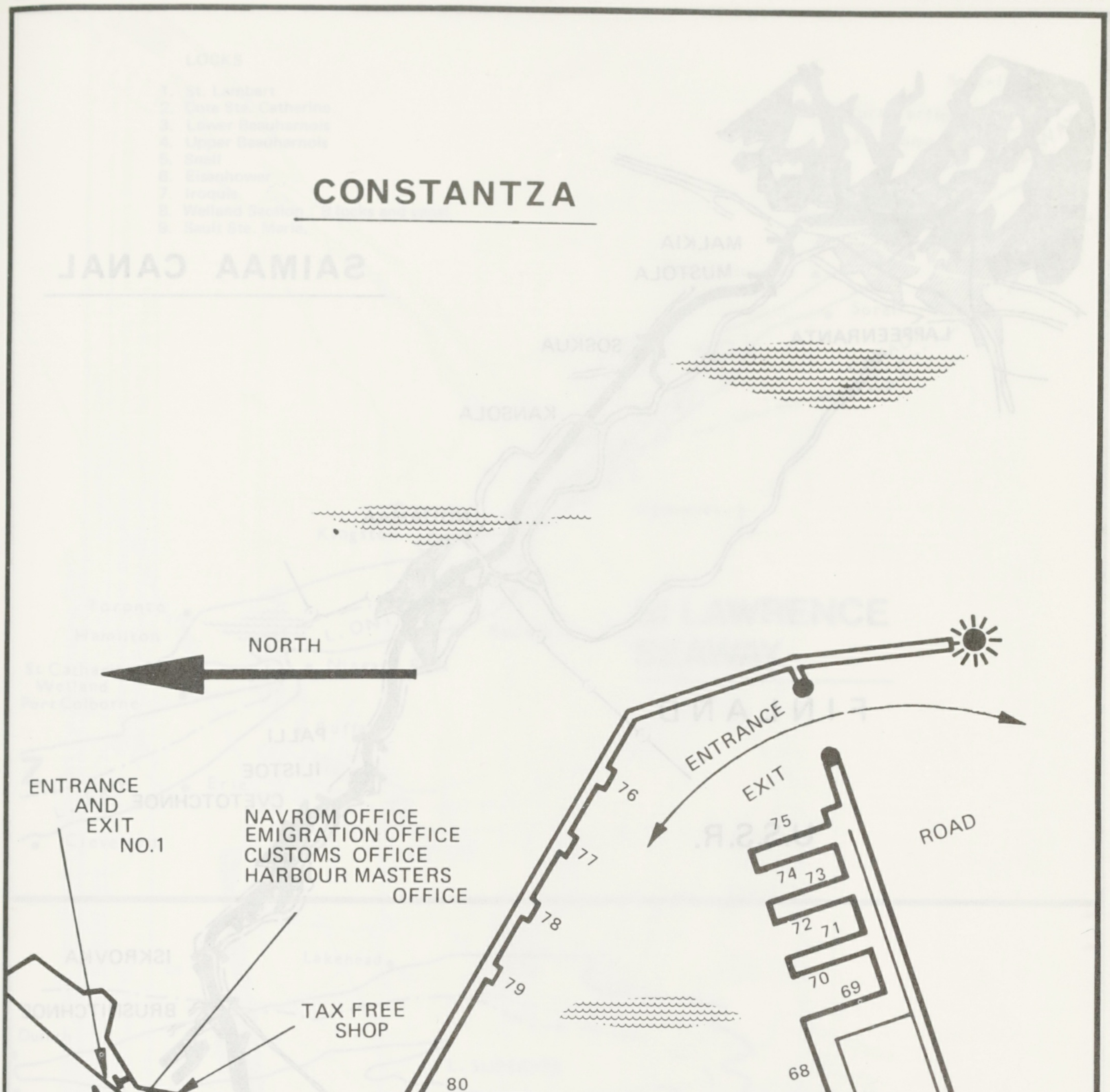

Mooring dolphins fitted with small winch and 3 mooring hooks
Loading platform fitted with Chicksan Booms
Vapour Return Line
Loading Gasolene
Loading Propane/Butane
Yokohama Fenders
Breasting dolphins fitted with small winch and 2 mooring hooks
L.P.G. CARRIER
Vessels may moor in either direction

UMM SAID

(L.N.G. JETTY MOORING ARRANGEMENT)

CONSTANTZA


NORTH
ENTRANCE
EXIT
ROAD
ENTRANCE AND EXIT NO.1
NAVROM OFFICE
EMIGRATION OFFICE
CUSTOMS OFFICE
HARBOUR MASTERS OFFICE
TAX FREE SHOP
MAIN STREET
MAIN STREET
MAIN STREET
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

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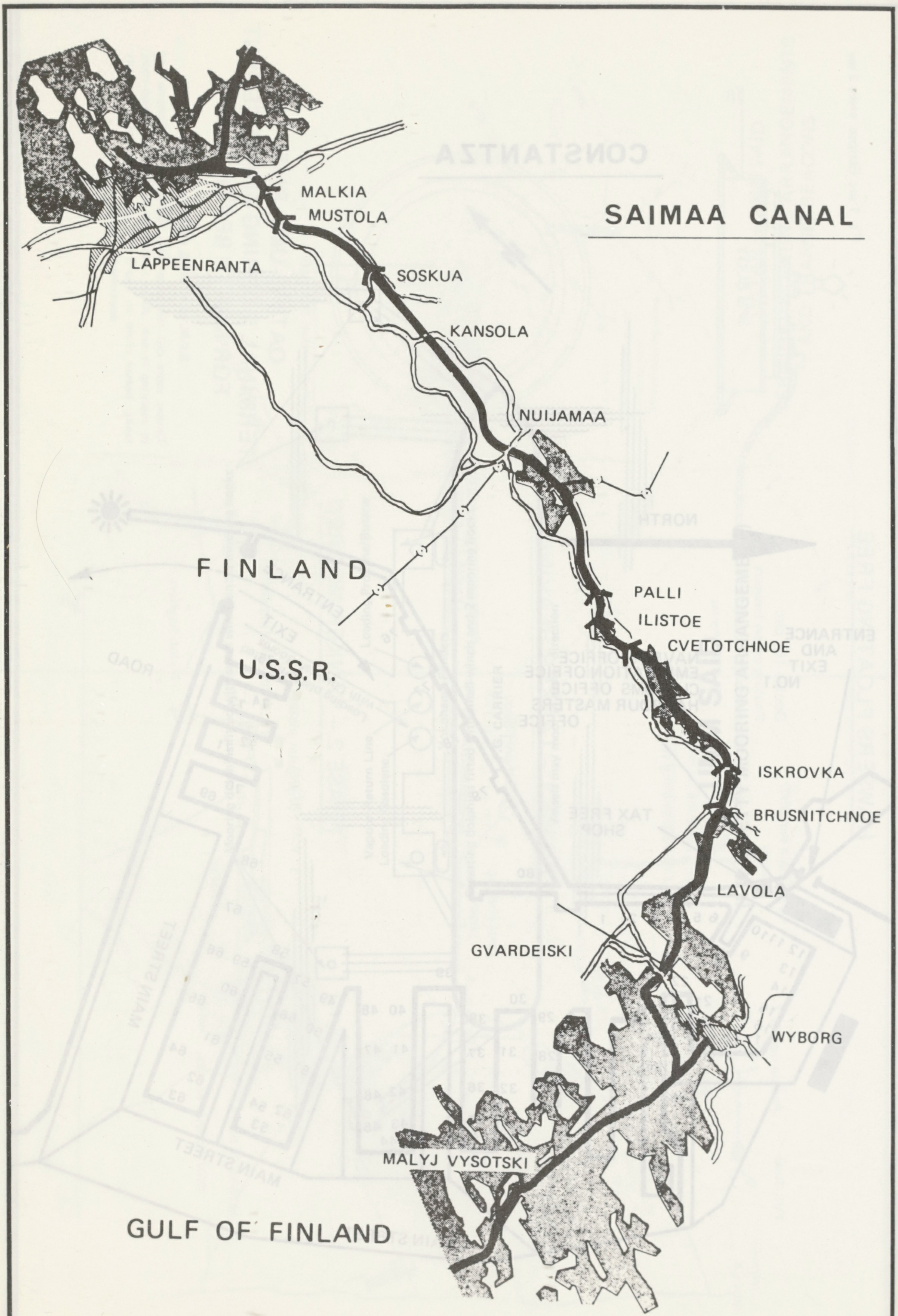
SAIMAA CANAL
MALKIA
MUSTOLA
LAPPEENRANTA
SOSKUA
KANSOLA
NUIJAMAA
FINLAND
U.S.S.R.
PALLI
ILISTOE
CVETOTCHNOE
ISKROVKA
BRUSNITCHNOE
LAVOLA
GVARDEISKI
WYBORG
MALYJ VYSOTSKI
GULF OF FINLAND

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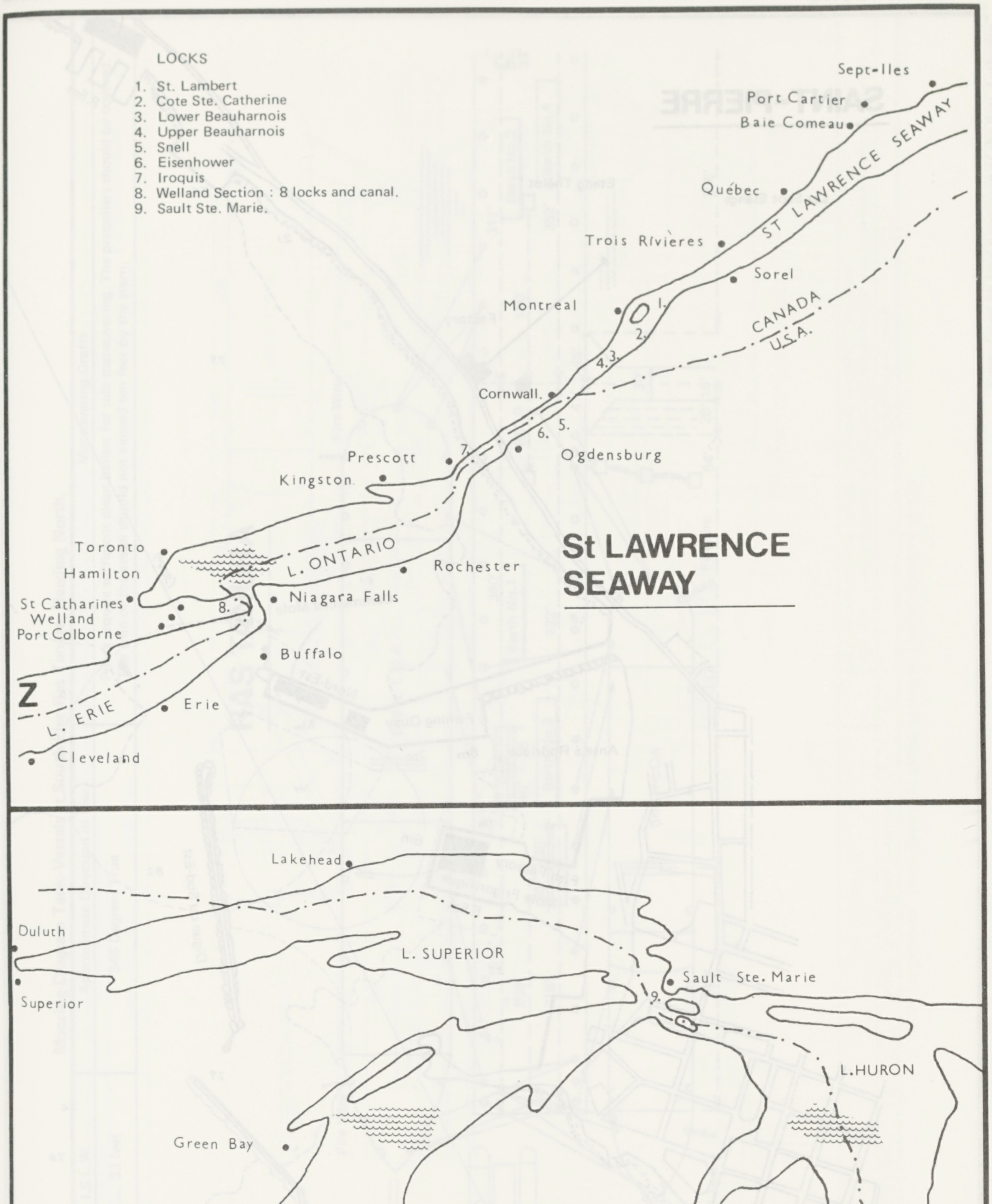
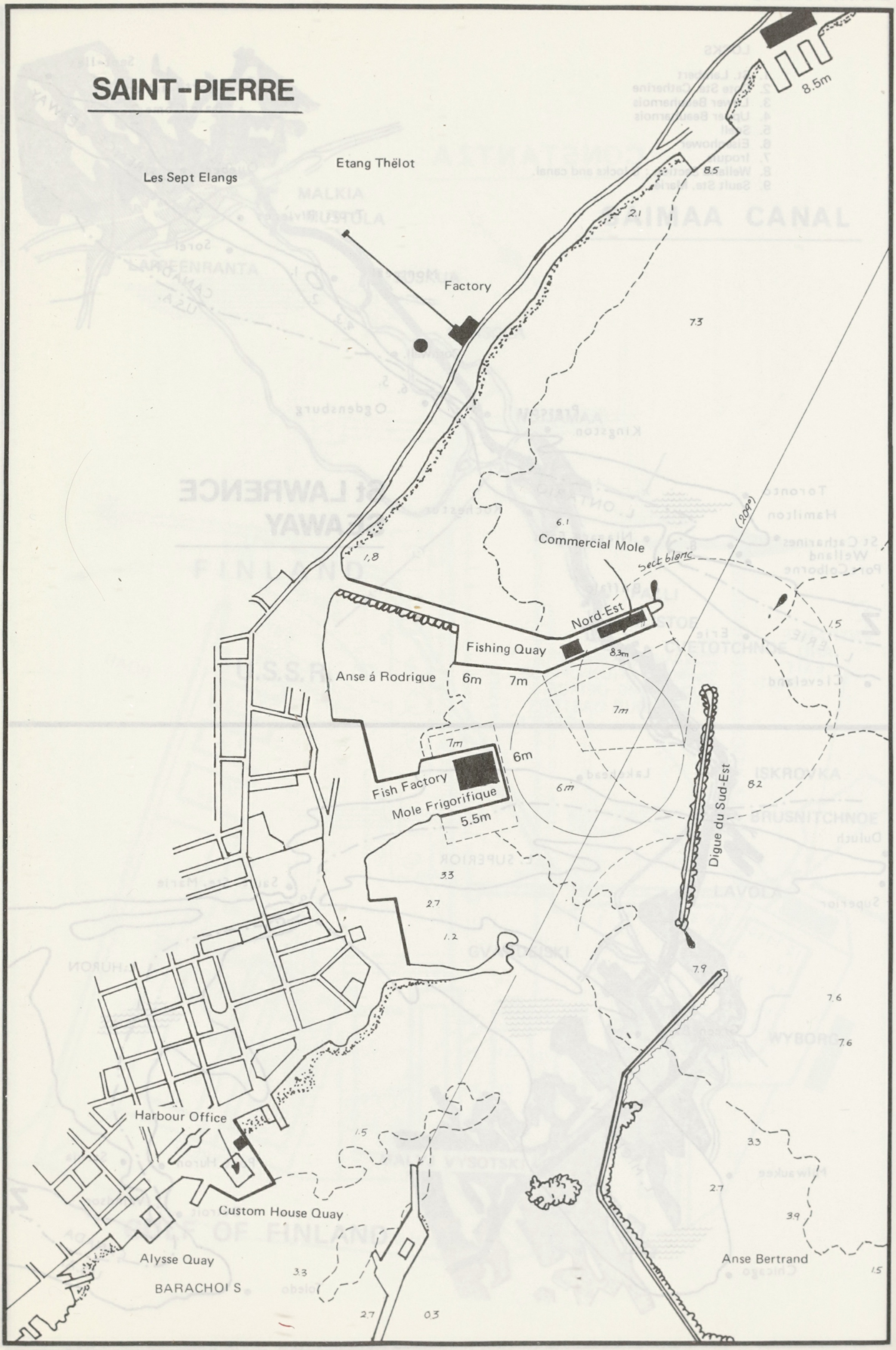

LOCKS
1. St. Lambert
2. Cote Ste. Catherine
3. Lower Beauharnois
4. Upper Beauharnois
5. Snell
6. Eisenhower
7. Iroquis
8. Welland Section : 8 locks and canal.
9. Sault Ste. Marie.
St LAWRENCE SEAWAY
Sept-Iles
Port Cartier
Baie Comeau
ST LAWRENCE SEAWAY
Québec
Trois Rivieres
Sorel
Montreal
1.
2.
CANADA
U.S.A.
4.
3.
Cornwall.
6.
5.
7.
Prescott
Ogdensburg
Kingston
Toronto
L. ONTARIO
Rochester
Hamilton
St Catharines
Welland
Port Colborne
8.
Niagara Falls
Buffalo
Z
L. ERIE
Erie
Cleveland
Lakehead
Duluth
L. SUPERIOR
Superior
Sault Ste. Marie
9.
L.HURON
Green Bay
L. MICHIGAN
Milwaukee
Port Huron
Sarnia
Windsor
Z
Detroit
CANADA
U.S.A.
Chicago
Toledo

Based on map supplied by St. Lawrence Seaway Authority.


SAINT-PIERRE
8.5m
8.5
Etang Thëlot
Les Sept Elangs
2.1
Factory
7.3
6.1
Commercial Mole
(209°)
Sect blanc
1.8
Nord-Est
Fishing Quay
8.3m
1.5
Anse á Rodrigue
6m
7m
7m
7m
6m
Fish Factory
Mole Frigorifique
5.5m
6m
8.2
Digue du Sud-Est
3.3
2.7
1.2
7.9
7.6
7.6
Harbour Office
1.5
3.3
2.7
Custom House Quay
3.9
Alysse Quay
Anse Bertrand
1.5
3.3
BARACHOIS
2.7
0.3

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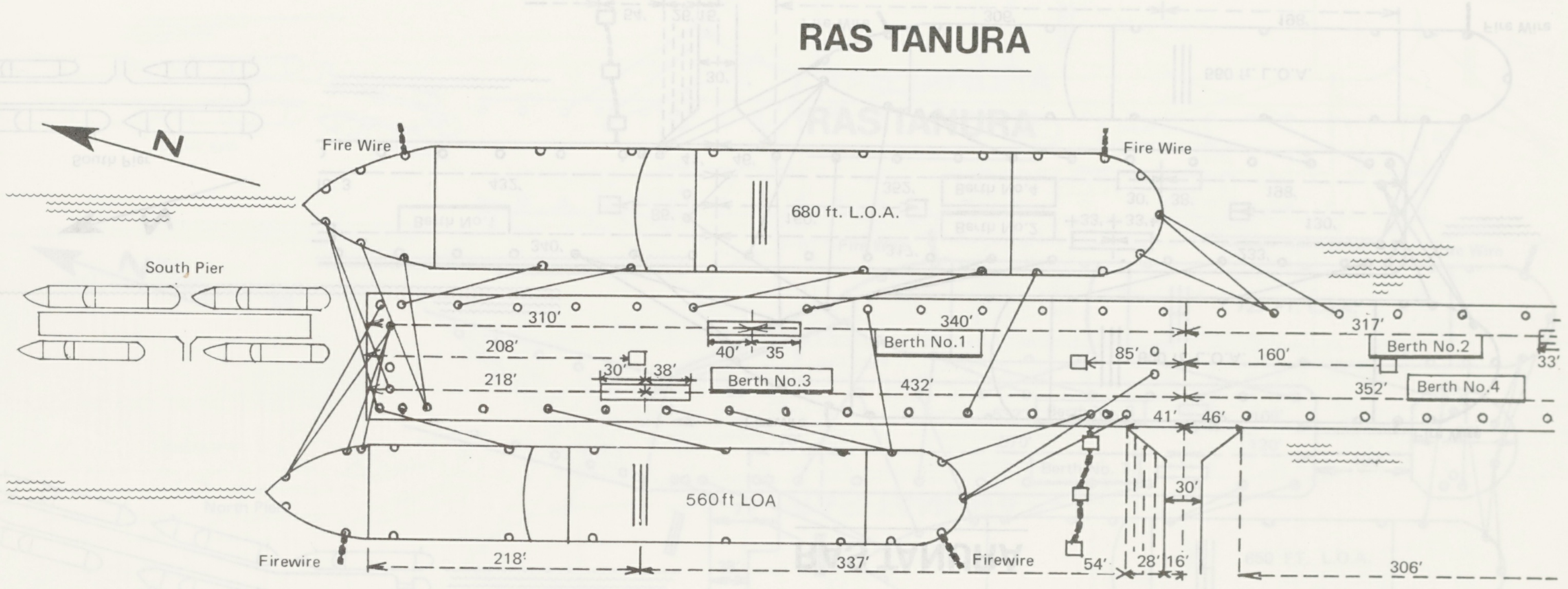
Mooring-Diagram Tank-Vessels at South Pier Ras Tanura, Heading North.

Approx. Min. Depths at Berths at I.S.L.W.	Approximate Direction of Pier	Maneuvering Drafts
Berth No.1 .... 33 feet Berth No.3 .... 33 feet	346 Degrees True	Pilots require sufficient clean ballast for safe maneuvering. The propellers should be covered. The trim of the vessel should not exceed ten feet by the stern.


RAS TANURA
N
Fire Wire
Fire Wire
South Pier
680 ft. L.O.A.
310′
340′
317′
208′
Berth No.1
Berth No.2
33′
40′
35
85′
160′
30′
38′
218′
Berth No.3
432′
352′
Berth No.4
41′
46′
560ft LOA
30′
Firewire
Firewire
218′
337′
54′
28′
16′
306′

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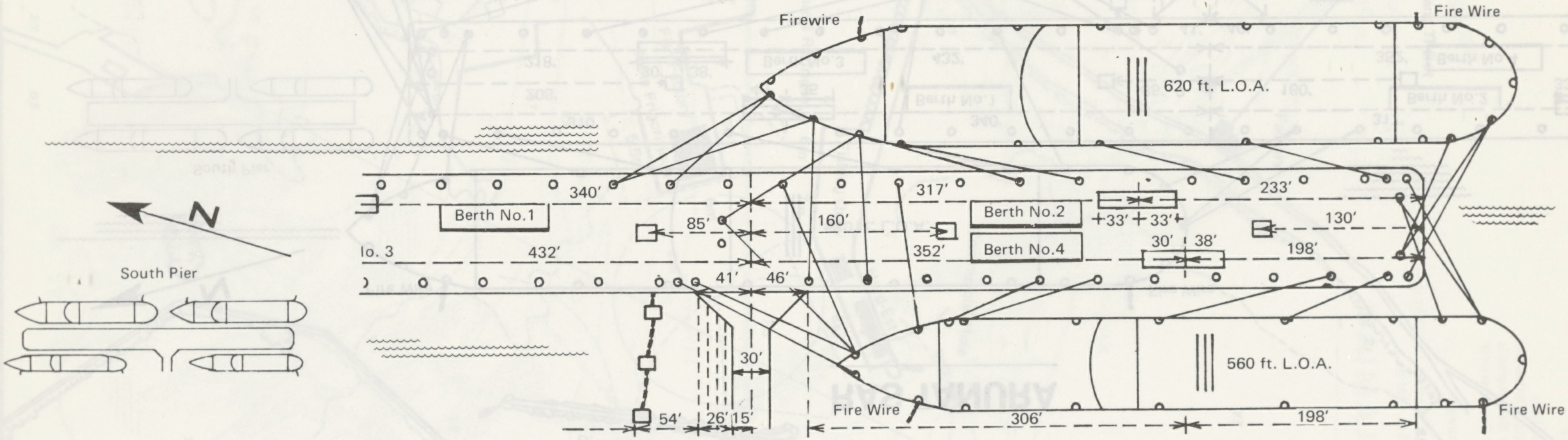
Mooring-Diagram Tank-Vessels at South Pier Ras Tanura, Heading North.

Approx. Minimum Depths at Berths at I.S.L.W.	Approximate Direction of Pier	Maneuvering Drafts
Berth No.2 .... 33 feet Berth No.4 .... 32 feet	346 Degrees True	Pilots require sufficient clean ballast for safe maneuvering. The propellers should be covered. The trim of the vessel should not exceed ten feet by the stern.

RAS TANURA


Firewire
Fire Wire
620 ft. L.O.A.
340′
317′
233′
N
Berth No.1
Berth No.2
85′
160′
33′
33′
130′
South Pier
lo. 3
432′
352′
Berth No.4
30′
38′
198′
41′
46′
30′
560 ft. L.O.A.
Fire Wire
Fire Wire
54′
26′
15′
306′
198′

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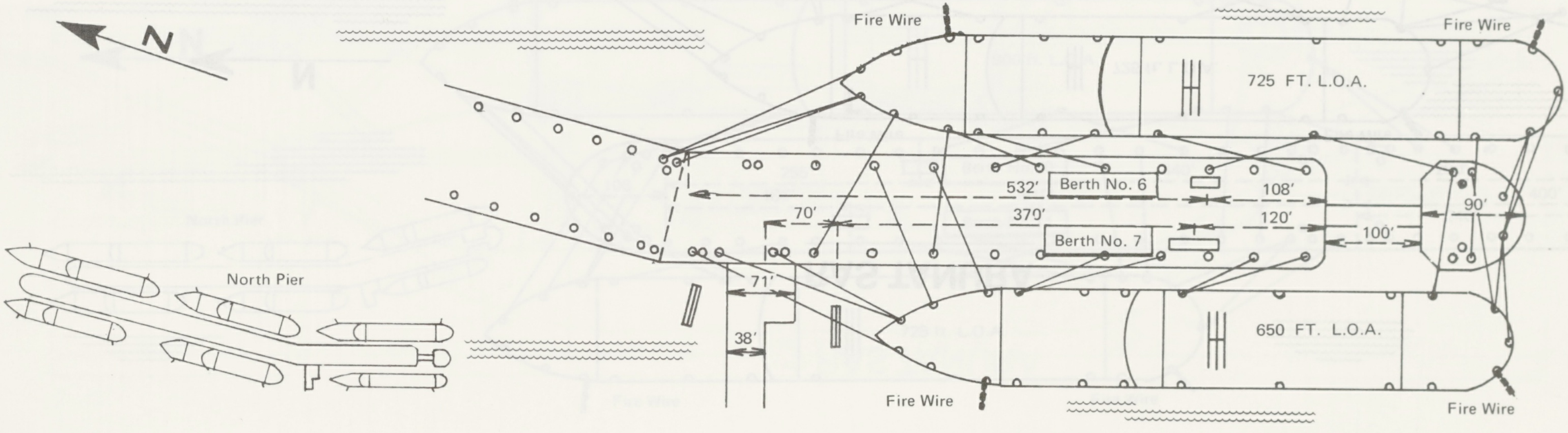
Mooring-Diagram Tank-Vessels at North Pier Ras Tanura, Heading North

Approx. Minimum Depths at Berths at I.S.L.W.	Approximate Direction of Pier	Maneuvering Drafts
Berth No. 6 48 feet Berth No. 7 42 feet	Berths Nos. 6 & 7 —346° True	Pilots require sufficient clean ballast for safe maneuvering. The propellers should be covered. The trim of the vessel should not exceed ten feet by the stern.

RAS TANURA


Fire Wire
Fire Wire
N
725 FT. L.O.A.
532′
Berth No. 6
108′
90′
70′
370′
120′
100′
Berth No. 7
North Pier
71′
38′
650 FT. L.O.A.
Fire Wire
Fire Wire

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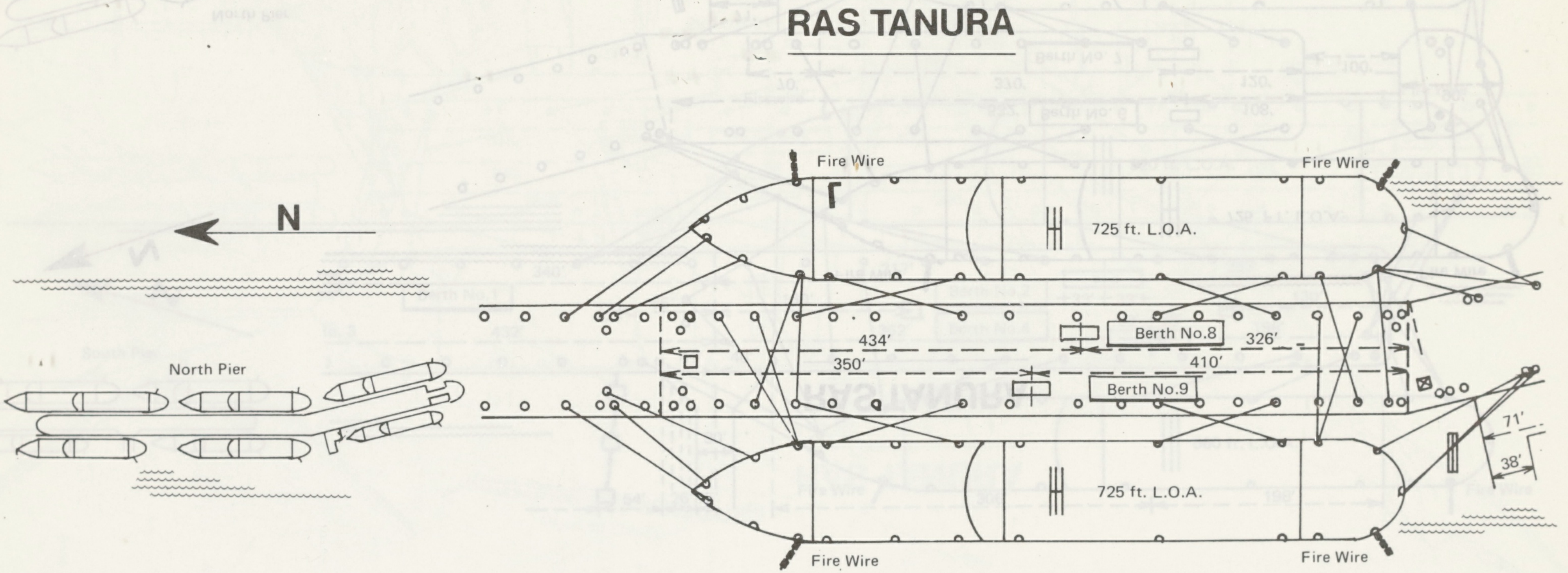
Mooring-Diagram Tank-Vessels at North Pier Ras Tanura, Heading North

Approx. Minimum Depths at Berths at I.S.L.W.		Approximate Direction of Pier	Maneuvering Drafts
Berth No. 8	50 feet	Berths Nos. 8, 9 – 360° True	Pilots require sufficient clean ballast for safe maneuvering. The propellers should be covered. The trim of the vessel should not exceed ten feet by the stern.
Berth No. 9	48 feet		


RAS TANURA
N
North Pier
Fire Wire
Fire Wire
725 ft. L.O.A.
Berth No.8
434′
326′
350′
410′
Berth No.9
71′
38′
725 ft. L.O.A.
Fire Wire
Fire Wire

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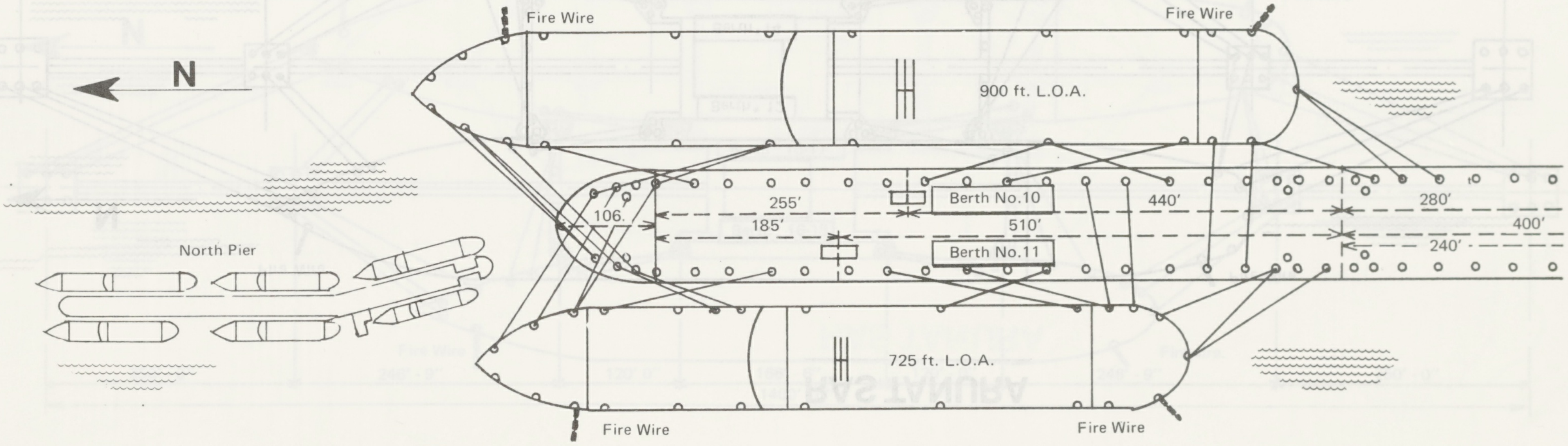
Mooring-Diagram Tank-Vessels at North Pier Ras Tanura, Heading North

Approx. Minimum Depths at Berths at I.S.L.W.	Approximate Direction of Pier	Maneuvering Drafts
Berth No. 10 50 feet Berth No. 11 50 feet	Berths Nos. 10 & 11-360° True	Pilots require sufficient clean ballast for safe maneuvering. The propellers should be covered. The trim of the vessel should not exceed ten feet by the stern.

RAS TANURA


Fire Wire
Fire Wire
N
900 ft. L.O.A.
106.
255'
185'
Berth No.10
510'
440'
280'
400'
240'
Berth No.11
North Pier
725 ft. L.O.A.
Fire Wire
Fire Wire

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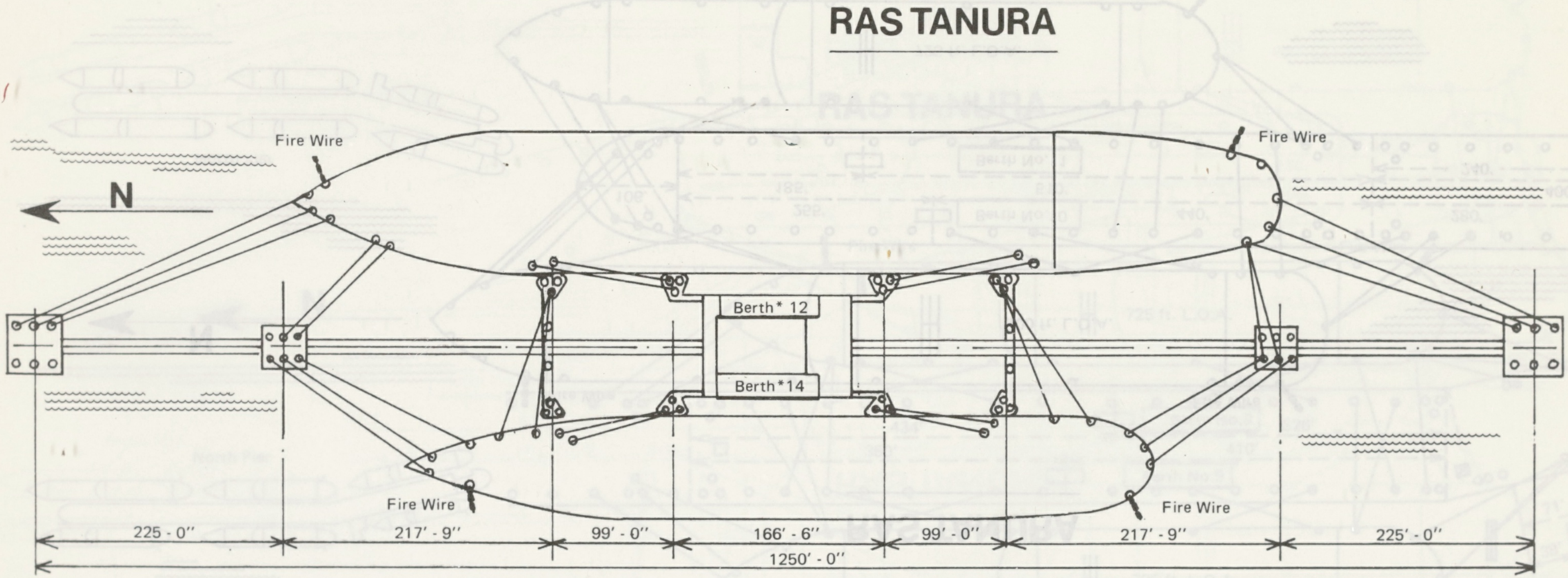
Mooring-Diagram Tank-Vessels at Sea Island No. 1 Ras Tanura, Heading North.

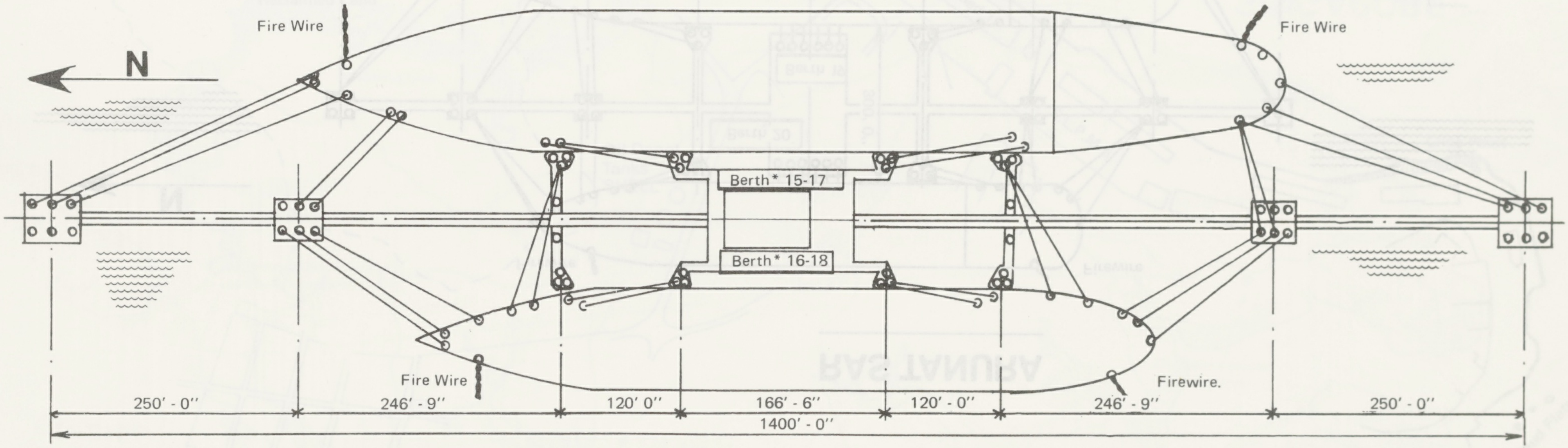
Approx. Minimum Depths at Berths at I.S.L.W.	Approx. Direction of Sea Island	Minimum Maneuvering Drafts
Berth No.12 .... 85 feet Berth No.14 .... 85 feet	356 Degrees True	*Pilots require sufficient clean ballast for safe maneuvering. The propellers should be covered. The trim of the vessel should not exceed fifteen feet by the stern.


RAS TANURA
N
Fire Wire
Fire Wire
Berth* 12
Berth*14
Fire Wire
Fire Wire
225 - 0"
217' - 9"
99' - 0"
166' - 6"
99' - 0"
217' - 9"
225' - 0"
1250' - 0"

Mooring-Diagram Tank-Vessels at Sea Islands No. 2 and 3 Ras Tanura, Heading North

Approx. Min. Depths at Berths at I.S.L.W.	Approx. Direction of Sea Island	Minimum Maneuvering Drafts
Berth No.15 .... 85 feet Berth No.17 .... 85 feet Berth No.16 .... 85 feet Berth No.18 .... 85 feet	356 Degrees True	*Pilots require sufficient clean ballast for safe maneuvering. The propellers should be covered. The trim of the vessel should not exceed fifteen feet by the stern.

RAS TANURA


Fire Wire
Fire Wire
N
Berth* 15-17
Berth* 16-18
Fire Wire
Firewire.
250' - 0''
246' - 9''
120' 0''
166' - 6''
120' - 0''
246' - 9''
250' - 0''
1400' - 0''

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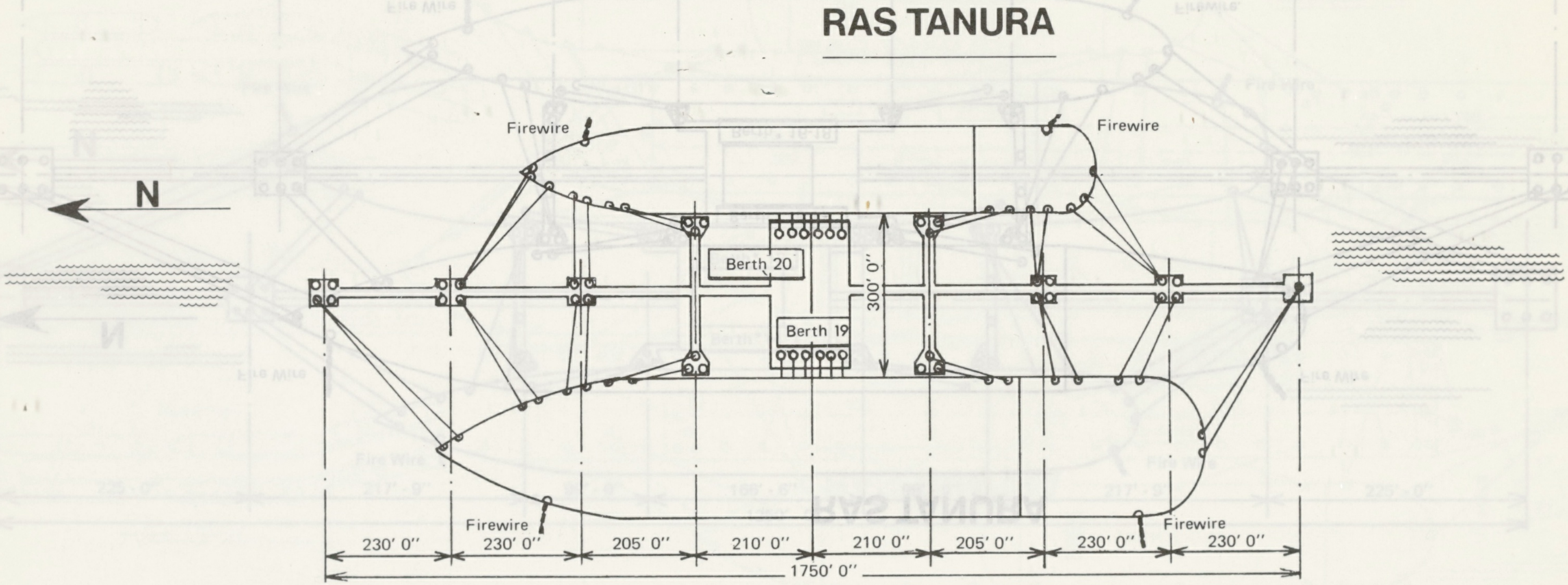
Mooring-Diagram Tank-Vessels at Sea Island No. 4 Ras Tanura Heading North

Approx. Min. Depths at Berths at I.S.L.W.	Approx. Direction of Sea Island	Minimum Maneuvering Drafts
Berth No.19 .... 85 feet Berth No.20 .... 85 feet	356 Degrees True	*Pilots require sufficient clean ballast for safe maneuvering. The propellers should not be covered. The trim of the vessel should not exceed fifteen (15) feet by the stern.


RAS TANURA
N
Firewire
Firewire
Berth 20
Berth 19
300' 0"
Firewire
Firewire
230' 0"
230' 0"
205' 0"
210' 0"
210' 0"
205' 0"
230' 0"
230' 0"
1750' 0"

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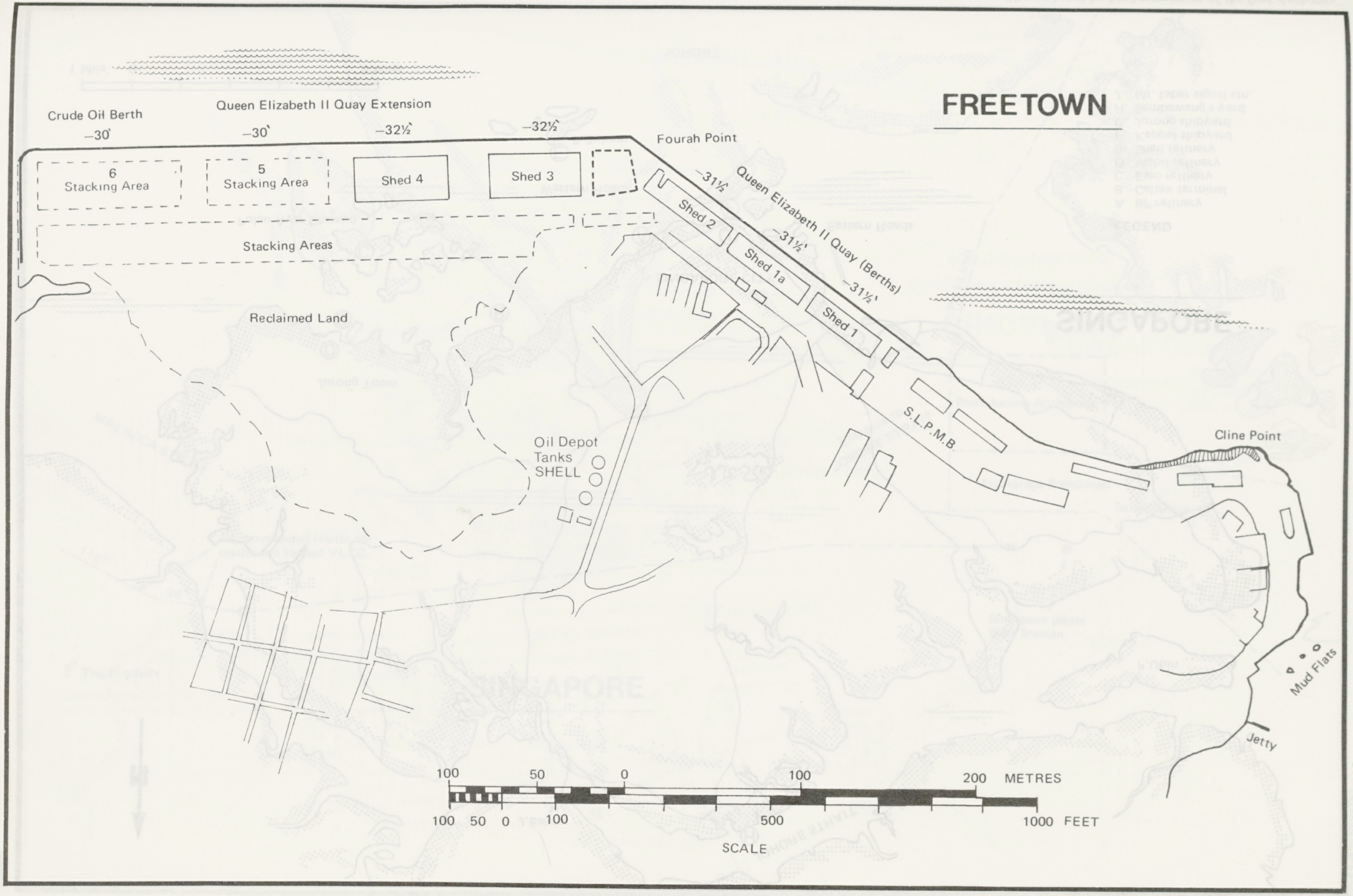
FREETOWN
Crude Oil Berth
–30'
Queen Elizabeth II Quay Extension
–30'
–32½'
–32½'
Fourah Point
6
Stacking Area
5
Stacking Area
Shed 4
Shed 3
Stacking Areas
Reclaimed Land
–31½'
Queen Elizabeth II Quay (Berths)
Shed 2
–31½'
Shed 1a
–31½'
Shed 1
S.L.P.M.B.
Oil Depot
Tanks
SHELL
Cline Point
Mud Flats
Jetty
100
50
0
100
200
METRES
100
50
0
100
500
1000
FEET
SCALE

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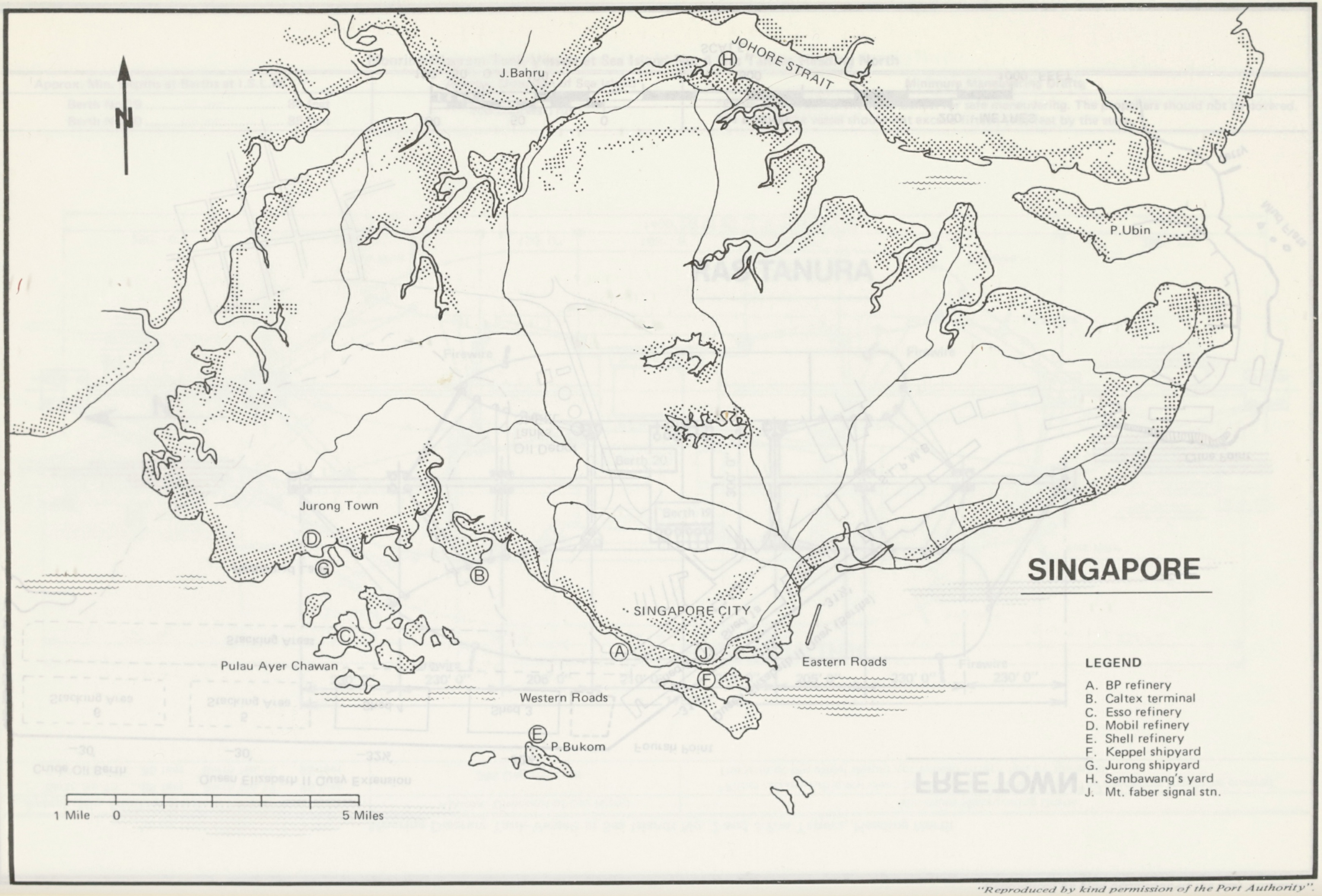
SINGAPORE
N
J.Bahru
JOHORE STRAIT
H
P.Ubin
Jurong Town
D
G
B
C
Pulau Ayer Chawan
SINGAPORE CITY
A
J
F
Eastern Roads
Western Roads
E
P.Bukom
1 Mile
0
5 Miles
LEGEND
A. BP refinery
B. Caltex terminal
C. Esso refinery
D. Mobil refinery
E. Shell refinery
F. Keppel shipyard
G. Jurong shipyard
H. Sembawang's yard
J. Mt. faber signal stn.

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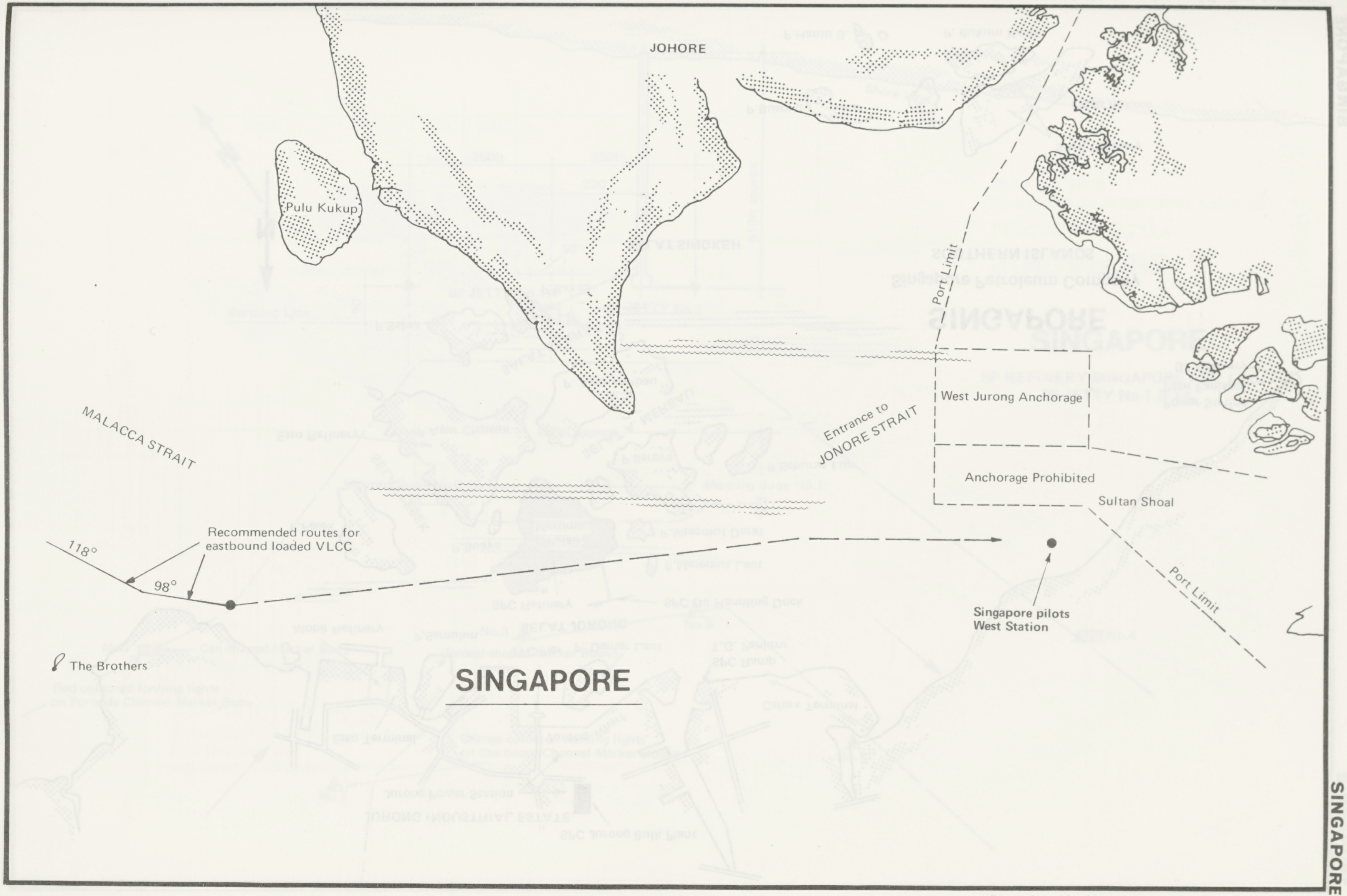
JOHORE
Pulu Kukup
MALACCA STRAIT
Port Limit
West Jurong Anchorage
Entrance to
JONORE STRAIT
Anchorage Prohibited
Sultan Shoal
Recommended routes for
eastbound loaded VLCC
118°
98°
Port Limit
Singapore pilots
West Station
The Brothers
SINGAPORE

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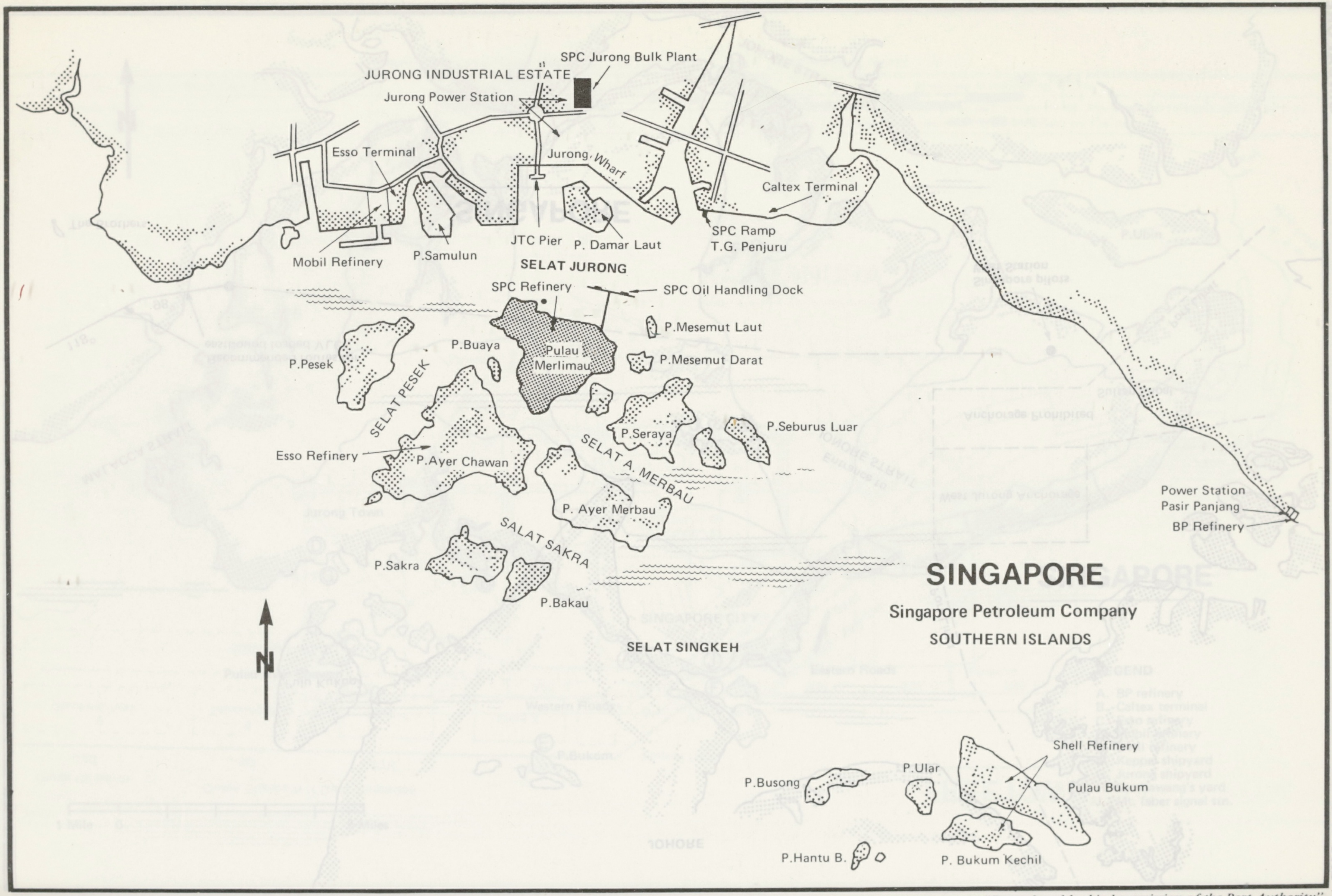
JURONG INDUSTRIAL ESTATE
SPC Jurong Bulk Plant
Jurong Power Station
Esso Terminal
Jurong Wharf
Caltex Terminal
Mobil Refinery
P.Samulun
JTC Pier
P. Damar Laut
SPC Ramp
T.G. Penjuru
SELAT JURONG
SPC Refinery
SPC Oil Handling Dock
P.Mesemut Laut
P.Buaya
P.Pesek
Pulau Merlimau
P.Mesemut Darat
SELAT PESEK
P.Seraya
P.Seburus Luar
Esso Refinery
P.Ayer Chawan
SELAT A. MERBAU
P. Ayer Merbau
SALAT SAKRA
P.Sakra
P.Bakau
Power Station
Pasir Panjang
BP Refinery
N
SINGAPORE
Singapore Petroleum Company
SOUTHERN ISLANDS
SELAT SINGKEH
Shell Refinery
P.Ular
P.Busong
Pulau Bukum
P.Hantu B.
P. Bukum Kechil

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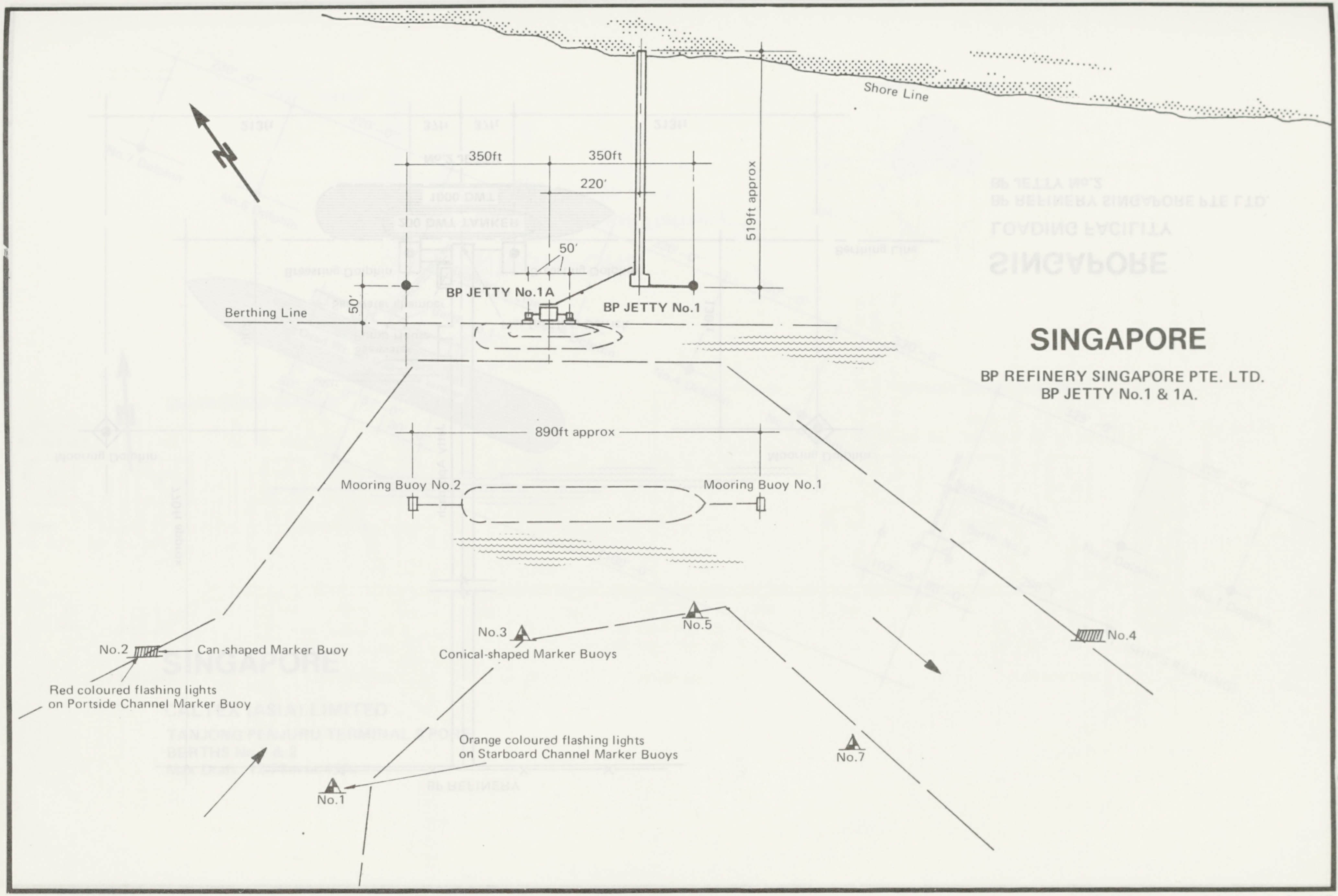
Shore Line
350ft
350ft
220′
519ft approx
50′
50′
BP JETTY No.1A
BP JETTY No.1
Berthing Line
890ft approx
Mooring Buoy No.2
Mooring Buoy No.1
No.2
Can-shaped Marker Buoy
Red coloured flashing lights
on Portside Channel Marker Buoy
No.3
No.5
Conical-shaped Marker Buoys
No.4
Orange coloured flashing lights
on Starboard Channel Marker Buoys
No.7
No.1

SINGAPORE

BP REFINERY SINGAPORE PTE. LTD.
BP JETTY No.1 & 1A.

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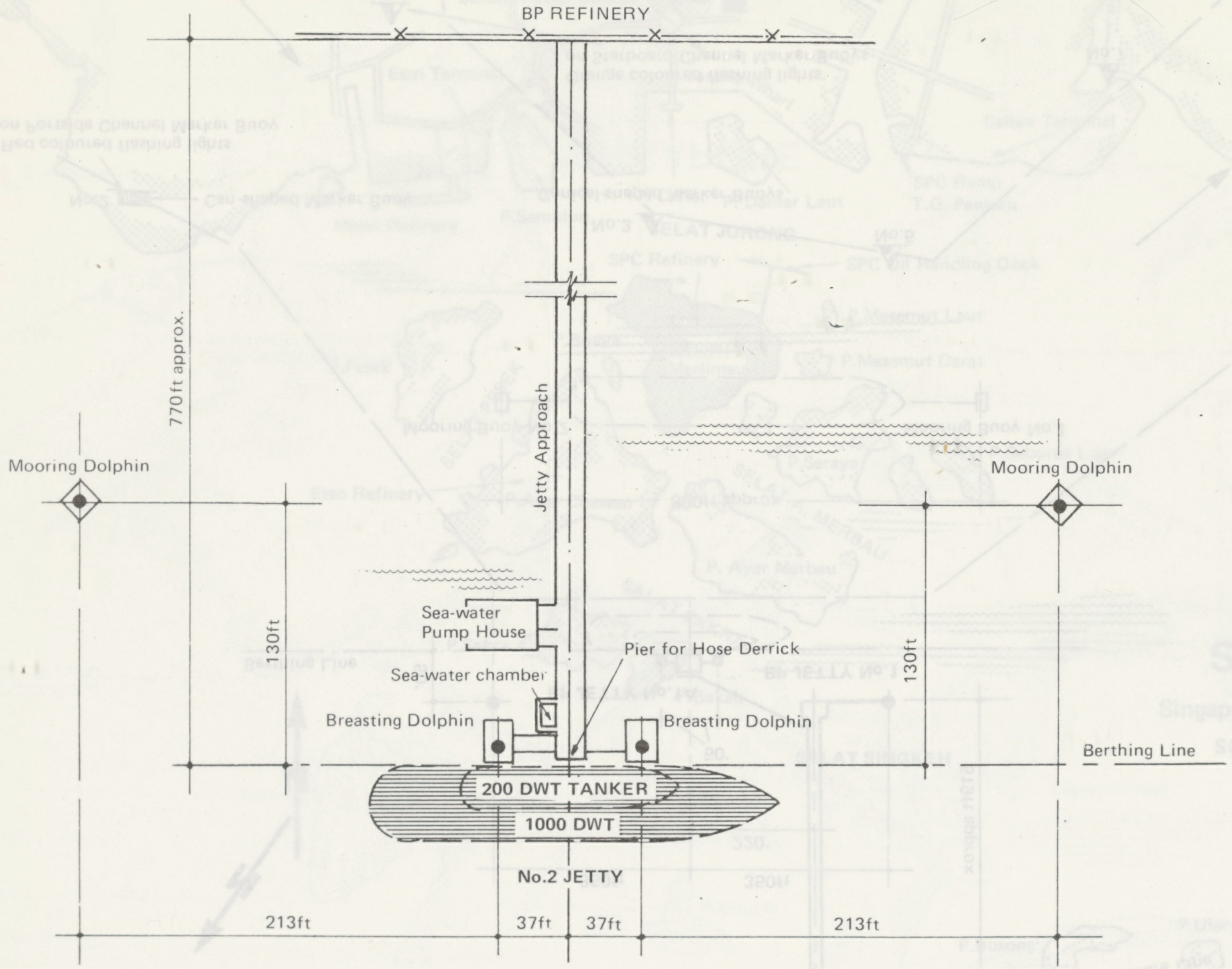
BP REFINERY
770ft approx.
Jetty Approach
Mooring Dolphin
Mooring Dolphin
Sea-water Pump House
Pier for Hose Derrick
Sea-water chamber
130ft
130ft
Breasting Dolphin
Breasting Dolphin
Berthing Line
200 DWT TANKER
1000 DWT
No.2 JETTY
213ft
37ft
37ft
213ft

SINGAPORE

LOADING FACILITY

BP REFINERY SINGAPORE PTE LTD.
BP JETTY No.2

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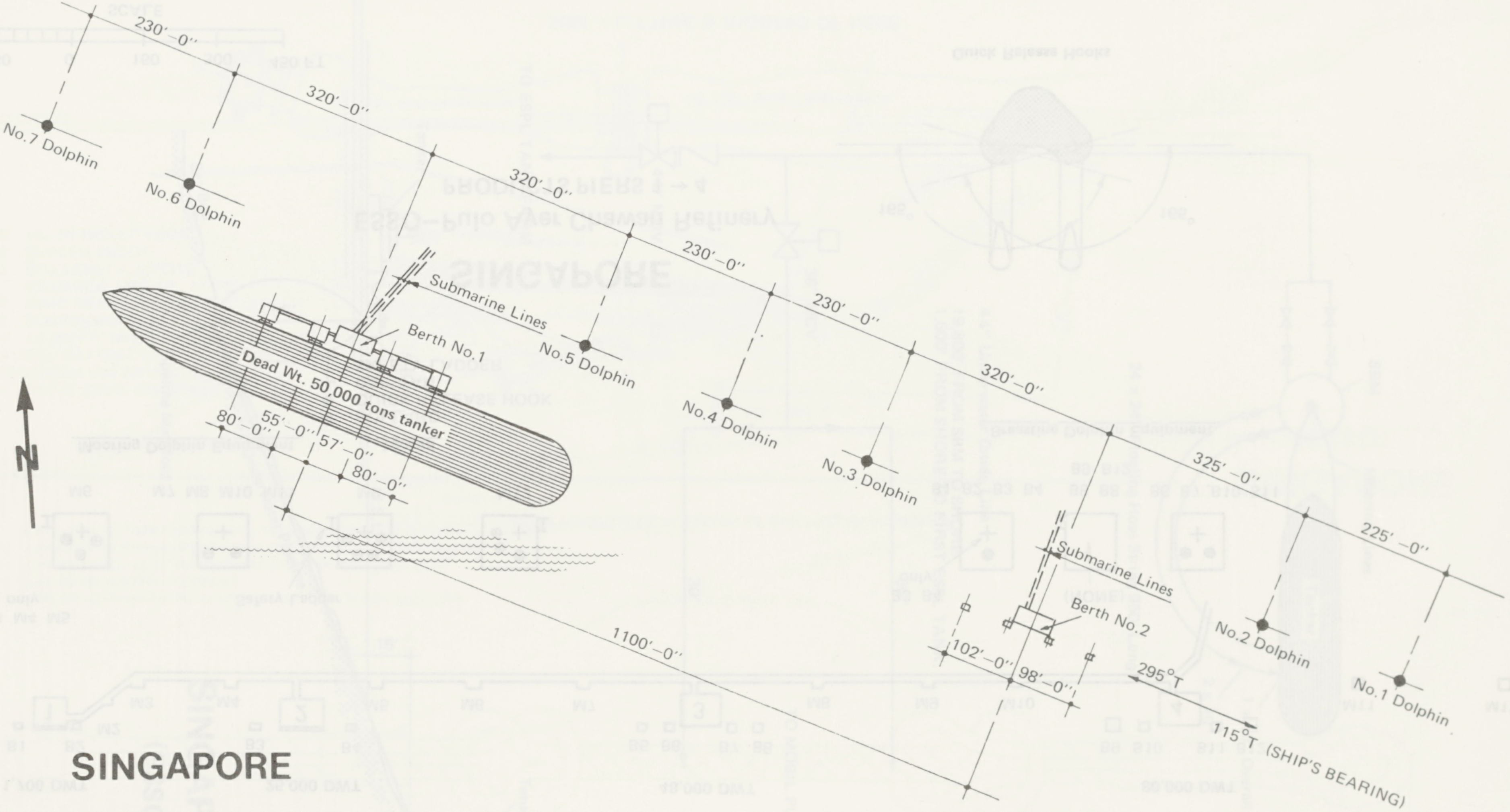
230′–0″
320′–0″
320′–0″
230′–0″
230′–0″
320′–0″
325′–0″
225′–0″
No.7 Dolphin
No.6 Dolphin
No.5 Dolphin
No.4 Dolphin
No.3 Dolphin
No.2 Dolphin
No.1 Dolphin
Submarine Lines
Berth No.1
Dead Wt. 50,000 tons tanker
80′–0″
55′–0″
57′–0″
80′–0″
N
1100′–0″
Submarine Lines
Berth No.2
102′–0″
98′–0″
295°T
115°T (SHIP'S BEARING)

SINGAPORE

CALTEX (ASIA) LIMITED
TANJONG PENJURU TERMINAL S'PORE
BERTHS No.1 & 2
Max Draft: 12.77m or 42ft.

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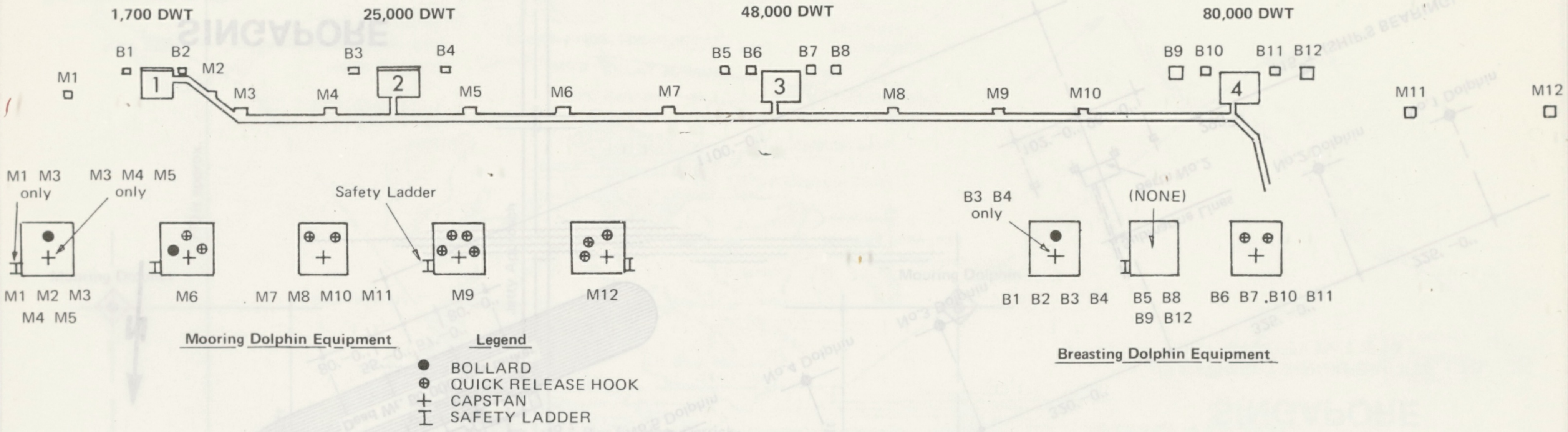
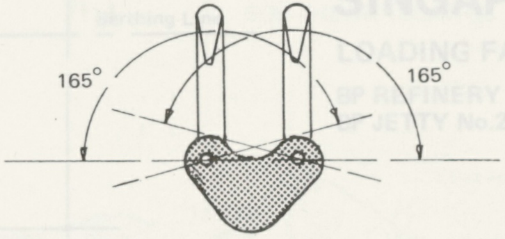

1,700 DWT
25,000 DWT
48,000 DWT
80,000 DWT
M1
B1
B2
M2
1
B3
2
B4
M3
M4
M5
M6
M7
B5
B6
3
B7
B8
M8
M9
M10
B9
B10
4
B11
B12
M11
M12
M1 M3 only
M3 M4 M5 only
M1 M2 M3
M4 M5
M6
M7 M8 M10 M11
Safety Ladder
M9
M12
Mooring Dolphin Equipment
Legend
● BOLLARD
⊕ QUICK RELEASE HOOK
+ CAPSTAN
I SAFETY LADDER
B3 B4 only
(NONE)
B1 B2 B3 B4
B5 B8
B9 B12
B6 B7 .B10 B11
Breasting Dolphin Equipment

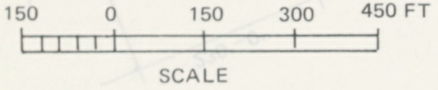
SINGAPORE

ESSO–Pulo Ayer Chawan Refinery

PRODUCTS PIERS 1 → 4



Quick Release Hooks


150
0
150
300
450 FT
SCALE

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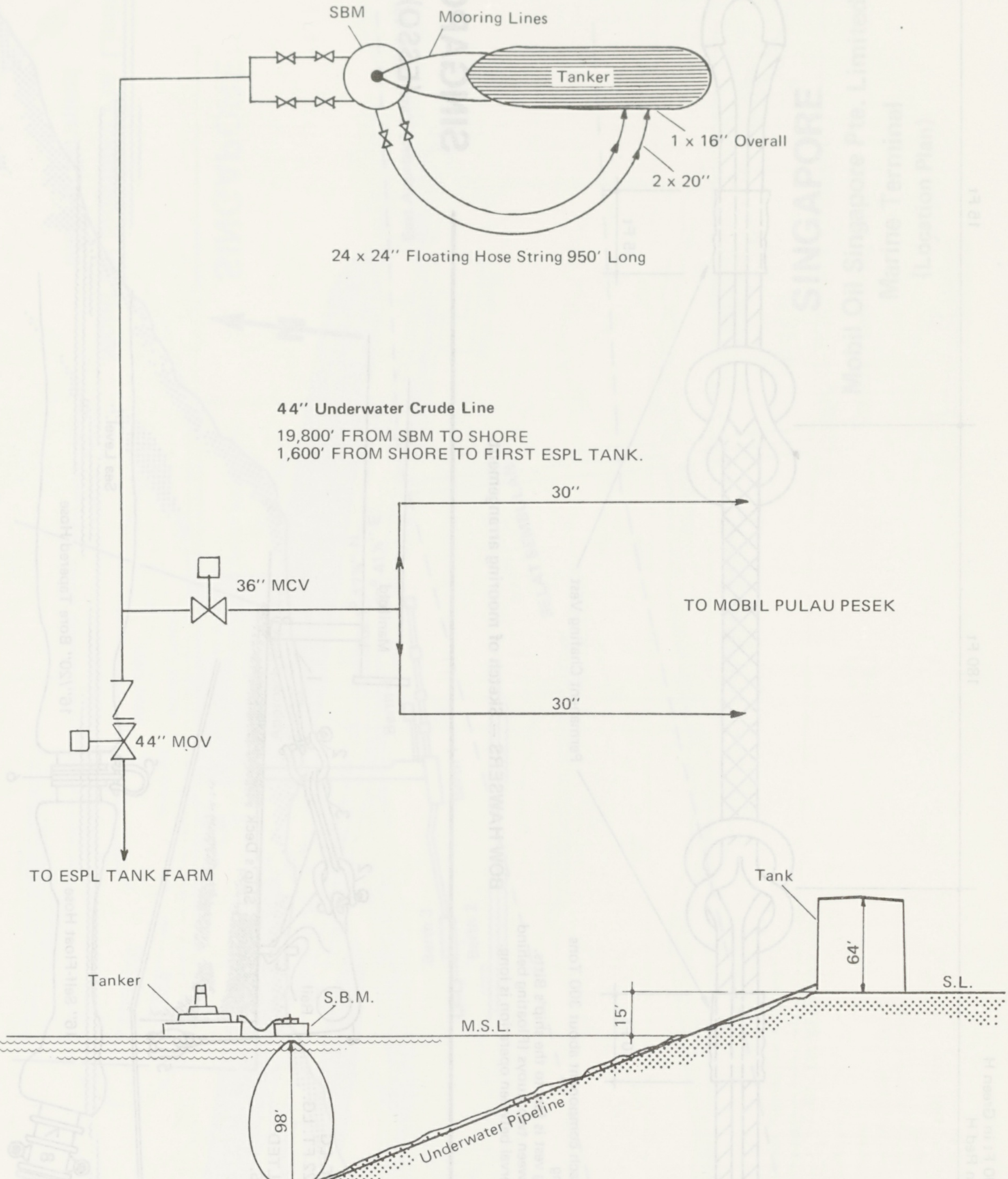
SBM
Mooring Lines
Tanker
1 x 16" Overall
2 x 20"
24 x 24" Floating Hose String 950' Long
44" Underwater Crude Line
19,800' FROM SBM TO SHORE
1,600' FROM SHORE TO FIRST ESPL TANK.
30"
36" MCV
TO MOBIL PULAU PESEK
30"
44" MOV
TO ESPL TANK FARM
Tank
64'
S.L.
15'
Tanker
S.B.M.
M.S.L.
98'
Underwater Pipeline
Sea Bed
Pipeline Manifold

SINGAPORE
(ESSO)

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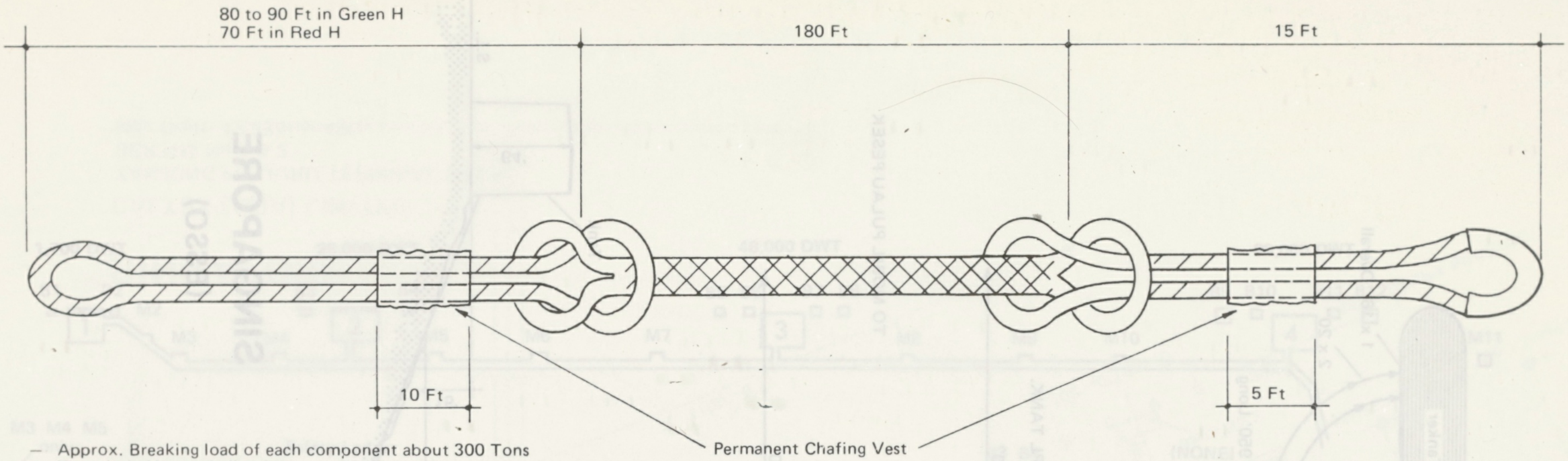
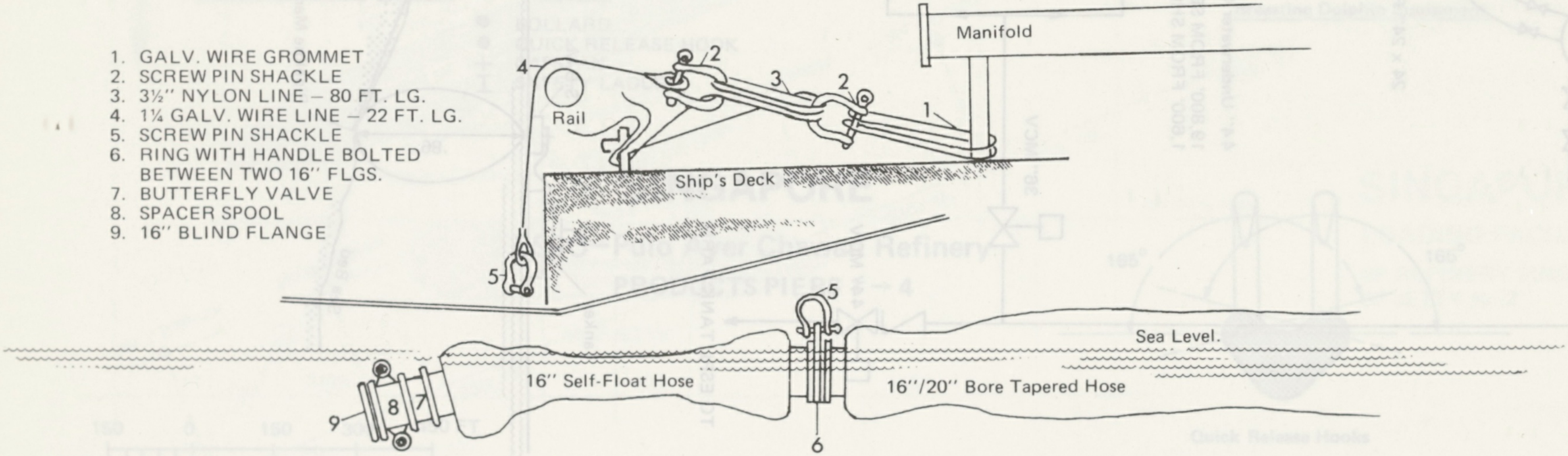

80 to 90 Ft in Green H
70 Ft in Red H
180 Ft
15 Ft
10 Ft
5 Ft
Permanent Chafing Vest

- Approx. Breaking load of each component about 300 Tons
- The whole Hawser is floating
- The part with 10 ft. chafing vest is fast to the ship's Bitts.
- The Hawsers are stored between two Buoys (Floating behind PAC Dock 4) when the interval between operation is long.

BOW HAWSERS – Sketch of mooring arrangement.

SINGAPORE
(ESSO)


Manifold
Rail
Ship's Deck
Sea Level.
16" Self-Float Hose
16"/20" Bore Tapered Hose
1
2
2
3
4
5
5
6
7
8
9

1. GALV. WIRE GROMMET
2. SCREW PIN SHACKLE
3. 3½" NYLON LINE – 80 FT. LG.
4. 1¼ GALV. WIRE LINE – 22 FT. LG.
5. SCREW PIN SHACKLE
6. RING WITH HANDLE BOLTED BETWEEN TWO 16" FLGS.
7. BUTTERFLY VALVE
8. SPACER SPOOL
9. 16" BLIND FLANGE

SBM – LIFTING & RIGGING OF HOSE

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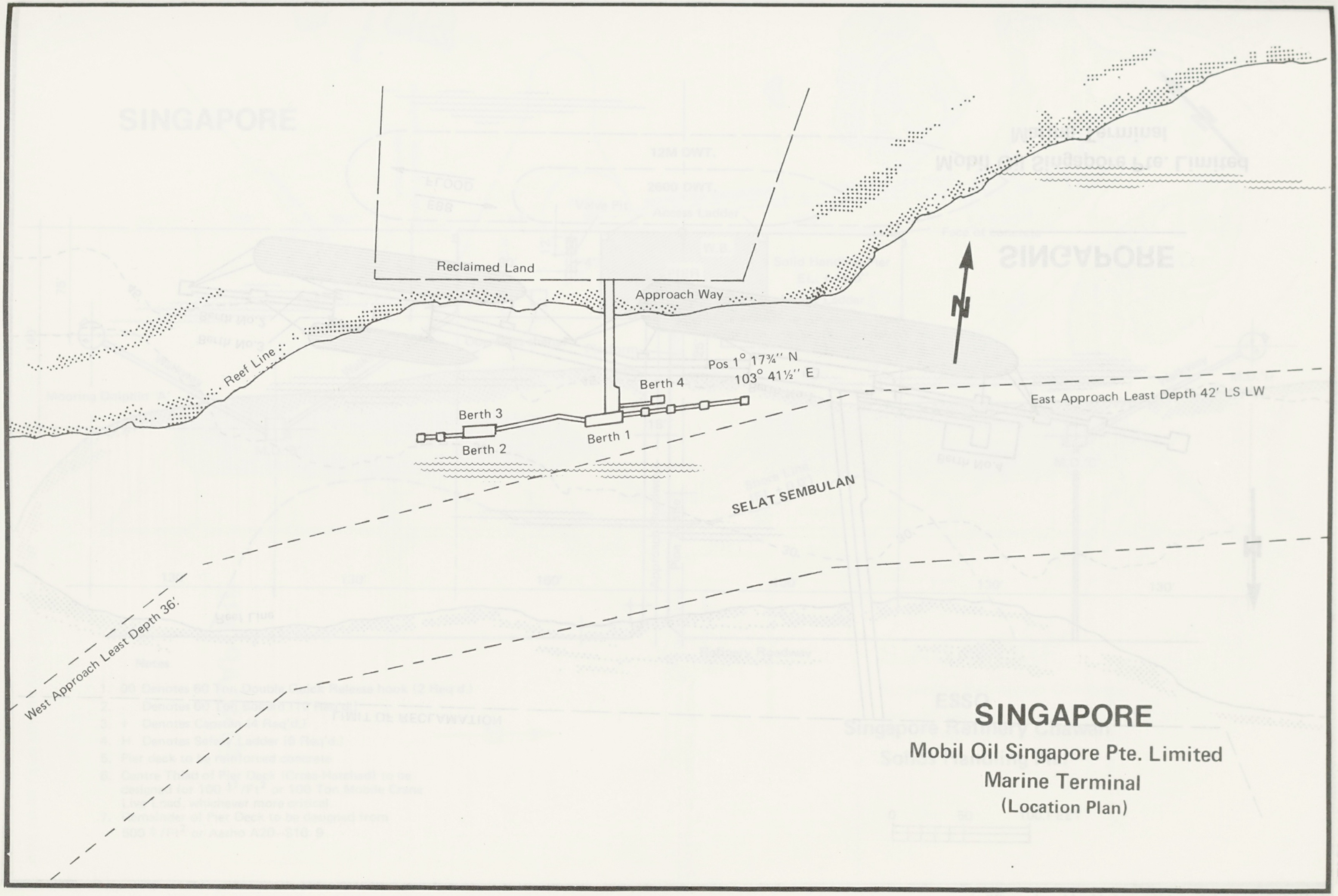
Reclaimed Land
Approach Way
Reef Line
N
Pos 1° 17¾'' N
103° 41½'' E
Berth 4
Berth 3
Berth 1
Berth 2
East Approach Least Depth 42' LS LW
SELAT SEMBULAN
West Approach Least Depth 36'

SINGAPORE

Mobil Oil Singapore Pte. Limited
Marine Terminal
(Location Plan)

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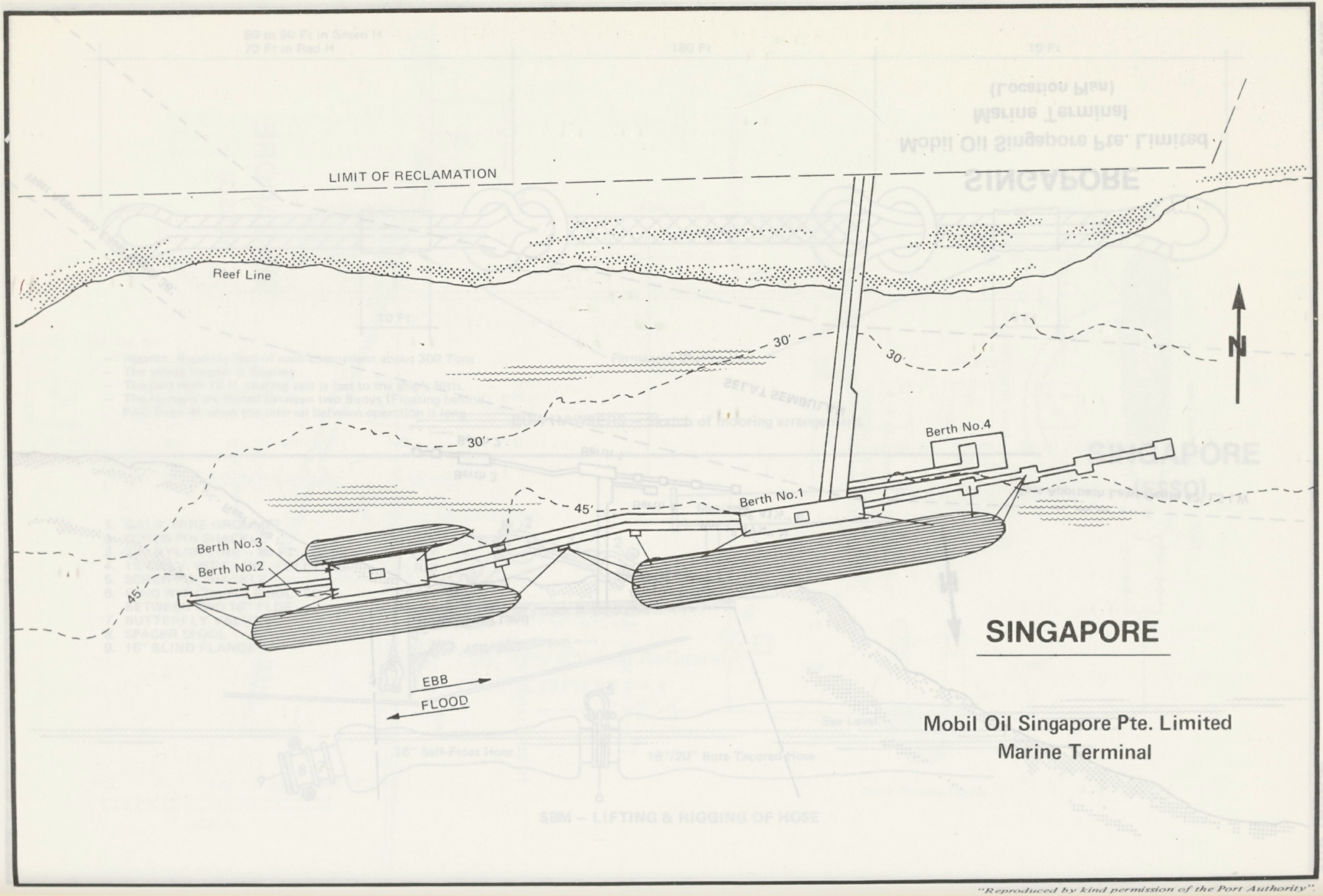
LIMIT OF RECLAMATION
Reef Line
30′
30′
30′
45′
45′
Berth No.1
Berth No.2
Berth No.3
Berth No.4
N
EBB
FLOOD

SINGAPORE

Mobil Oil Singapore Pte. Limited
Marine Terminal

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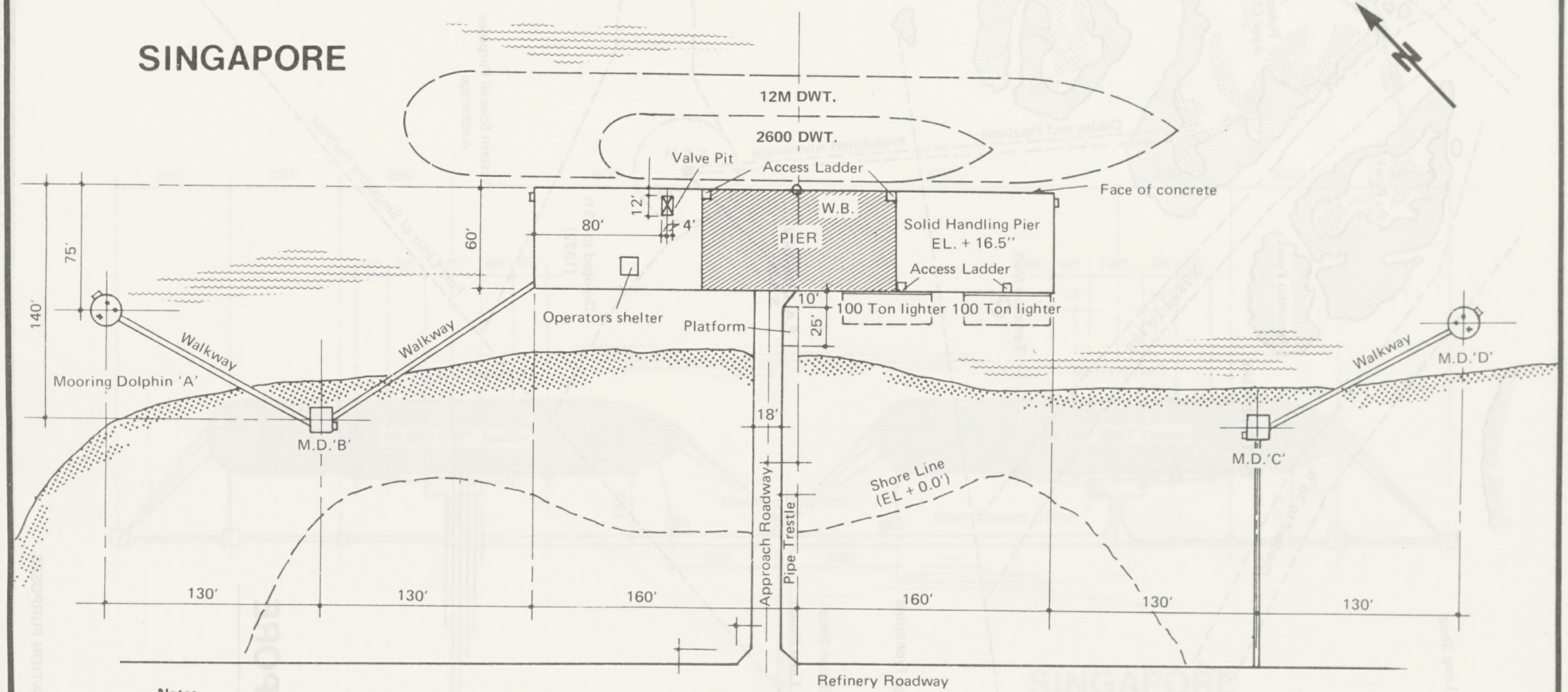
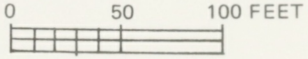
SINGAPORE


12M DWT.
2600 DWT.
Valve Pit
Access Ladder
Face of concrete
12'
4'
80'
60'
75'
140'
W.B.
PIER
Solid Handling Pier
EL. + 16.5"
Access Ladder
10'
100 Ton lighter
100 Ton lighter
25'
Operators shelter
Platform
Walkway
Walkway
Walkway
Mooring Dolphin 'A'
M.D.'B'
M.D.'C'
M.D.'D'
18'
Approach Roadway
Pipe Trestle
Shore Line
(EL + 0.0')
130'
130'
160'
160'
130'
130'
Refinery Roadway

Notes

1. 00 Denotes 60 Ton Double Quick Release hook (2 Req'd.)
2. · Denotes 60 Ton Bollard (10 Req'd.)
3. + Denotes Capstan (4 Req'd.)
4. H Denotes Safety Ladder (6 Req'd.)
5. Pier deck to be reinforced concrete
6. Centre Thiad of Pier Deck (Cross-Hatched) to be designed for 100 ‡^{1}/Ft^2 or 100 Ton Mobile Crane Live Load, whichever more critical.
7. Remainder of Pier Deck to be designed from 500 ‡ /Ft^2 or Aasho A20–S16 9

ESSO
Singapore Refinery Chawan
Solids Handling Pier


0
50
100 FEET

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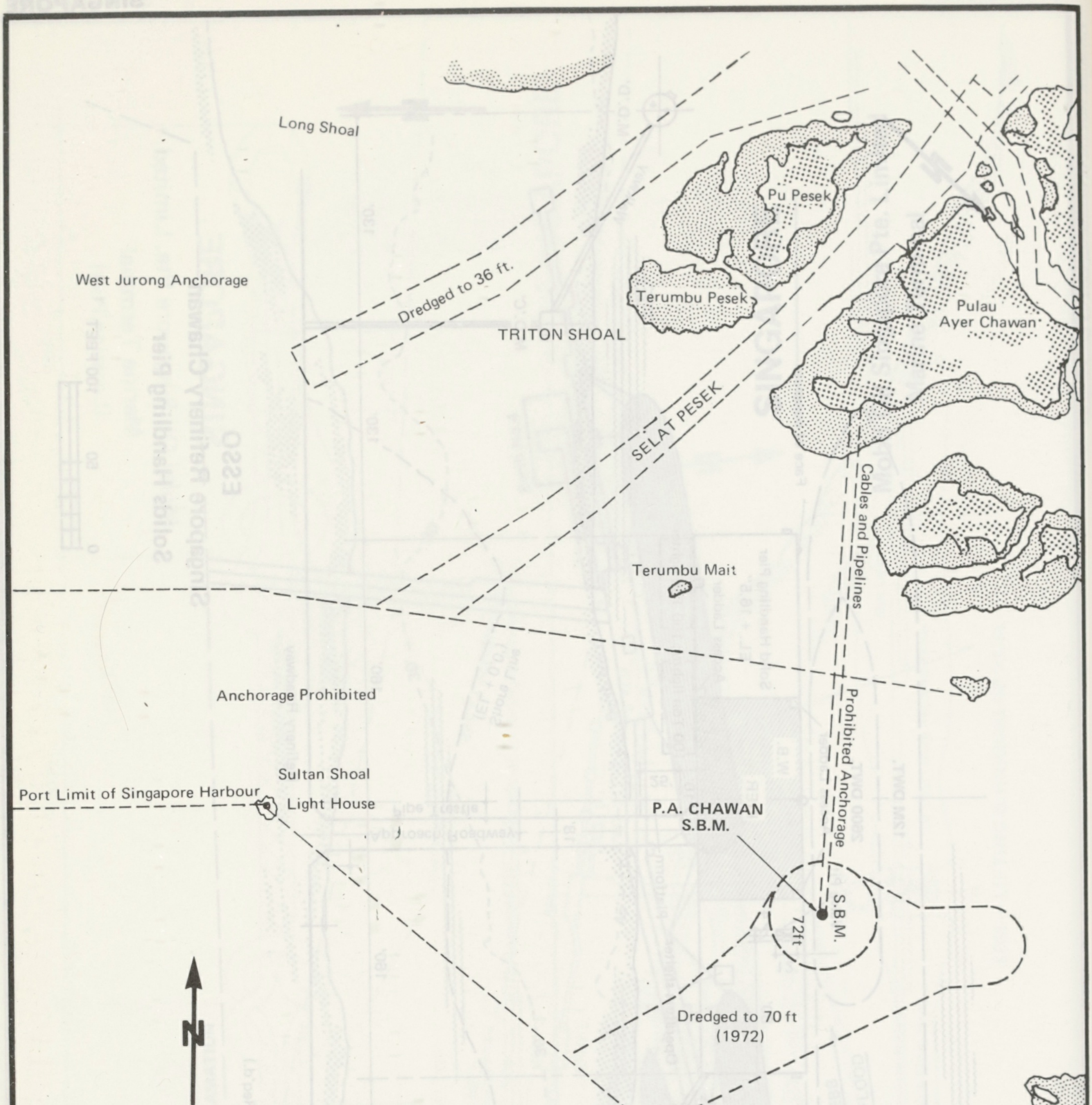
Long Shoal
West Jurong Anchorage
Dredged to 36 ft.
TRITON SHOAL
Pu Pesek
Terumbu Pesek
Pulau Ayer Chawan
SELAT PESEK
Cables and Pipelines
Terumbu Mait
Anchorage Prohibited
Prohibited Anchorage
Sultan Shoal
Light House
Port Limit of Singapore Harbour
P.A. CHAWAN S.B.M.
S.B.M.
72ft
Dredged to 70 ft (1972)
N
Western Special Purposes Anchorage
Selat Salu
Port Limit of Singapore Harbour
SINGAPORE
NOT TO BE USED FOR NAVIGATION PURPOSES.

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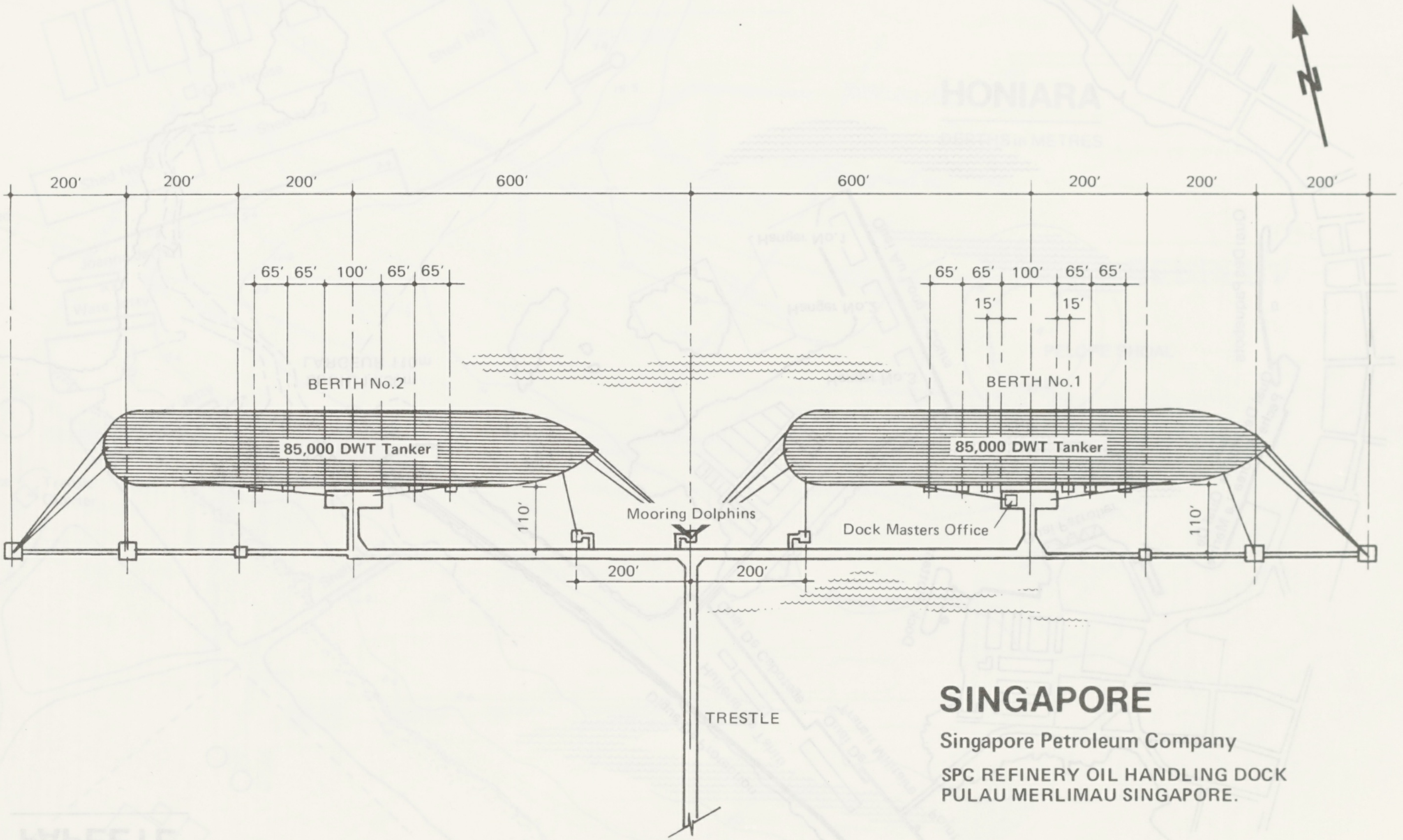
N
200′
200′
200′
600′
600′
200′
200′
200′
65′
65′
100′
65′
65′
65′
65′
100′
65′
65′
15′
15′
BERTH No.2
BERTH No.1
85,000 DWT Tanker
85,000 DWT Tanker
110′
110′
Mooring Dolphins
Dock Masters Office
200′
200′
TRESTLE

SINGAPORE

Singapore Petroleum Company

SPC REFINERY OIL HANDLING DOCK
PULAU MERLIMAU SINGAPORE.

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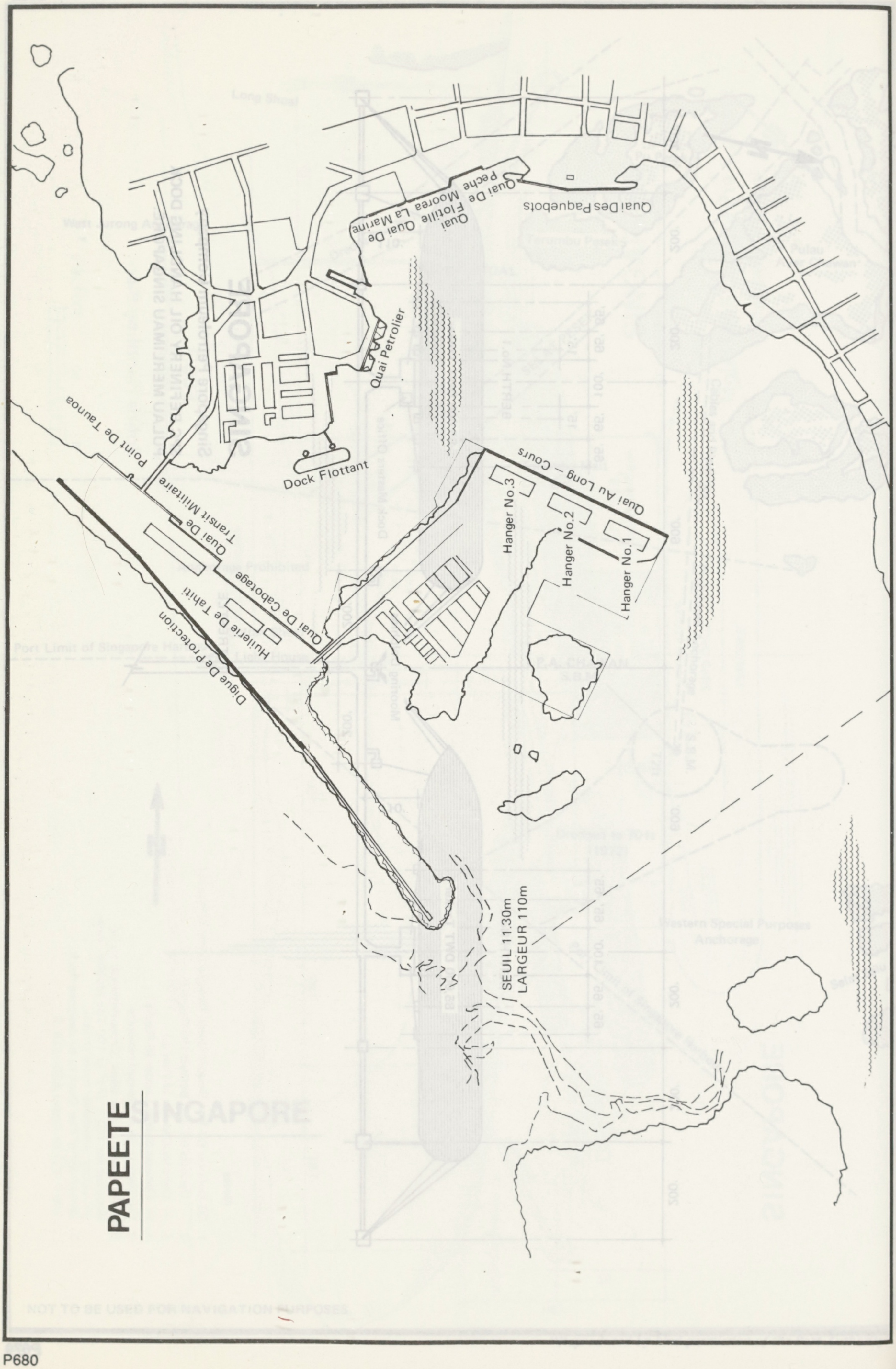
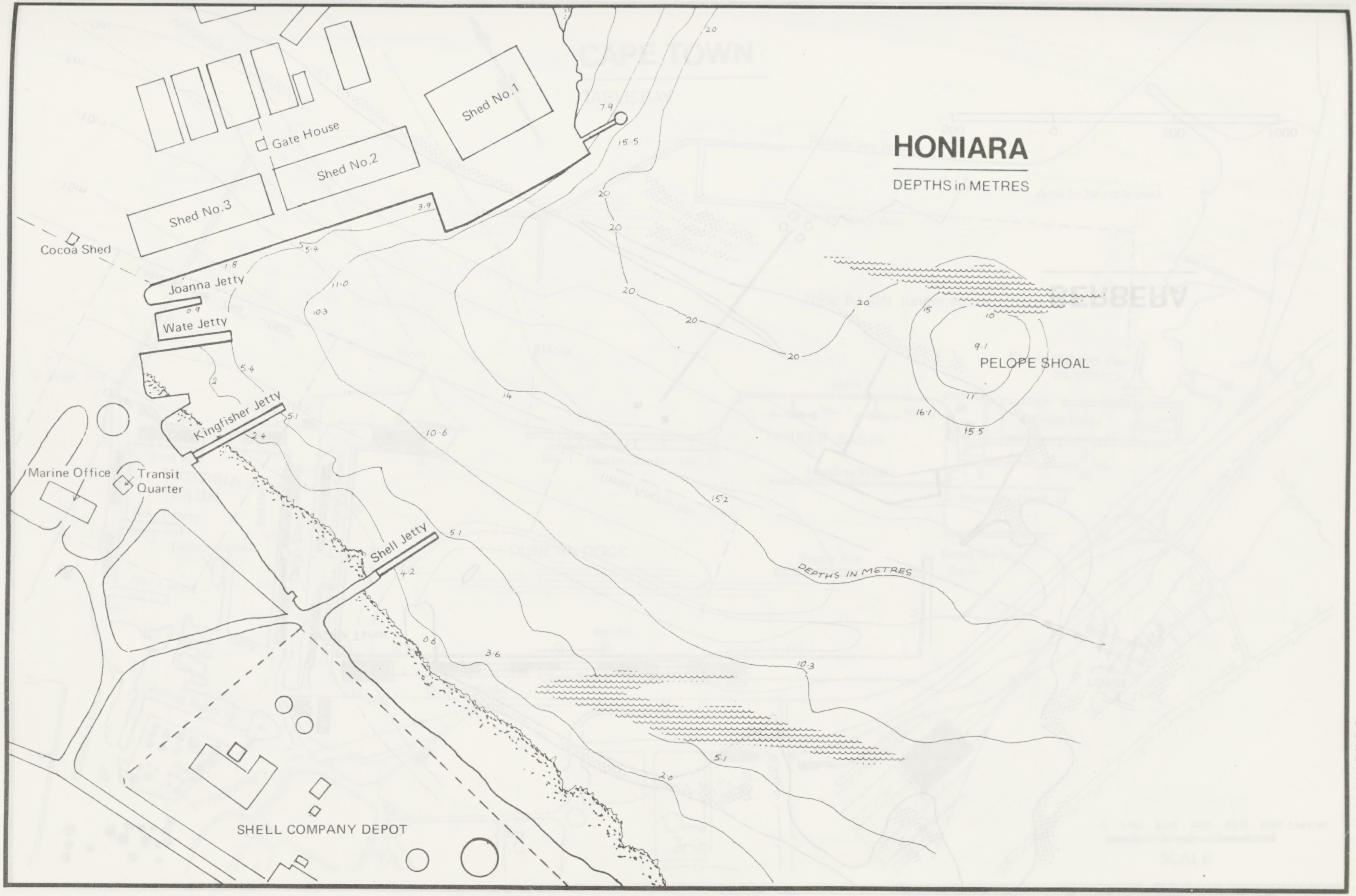

PAPEETE
Quai Des Paquebots
Quai De Peche Moorea
Quai Flotille
Quai De La Marine
Quai Petrolier
Dock Flottant
Point De Tanoua
Quai De Transit Militaire
Quai De Cabotage
Huilerie De Tahiti
Digue De Protection
Quai Au Long – Cours
Hanger No.3
Hanger No.2
Hanger No.1
SEUIL 11.30m
LARGEUR 110m


HONIARA
DEPTHS in METRES
Shed No.1
Gate House
Shed No.2
Shed No.3
Cocoa Shed
Joanna Jetty
Wate Jetty
Kingfisher Jetty
Marine Office
Transit Quarter
Shell Jetty
SHELL COMPANY DEPOT
PELOPE SHOAL
DEPTHS IN METRES
20
7.9
15.5
20
20
3.9
5.4
1.8
11.0
10.3
0.9
20
20
20
20
15
10
9.1
11
16.1
15.5
5.4
2
14
5.1
2.4
10.6
15.2
5.1
4.2
0.6
3.6
10.3
5.1
2.0

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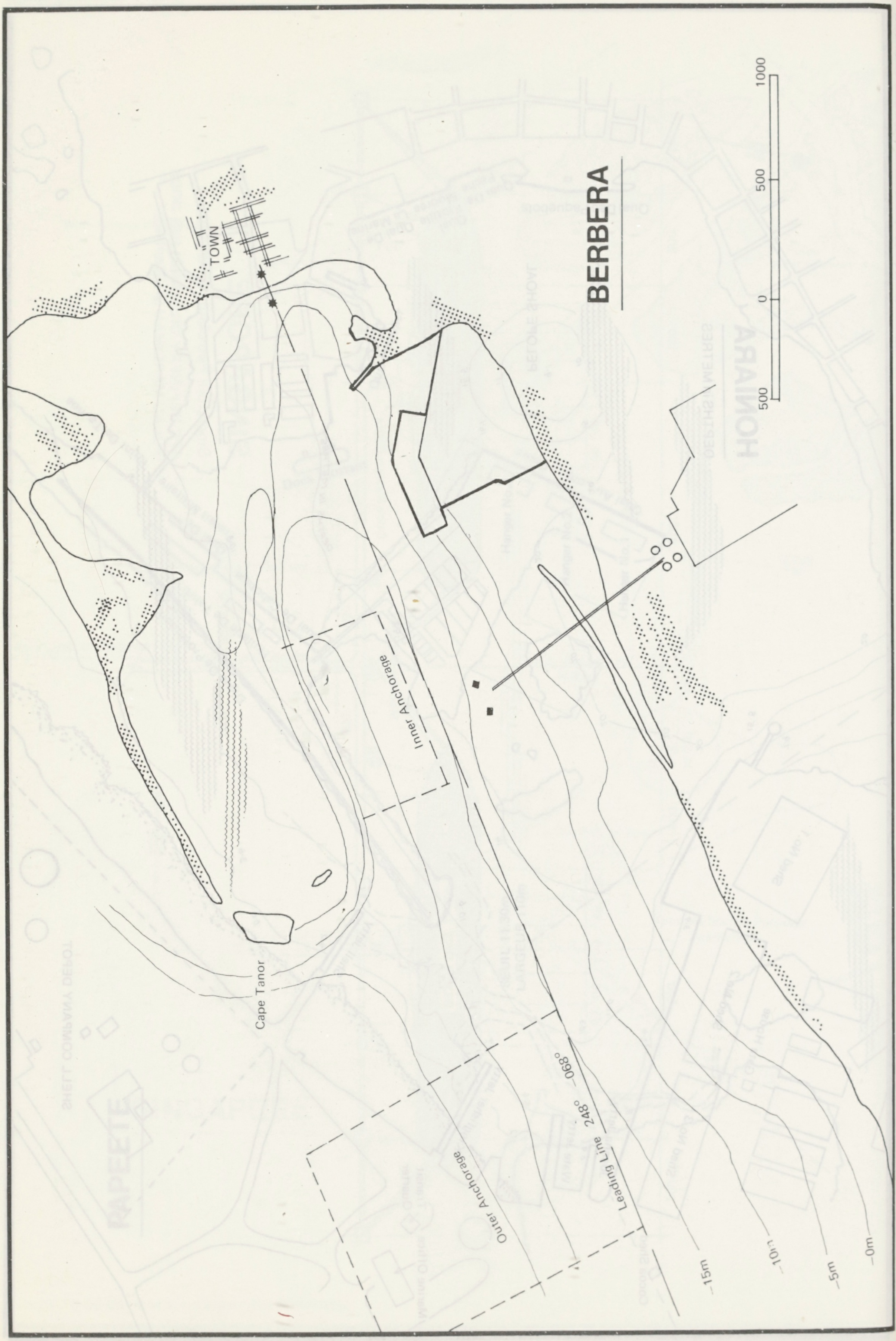
BERBERA
TOWN
Cape Tanor
Inner Anchorage
Outer Anchorage
Leading Line 248° – 068°
–15m
–10m
–5m
–0m
1000
500
0
500

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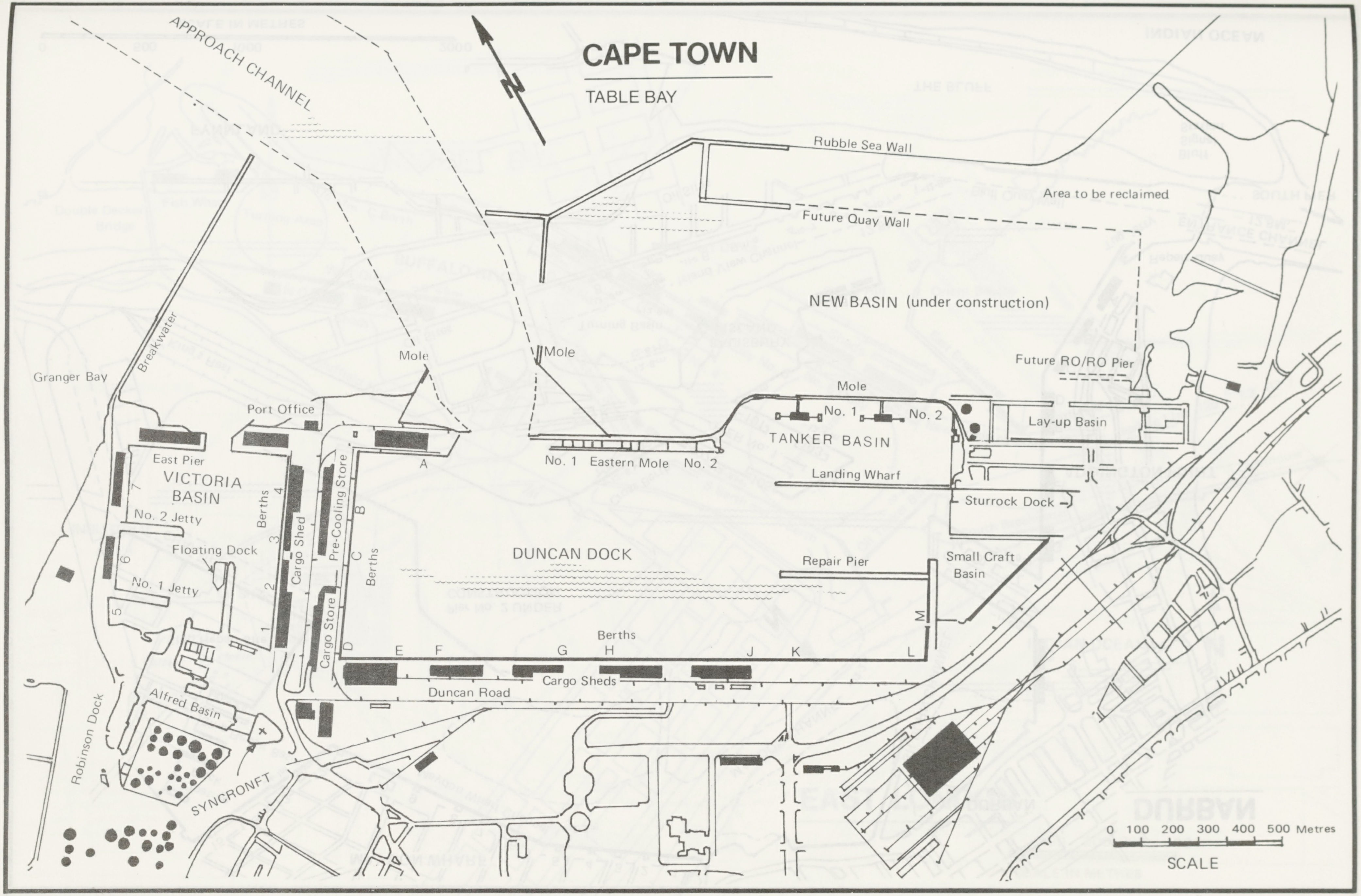
CAPE TOWN
TABLE BAY
N
APPROACH CHANNEL
Rubble Sea Wall
Area to be reclaimed
Future Quay Wall
NEW BASIN (under construction)
Future RO/RO Pier
Mole
Mole
Mole
Breakwater
Granger Bay
Port Office
A
No. 1
Eastern Mole
No. 2
No. 1
No. 2
TANKER BASIN
Lay-up Basin
Landing Wharf
Sturrock Dock
East Pier
VICTORIA BASIN
7
No. 2 Jetty
6
Floating Dock
No. 1 Jetty
5
Berths
4
3
2
1
Cargo Shed
Pre-Cooling Store
B
C
Berths
Cargo Store
D
DUNCAN DOCK
Repair Pier
Small Craft Basin
M
Berths
E
F
G
H
J
K
L
Cargo Sheds
Duncan Road
Alfred Basin
Robinson Dock
SYNCRONFT
0 100 200 300 400 500 Metres
SCALE

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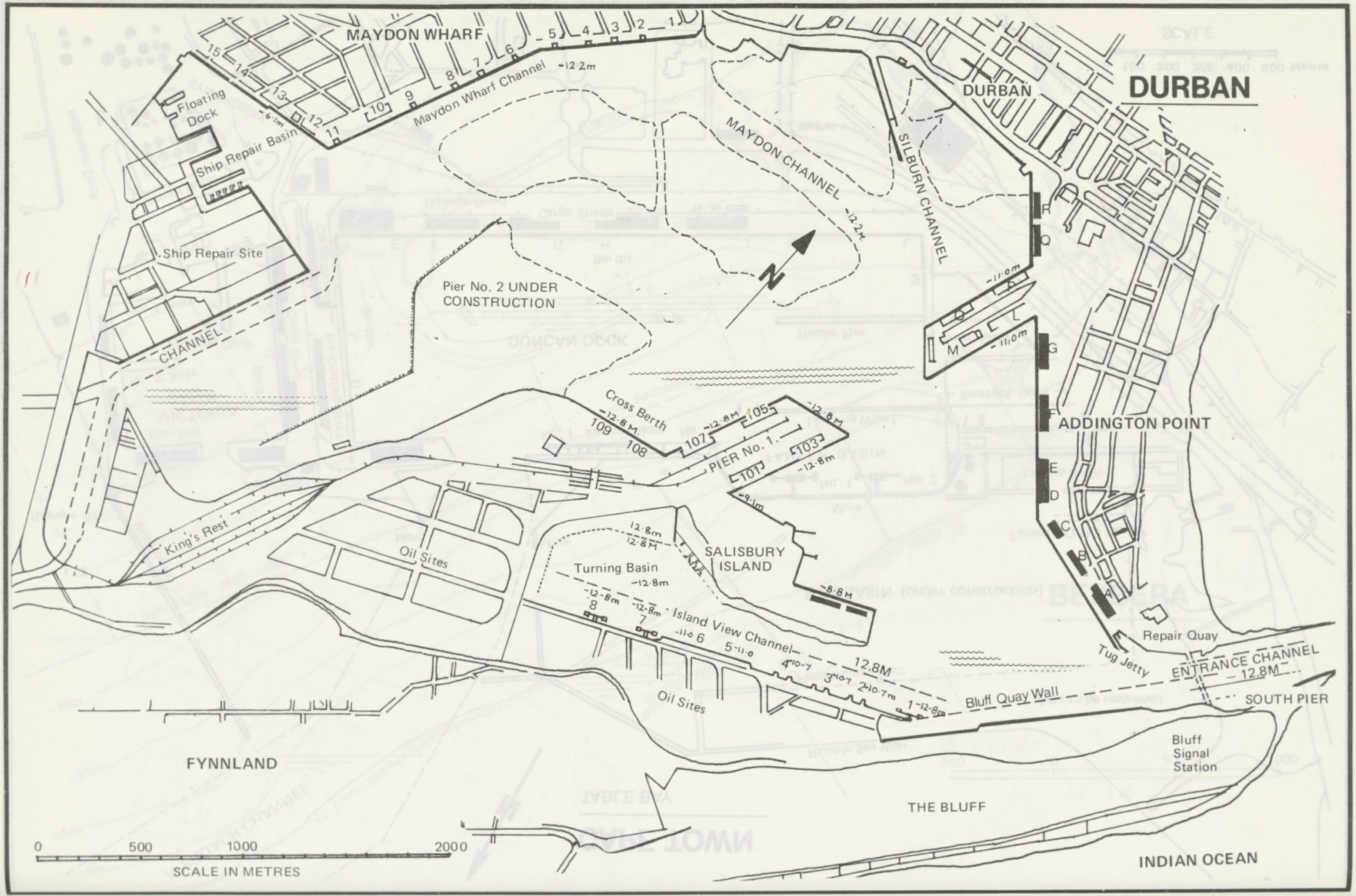
DURBAN
MAYDON WHARF
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
-12·2m
Maydon Wharf Channel
-6·1m
Floating Dock
Ship Repair Basin
Ship Repair Site
CHANNEL
DURBAN
MAYDON CHANNEL
-12·2m
SILBURN CHANNEL
N
Pier No. 2 UNDER CONSTRUCTION
-11·0m
-11·0m
R
Q
P
O
L
M
G
F
E
D
C
B
A
ADDINGTON POINT
Cross Berth
-12·8M
109
108
107
-12·8M
105
-12·8M
PIER No. 1.
103
-12·8m
101
-9·1m
King's Rest
Oil Sites
12·8m
12·8M
Turning Basin
-12·8m
SALISBURY ISLAND
-8·8M
-12·8m
-12·8m
8
7
-11·0
6
5-11·0
4-10·7
3-10·7
2-10·7m
1-12·8m
Island View Channel
12.8M
Oil Sites
Bluff Quay Wall
Repair Quay
Tug Jetty
ENTRANCE CHANNEL
– 12.8M
SOUTH PIER
Bluff Signal Station
FYNNLAND
THE BLUFF
INDIAN OCEAN
0
500
1000
2000
SCALE IN METRES

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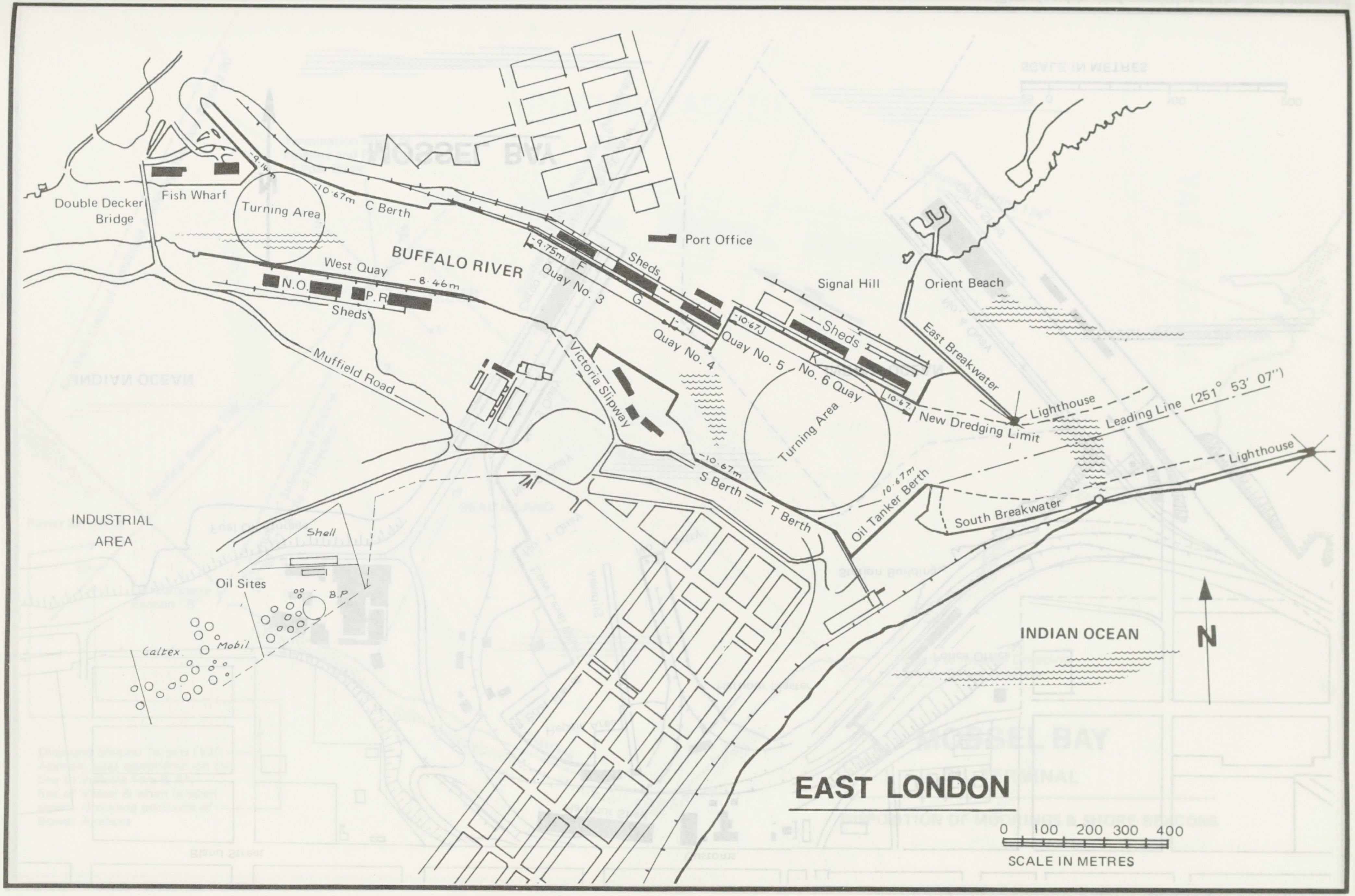
Double Decker Bridge
Fish Wharf
-9.14m
-10.67m
C Berth
Turning Area
Port Office
BUFFALO RIVER
West Quay
N.O.
P.R.
Sheds
-8.46m
-9.75m
F
Quay No. 3
Sheds
G
Quay No. 4
-10.67
Quay No. 5
Signal Hill
Sheds
Orient Beach
K
No. 6 Quay
-10.67
East Breakwater
Lighthouse
New Dredging Limit
Leading Line (251° 53′ 07″)
Muffield Road
Victoria Slipway
Turning Area
-10.67m
S Berth
T Berth
10.67m
Oil Tanker Berth
South Breakwater
Lighthouse
INDUSTRIAL AREA
Shell
Oil Sites
B.P.
Caltex
Mobil
INDIAN OCEAN
N
EAST LONDON
0 100 200 300 400
SCALE IN METRES

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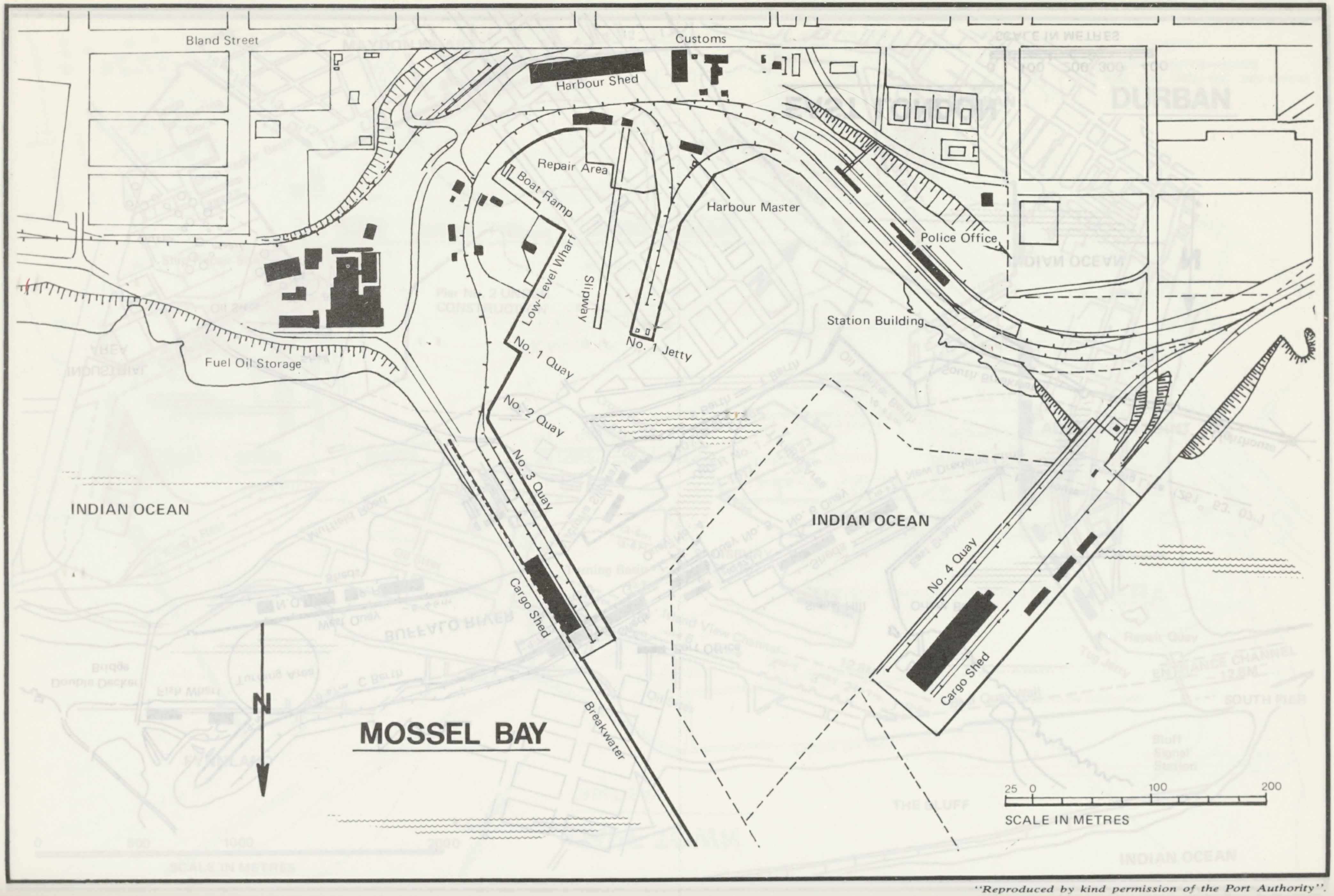
Bland Street
Customs
Harbour Shed
Repair Area
Boat Ramp
Harbour Master
Police Office
Low-Level Wharf
Slipway
No. 1 Jetty
Station Building
Fuel Oil Storage
No. 1 Quay
No. 2 Quay
No. 3 Quay
Cargo Shed
Breakwater
INDIAN OCEAN
INDIAN OCEAN
No. 4 Quay
Cargo Shed
N
MOSSEL BAY
25 0 100 200
SCALE IN METRES

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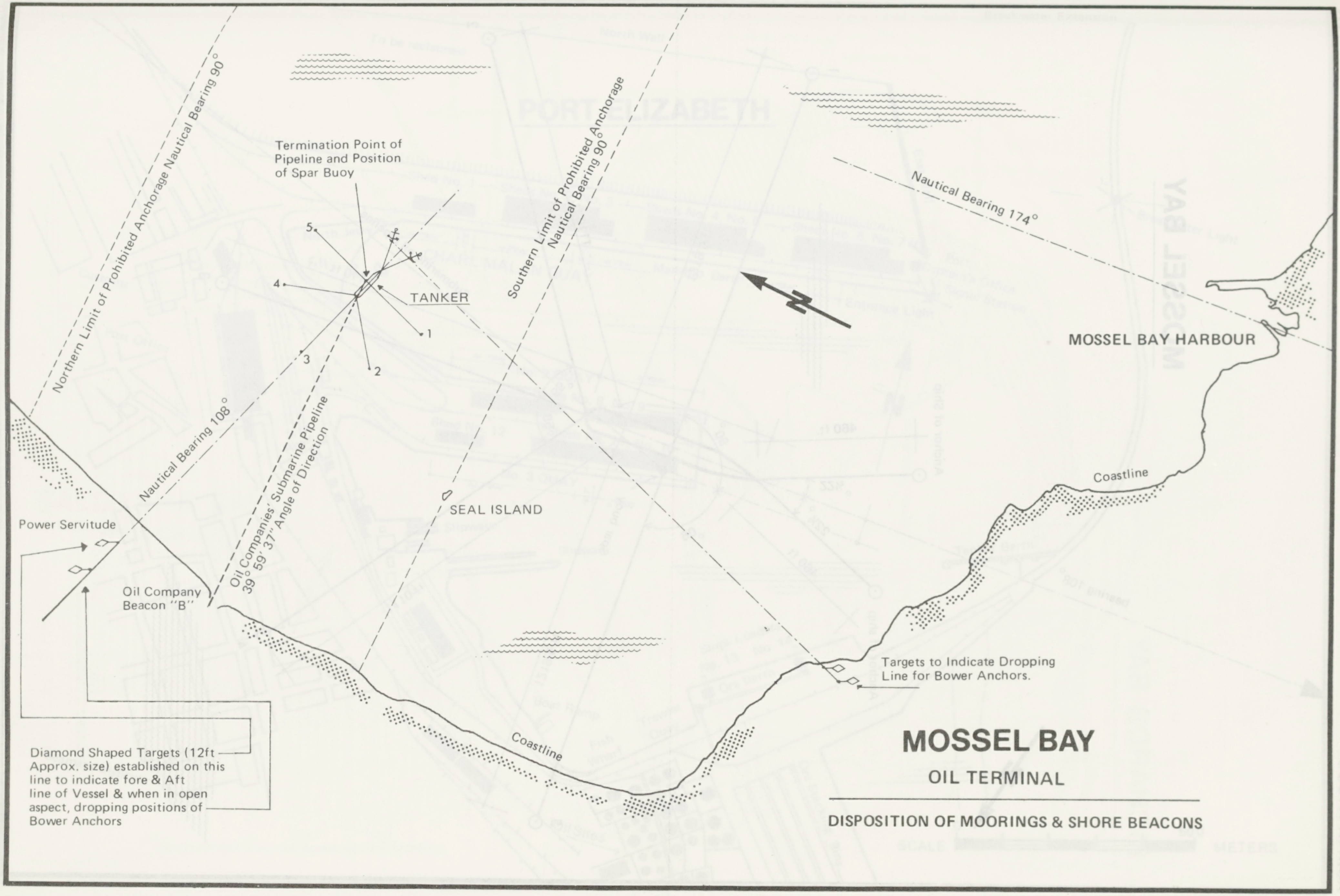
Northern Limit of Prohibited Anchorage Nautical Bearing 90°
Termination Point of Pipeline and Position of Spar Buoy
5
4
TANKER
1
2
3
Southern Limit of Prohibited Anchorage Nautical Bearing 90°
Nautical Bearing 174°
MOSSEL BAY HARBOUR
Nautical Bearing 108°
Oil Companies' Submarine Pipeline 39° 59' 37" Angle of Direction
SEAL ISLAND
Coastline
Power Servitude
Oil Company Beacon "B"
Targets to Indicate Dropping Line for Bower Anchors.
Coastline
Diamond Shaped Targets (12ft Approx. size) established on this line to indicate fore & Aft line of Vessel & when in open aspect, dropping positions of Bower Anchors

MOSSEL BAY

OIL TERMINAL

DISPOSITION OF MOORINGS & SHORE BEACONS

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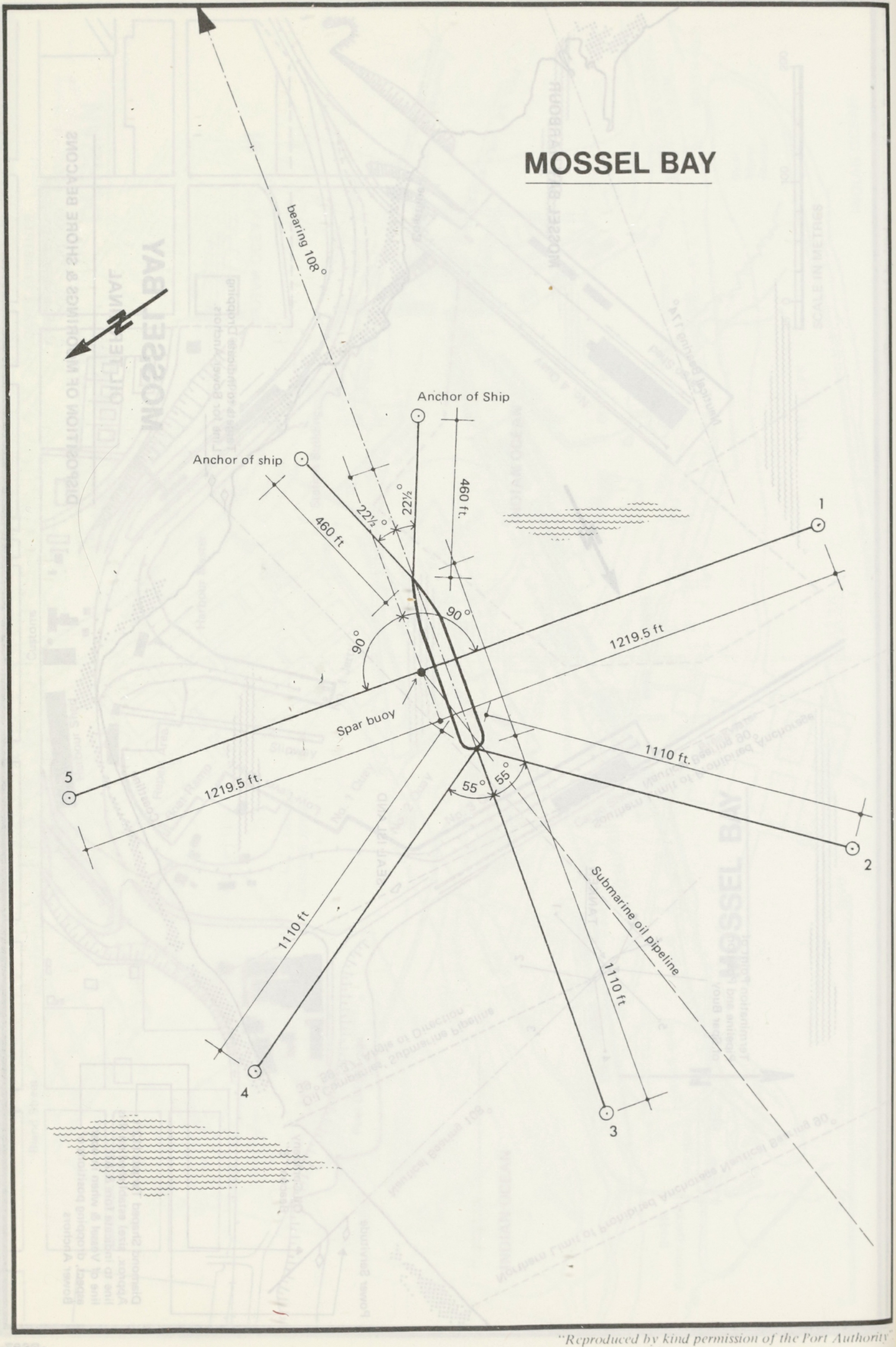
MOSSEL BAY


bearing 108°
Anchor of Ship
Anchor of ship
460 ft
22½°
22½°
460 ft.
1
90°
90°
1219.5 ft
Spar buoy
5
1219.5 ft.
1110 ft.
2
55°
55°
1110 ft
Submarine oil pipeline
1110 ft
4
3

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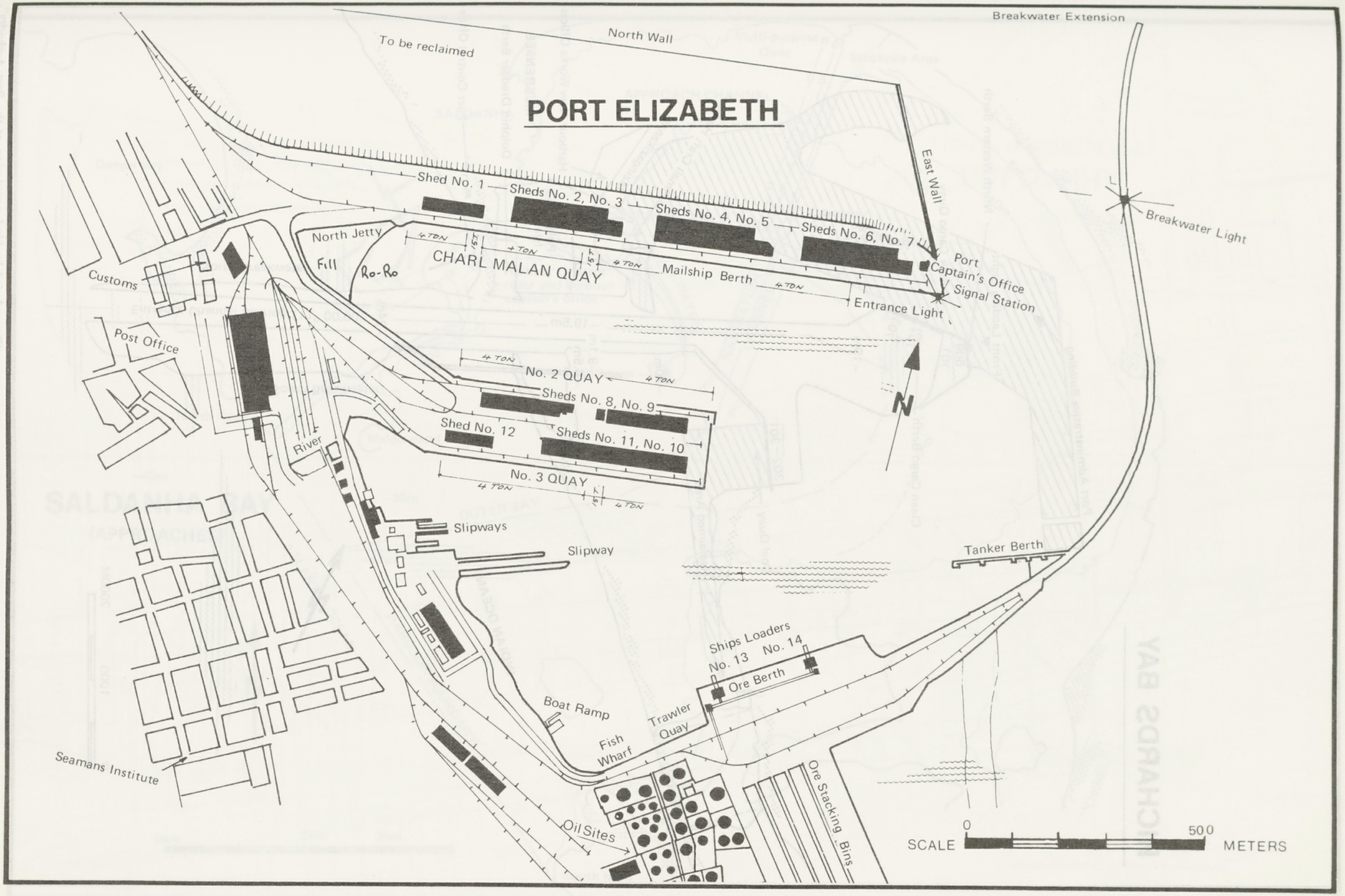
PORT ELIZABETH
To be reclaimed
North Wall
Breakwater Extension
East Wall
Breakwater Light
Shed No. 1
Sheds No. 2, No. 3
Sheds No. 4, No. 5
Sheds No. 6, No. 7
North Jetty
Fill
Ro-Ro
CHARL MALAN QUAY
Mailship Berth
4 TON
15 T.
Port Captain's Office
Signal Station
Entrance Light
Customs
Post Office
No. 2 QUAY
Sheds No. 8, No. 9
Shed No. 12
Sheds No. 11, No. 10
No. 3 QUAY
River
N
Slipways
Slipway
Tanker Berth
Ships Loaders
No. 13
No. 14
Ore Berth
Trawler Quay
Fish Wharf
Boat Ramp
Seamans Institute
Oil Sites
Ore Stacking Bins
SCALE
0
500
METERS

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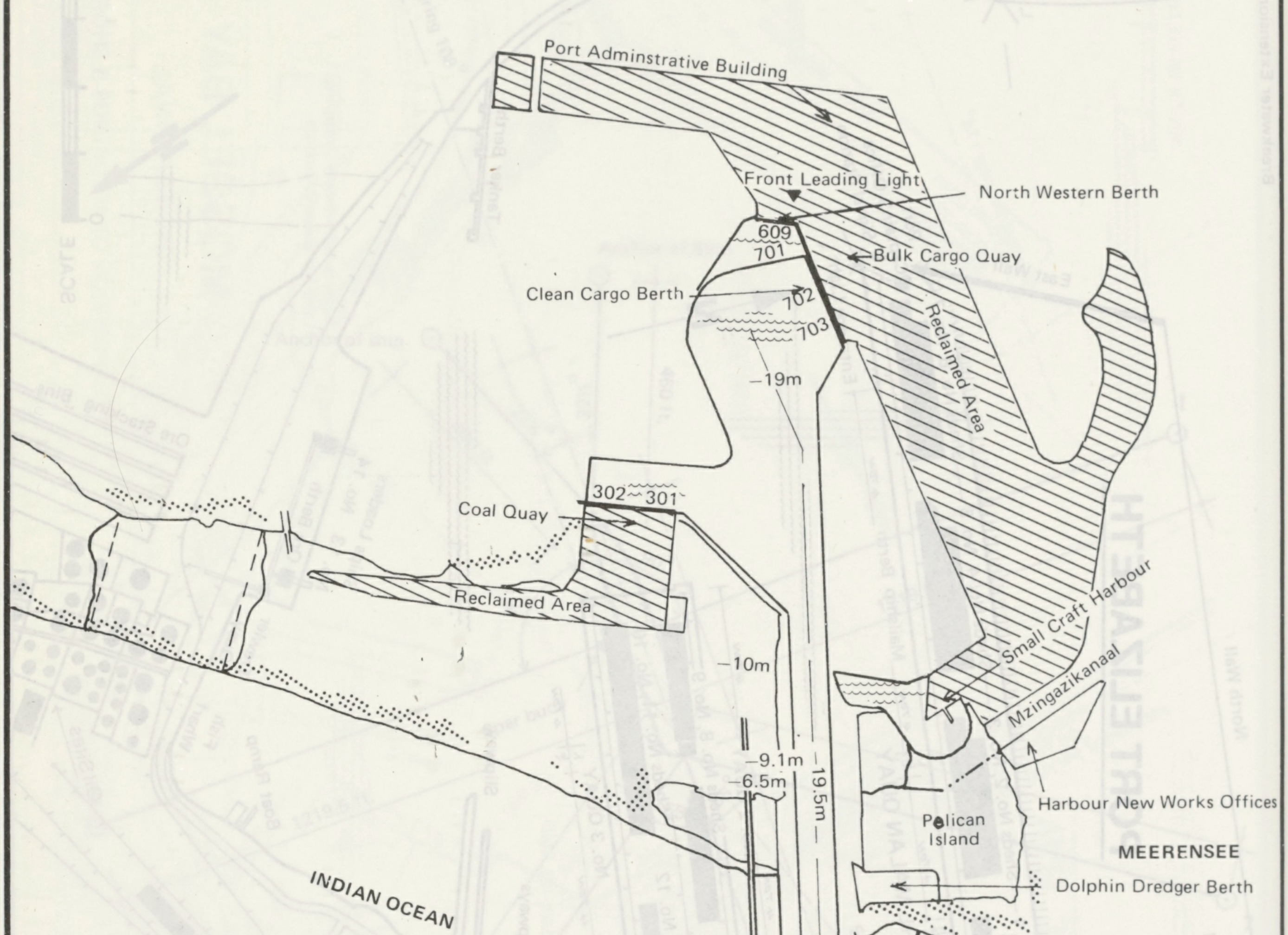
RICHARDS BAY


Port Adminstrative Building
Front Leading Light
North Western Berth
609
701
Bulk Cargo Quay
Clean Cargo Berth
702
703
Reclaimed Area
−19m
302
301
Coal Quay
Reclaimed Area
Small Craft Harbour
Mzingazikanaal
−10m
−9.1m
−6.5m
−19.5m
Harbour New Works Offices
Pelican Island
MEERENSEE
Dolphin Dredger Berth
Port Control Office
INDIAN OCEAN
−24m
South Breakwater
Entrance Channel Bearing 111° 00'00"
North Breakwater
0
1000
2000M

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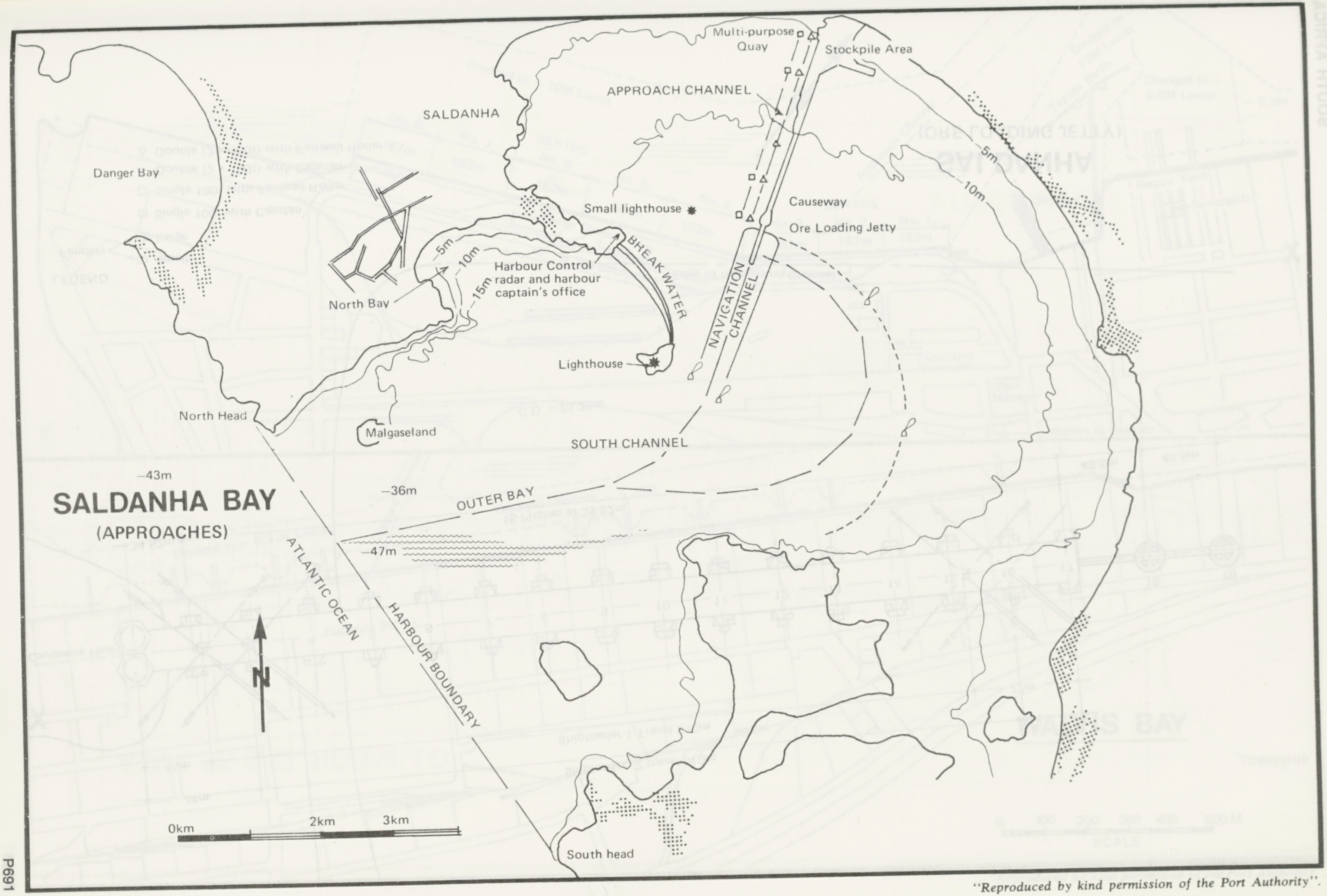
Multi-purpose Quay
Stockpile Area
APPROACH CHANNEL
SALDANHA
Danger Bay
Small lighthouse
Causeway
Ore Loading Jetty
5m
10m
15m
Harbour Control radar and harbour captain's office
BREAKWATER
NAVIGATION CHANNEL
North Bay
Lighthouse
North Head
Malgaseland
SOUTH CHANNEL
–43m
–36m
OUTER BAY
–47m
ATLANTIC OCEAN
HARBOUR BOUNDARY
N
0km
2km
3km
South head

SALDANHA BAY
(APPROACHES)

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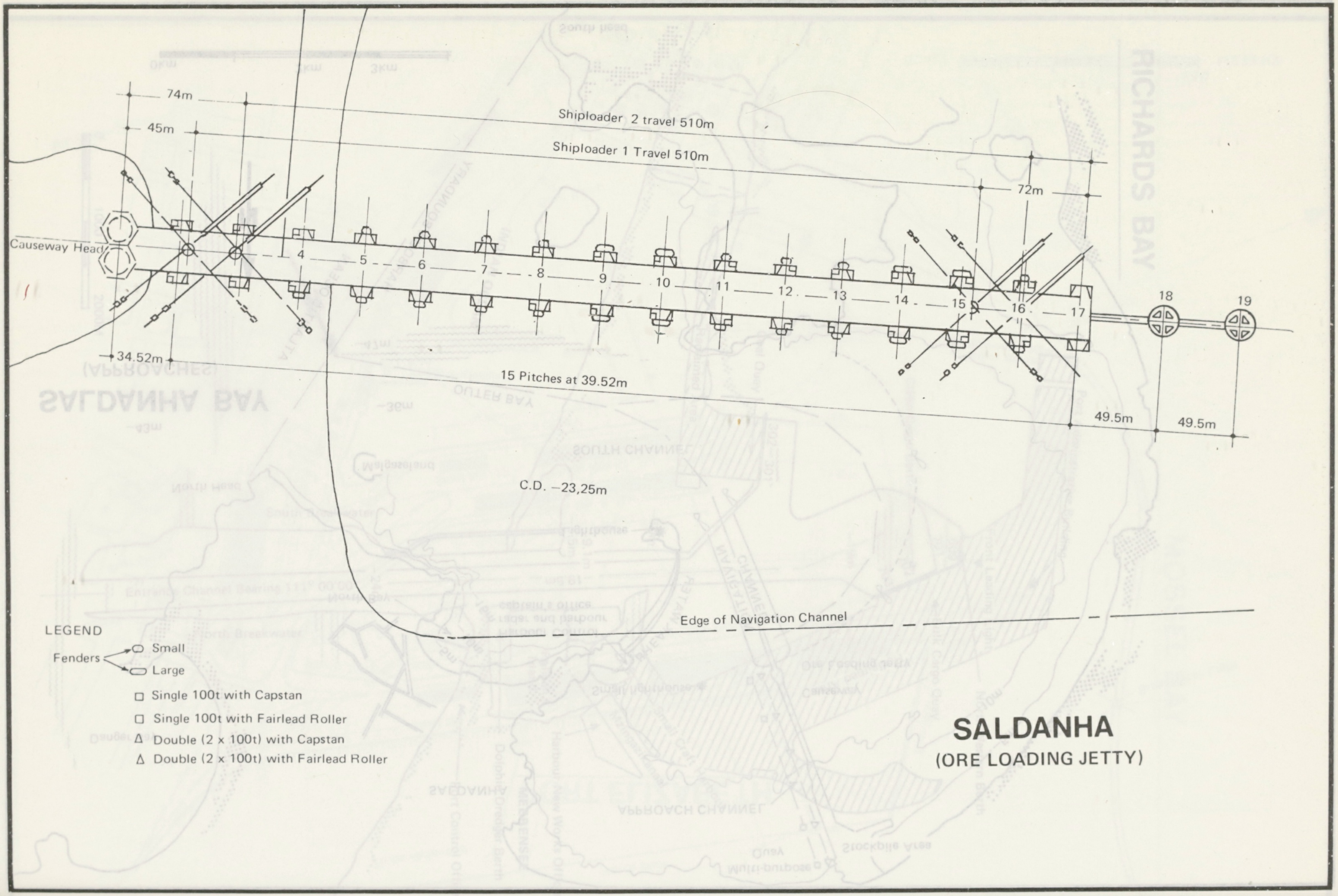
74m
45m
Shiploader 2 travel 510m
Shiploader 1 Travel 510m
72m
Causeway Head
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
34.52m
15 Pitches at 39.52m
49.5m
49.5m
C.D. –23,25m
Edge of Navigation Channel
LEGEND
Fenders
Small
Large
Single 100t with Capstan
Single 100t with Fairlead Roller
Double (2 x 100t) with Capstan
Double (2 x 100t) with Fairlead Roller

SALDANHA

(ORE LOADING JETTY)

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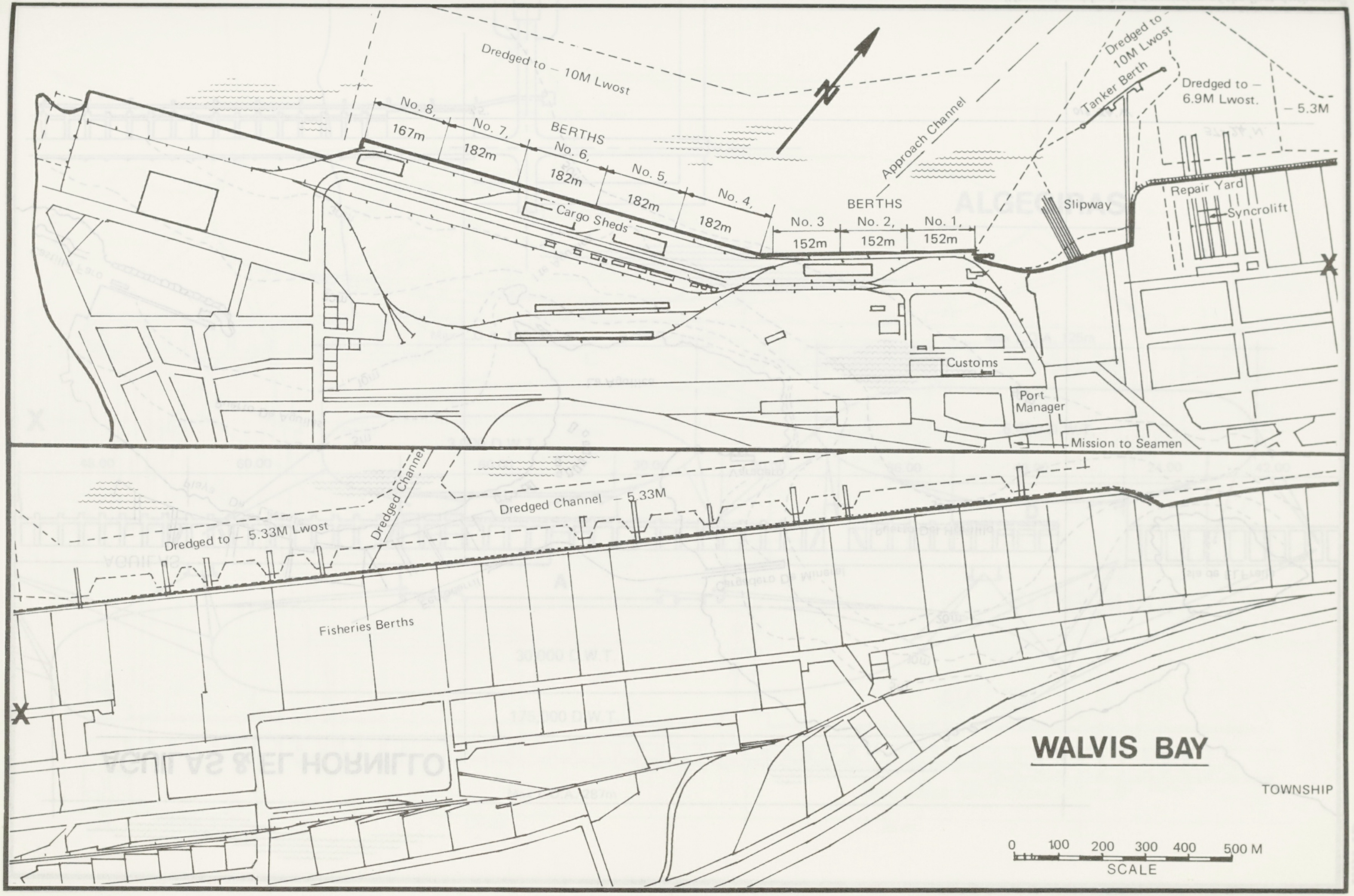

WALVIS BAY

Dredged to – 10M Lwost
No. 8, 167m
No. 7, 182m
BERTHS
No. 6, 182m
No. 5, 182m
No. 4, 182m
Cargo Sheds
Approach Channel
BERTHS
No. 3 152m
No. 2, 152m
No. 1, 152m
Dredged to 10M Lwost
Tanker Berth
Dredged to – 6.9M Lwost.
– 5.3M
Slipway
Repair Yard
Syncrolift
Customs
Port Manager
Mission to Seamen
X
Dredged Channel
Dredged Channel – 5.33M
Dredged to – 5.33M Lwost
Fisheries Berths
X
TOWNSHIP
0 100 200 300 400 500 M
SCALE

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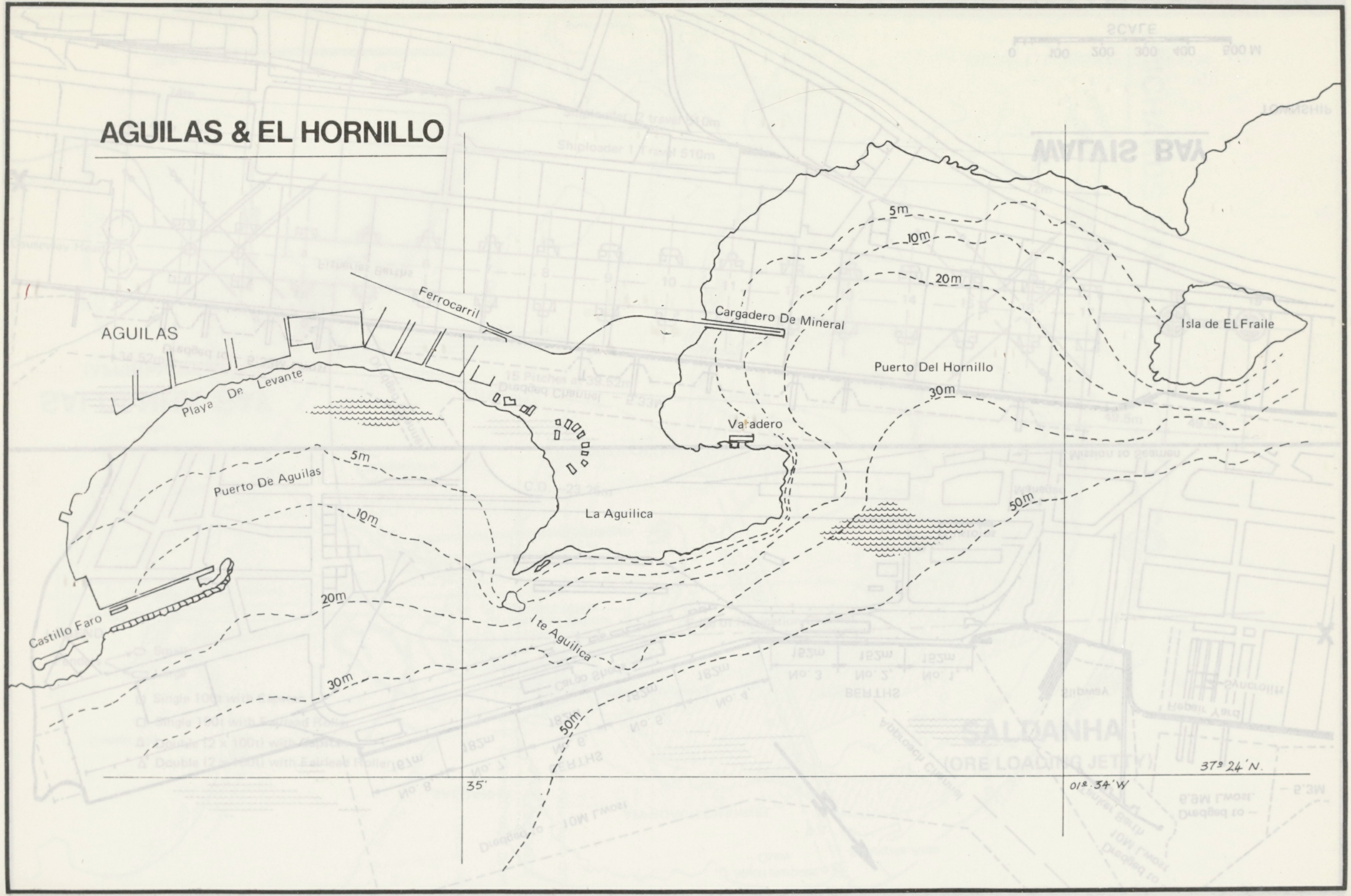
AGUILAS & EL HORNILLO


AGUILAS
Playa De Levante
Ferrocarril
Cargadero De Mineral
Isla de El Fraile
Puerto Del Hornillo
Varadero
La Aguilica
Puerto De Aguilas
Castillo Faro
I te Aguilica
5m
10m
20m
30m
50m
35'
01° 34' W
37° 24' N.

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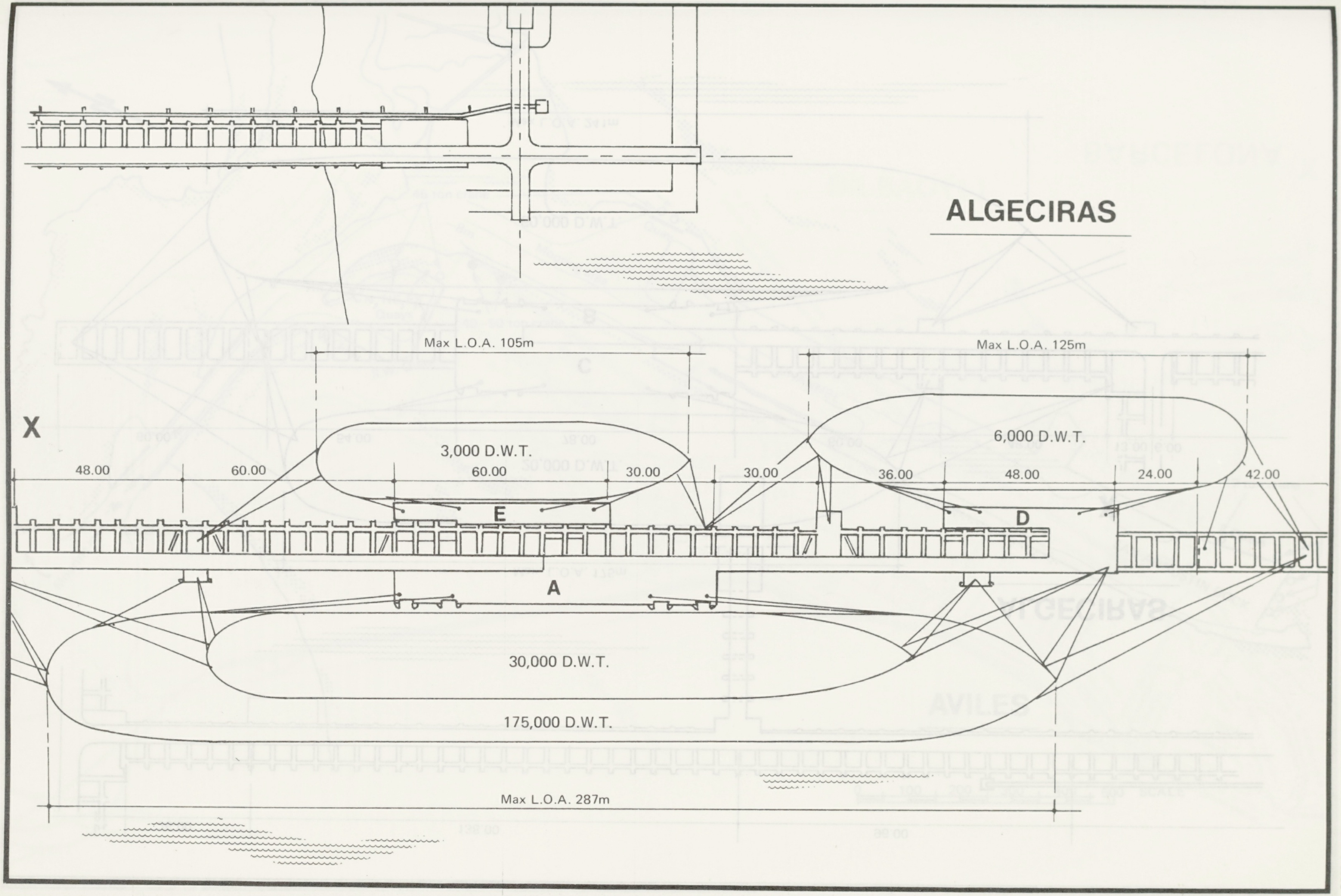
ALGECIRAS
Max L.O.A. 105m
Max L.O.A. 125m
X
3,000 D.W.T.
6,000 D.W.T.
48.00
60.00
60.00
30.00
30.00
36.00
48.00
24.00
42.00
E
D
A
30,000 D.W.T.
175,000 D.W.T.
Max L.O.A. 287m

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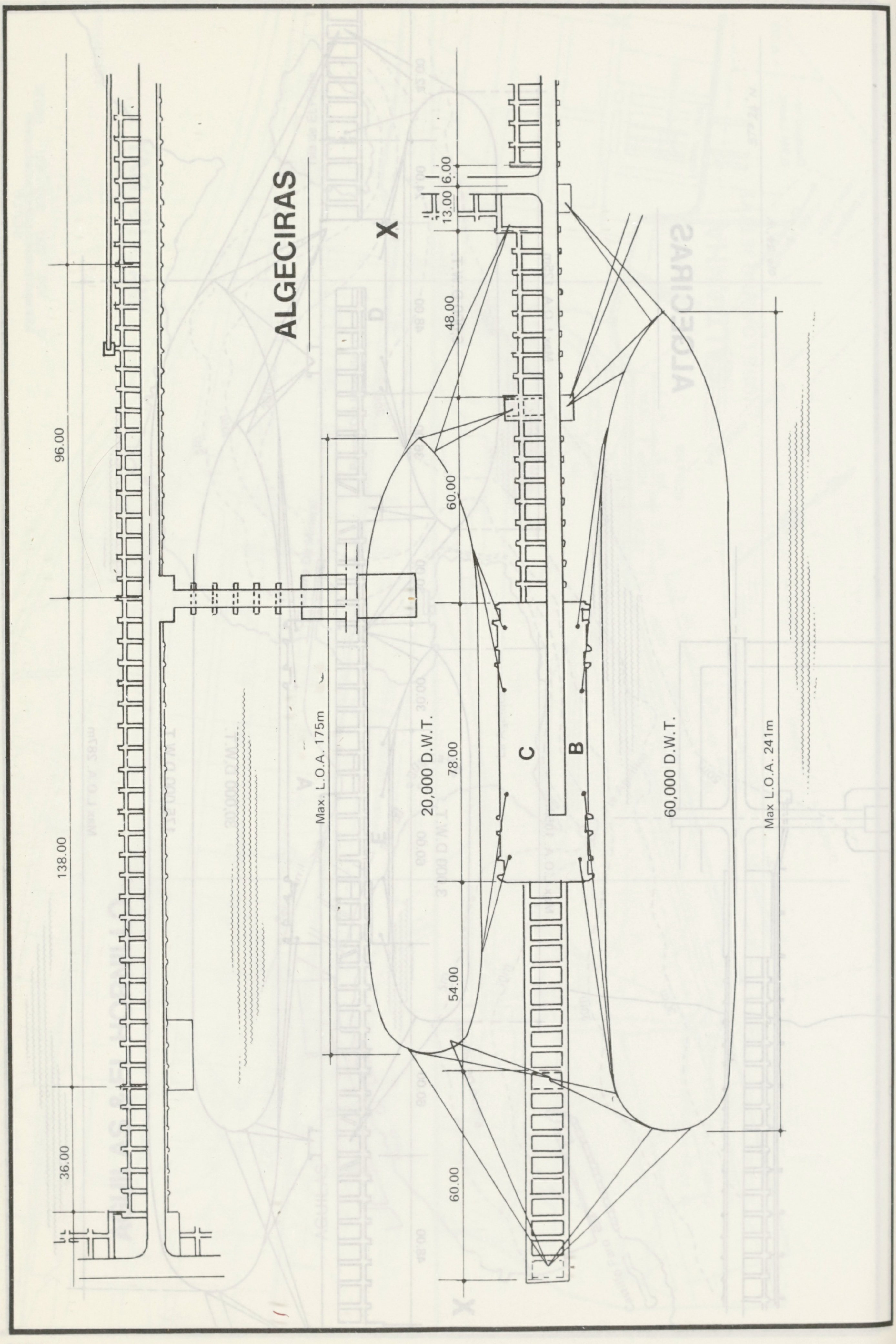
ALGECIRAS
X
96.00
138.00
36.00
13.00
6.00
48.00
60.00
Max. L.O.A. 175m
20,000 D.W.T.
78.00
C
B
54.00
60.00
60,000 D.W.T.
Max L.O.A. 241m

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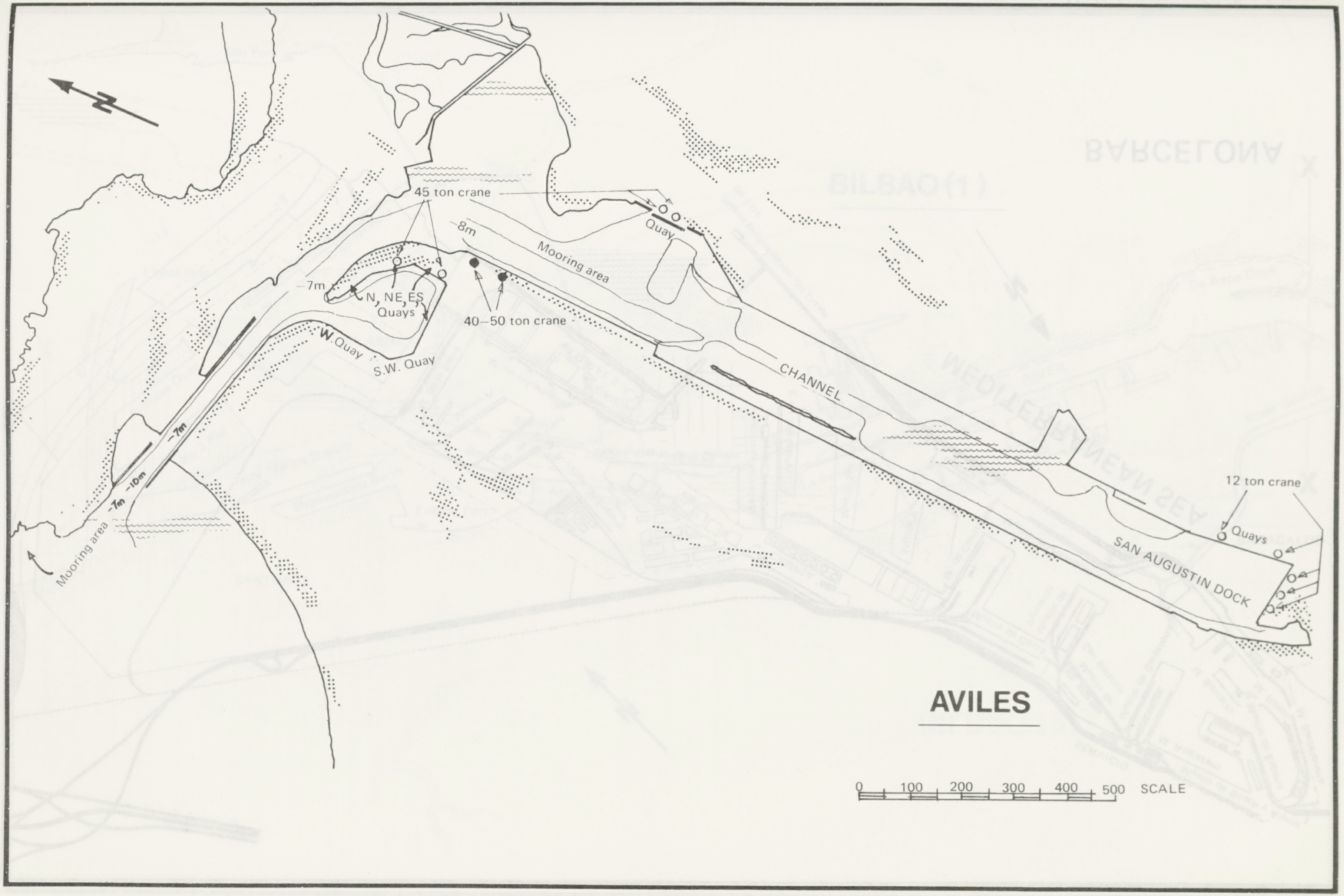
AVILES


45 ton crane
–8m
Mooring area
Quay
–7m
N, NE, ES
Quays
40–50 ton crane
W. Quay
S.W. Quay
CHANNEL
–7m
–7m –10m
Mooring area
12 ton crane
Quays
SAN AUGUSTIN DOCK
0 100 200 300 400 500 SCALE

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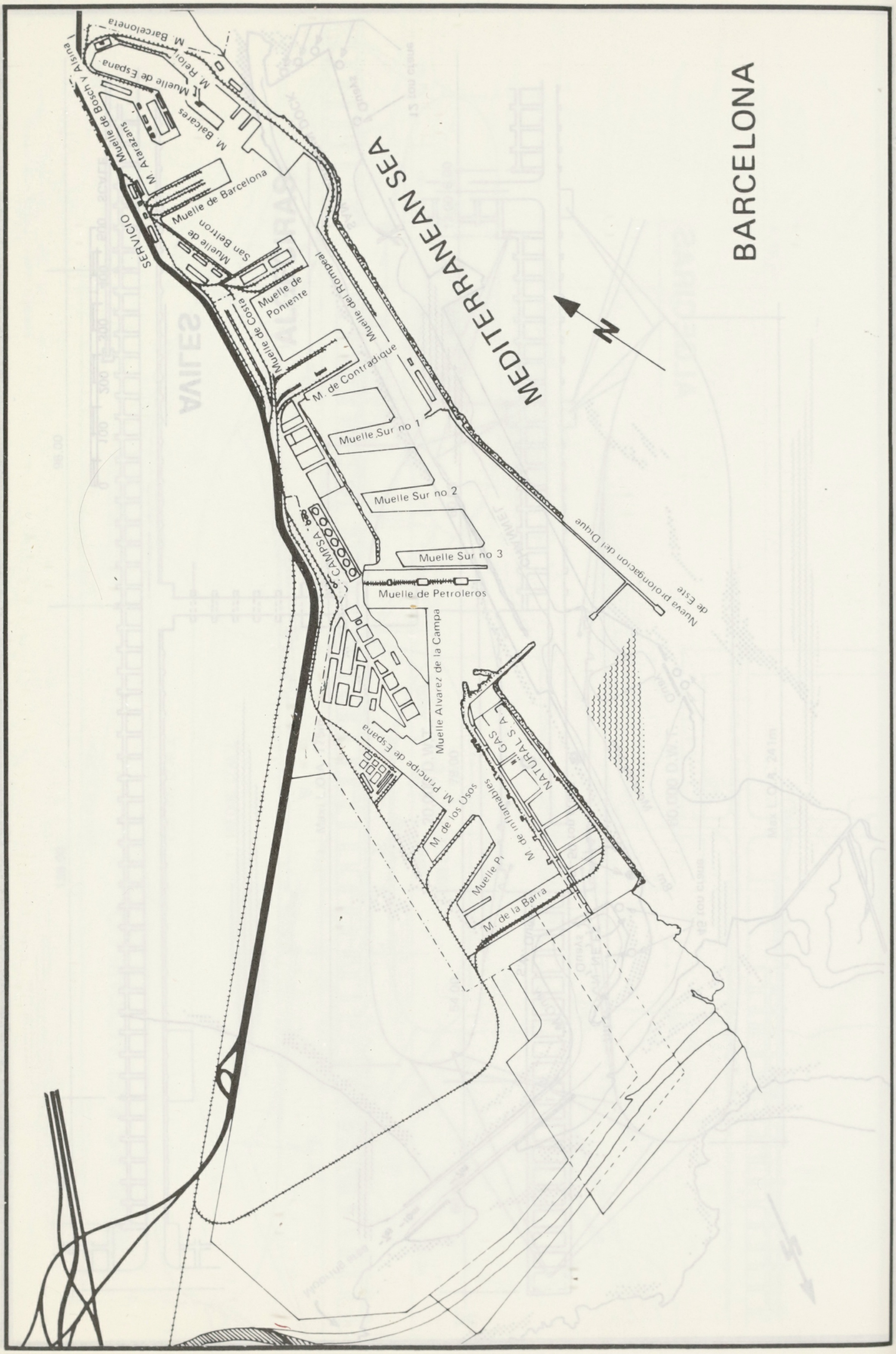
BARCELONA
MEDITERRANEAN SEA
N
M. Barceloneta
M. Reloj
Muelle de Espana
Muelle de Bosch y Alsina
M. Balcares
Muelle de Atarazans
M. Atarazans
Muelle de Barcelona
Muelle de San Beltran
SERVICIO
Muelle de Costa
Muelle de Poniente
Muelle del Rompeal
M. de Contradique
Muelle Sur no 1
Muelle Sur no 2
Muelle Sur no 3
CAMPSA
Muelle de Petroleros
Nueva prolongacion del Dique de Este
Muelle Alvarez de la Campa
M. Principe de Espana
M. de los Osos
Muelle Pr
M. de inflamables
GAS NATURAL S.A.
M. de la Barra

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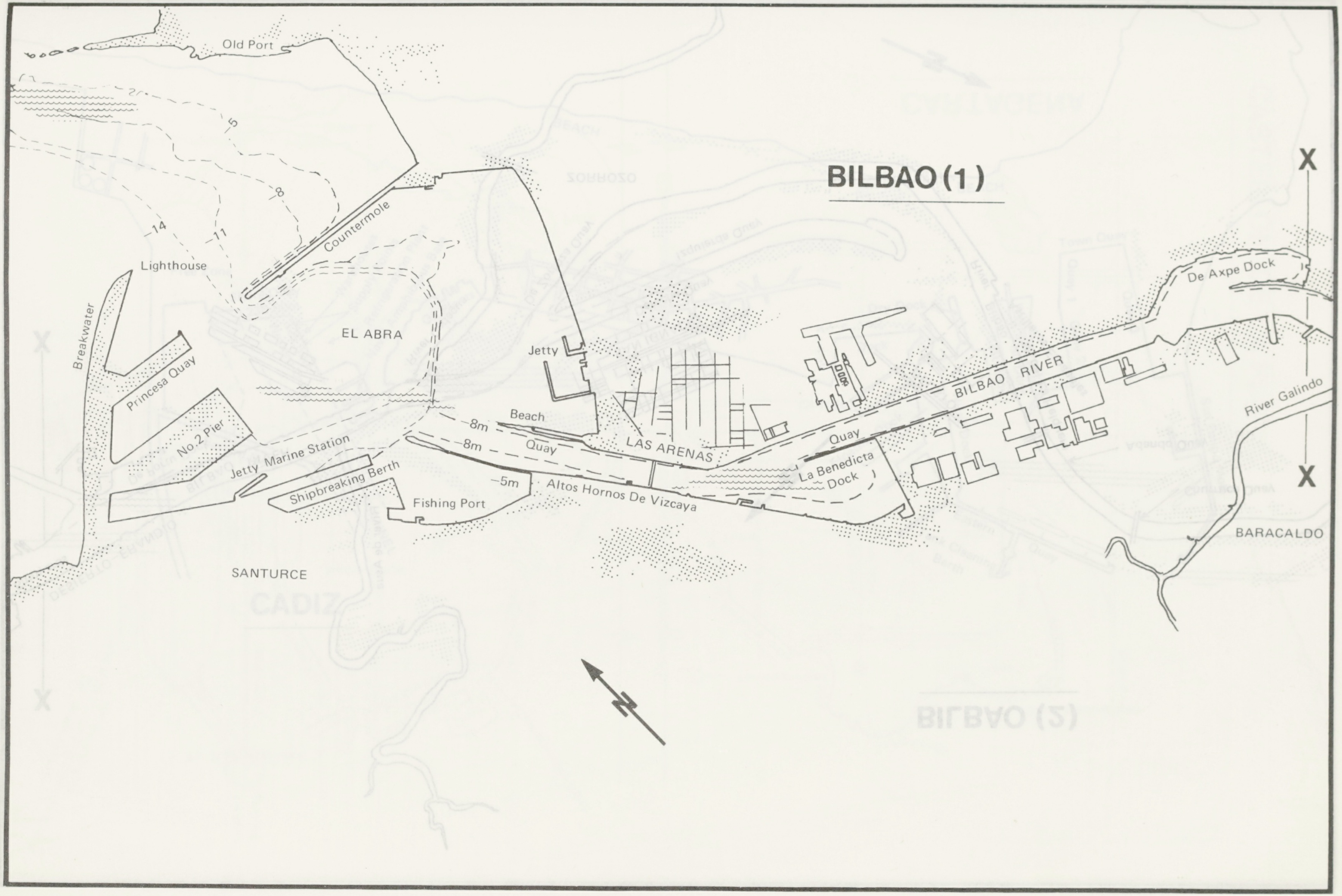
BILBAO (1)



Old Port
Countermole
Lighthouse
Breakwater
Princesa Quay
No.2 Pier
Jetty Marine Station
Shipbreaking Berth
Fishing Port
EL ABRA
Jetty
Beach
Quay
LAS ARENAS
Altos Hornos De Vizcaya
La Benedicta Dock
Quay
BILBAO RIVER
De Axpe Dock
River Galindo
BARACALDO
SANTURCE
−5
−8
−11
−14
−8m
−8m
−5m
X
X
X
X
N

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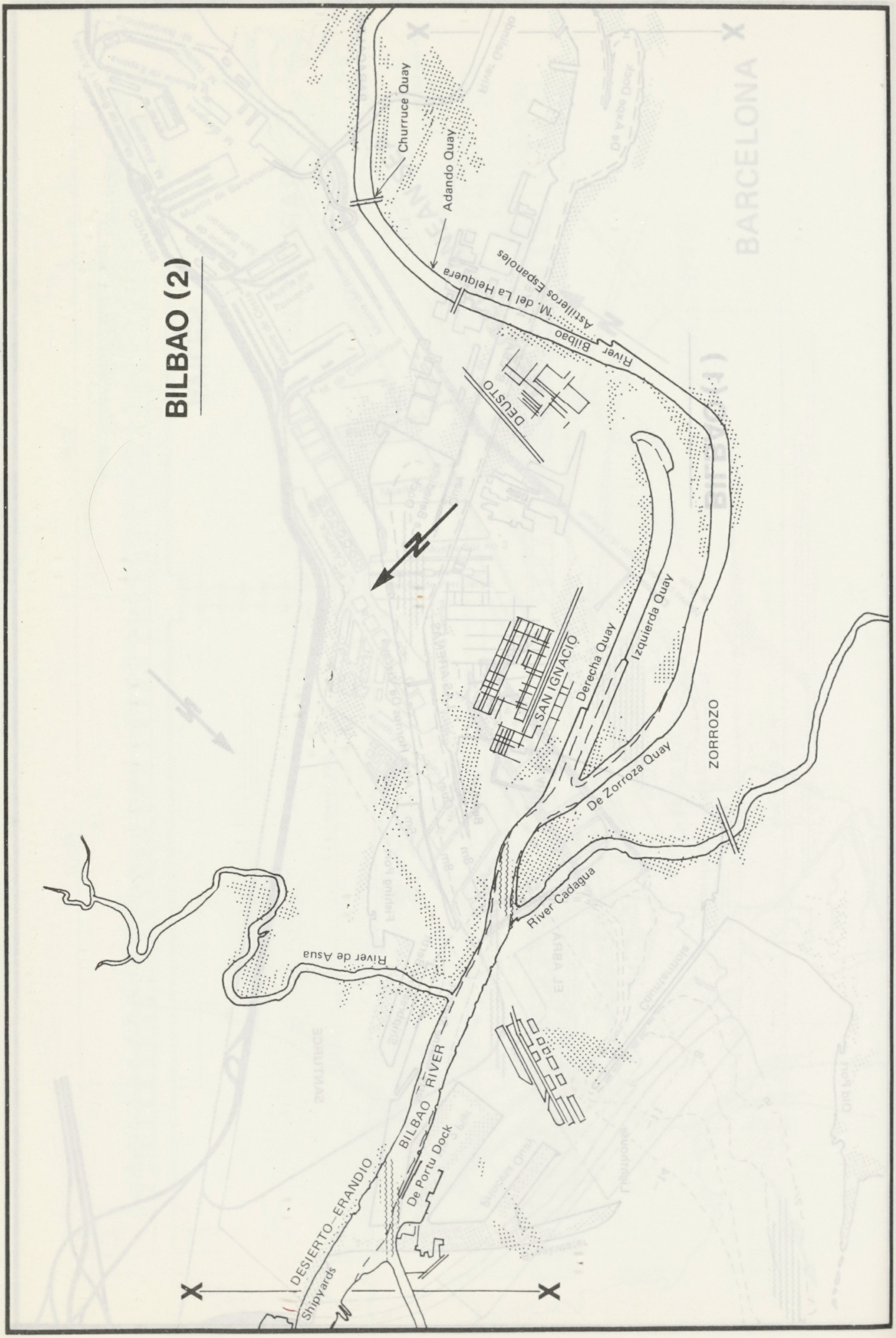
BILBAO (2)


Churruce Quay
Adando Quay
M. del La Helguera
Astilleros Espanoles
River Bilbao
DEUSTO
SAN IGNACIO
Derecha Quay
Izquierda Quay
ZORROZO
De Zorroza Quay
River Cadagua
River de Asua
BILBAO RIVER
De Portu Dock
DESIERTO-ERANDIO
Shipyards

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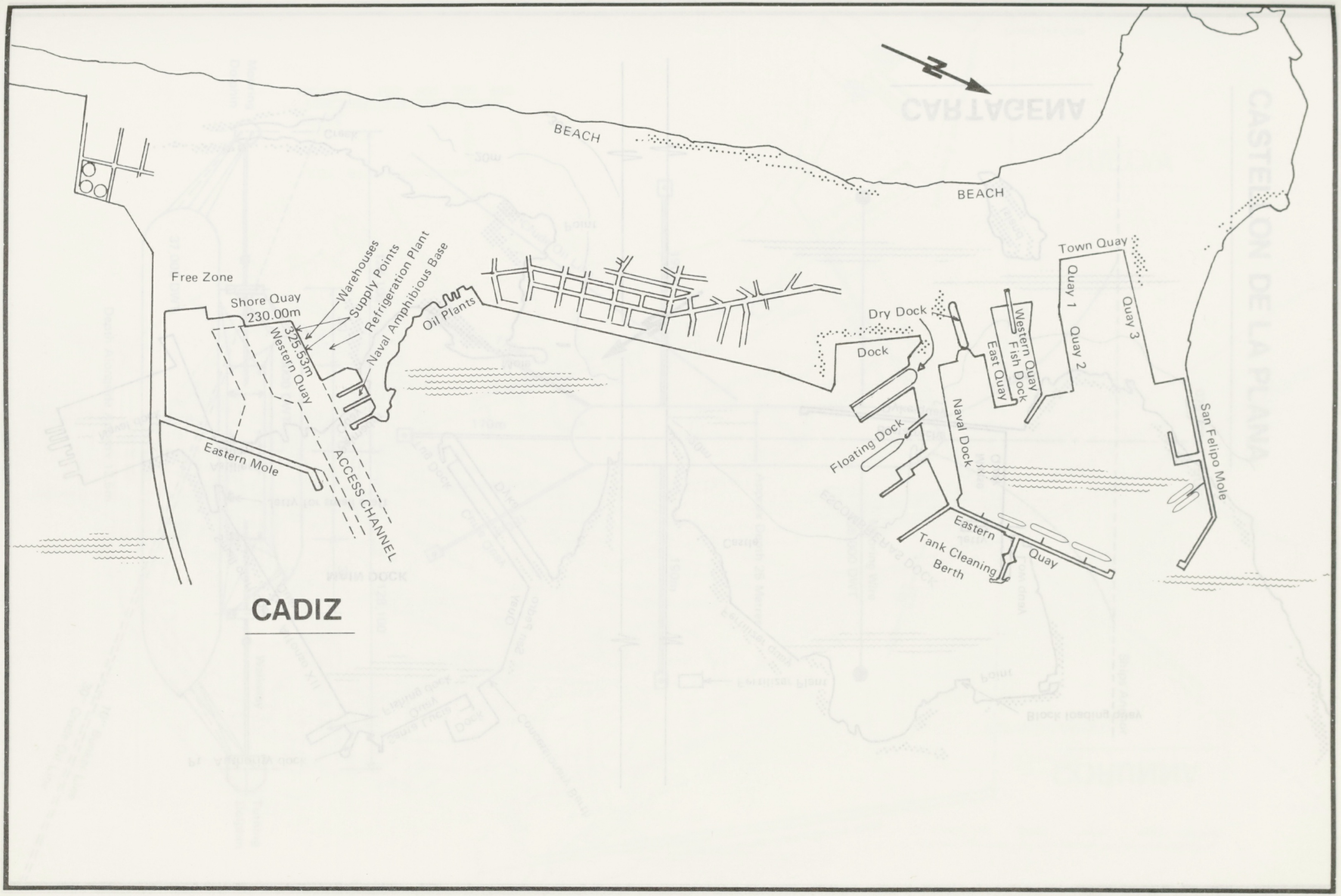
BEACH
BEACH
Free Zone
Shore Quay
230.00m
325.53m
Western Quay
Warehouses
Supply Points
Refrigeration Plant
Naval Amphibious Base
Oil Plants
Eastern Mole
ACCESS CHANNEL
Dry Dock
Dock
Floating Dock
Naval Dock
Western Quay
Fish Dock
East Quay
Town Quay
Quay 1
Quay 2
Quay 3
San Felipo Mole
Eastern
Quay
Tank Cleaning
Berth

CADIZ

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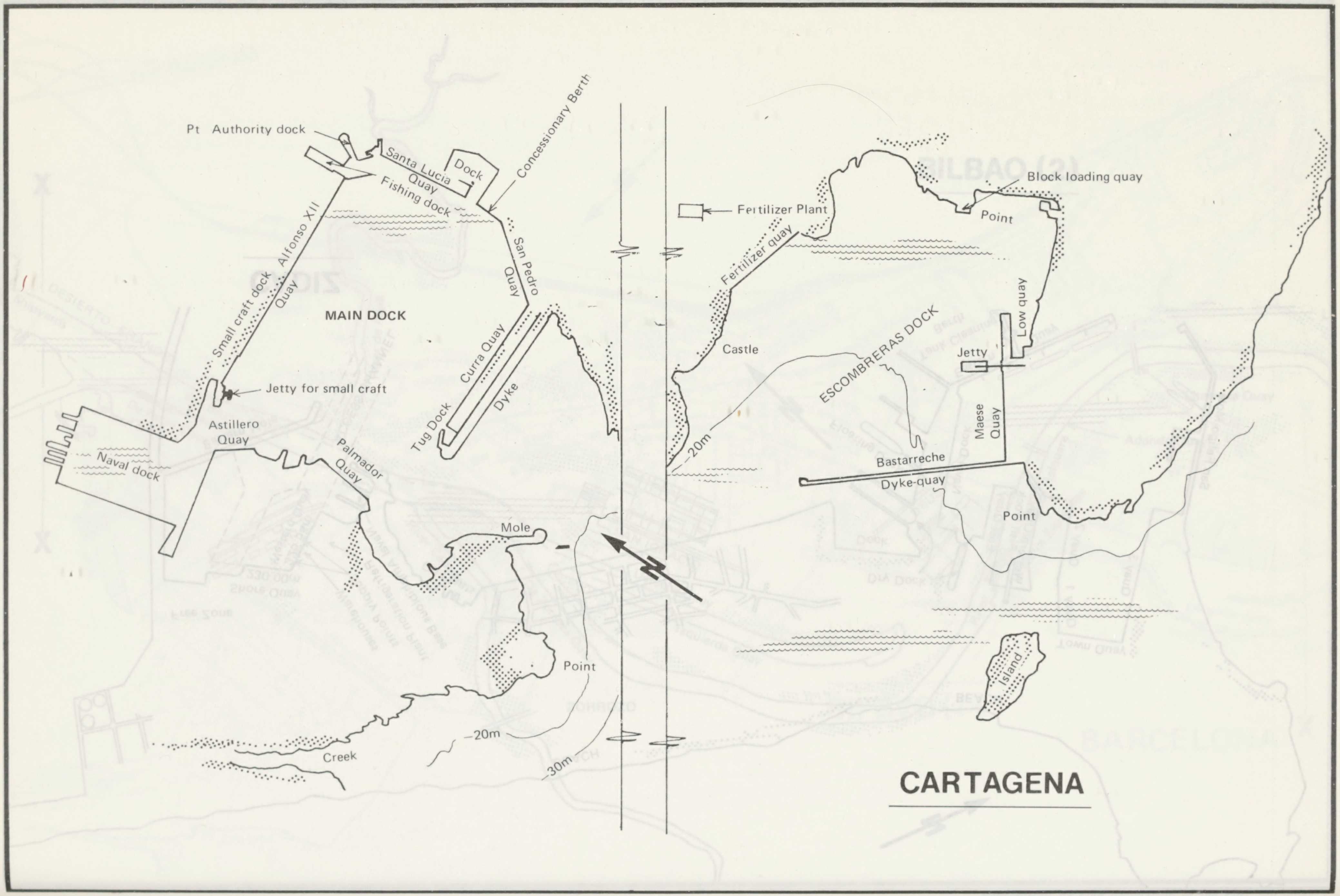
Pt Authority dock
Santa Lucia Quay
Dock
Concessionary Berth
Fishing dock
Alfonso XII Quay
Small craft dock
MAIN DOCK
San Pedro Quay
Curra Quay
Dyke
Tug Dock
Jetty for small craft
Astillero Quay
Naval dock
Palmador Quay
Mole
Point
Creek
–20m
–30m
Fertilizer Plant
Fertilizer quay
Castle
ESCOMBRERAS DOCK
–20m
Block loading quay
Point
Low quay
Jetty
Maese Quay
Bastarreche
Dyke-quay
Point
Island

CARTAGENA

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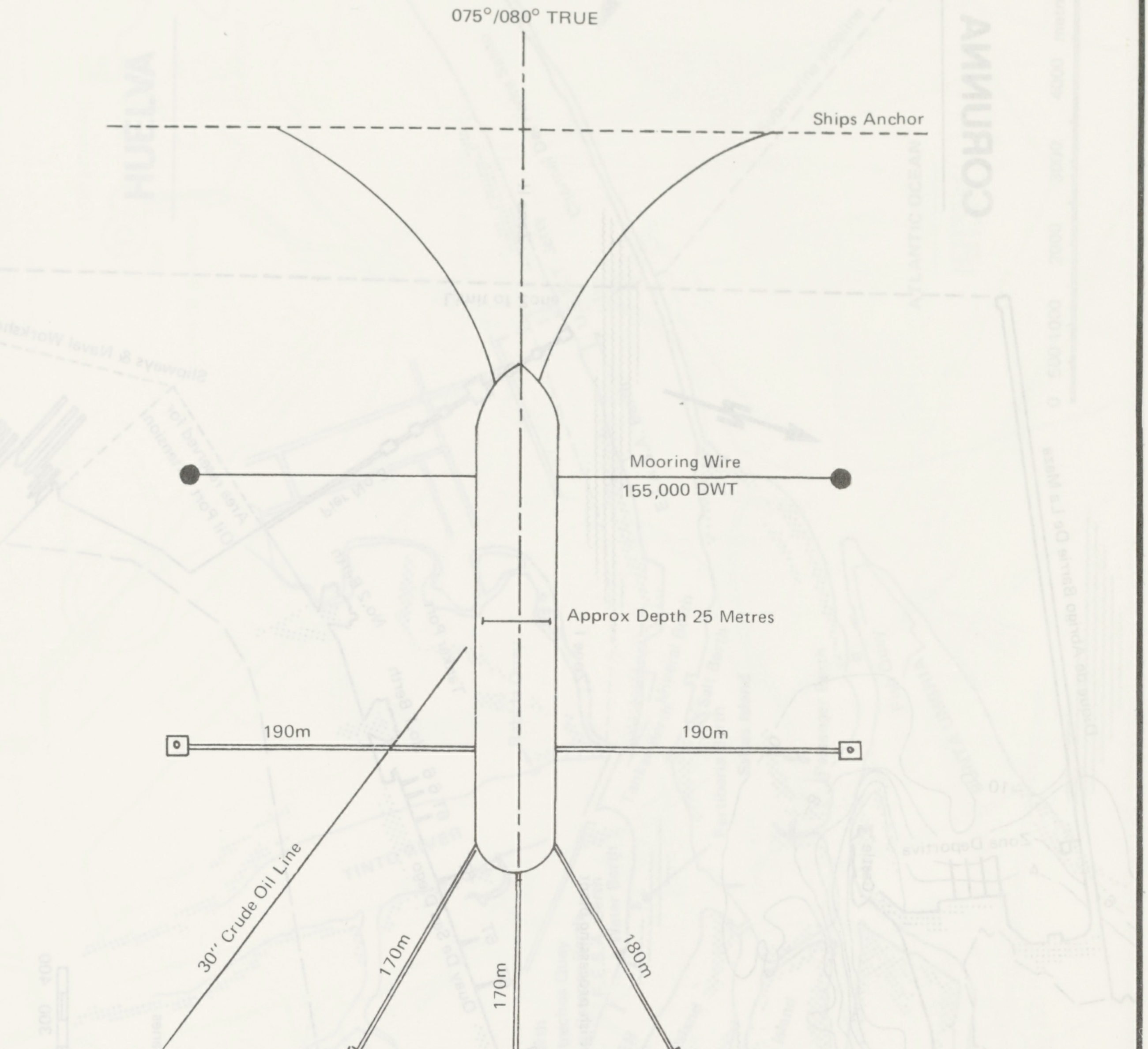
CASTELLON DE LA PLANA


075°/080° TRUE
Ships Anchor
Mooring Wire
155,000 DWT
Approx Depth 25 Metres
190m
190m
30" Crude Oil Line
170m
170m
180m
128,100
128,100
30
70
30
3000 DWT
Mooring Dolphin
Walkway
Turning Dolphin
37,000 DWT
Depth Alongside Approx 12.5m
10" Bunker Line
30" Crude Oil Line

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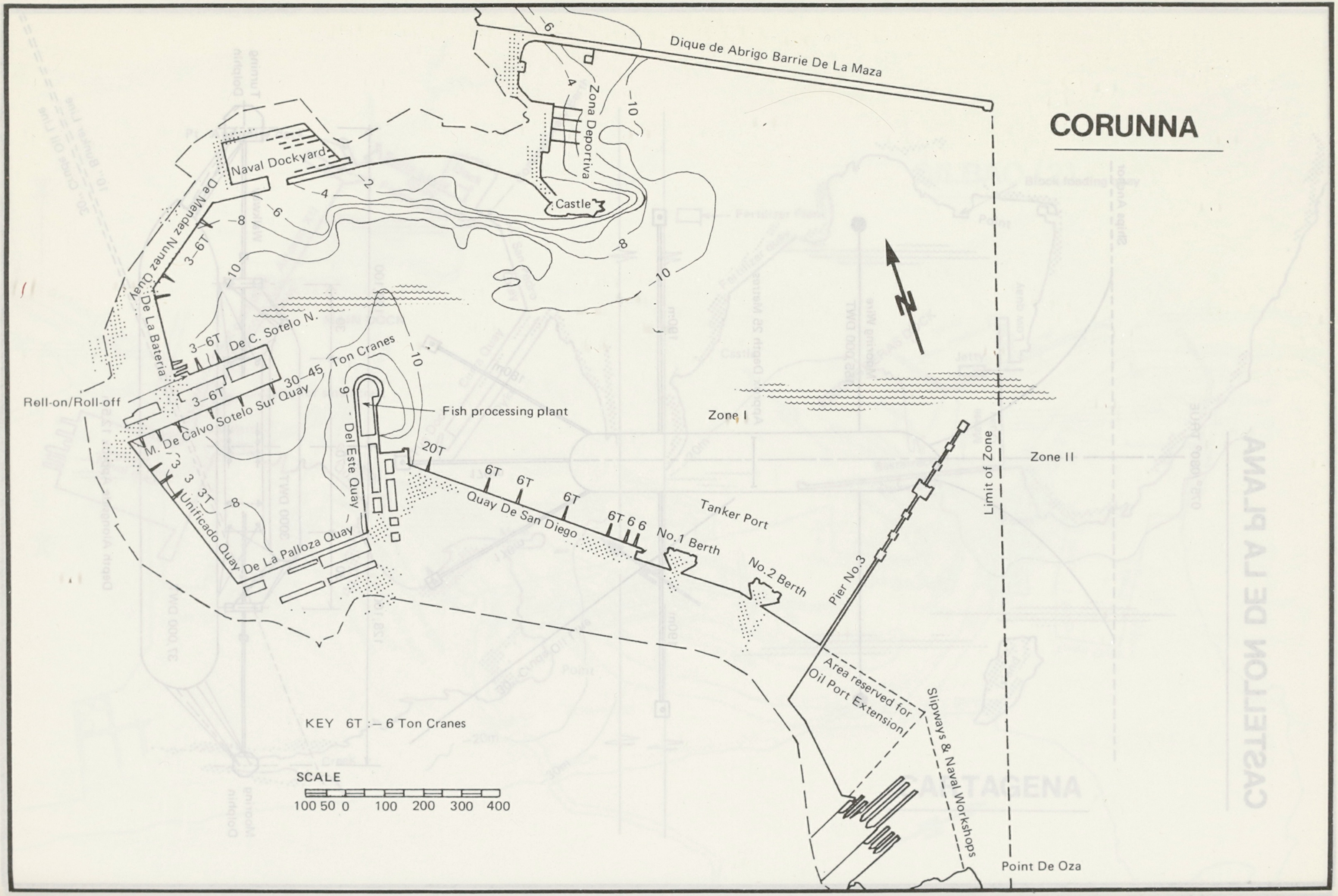
CORUNNA
Dique de Abrigo Barrie De La Maza
Zona Deportiva
Castle
Naval Dockyard
De Mendez Nunez Quay
De La Bateria
De C. Sotelo N.
M. De Calvo Sotelo Sur Quay
Roll-on/Roll-off
Unificado Quay
De La Palloza Quay
Del Este Quay
Fish processing plant
30–45 Ton Cranes
3–6T
3–6T
3–6T
3
3
3T
20T
6T
6T
6T
6T 6 6
Quay De San Diego
No.1 Berth
No.2 Berth
Tanker Port
Pier No.3
Zone I
Zone II
Limit of Zone
Area reserved for Oil Port Extension
Slipways & Naval Workshops
Point De Oza
N
2
4
6
6
4
8
8
8
9
10
10
10
10
KEY 6T :– 6 Ton Cranes
SCALE
100 50 0 100 200 300 400

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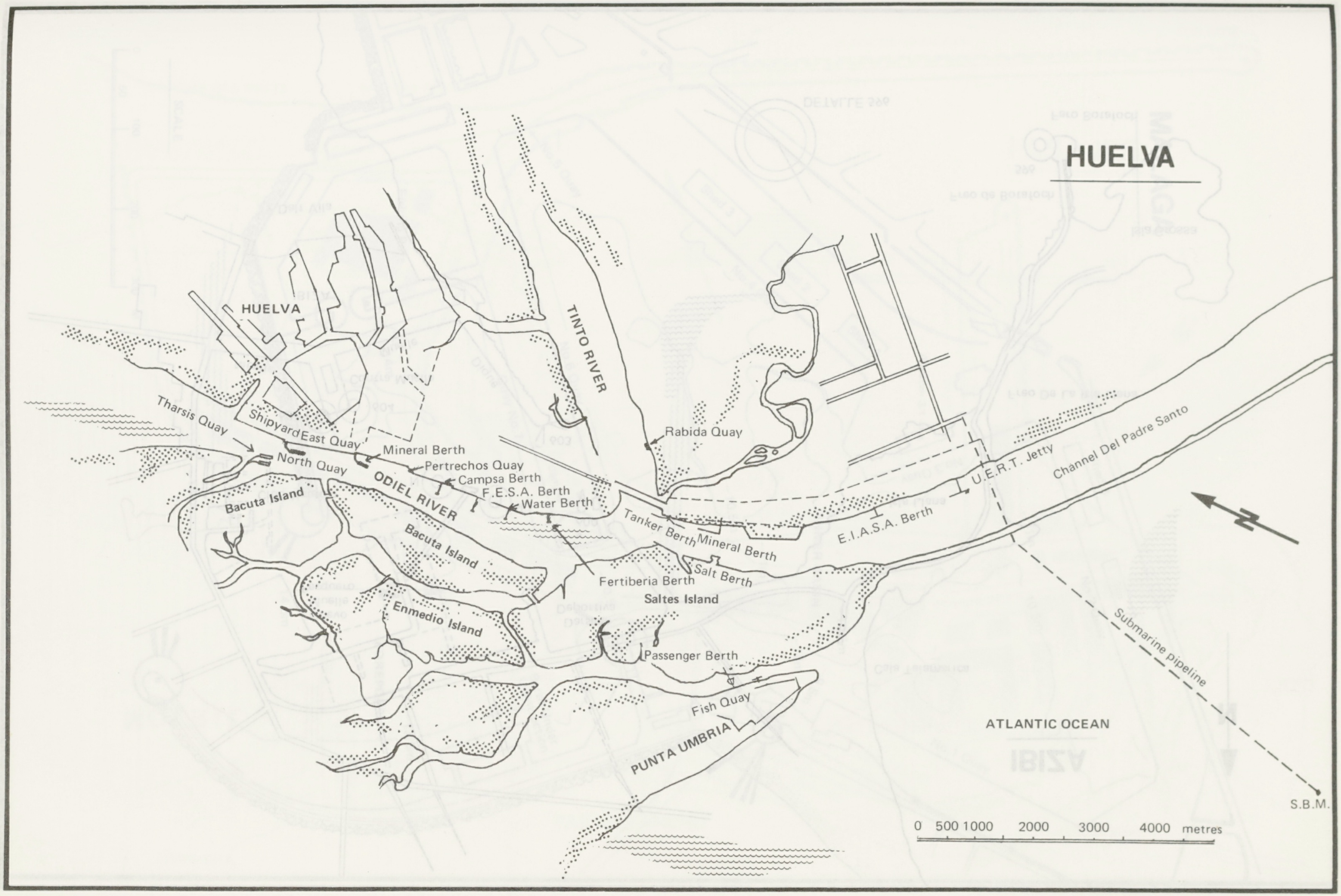
HUELVA
HUELVA
Tharsis Quay
Shipyard
East Quay
North Quay
Mineral Berth
Pertrechos Quay
Campsa Berth
F.E.S.A. Berth
Water Berth
ODIEL RIVER
Bacuta Island
Bacuta Island
Enmedio Island
TINTO RIVER
Rabida Quay
Tanker Berth
Mineral Berth
Salt Berth
Fertiberia Berth
Saltes Island
Passenger Berth
Fish Quay
PUNTA UMBRIA
E.I.A.S.A. Berth
U.E.R.T. Jetty
Channel Del Padre Santo
N
Submarine pipeline
S.B.M.
ATLANTIC OCEAN
0 500 1000 2000 3000 4000 metres

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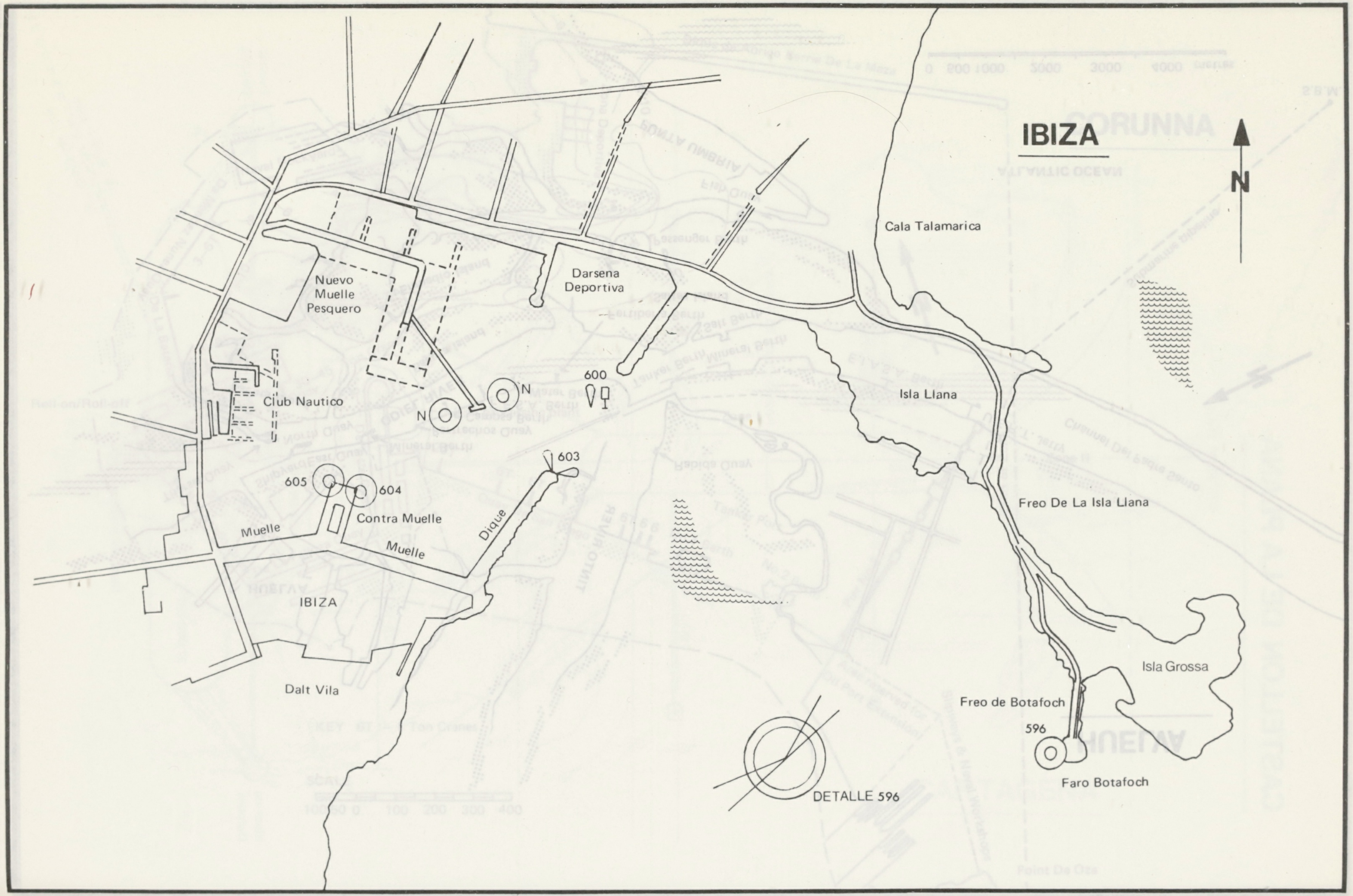
IBIZA
N
Cala Talamarica
Nuevo
Muelle
Pesquero
Darsena
Deportiva
600
Club Nautico
N
N
Isla Llana
603
605
604
Contra Muelle
Freo De La Isla Llana
Muelle
Muelle
Dique
IBIZA
Isla Grossa
Dalt Vila
Freo de Botafoch
596
Faro Botafoch
DETALLE 596

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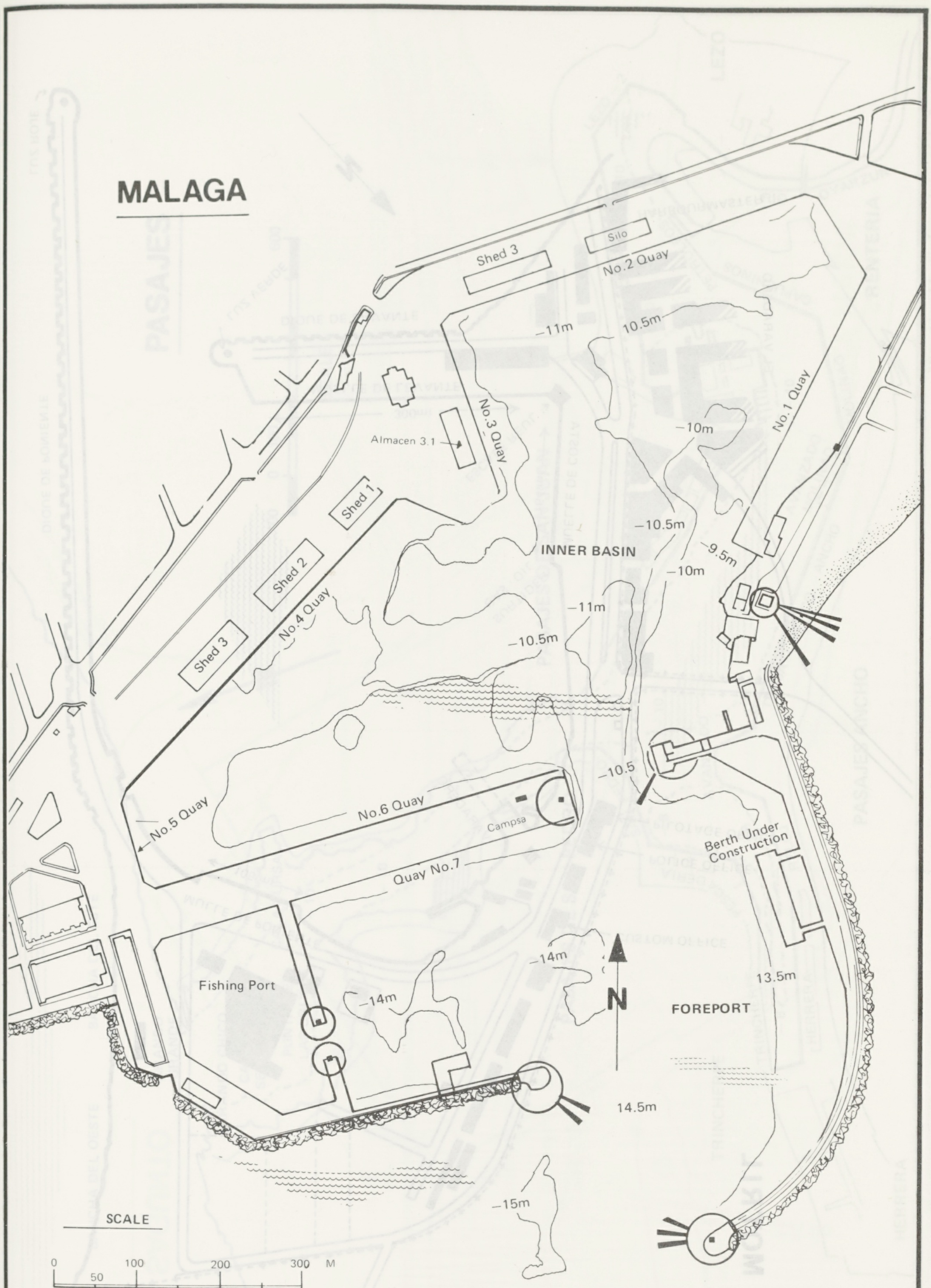
MALAGA


Shed 3
Silo
No.2 Quay
−11m
10.5m
No.1 Quay
No.3 Quay
Almacen 3.1
−10m
Shed 1
Shed 2
No.4 Quay
Shed 3
INNER BASIN
−10.5m
9.5m
−10m
−11m
−10.5m
−10.5
No.5 Quay
No.6 Quay
Campsa
Quay No.7
Berth Under Construction
Fishing Port
−14m
−14m
N
FOREPORT
13.5m
14.5m
−15m
SCALE
0
50
100
200
300
M

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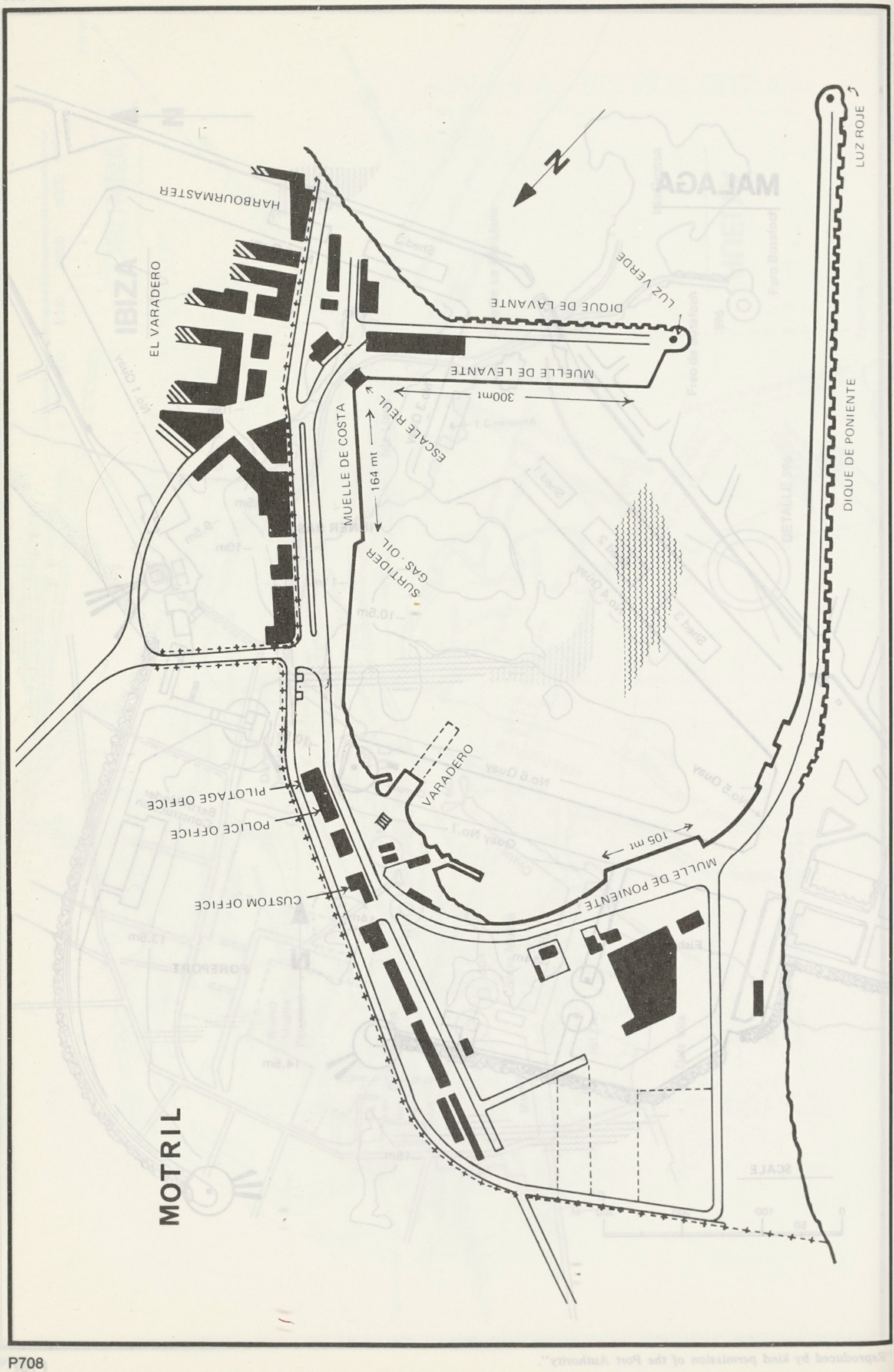
MOTRIL
HARBOURMASTER
EL VARADERO
MUELLE DE COSTA
164 mt
ESCALE REUL
MUELLE DE LEVANTE
300mt
DIQUE DE LAVANTE
LUZ VERDE
N
LUZ ROJE
DIQUE DE PONIENTE
SURTIDER
GAS · OIL
VARADERO
PILOTAGE OFFICE
POLICE OFFICE
CUSTOM OFFICE
MUELLE DE PONIENTE
105 mt

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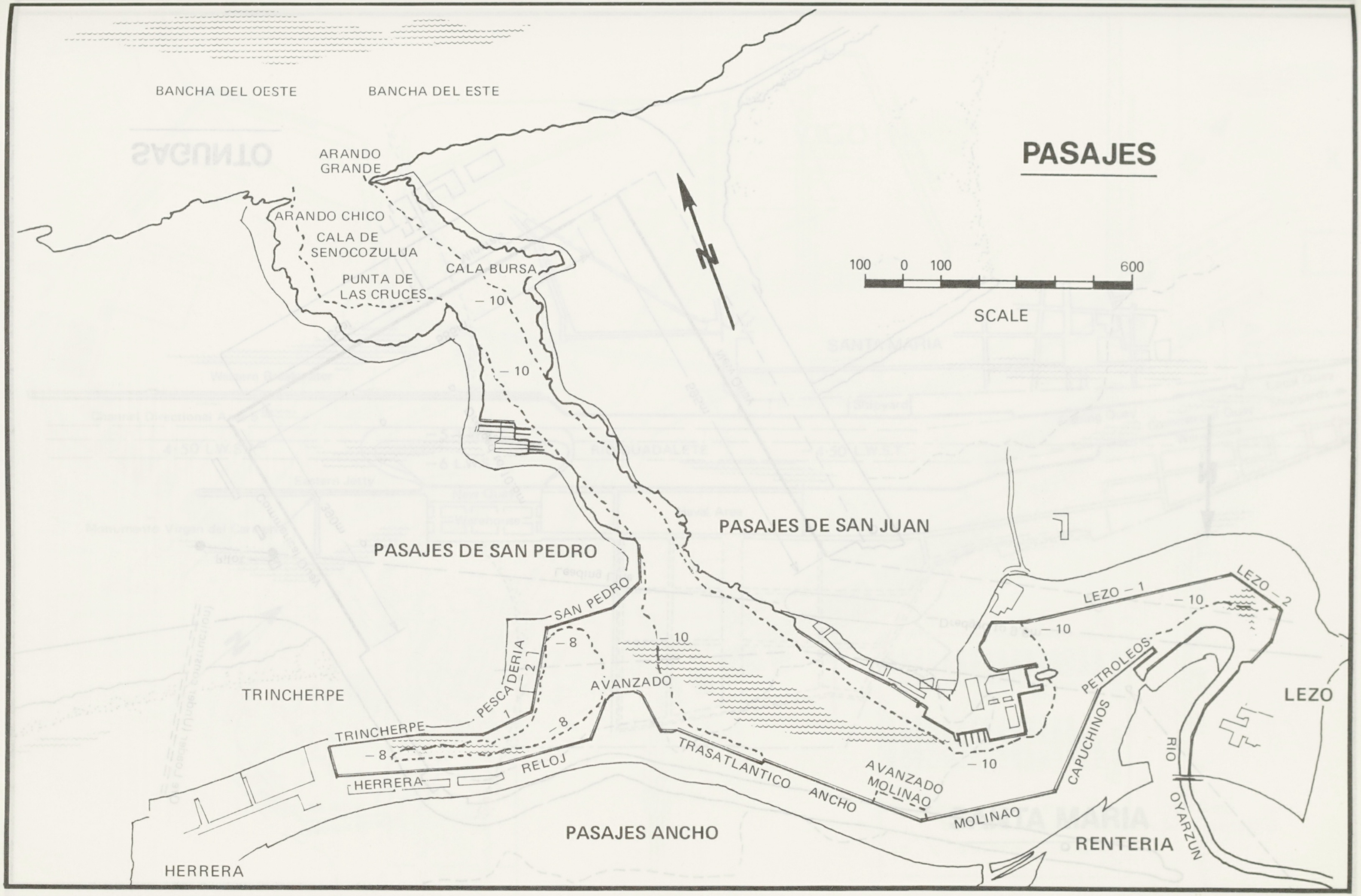
BANCHA DEL OESTE
BANCHA DEL ESTE
PASAJES
ARANDO GRANDE
ARANDO CHICO
CALA DE SENOCOZULUA
CALA BURSA
PUNTA DE LAS CRUCES
– 10
– 10
100
0
100
600
SCALE
N
PASAJES DE SAN JUAN
PASAJES DE SAN PEDRO
SAN PEDRO
– 8
– 10
PESCADERIA 2
PESCADERIA 1
AVANZADO
TRINCHERPE
– 8
– 8
RELOJ
HERRERA
TRASATLANTICO
ANCHO
AVANZADO MOLINAO
MOLINAO
– 10
– 10
LEZO – 1
LEZO – 2
– 10
PETROLEOS
CAPUCHINOS
RIO OYARZUN
LEZO
RENTERIA
PASAJES ANCHO
HERRERA

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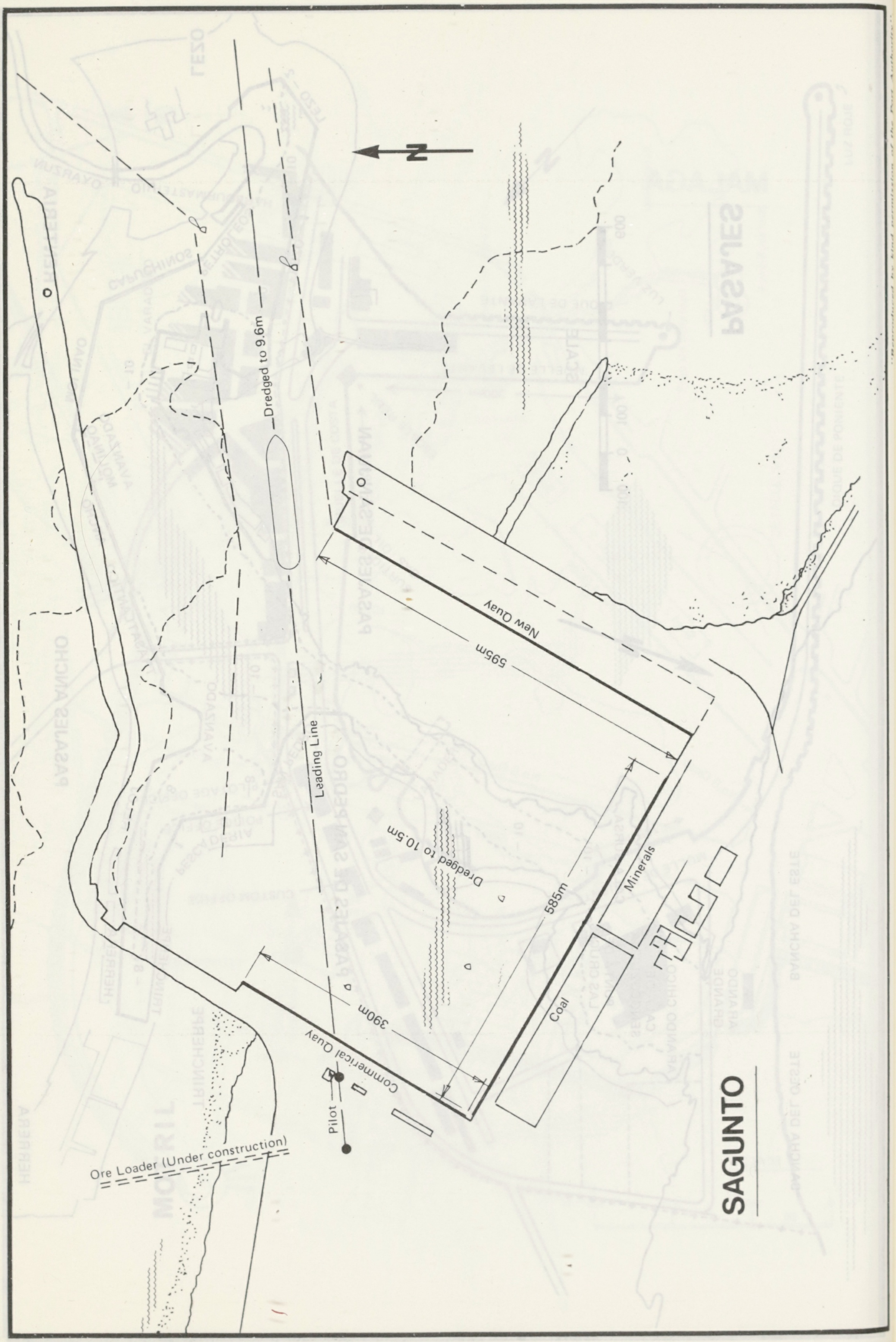
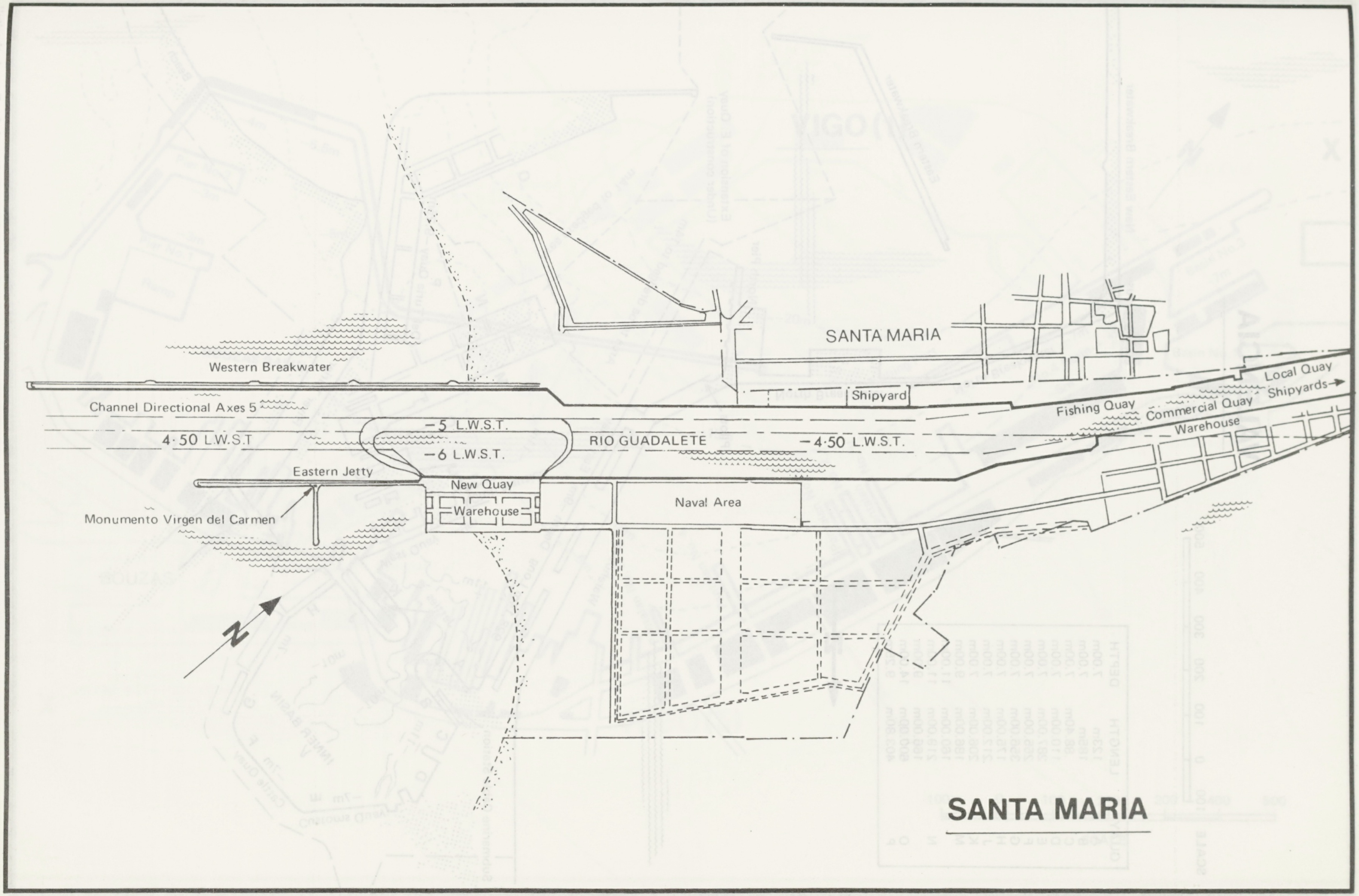

SAGUNTO
N
Dredged to 9.6m
Leading Line
New Quay
595m
Dredged to 10.5m
585m
Minerals
Coal
390m
Commerical Quay
Pilot
Ore Loader (Under construction)


SANTA MARIA
Western Breakwater
Channel Directional Axes 5
4·50 L.W.S.T
−5 L.W.S.T.
−6 L.W.S.T.
RIO GUADALETE
−4·50 L.W.S.T.
Shipyard
Fishing Quay
Commercial Quay
Local Quay
Shipyards→
Warehouse
Eastern Jetty
New Quay
Warehouse
Naval Area
Monumento Virgen del Carmen
N

SANTA MARIA

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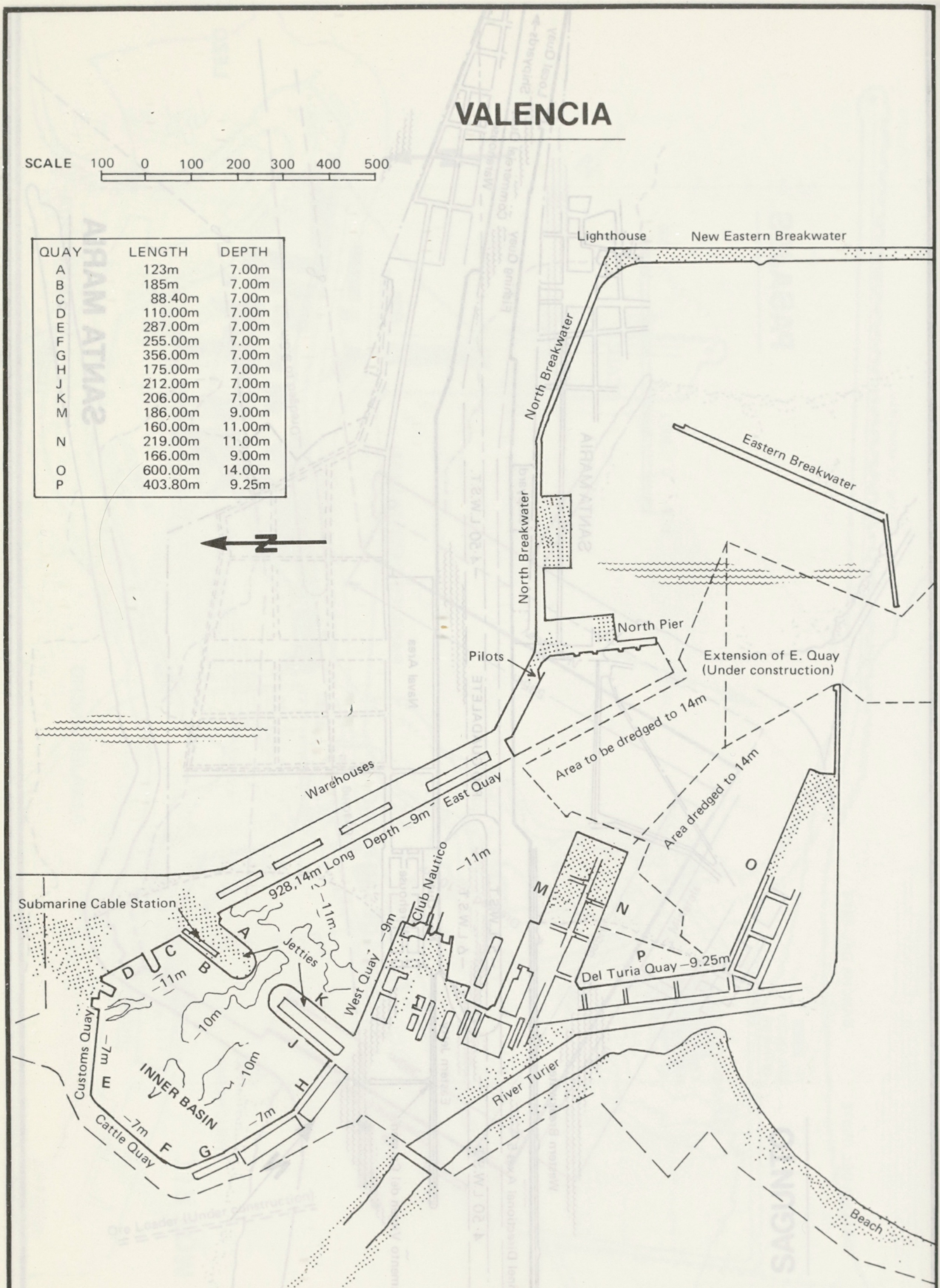
VALENCIA


SCALE 100 0 100 200 300 400 500
Lighthouse
New Eastern Breakwater
North Breakwater
Eastern Breakwater
North Breakwater
North Pier
Pilots
Extension of E. Quay
(Under construction)
Area to be dredged to 14m
Area dredged to 14m
Warehouses
928,14m Long Depth –9m East Quay
Club Nautico
–11m
–11m
–9m
West Quay
Submarine Cable Station
Jetties
A
B
C
D
E
F
G
H
J
K
M
N
O
P
–11m
–10m
–10m
–7m
–7m
–7m
Customs Quay
INNER BASIN
Cattle Quay
Del Turia Quay –9.25m
River Turier
Beach

QUAY	LENGTH	DEPTH
A	123m	7.00m
B	185m	7.00m
C	88.40m	7.00m
D	110.00m	7.00m
E	287.00m	7.00m
F	255.00m	7.00m
G	356.00m	7.00m
H	175.00m	7.00m
J	212.00m	7.00m
K	206.00m	7.00m
M	186.00m	9.00m
	160.00m	11.00m
N	219.00m	11.00m
	166.00m	9.00m
O	600.00m	14.00m
P	403.80m	9.25m

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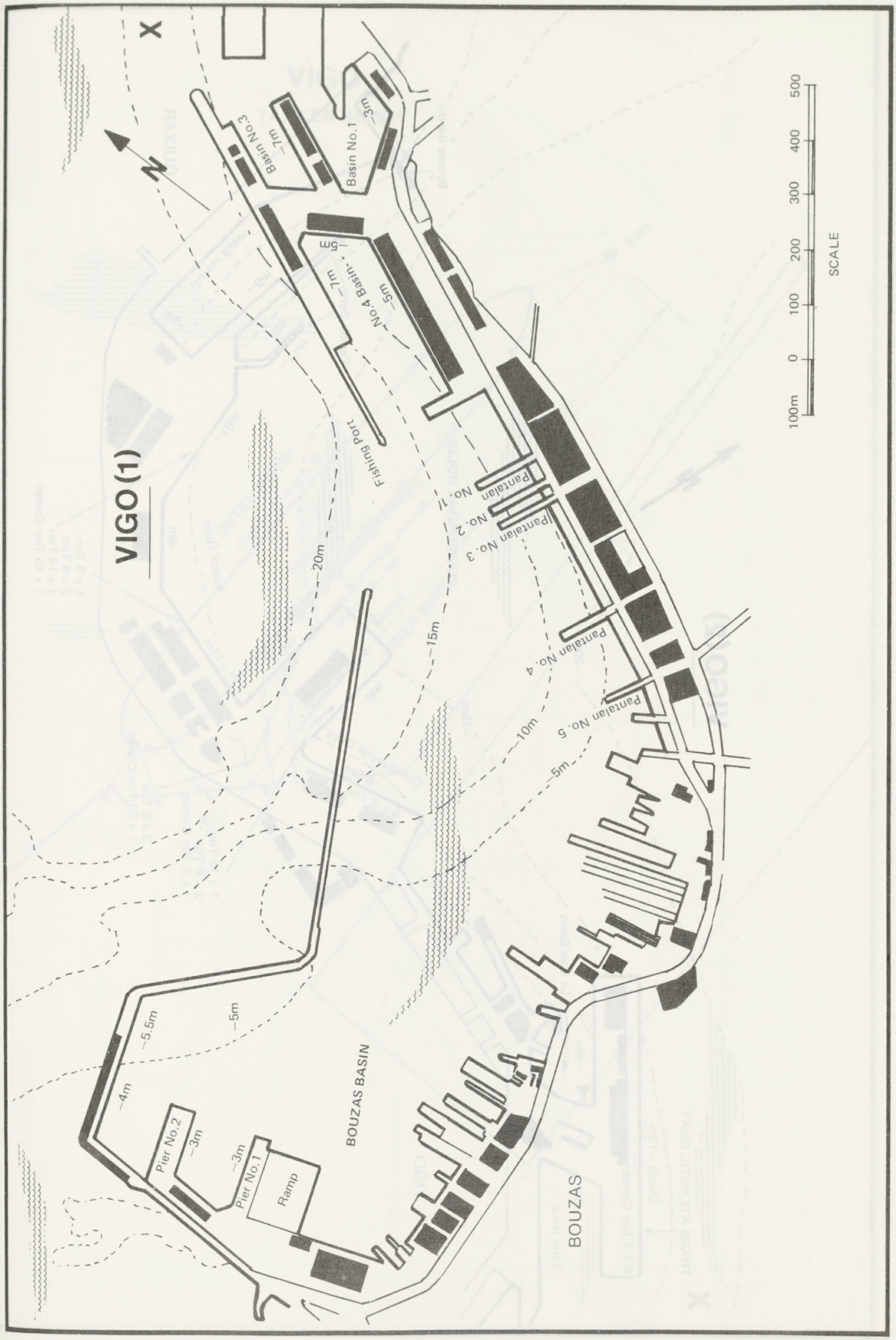
VIGO(1)
X
N
Basin No.3
–7m
Basin No.1
–3m
–5m
–7m
No.4 Basin
–5m
Fishing Port
Pantalan No.1
Pantalan No.2
Pantalan No.3
Pantalan No.4
Pantalan No.5
–20m
–15m
–10m
–5m
BOUZAS BASIN
–5.5m
–5m
–4m
Pier No.2
–3m
–3m
Pier No.1
Ramp
BOUZAS
100m
0
100
200
300
400
500
SCALE

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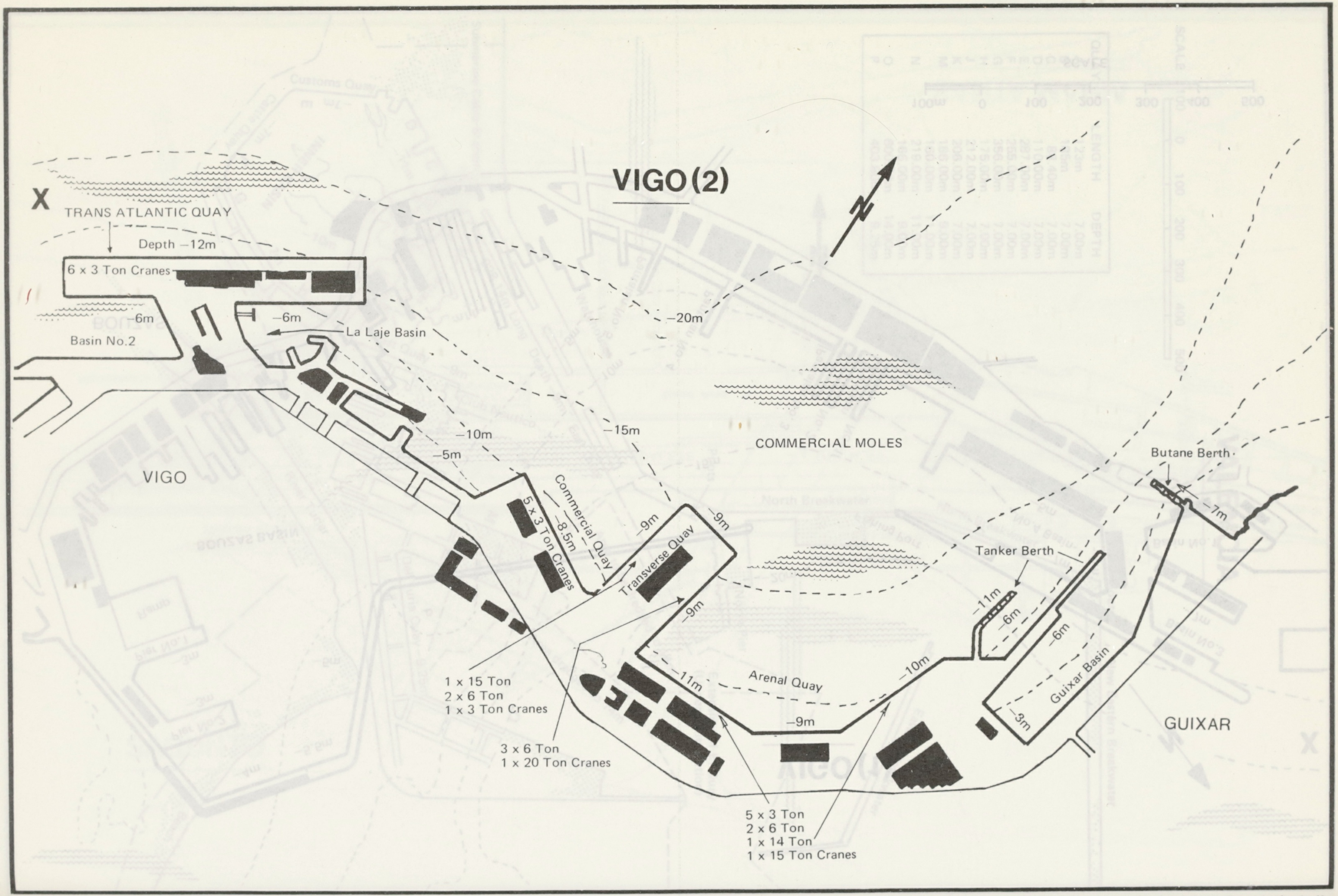
VIGO (2)
X
TRANS ATLANTIC QUAY
Depth −12m
6 x 3 Ton Cranes
−6m
−6m
Basin No.2
La Laje Basin
−20m
−15m
−10m
−5m
VIGO
COMMERCIAL MOLES
Commercial Quay
−8.5m
5 x 3 Ton Cranes
−9m
−9m
Transverse Quay
−9m
1 x 15 Ton
2 x 6 Ton
1 x 3 Ton Cranes
3 x 6 Ton
1 x 20 Ton Cranes
−11m
Arenal Quay
−9m
−10m
5 x 3 Ton
2 x 6 Ton
1 x 14 Ton
1 x 15 Ton Cranes
Tanker Berth
−11m
−6m
−6m
Guixar Basin
−3m
Butane Berth
−7m
GUIXAR

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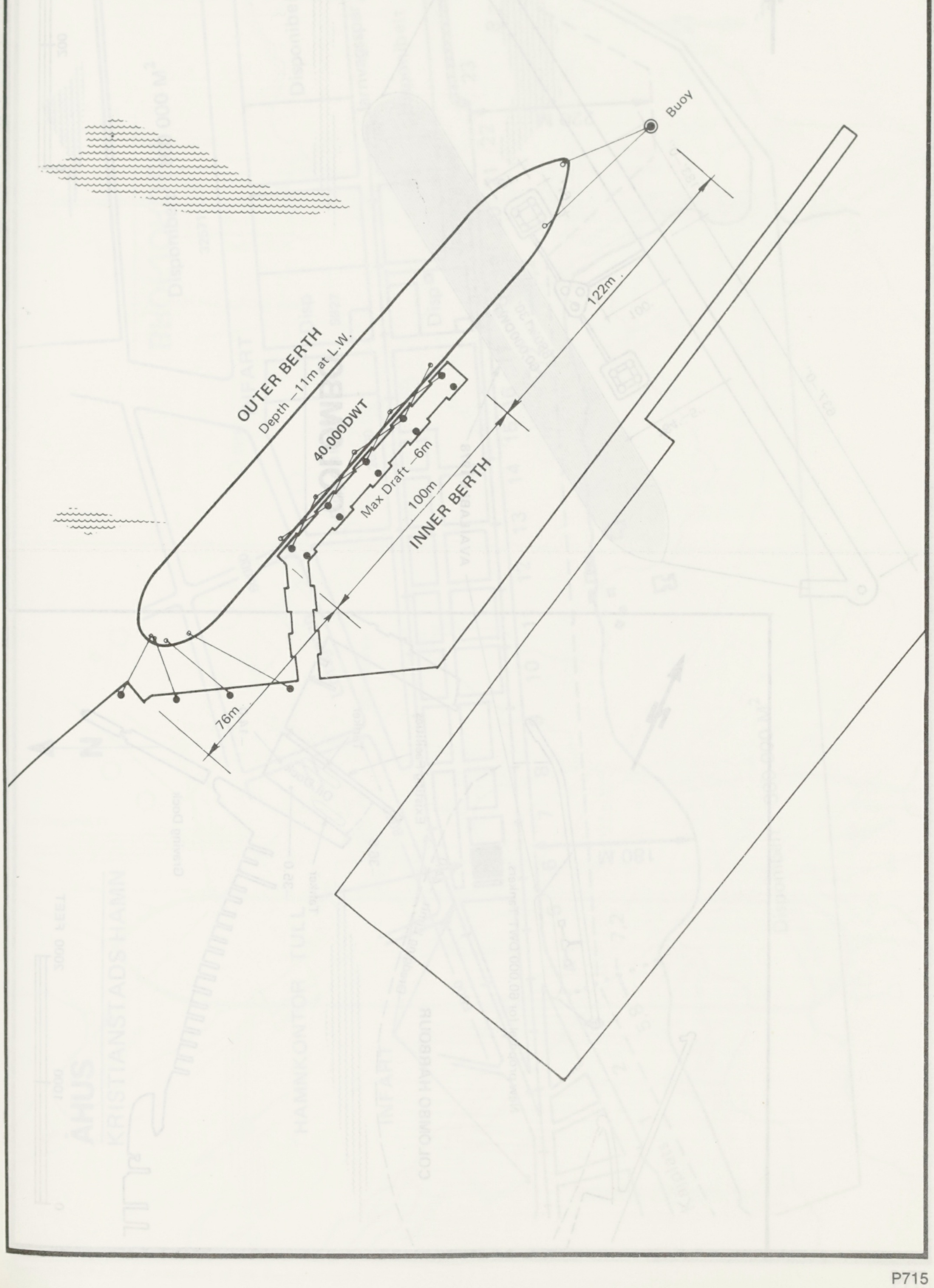
VIGO

TANKER BERTH


OUTER BERTH
Depth –11m at L.W.
40.000DWT
Max Draft –6m
100m
INNER BERTH
76m
122m
Buoy

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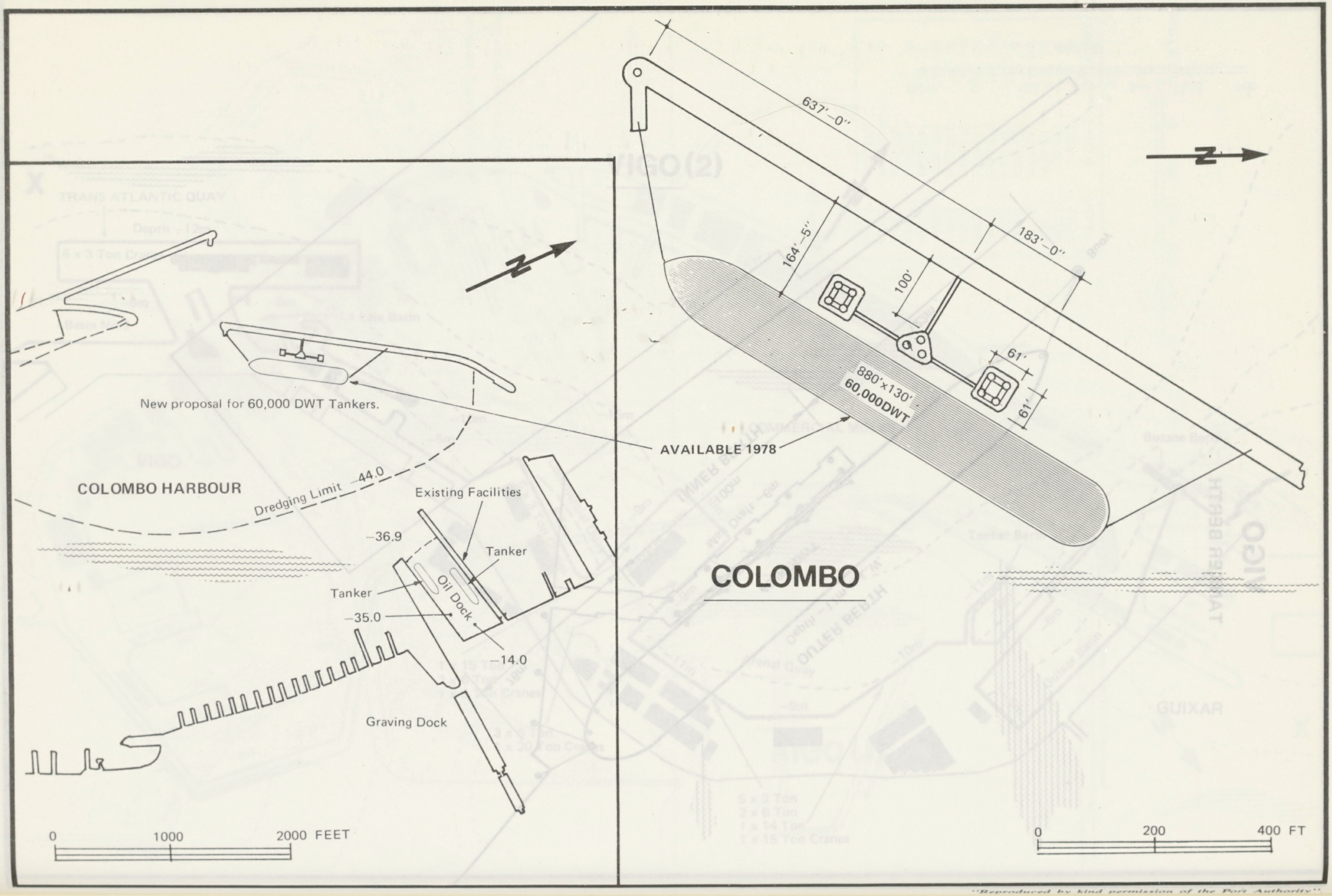
COLOMBO
COLOMBO HARBOUR
New proposal for 60,000 DWT Tankers.
AVAILABLE 1978
Dredging Limit
–44.0
–36.9
–35.0
–14.0
Existing Facilities
Tanker
Tanker
Oil Dock
Graving Dock
N
0
1000
2000 FEET
637'–0"
164'–5"
183'–0"
100'
61'
61'
880'x130'
60,000DWT
N
0
200
400 FT

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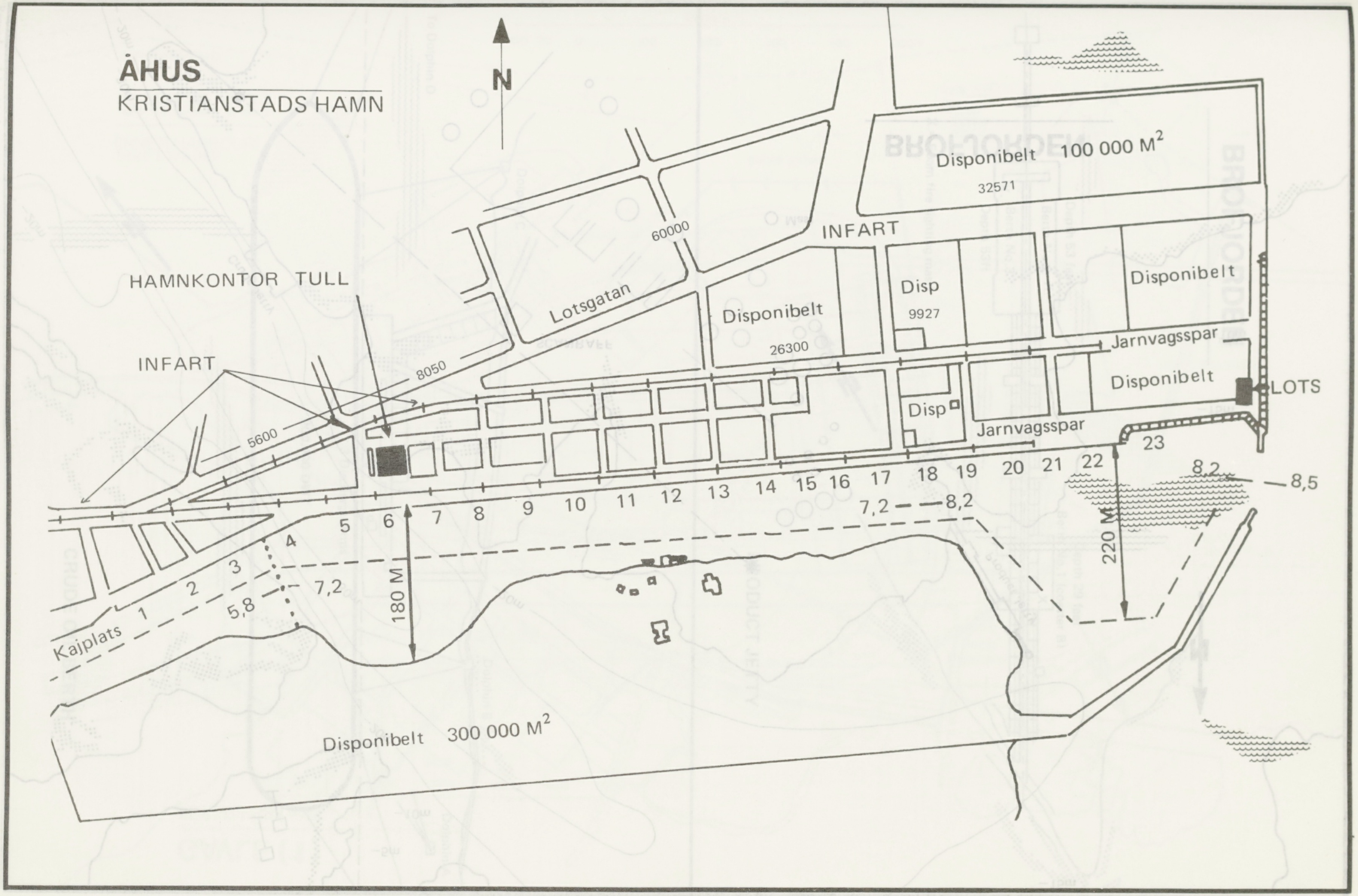
ÅHUS
KRISTIANSTADS HAMN
N
HAMNKONTOR TULL
INFART
INFART
Lotsgatan
60000
8050
5600
Disponibelt 100 000 M^2
32571
Disponibelt
26300
Disp
9927
Disponibelt
Jarnvagsspar
Disponibelt
LOTS
Disp
Jarnvagsspar
Kajplats 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
5,8
7,2
180 M
7,2 — 8,2
8,2
8,5
220 M
Disponibelt 300 000 M^2

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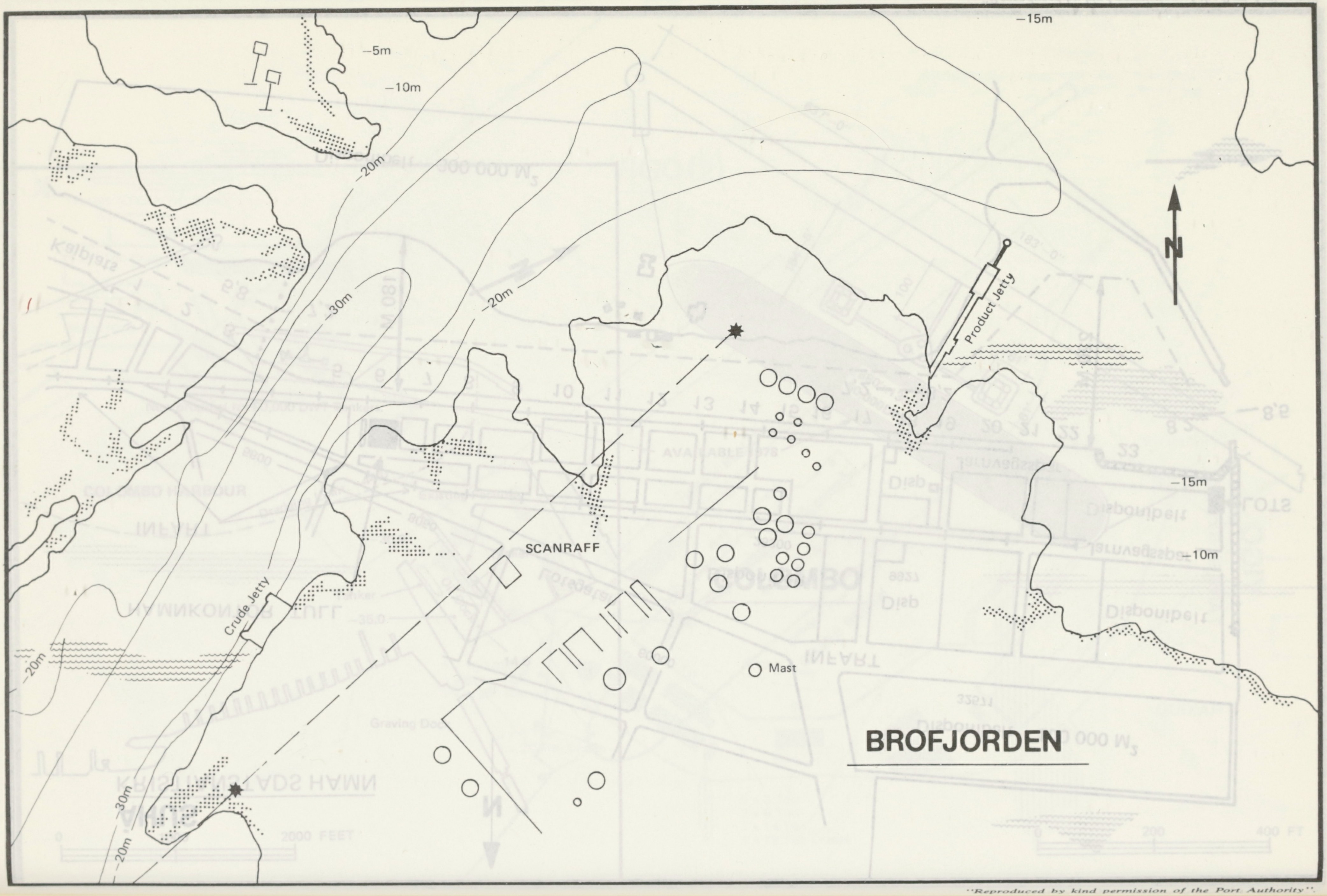
BROFJORDEN


N
Product Jetty
Crude Jetty
SCANRAFF
Mast
−5m
−10m
−15m
−20m
−30m
−20m
−30m
−20m
−20m
−15m
−10m

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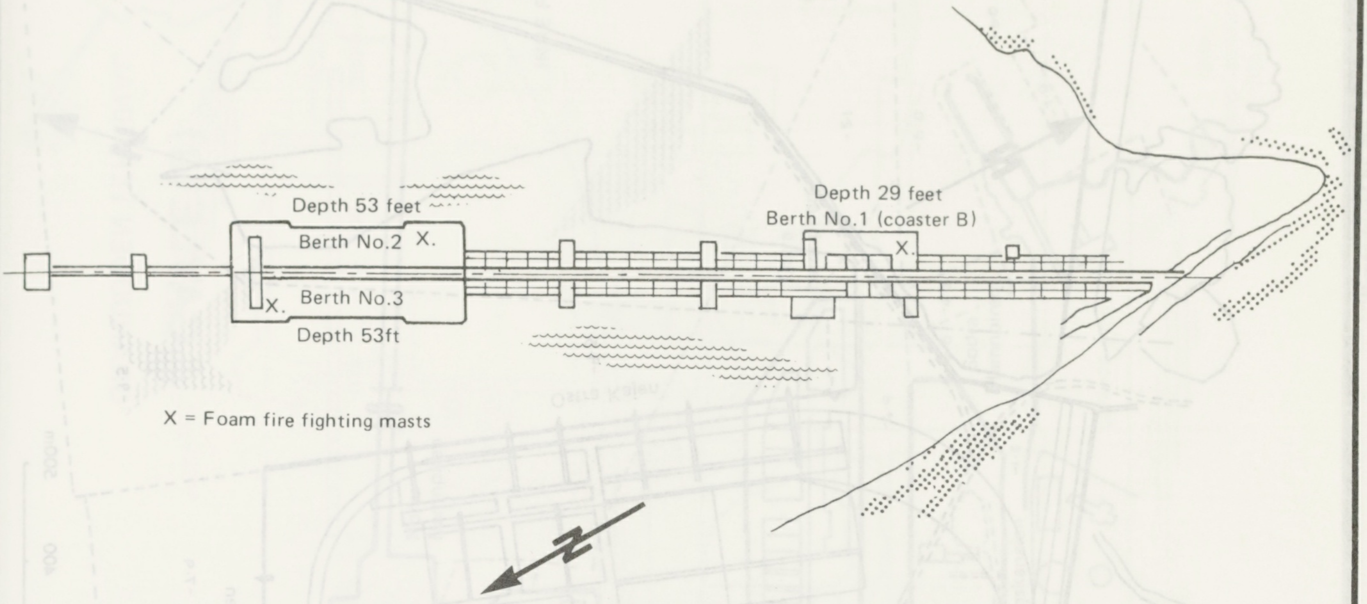
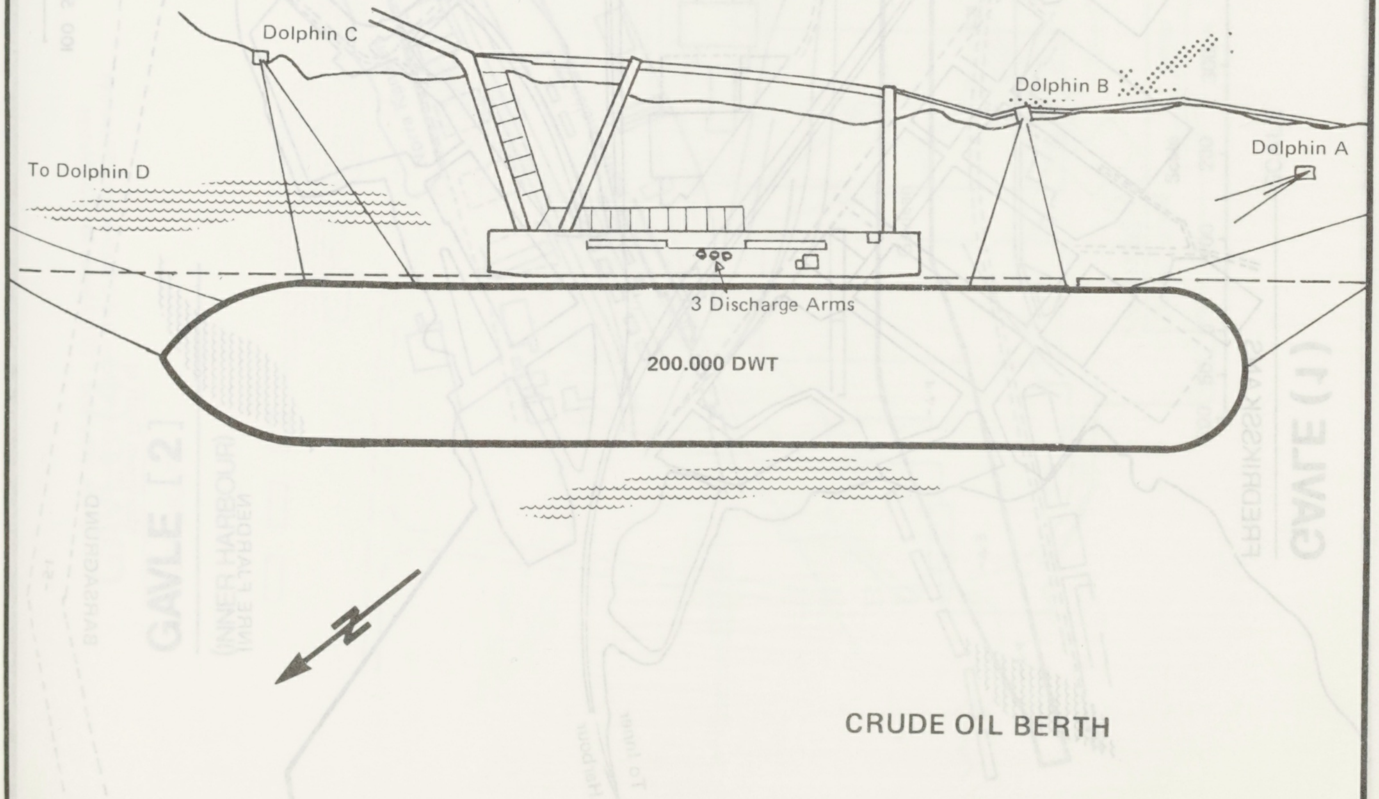
BROFJORDEN


Depth 53 feet
Berth No.2 X.
X. Berth No.3
Depth 53ft
Depth 29 feet
Berth No.1 (coaster B)
X.
X = Foam fire fighting masts

PRODUCT JETTY


Dolphin C
Dolphin B
Dolphin A
To Dolphin D
3 Discharge Arms
200.000 DWT

CRUDE OIL BERTH

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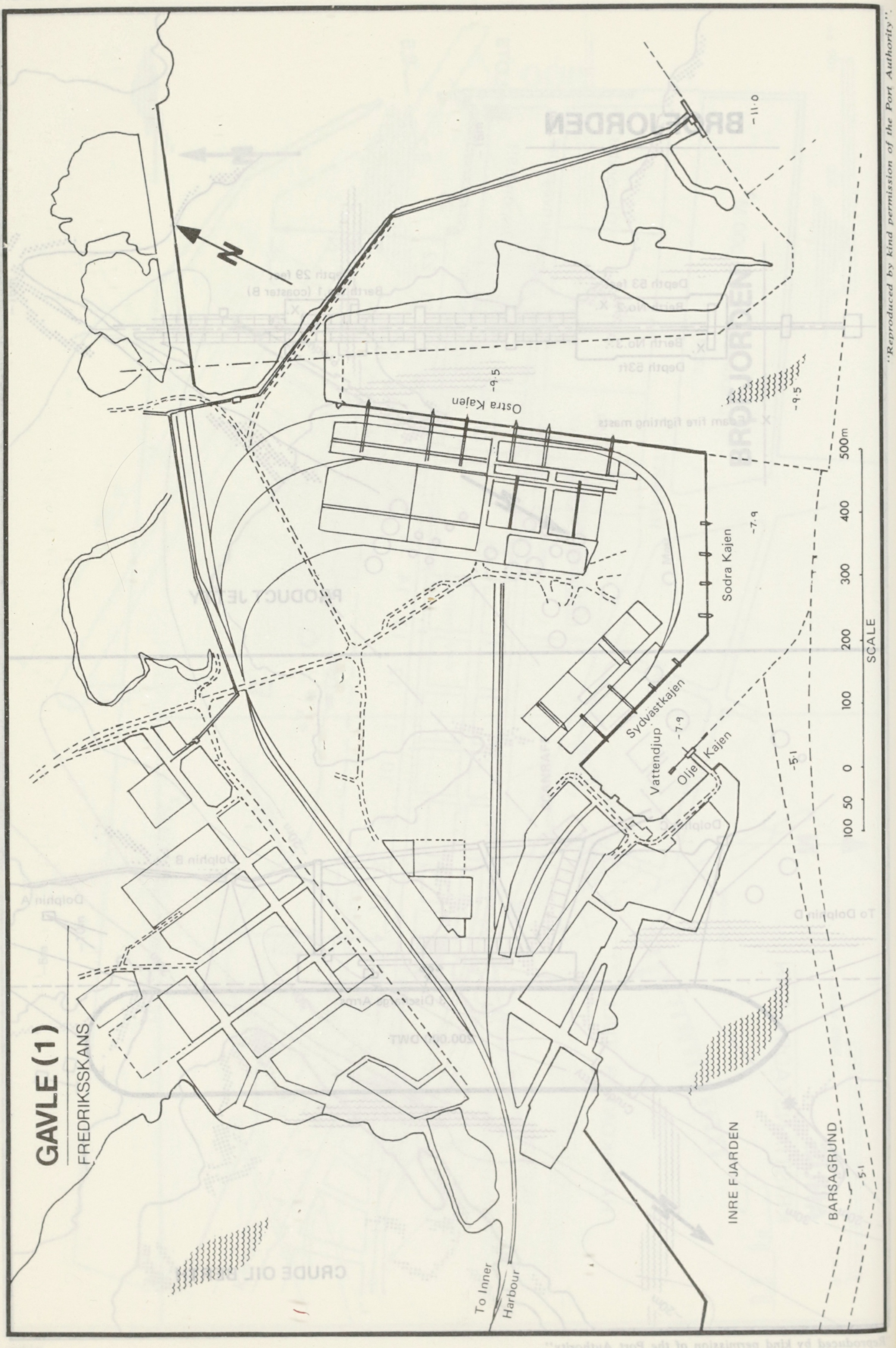
GAVLE (1)


FREDRIKSSKANS
N
Ostra Kajen
-9.6
Sodra Kajen
-7.9
Sydvästkajen
Vattendjup -7.9
Olje Kajen
-11.0
-9.5
-5.1
-5.1
INRE FJARDEN
BARSAGRUND
To Inner Harbour
SCALE
100 50 0 100 200 300 400 500m

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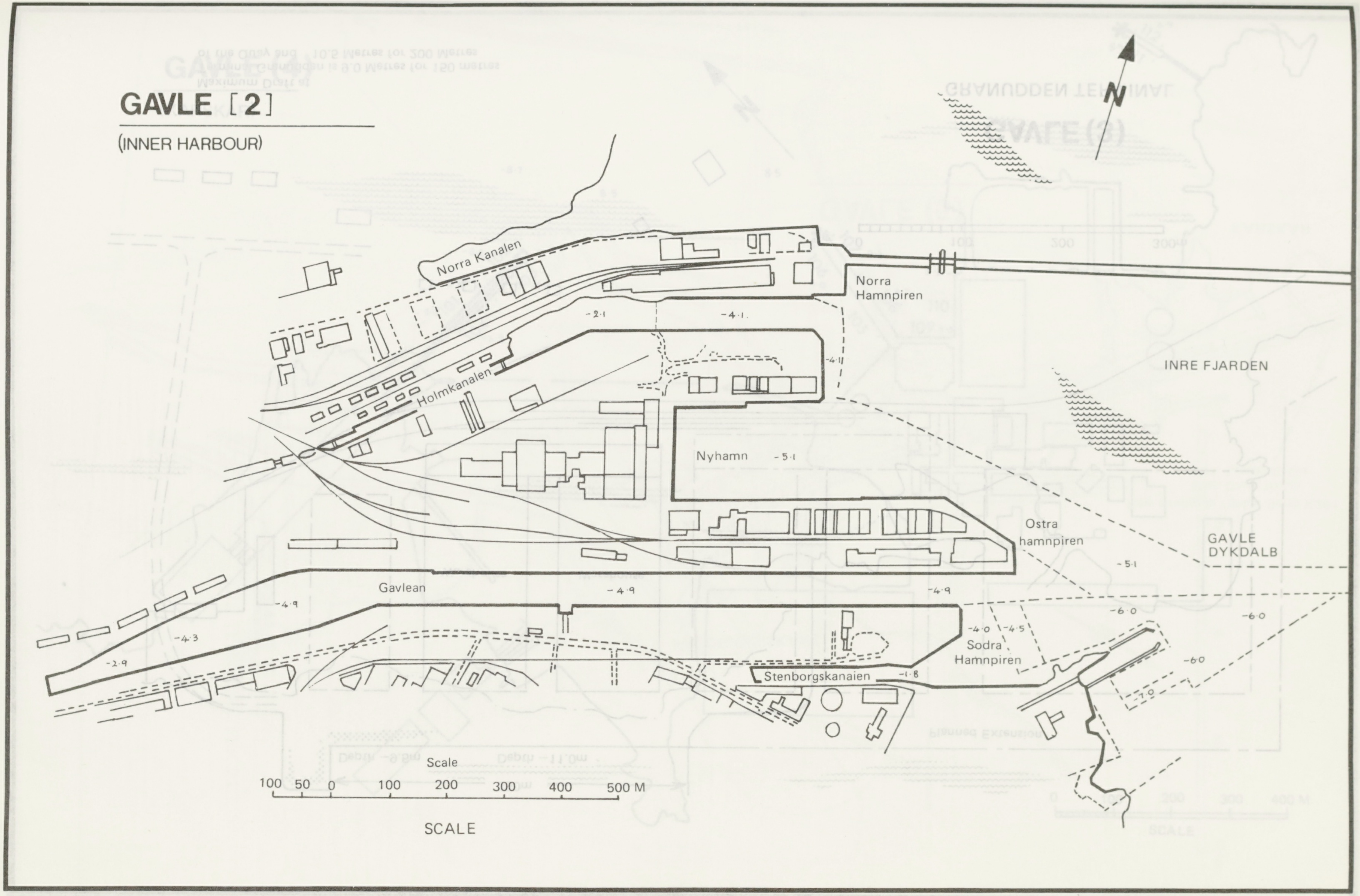
GAVLE [2]

(INNER HARBOUR)


N
Norra Kanalen
-2·1
-4·1
Norra Hamnpiren
-4·1
Holmkanalen
Nyhamn
-5·1
INRE FJARDEN
Ostra hamnpiren
GAVLE DYKDALB
-5·1
Gavlean
-4·9
-4·9
-4·9
-4·3
-2·9
-6·0
-6·0
-4·0
-4·5
Sodra Hamnpiren
-6·0
-7·0
Stenborgskanaien
-1·8
Scale
100 50 0 100 200 300 400 500 M
SCALE

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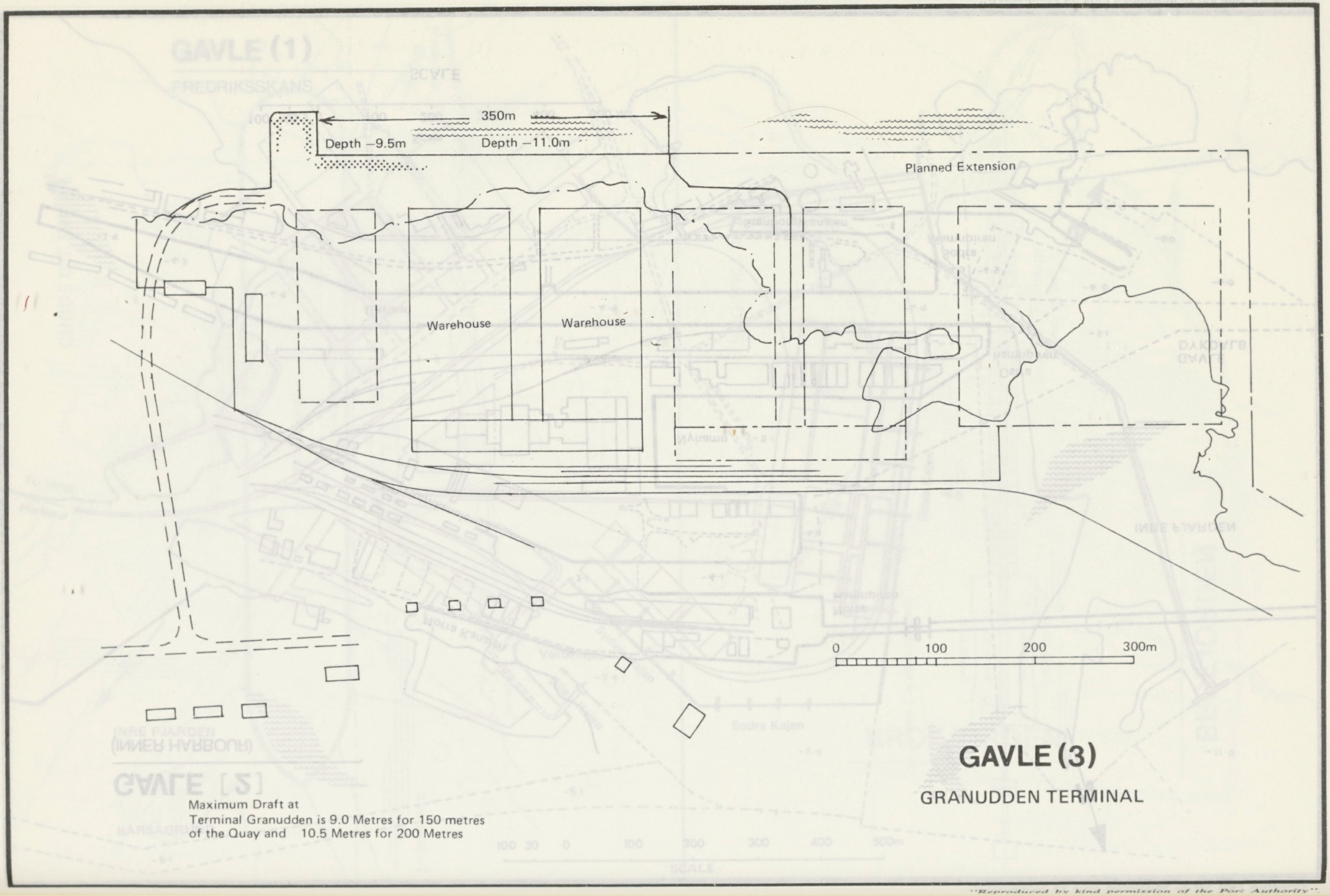
350m
Depth –9.5m
Depth –11.0m
Planned Extension
Warehouse
Warehouse
0
100
200
300m

GAVLE (3)

GRANUDDEN TERMINAL

Maximum Draft at Terminal Granudden is 9.0 Metres for 150 metres of the Quay and 10.5 Metres for 200 Metres

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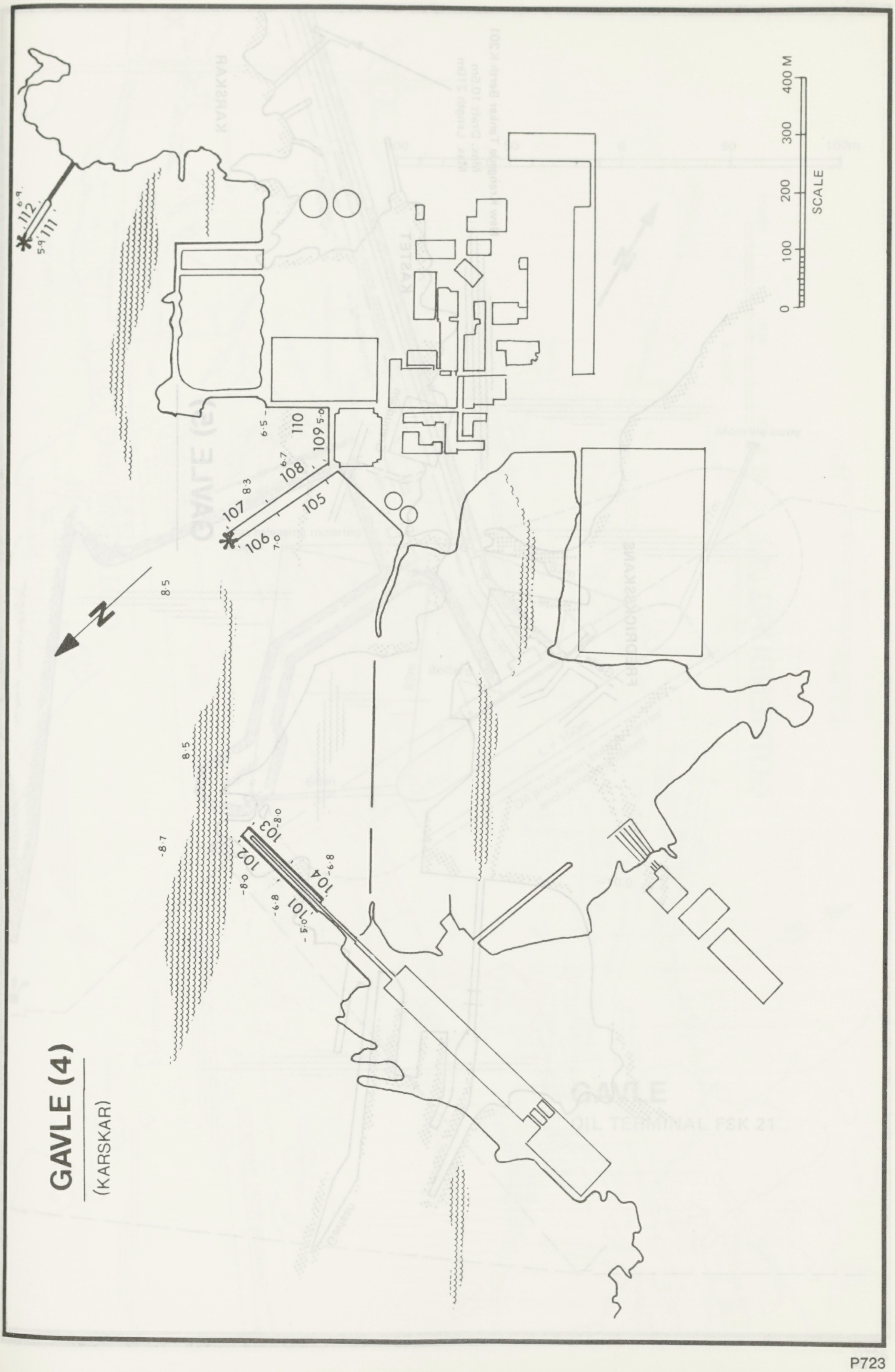

GAVLE (4)

(KARSKAR)

N
101
102
103
104
105
106
107
108
109
110
111
112
8·5
8·7
8·0
6·8
8·9
10·5
7·0
8·3
6·7
6·5
5·6
6·9
5·9
SCALE
0
100
200
300
400 M

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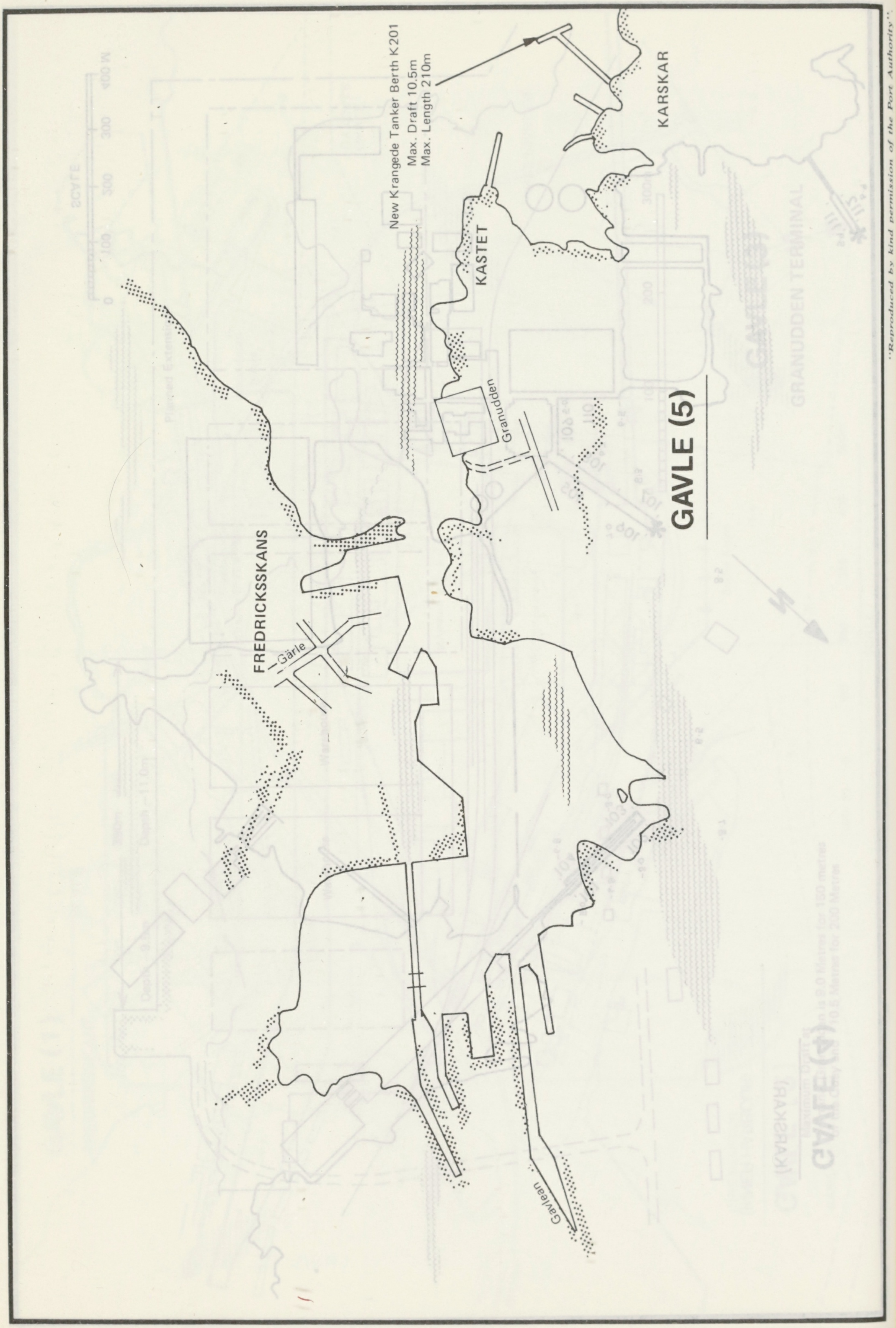
GAVLE (5)
New Krangede Tanker Berth K201
Max. Draft 10.5m
Max. Length 210m
KARSKAR
KASTET
Granudden
FREDRICKSSKANS
Gärle
Gavlean

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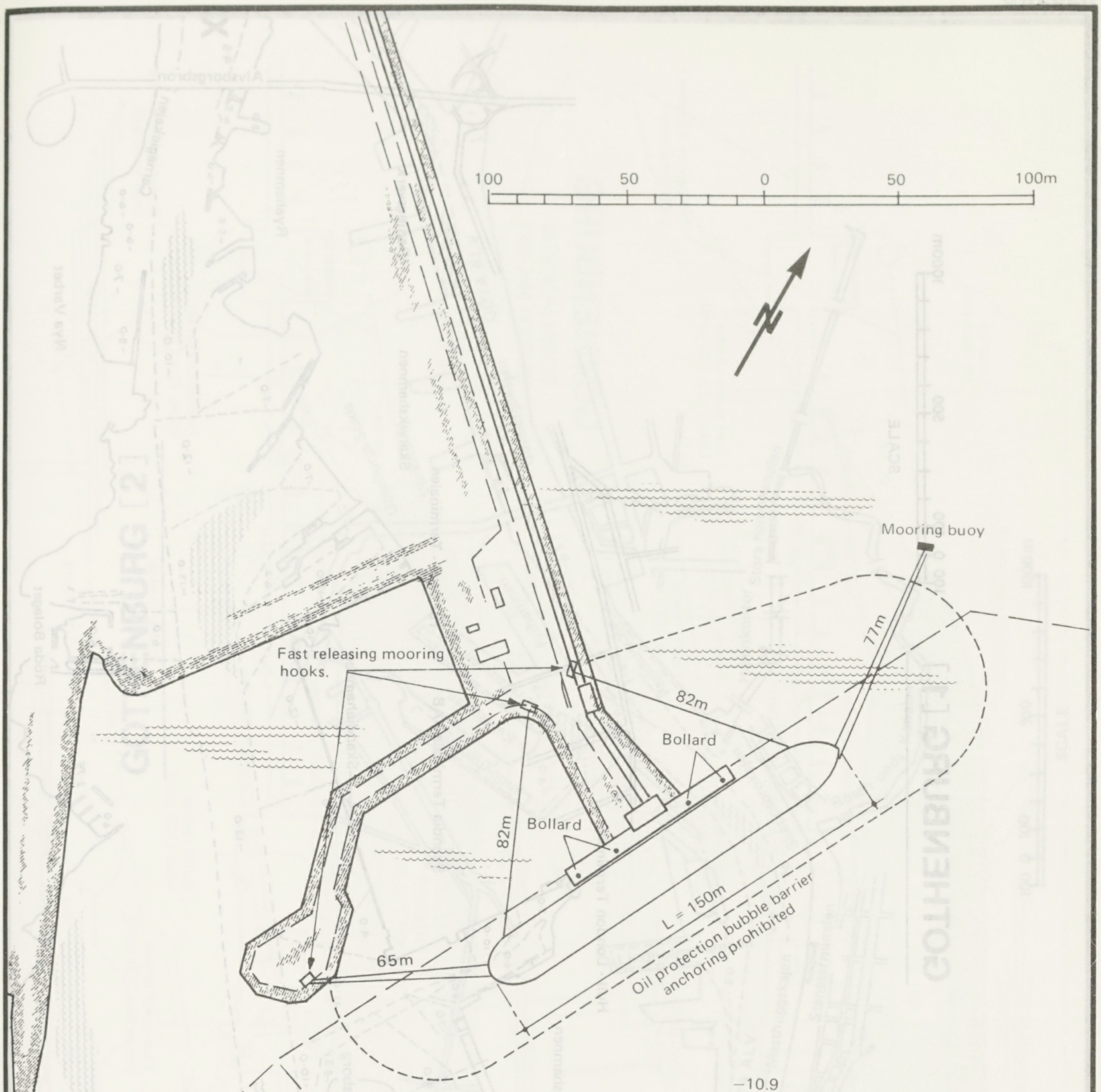
100
50
0
50
100m
Mooring buoy
77m
Fast releasing mooring hooks.
82m
Bollard
82m
Bollard
L = 150m
Oil protection bubble barrier anchoring prohibited
65m
−10.9

GAVLE

OIL TERMINAL FSK 21

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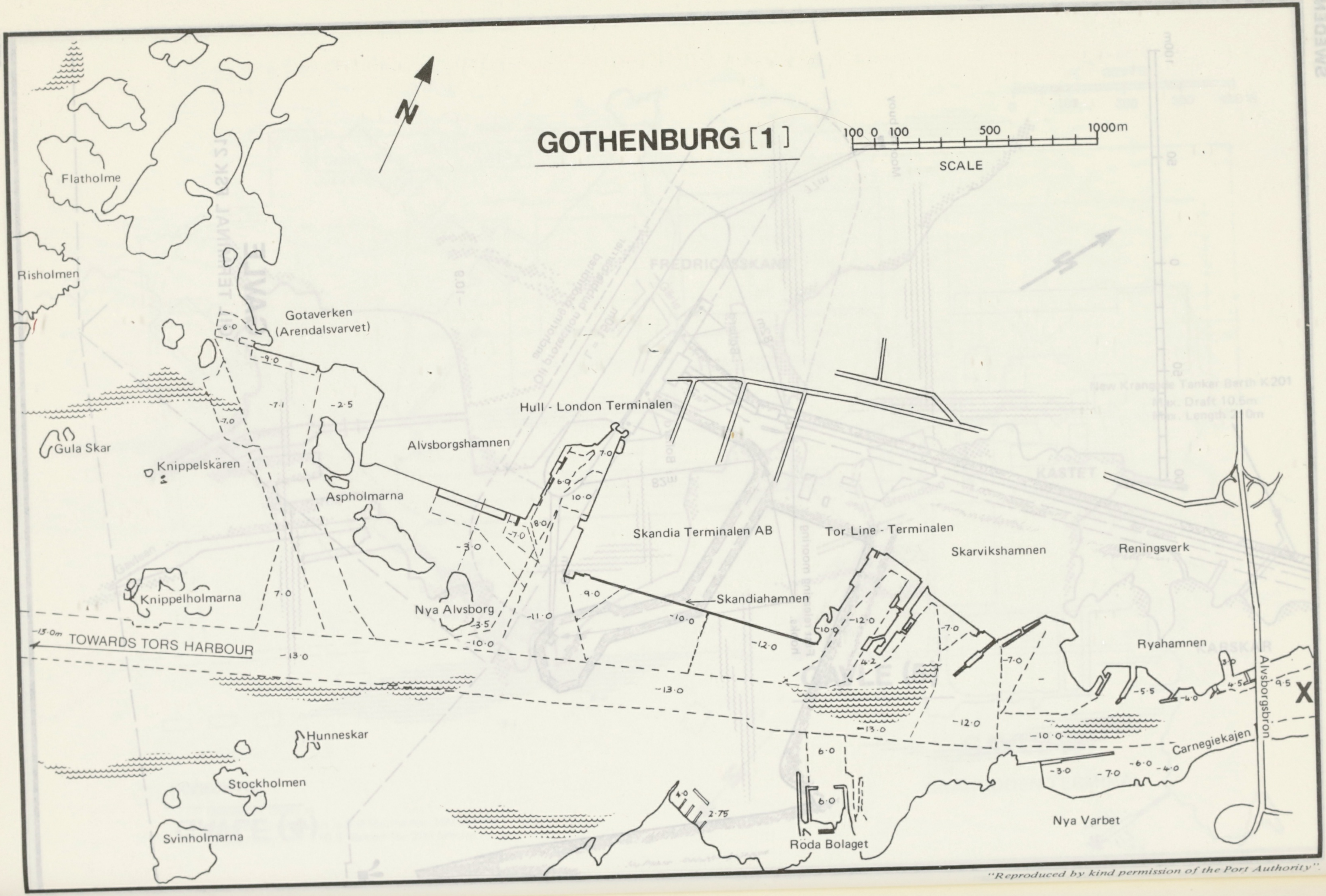
GOTHENBURG [1]


N
100 0 100 500 1000m
SCALE
Flatholme
Risholmen
Gotaverken
(Arendalsvarvet)
6·0
-9·0
-7·1
-2·5
-7·0
Gula Skar
Knippelskären
Aspholmarna
Alvsborgshamnen
Hull - London Terminalen
7·0
6·9
10·0
8·0
-7·0
-3·0
Skandia Terminalen AB
Tor Line - Terminalen
Skarvikshamnen
Reningsverk
Knippelholmarna
7·0
Nya Alvsborg
-3·5
-11·0
9·0
-10·0
Skandiahamnen
-12·0
10·9
-7·0
-13·0m
TOWARDS TORS HARBOUR
-13·0
-10·0
-12·0
4·2
-7·0
Ryahamnen
-13·0
-12·0
-13·0
-5·5
-4·0
4·5
3·0
9·5
X
Alvsborgsbron
-10·0
Carnegiekajen
Hunneskar
6·0
Stockholmen
4·0
2·75
6·0
-3·0
-7·0
-6·0
-4·0
Svinholmarna
Röda Bolaget
Nya Varbet

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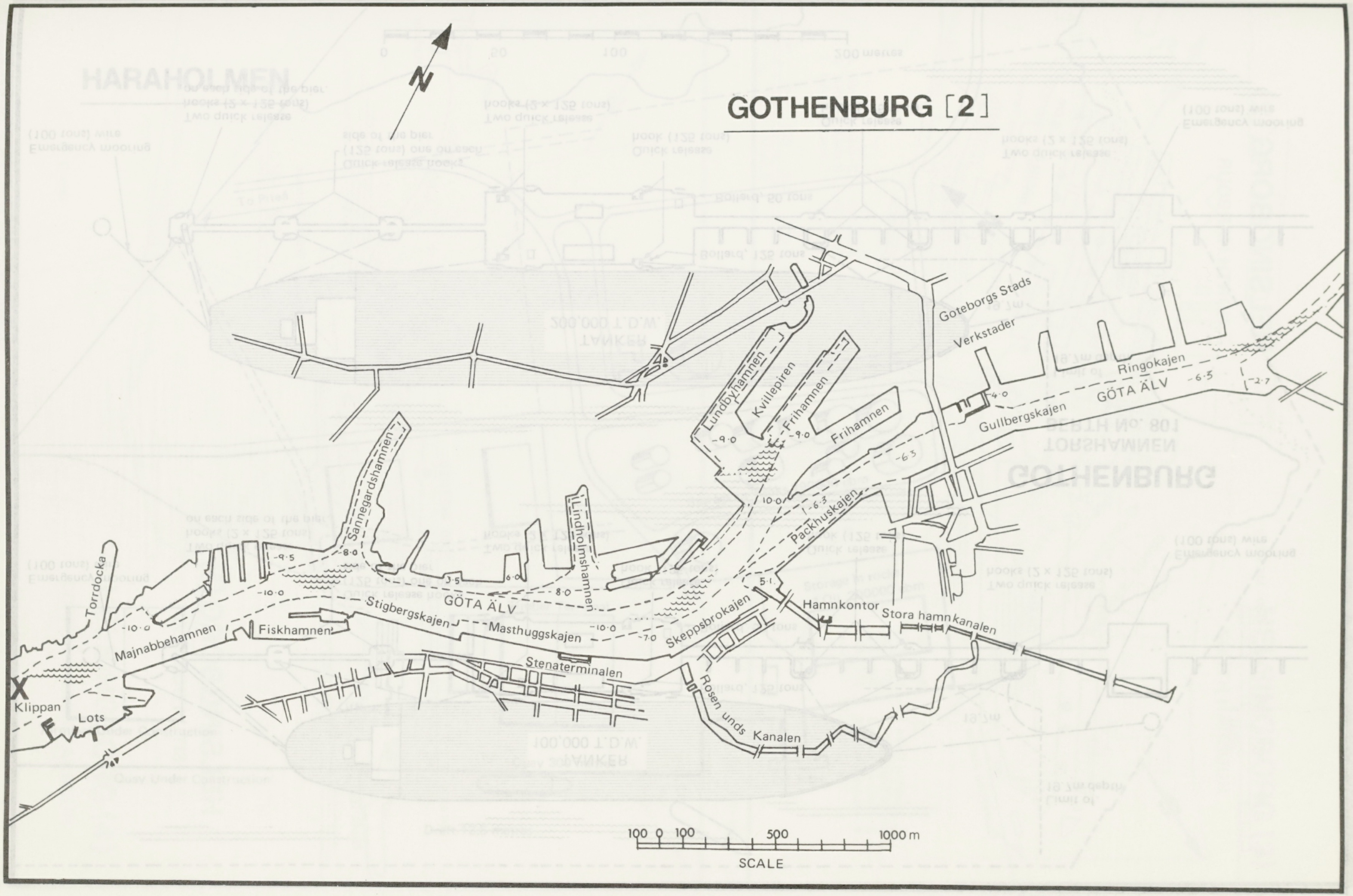
GOTHENBURG [2]


N
Goteborgs Stads
Verkstader
Ringokajen
GÖTA ÄLV
-6·5
-2·7
-4·0
Gullbergskajen
Lundbyhamnen
Kvillepiren
Frihamnen
Frihamnen
-9·0
-9·0
-6·3
10·0
-6·3
Packhuskajen
Sannegardshamnen
Lindholmshamnen
-9·5
-8·0
-10·0
3·5
6·0
8·0
5·1
Torrdocka
-10·0
Majnabbehamnen
Fiskhamnen
Stigbergskajen
GÖTA ÄLV
Masthuggskajen
-10·0
-7·0
Skeppsbrokajen
Hamnkontor
Stora hamnkanalen
Stenaterminalen
Rosen unds Kanalen
X
Klippan
F
Lots
100 0 100 500 1000 m
SCALE

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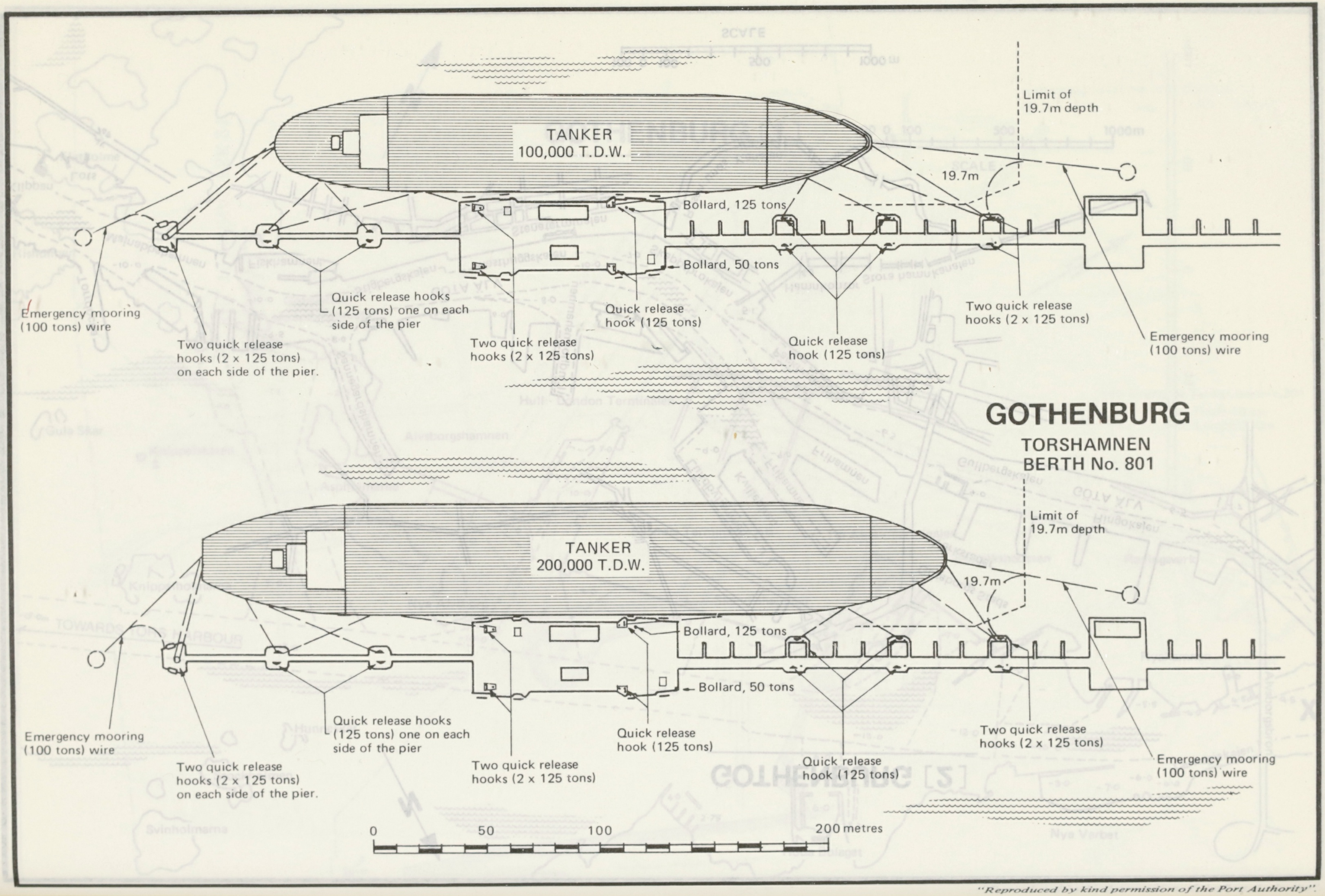
TANKER
100,000 T.D.W.
Limit of
19.7m depth
19.7m
Bollard, 125 tons
Bollard, 50 tons
Emergency mooring
(100 tons) wire
Two quick release
hooks (2 x 125 tons)
on each side of the pier.
Quick release hooks
(125 tons) one on each
side of the pier
Two quick release
hooks (2 x 125 tons)
Quick release
hook (125 tons)
Quick release
hook (125 tons)
Two quick release
hooks (2 x 125 tons)
Emergency mooring
(100 tons) wire
TANKER
200,000 T.D.W.
Limit of
19.7m depth
19.7m
Bollard, 125 tons
Bollard, 50 tons
Emergency mooring
(100 tons) wire
Two quick release
hooks (2 x 125 tons)
on each side of the pier.
Quick release hooks
(125 tons) one on each
side of the pier
Two quick release
hooks (2 x 125 tons)
Quick release
hook (125 tons)
Quick release
hook (125 tons)
Two quick release
hooks (2 x 125 tons)
Emergency mooring
(100 tons) wire
0
50
100
200 metres

GOTHENBURG

TORSHAMNEN
BERTH No. 801

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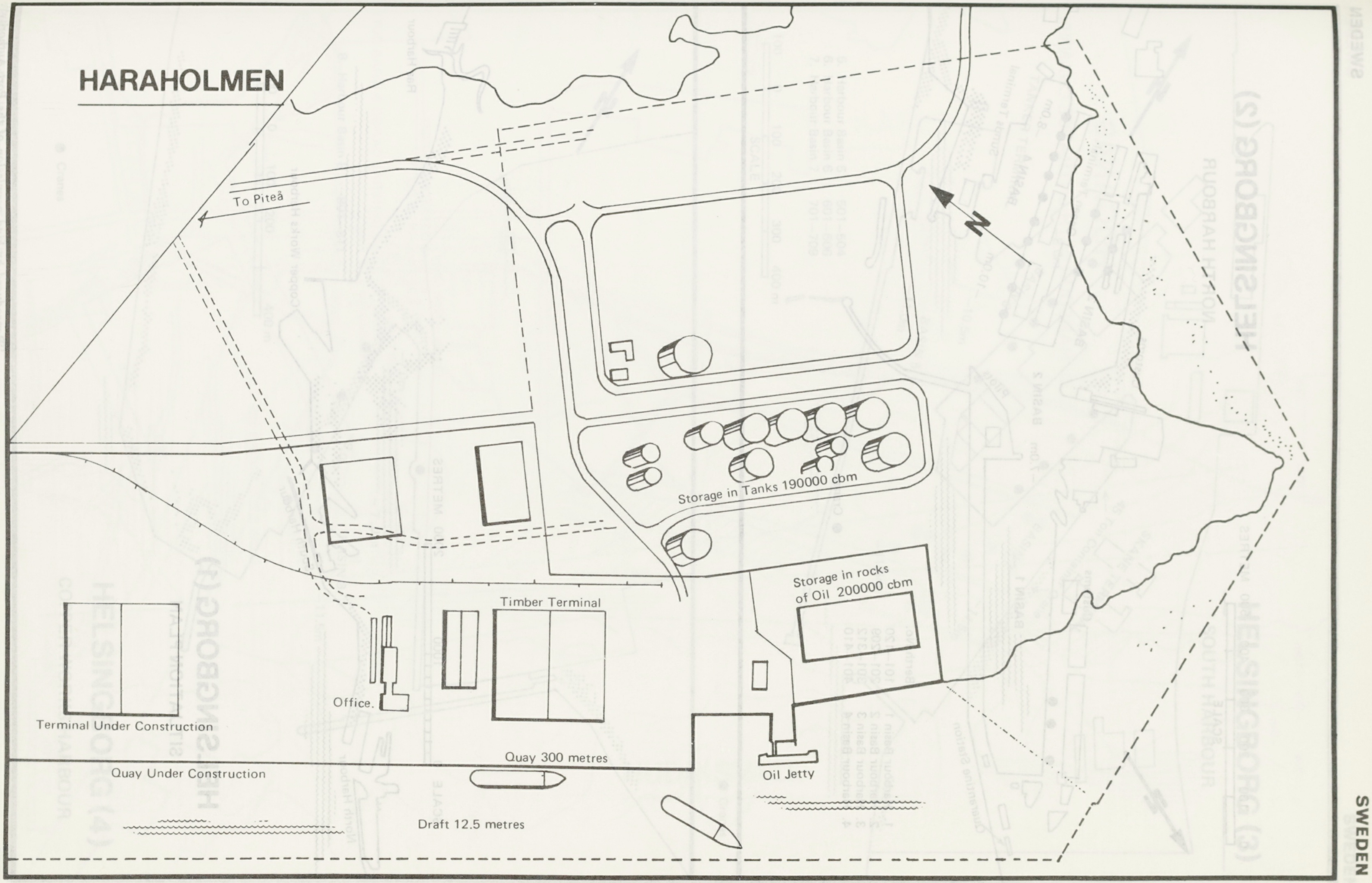
HARAHOLMEN


To Piteå
N
Storage in Tanks 190000 cbm
Storage in rocks of Oil 200000 cbm
Timber Terminal
Office.
Terminal Under Construction
Quay 300 metres
Quay Under Construction
Oil Jetty
Draft 12.5 metres

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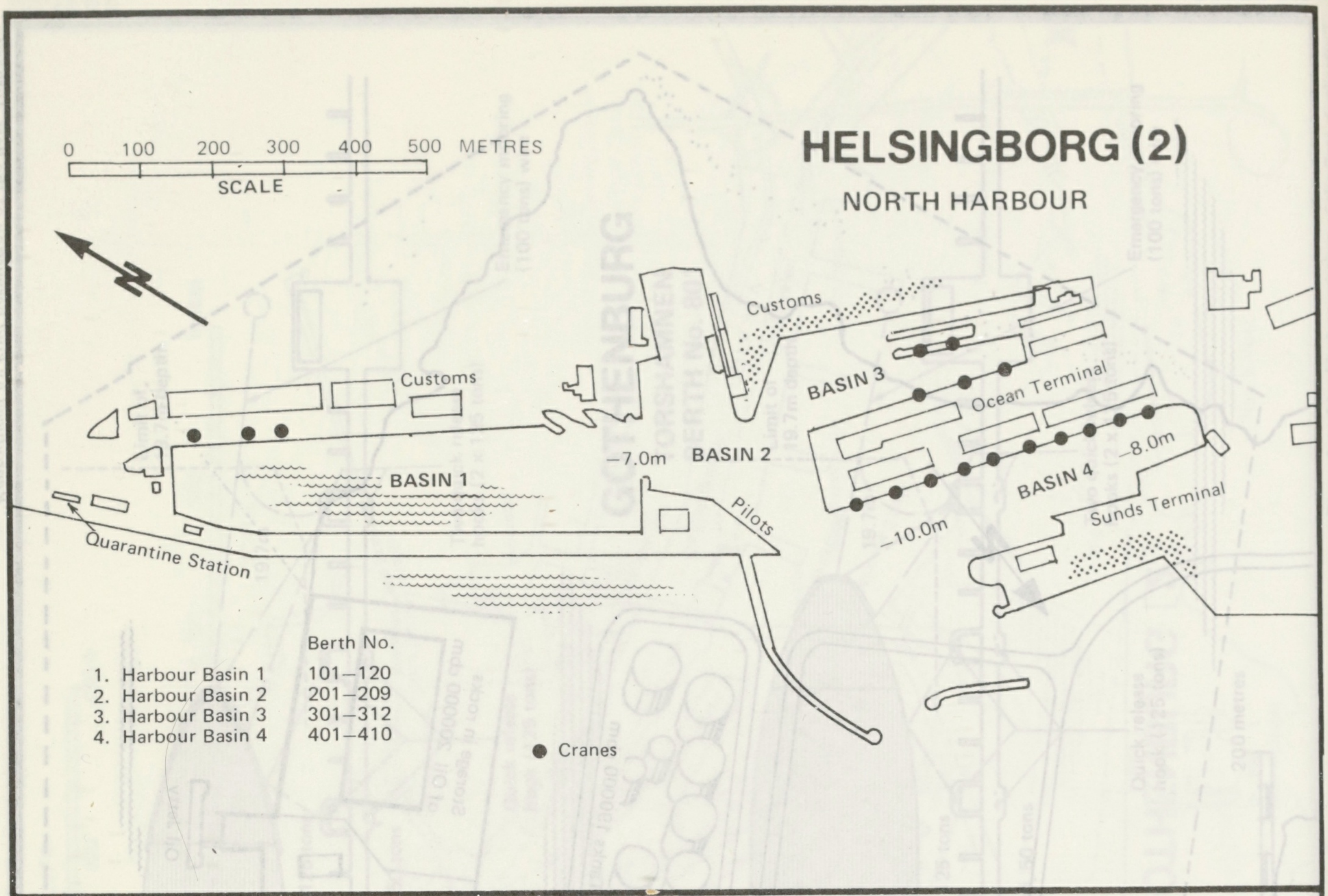


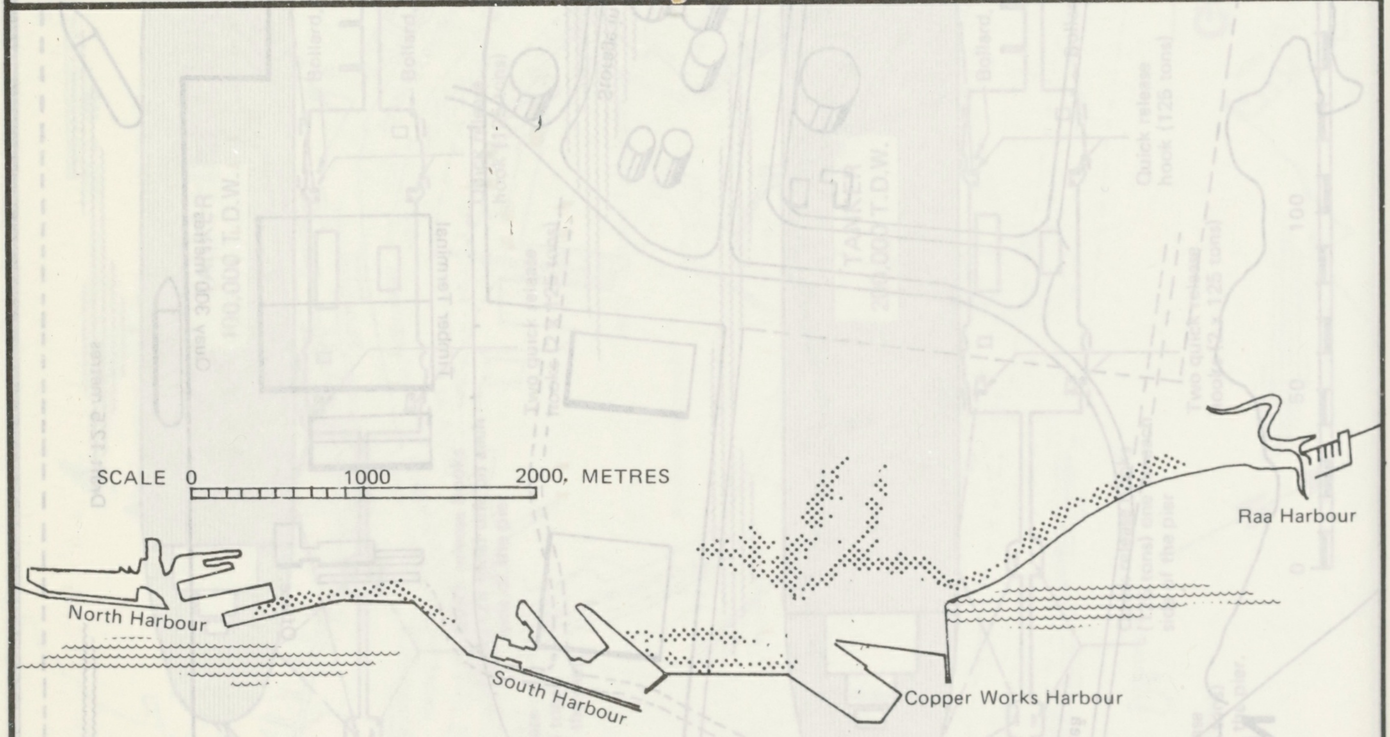
HELSINGBORG (2)

NORTH HARBOUR

0 100 200 300 400 500 METRES
SCALE
N
Customs
Customs
BASIN 1
BASIN 2
BASIN 3
BASIN 4
Ocean Terminal
Sunds Terminal
Pilots
Quarantine Station
–7.0m
–8.0m
–10.0m
Cranes

	Berth No.
1. Harbour Basin 1	101–120
2. Harbour Basin 2	201–209
3. Harbour Basin 3	301–312
4. Harbour Basin 4	401–410

● Cranes



HELSINGBORG (1)

SITUATION PLAN

SCALE 0 1000 2000 METRES
North Harbour
South Harbour
Copper Works Harbour
Raa Harbour

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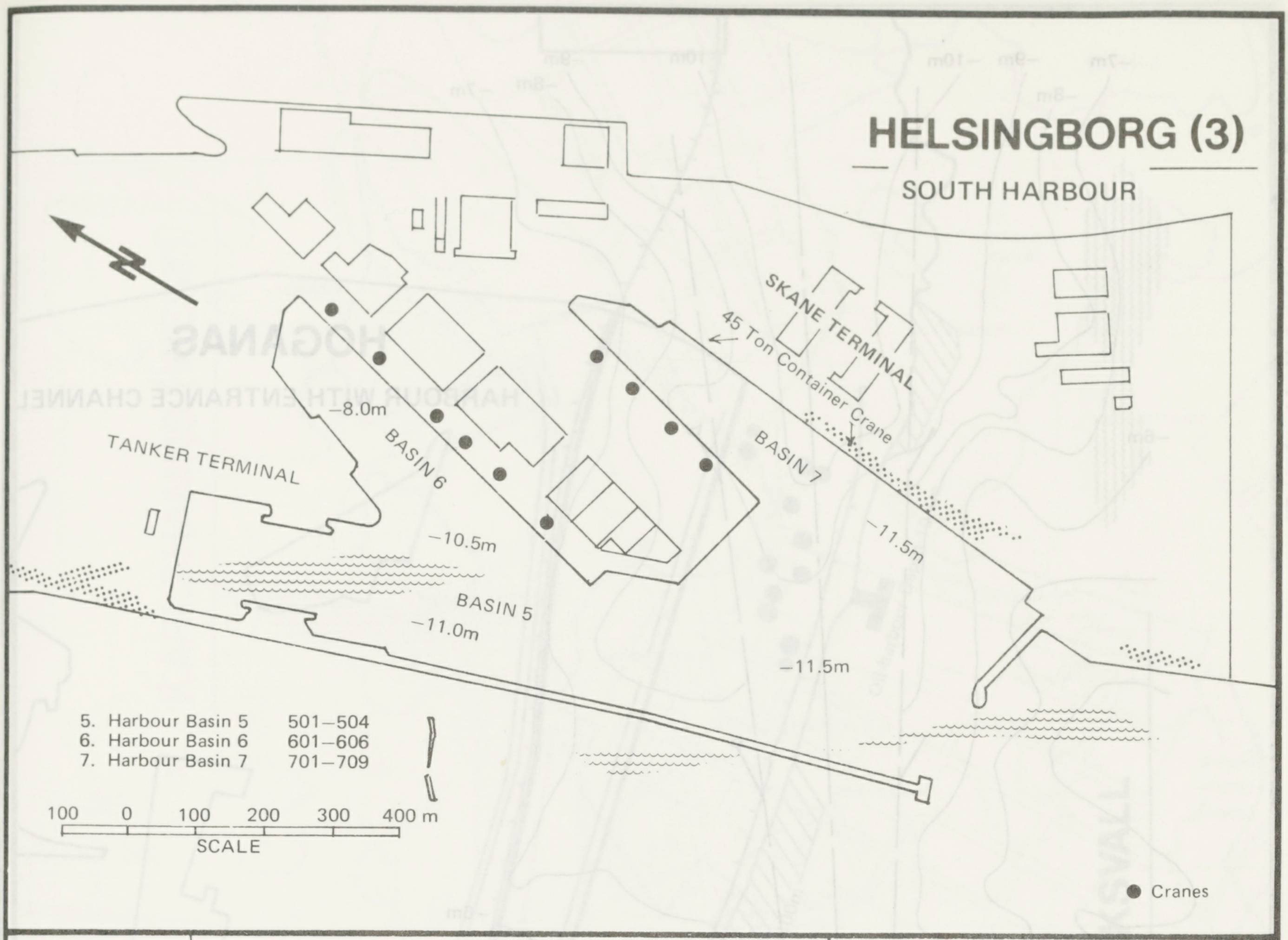
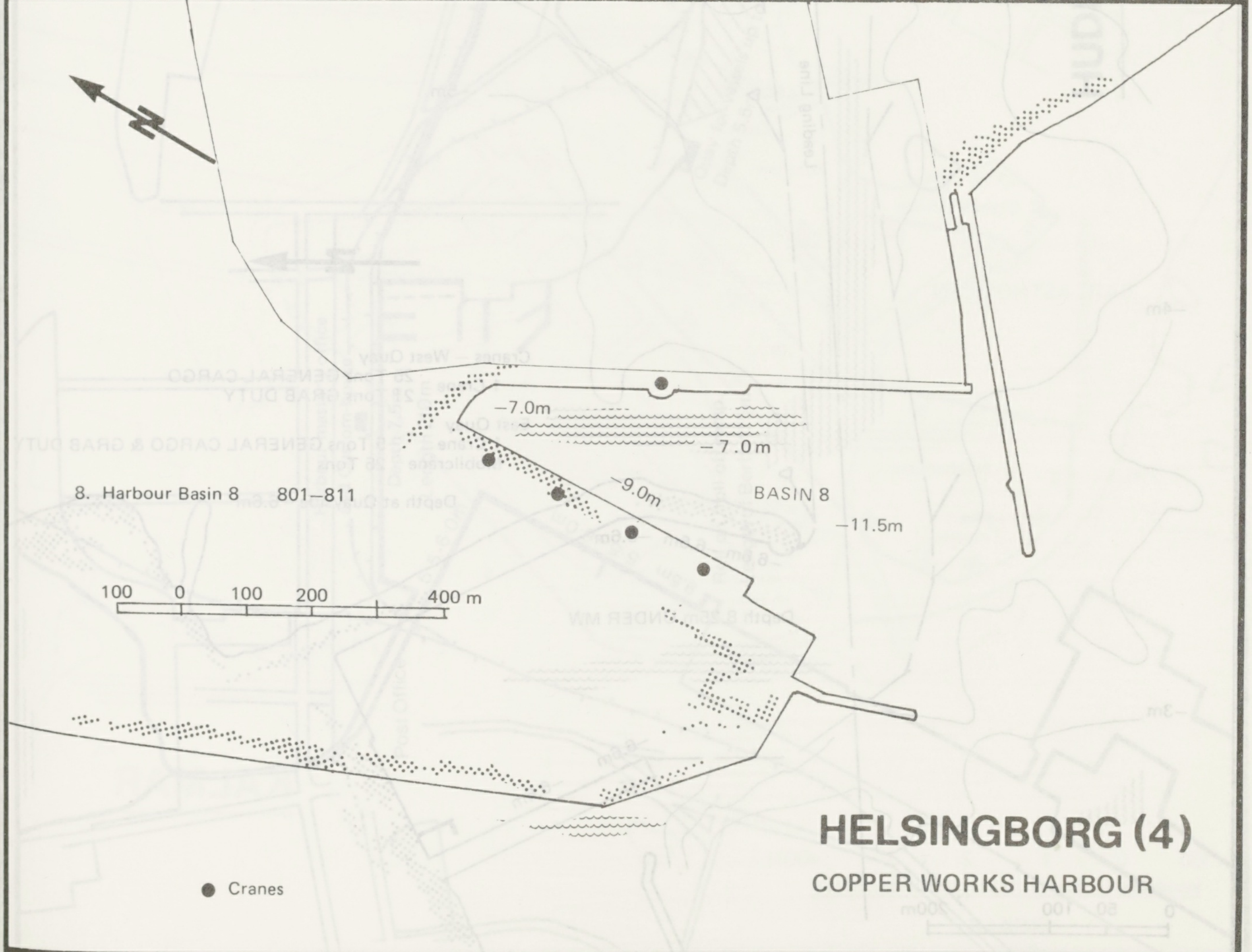
HELSINGBORG (3)

SOUTH HARBOUR


SKANE TERMINAL
45 Ton Container Crane
−8.0m
BASIN 6
TANKER TERMINAL
BASIN 7
−10.5m
−11.5m
BASIN 5
−11.0m
−11.5m
5. Harbour Basin 5 501–504
6. Harbour Basin 6 601–606
7. Harbour Basin 7 701–709
100 0 100 200 300 400 m
SCALE
● Cranes

HELSINGBORG (4)

COPPER WORKS HARBOUR


−7.0m
−7.0m
−9.0m
BASIN 8
−11.5m
8. Harbour Basin 8 801–811
100 0 100 200 400 m
● Cranes

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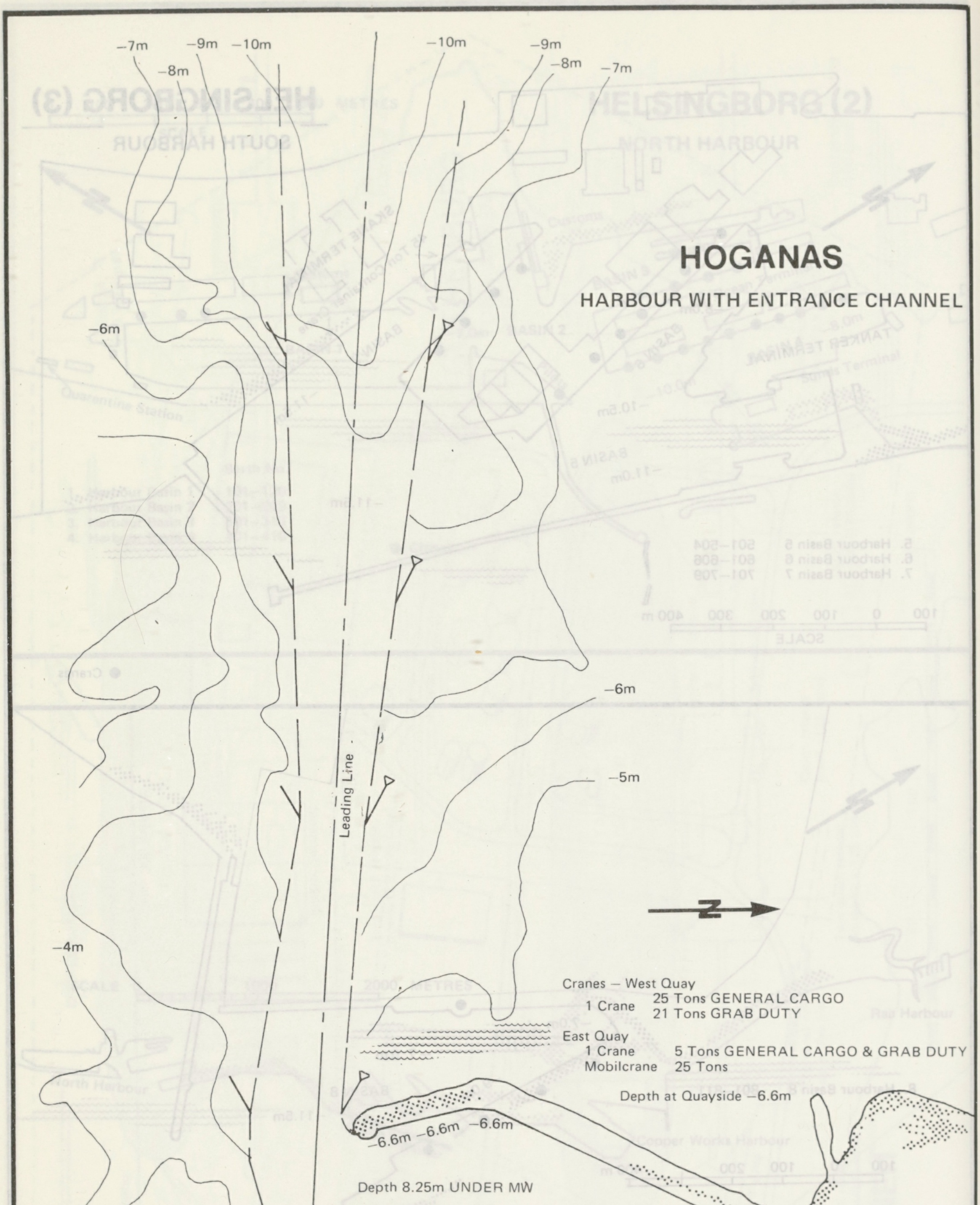
HOGANAS

HARBOUR WITH ENTRANCE CHANNEL



−7m
−8m
−9m
−10m
−10m
−9m
−8m
−7m
−6m
−6m
−5m
−4m
−3m
Leading Line
−6.6m
−6.6m
−6.6m
−6.6m
−6.6m
Depth 8.25m UNDER MW
0
50
100
200m

Cranes – West Quay
1 Crane 25 Tons GENERAL CARGO
21 Tons GRAB DUTY

East Quay
1 Crane 5 Tons GENERAL CARGO & GRAB DUTY
Mobilcrane 25 Tons

Depth at Quayside −6.6m

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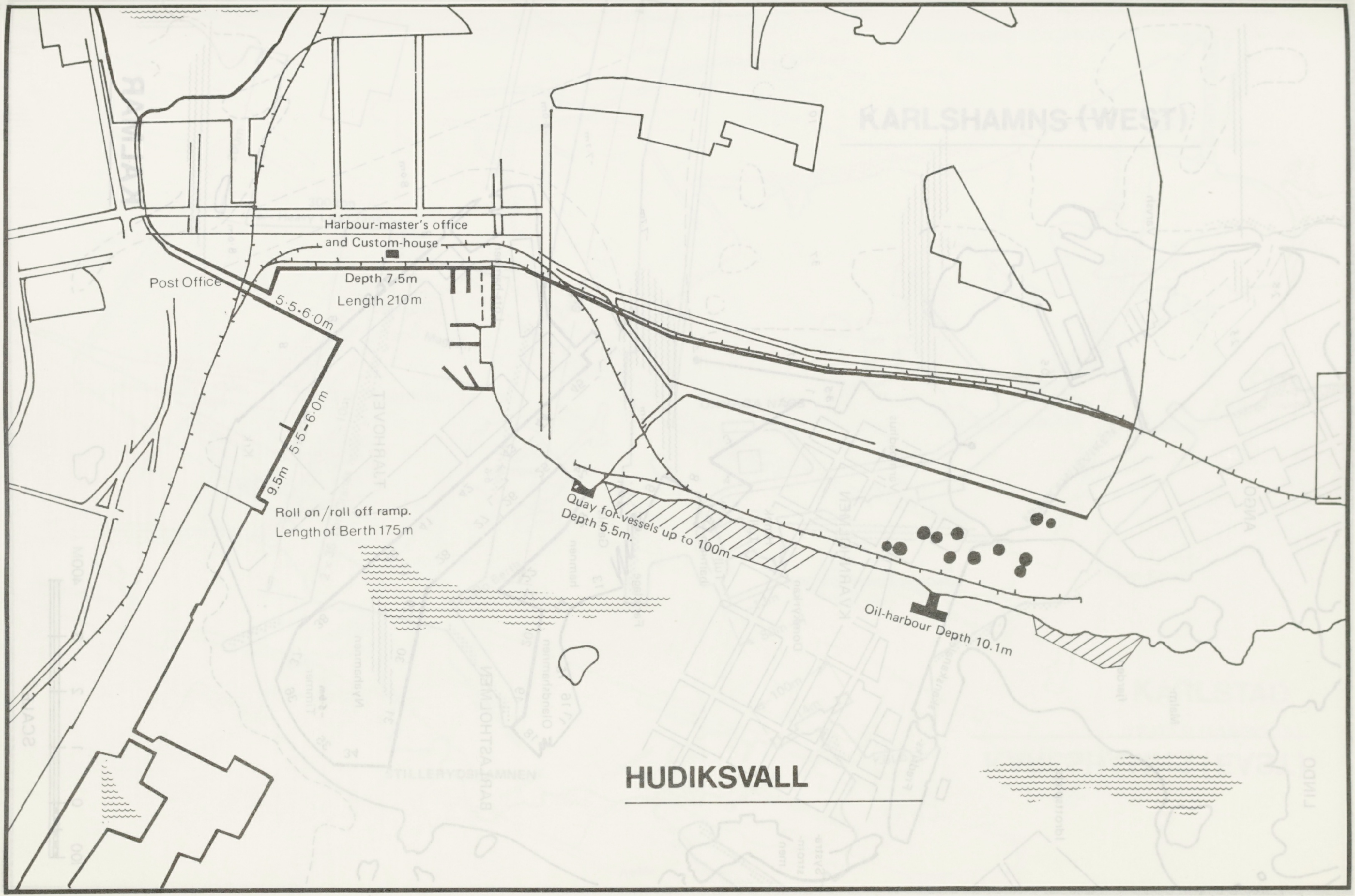

HUDIKSVALL

Harbour-master's office
and Custom-house
Post Office
Depth 7.5m
Length 210m
5·5-6·0m
5·5-6·0m
9.5m
Roll on/roll off ramp.
Length of Berth 175m
Quay for vessels up to 100m
Depth 5.5m.
Oil-harbour Depth 10.1m

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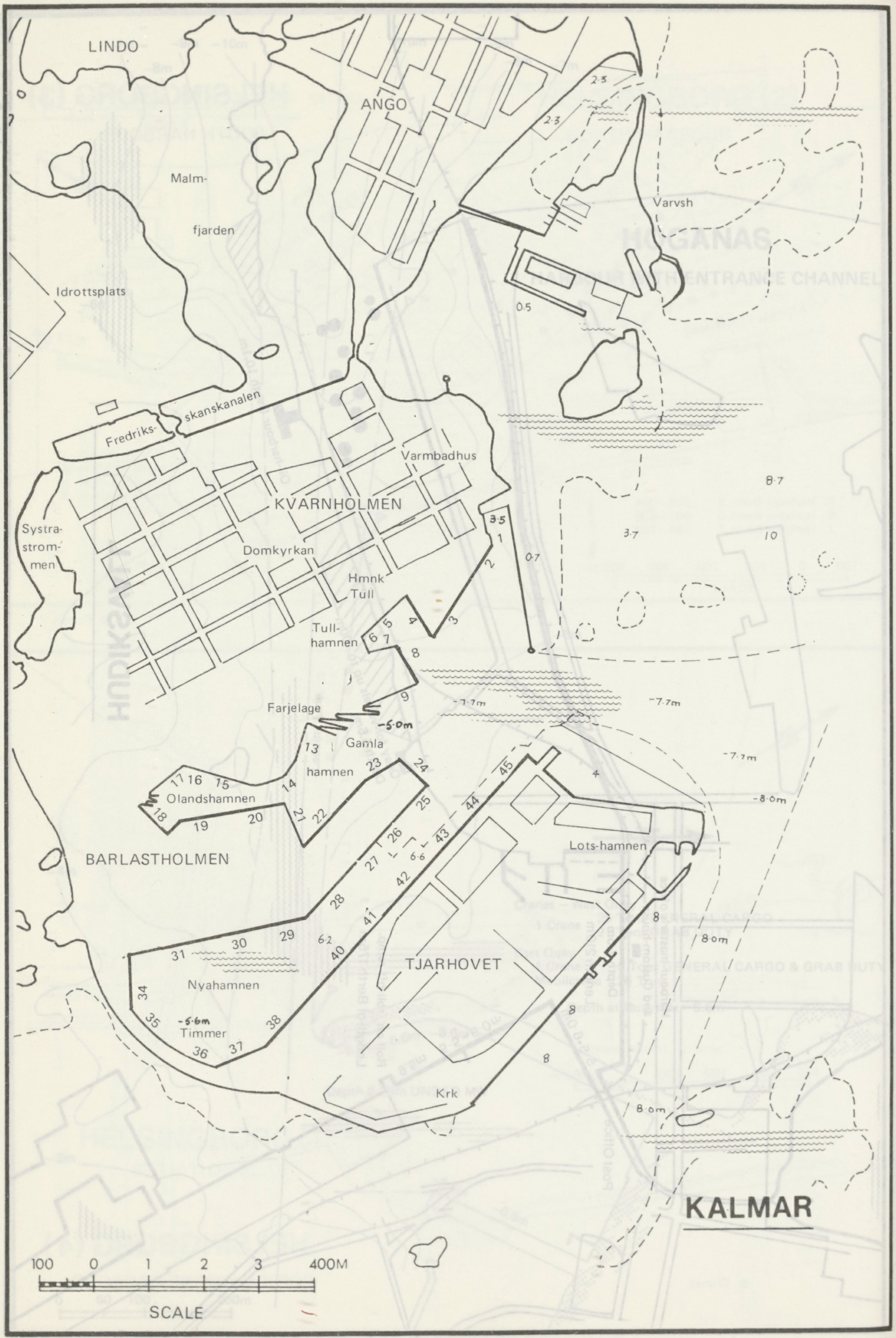
LINDO
ANGO
Malm-
fjarden
Idrottsplats
Varvsh
2·3
2·3
0.5
Fredriks-
skanskanalen
Varmbadhus
KVARNHOLMEN
Systra-
strom-
men
Domkyrkan
Hmnk
Tull
Tull-
hamnen
3·5
1
2
3
4
5
6
7
8
9
0·7
3·7
8·7
10
-7·7m
-7·7m
-7·7m
-8·0m
Farjelage
-5·0m
Gamla
hamnen
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
Olandshamnen
BARLASTHOLMEN
6·6
6·2
34
35
36
37
38
40
41
42
43
44
45
4
Lots-hamnen
8
8·0m
8
8
TJARHOVET
Nyahamnen
-5·6m
Timmer
Krk
8·0m
KALMAR
100
0
1
2
3
400M
SCALE

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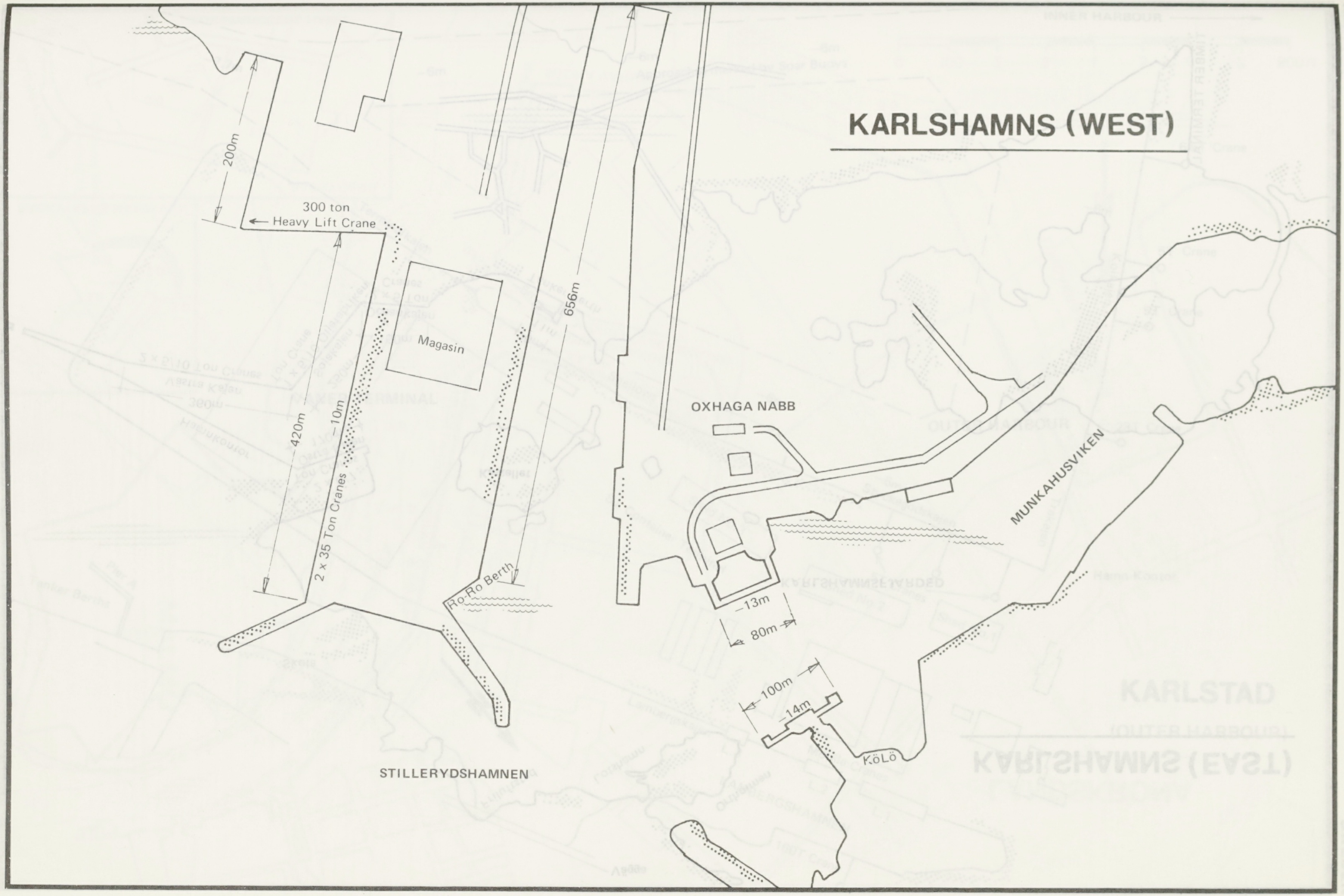
KARLSHAMNS (WEST)


200m
300 ton
Heavy Lift Crane
Magasin
656m
420m
-10m
2 × 35 Ton Cranes
Ro-Ro Berth
OXHAGA NABB
MUNKAHUSVIKEN
-13m
80m
100m
14m
KöLö
STILLERYDSHAMNEN

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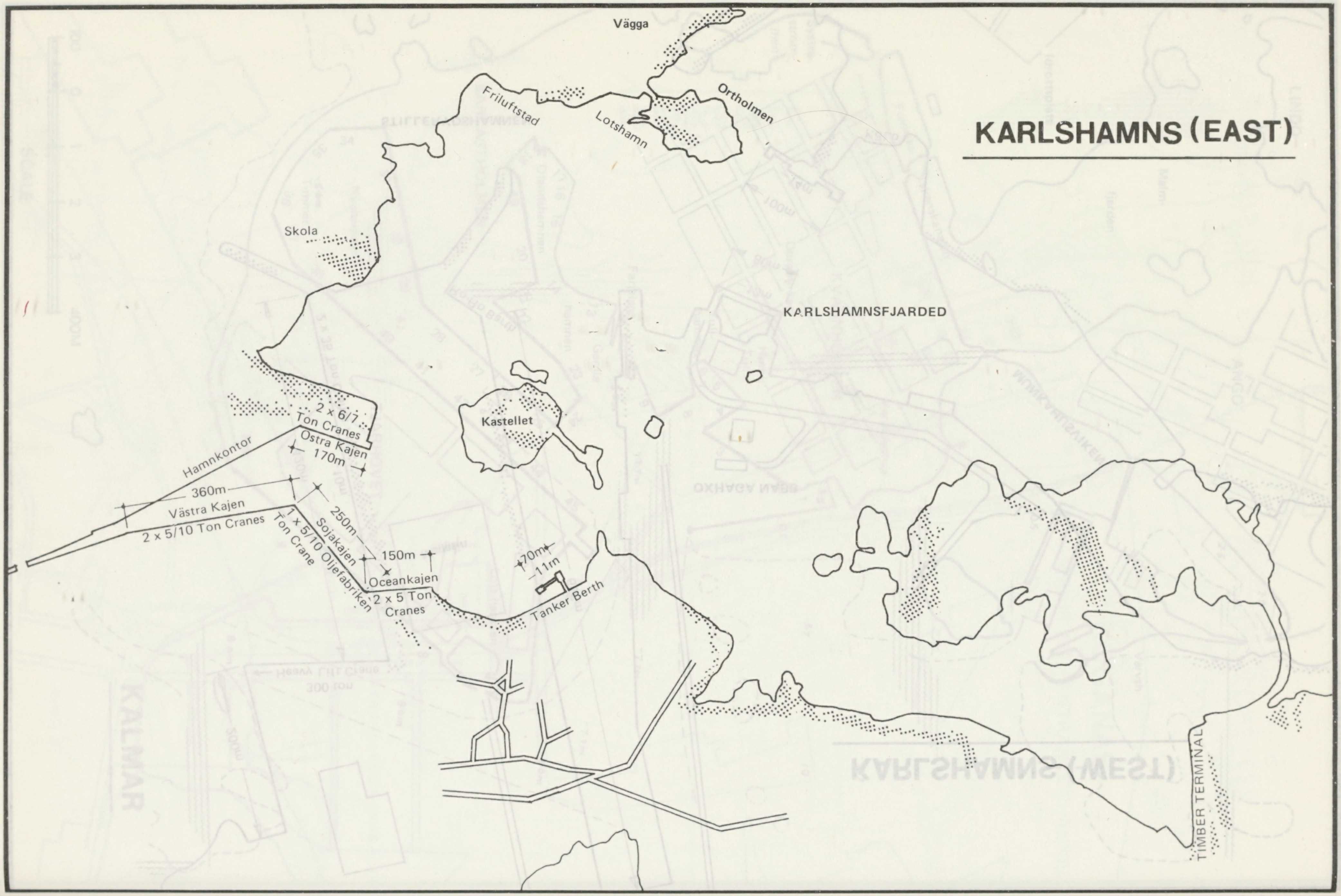
KARLSHAMNS (EAST)


Vägga
Friluftstad
Lotshamn
Ortholmen
Skola
KARLSHAMNSFJARDED
Kastellet
2 x 6/7 Ton Cranes
Ostra Kajen
170m
Hamnkontor
360m
Västra Kajen
2 x 5/10 Ton Cranes
1 x 5/10 Ton Crane
250m
Sojakajen
Oljefabriken
150m
Oceankajen
2 x 5 Ton Cranes
70m
11m
Tanker Berth
TIMBER TERMINAL

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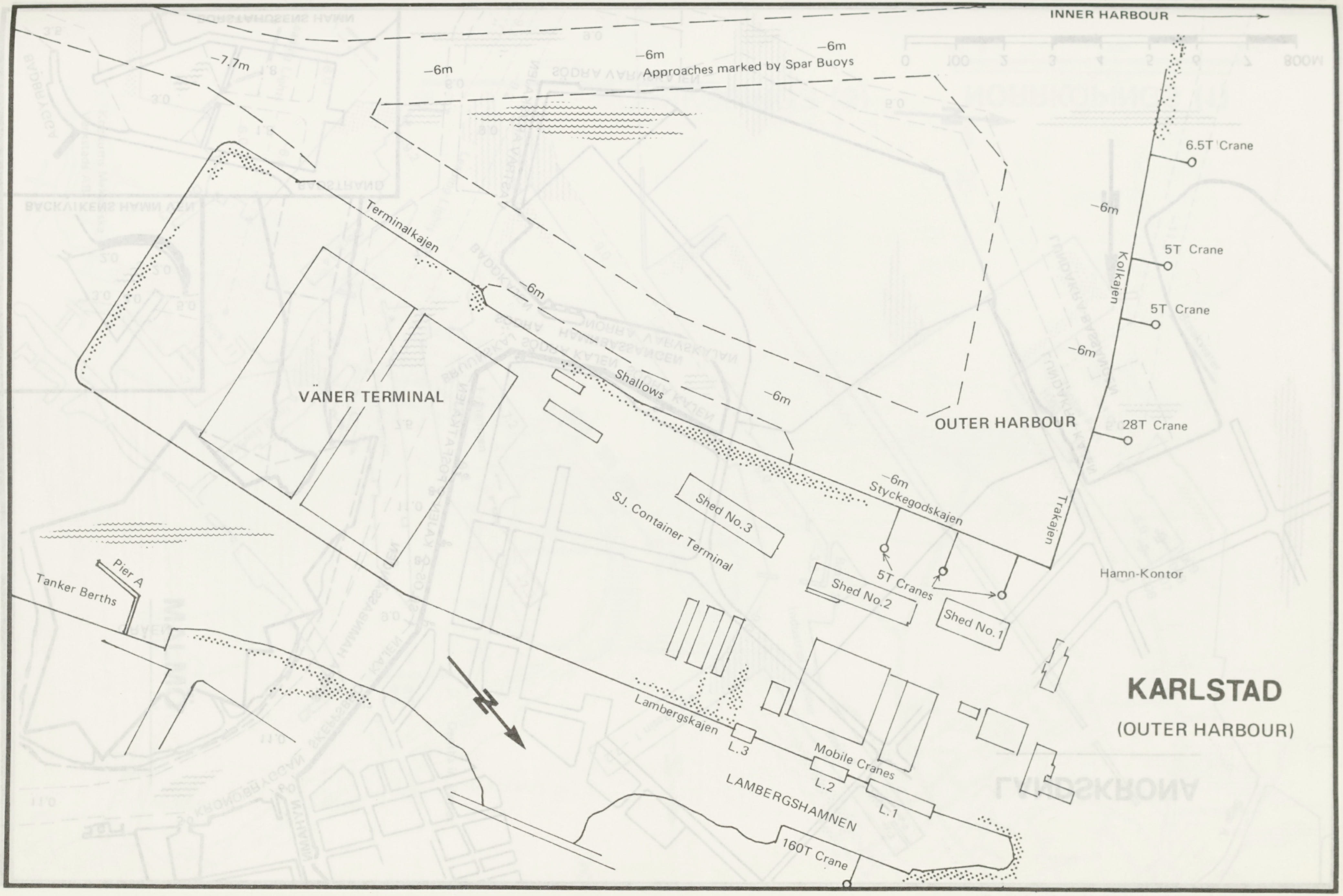
INNER HARBOUR
−7.7m
−6m
−6m
−6m
Approaches marked by Spar Buoys
6.5T Crane
−6m
Terminalkajen
5T Crane
Kolkajen
5T Crane
−6m
−6m
−6m
Shallows
VÄNER TERMINAL
OUTER HARBOUR
28T Crane
−6m
Styckegodskajen
Trakajen
Shed No.3
SJ. Container Terminal
5T Cranes
Shed No.2
Hamn-Kontor
Shed No.1
Pier A
Tanker Berths
Lambergskajen
L.3
Mobile Cranes
L.2
L.1
LAMBERGSHAMNEN
160T Crane

KARLSTAD

(OUTER HARBOUR)

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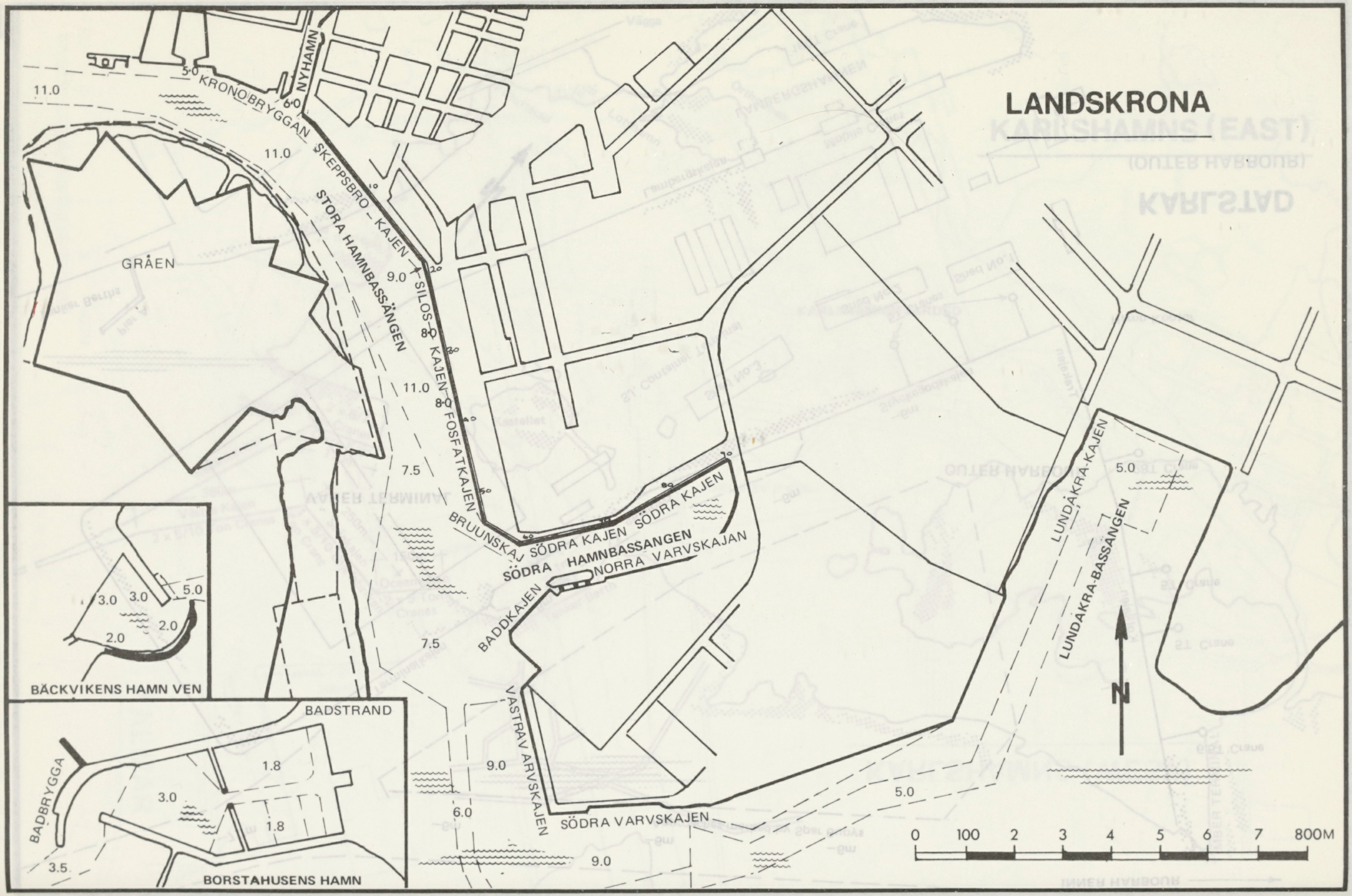
LANDSKRONA
11.0
5·0
KRONOBRYGGAN
6·0
NYHAMN
11.0
SKEPPSBRO - KAJEN
STORA HAMNBASSÄNGEN
GRÅEN
9.0
SILOS - KAJEN
8·0
11.0
8·0
FOSFATKAJEN
7.5
BRUUNSKAJ
SÖDRA KAJEN
SÖDRA KAJEN
SÖDRA HAMNBASSANGEN
NORRA VARVSKAJAN
BADDKAJEN
7.5
VASTRAV ARVSKAJEN
9.0
6.0
SÖDRA VARVSKAJEN
9.0
5.0
LUNDAKRA-KAJEN
LUNDAKRA-BASSANGEN
5.0
N
0
100
2
3
4
5
6
7
800M
3.0
3.0
5.0
2.0
2.0
BÄCKVIKENS HAMN VEN
BADSTRAND
BADBRYGGA
1.8
3.0
1.8
3.5
BORSTAHUSENS HAMN

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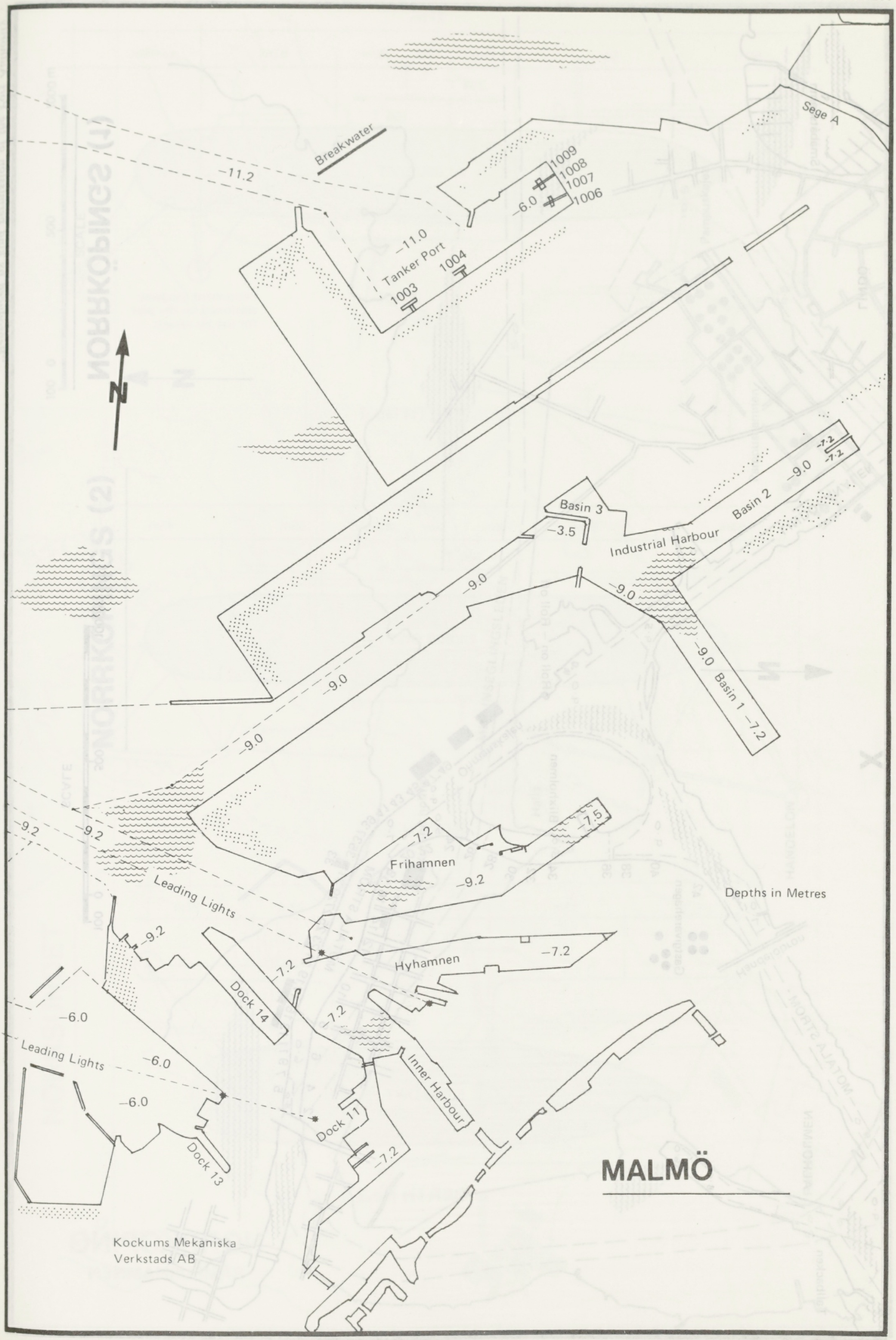
Sege A
Breakwater
–11.2
1009
1008
1007
1006
–6.0
–11.0
Tanker Port
1004
1003
Basin 3
–3.5
Industrial Harbour
Basin 2
–9.0
–7.2
–7.2
–9.0
–9.0
–9.0
Basin 1
–7.2
–9.0
–9.0
–9.2
–9.2
Leading Lights
–7.2
–7.5
Frihamnen
–9.2
Depths in Metres
–9.2
Hyhamnen
–7.2
–7.2
Dock 14
–7.2
–6.0
Leading Lights
–6.0
–6.0
Inner Harbour
Dock 11
–7.2
Dock 13
MALMÖ
Kockums Mekaniska
Verkstads AB

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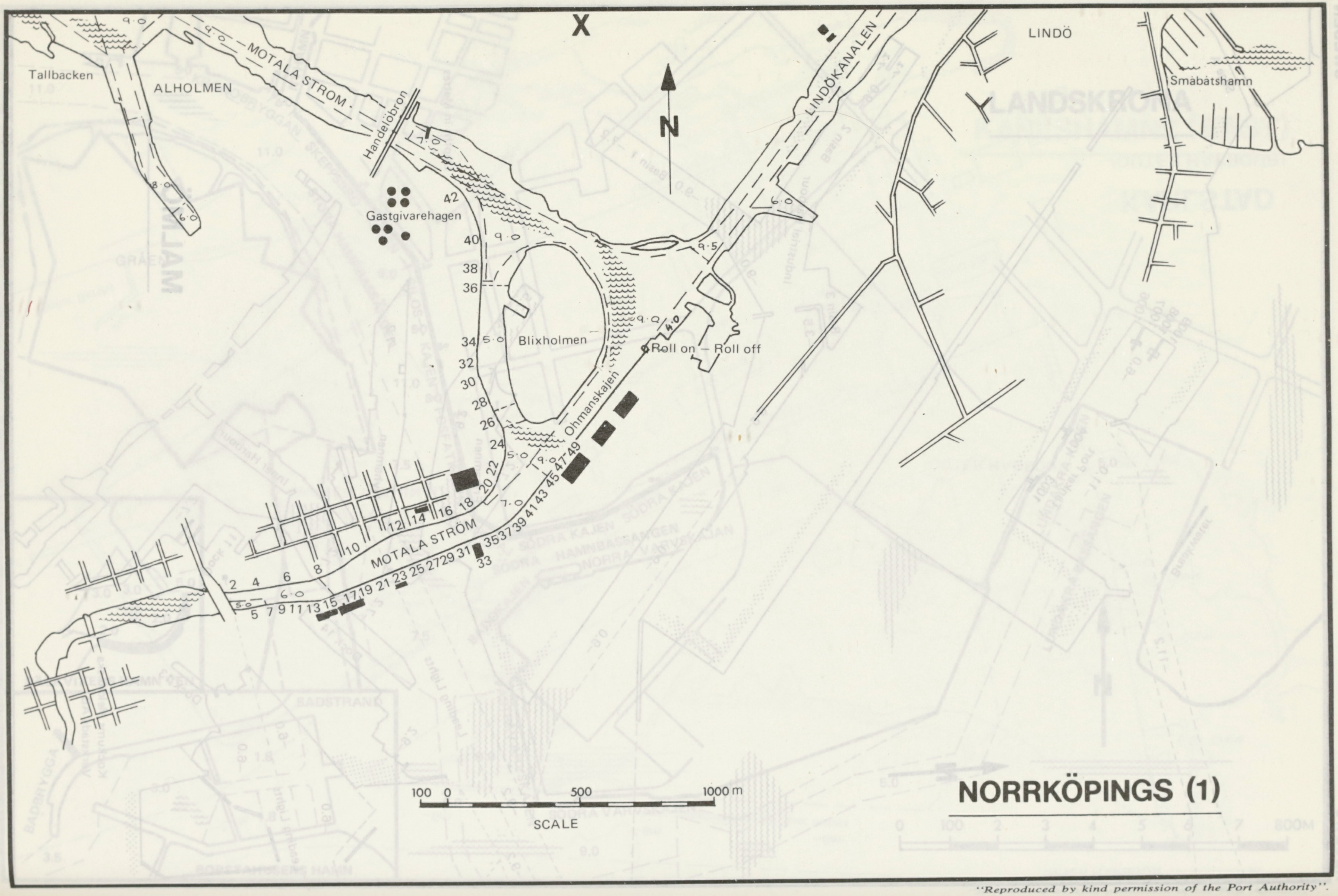

NORRKÖPINGS (1)

X
N
Tallbacken
ALHOLMEN
MOTALA STRÖM
Handelöbron
LINDÖKANALEN
LINDÖ
Småbåtshamn
Gastgivarehagen
Blixholmen
Roll on – Roll off
Ohmanskajen
MOTALA STRÖM
9·0
9·0
7·0
8·0
6·0
9·0
9·5
6·0
9·0
4·0
5·0
5·0
9·0
7·0
6·0
5·0
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
5
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
37
39
41
43
45
47
49
100
0
500
1000 m
SCALE

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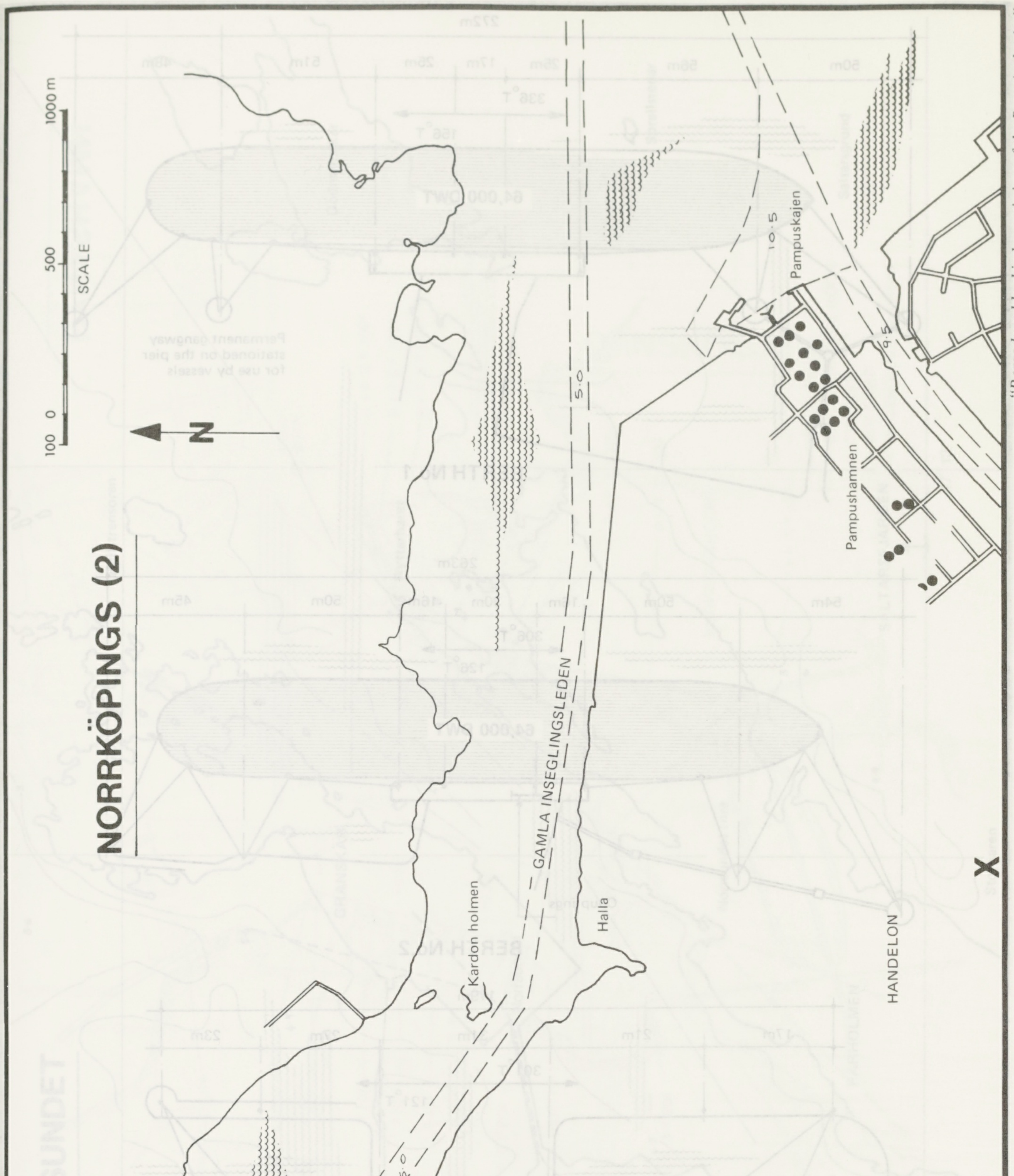
NORRKÖPINGS (2)


SCALE
100
0
500
1000 m
N
GAMLA INSEGLINGSLEDEN
5.0
Kardon holmen
Halla
HANDELON
X
Pampuskajen
10.5
9.5
Pampushamnen
Ramshall
5.0
9.0

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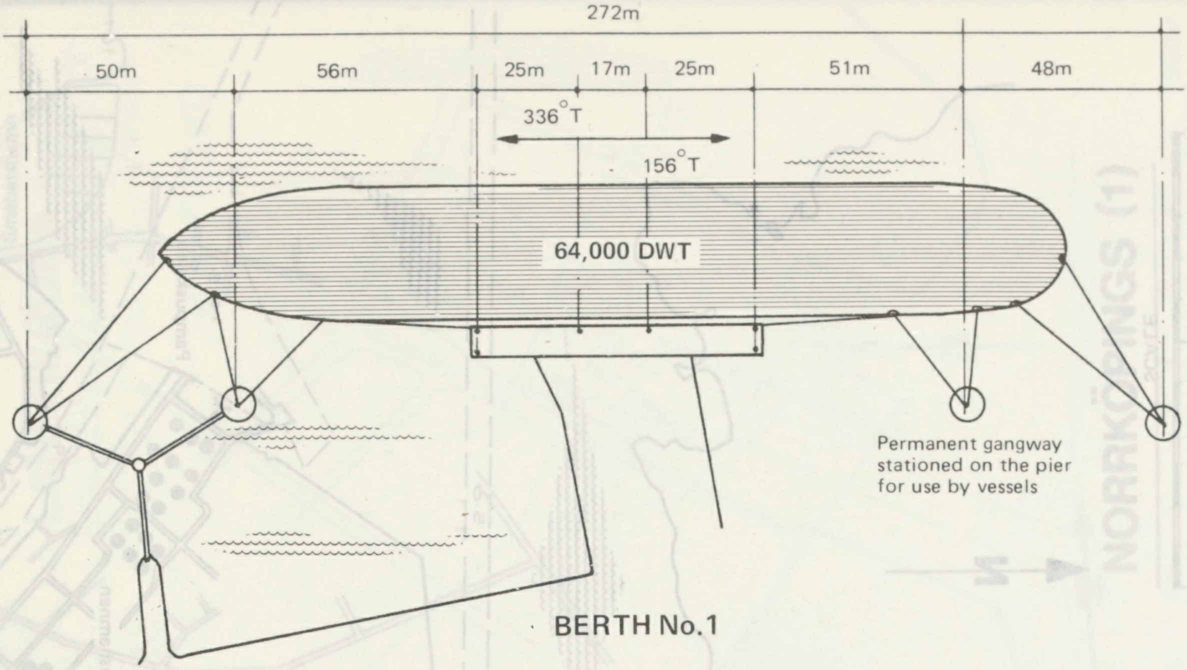
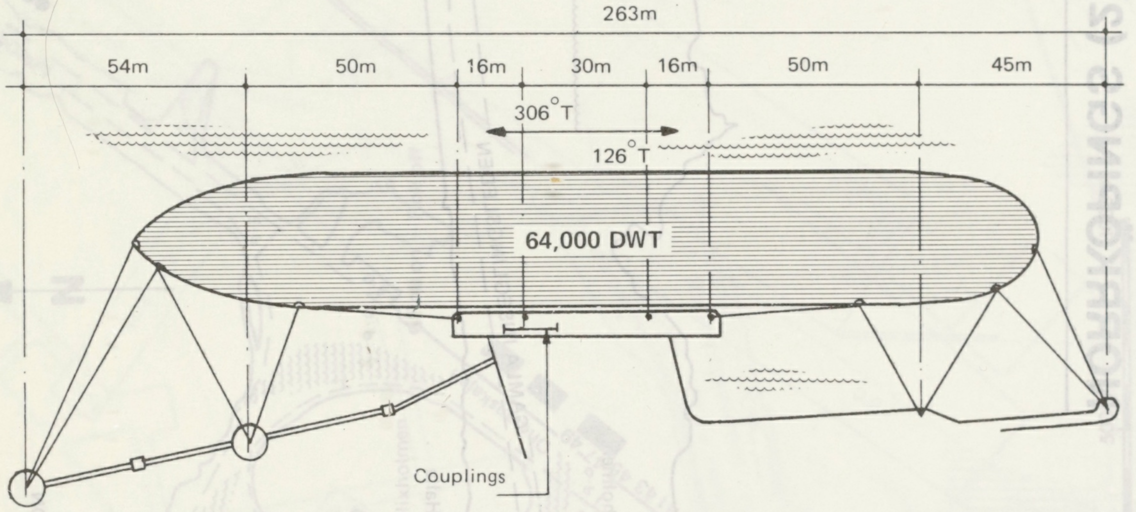
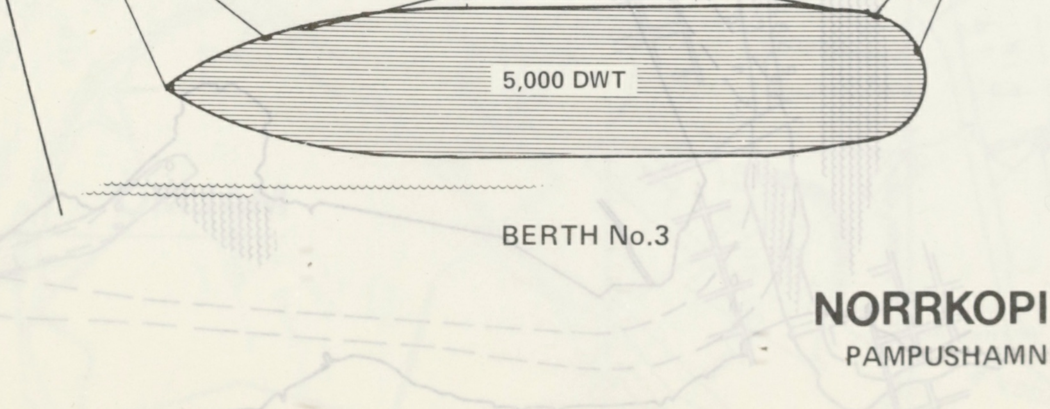

272m
50m
56m
25m
17m
25m
51m
48m
336° T
156° T
64,000 DWT
Permanent gangway stationed on the pier for use by vessels

BERTH No.1


263m
54m
50m
16m
30m
16m
50m
45m
306° T
126° T
64,000 DWT
Couplings

BERTH No.2


119m
17m
21m
31m
27m
23m
301° T
121° T
5,000 DWT

BERTH No.3

NORRKOPING

PAMPUSHAMNEN

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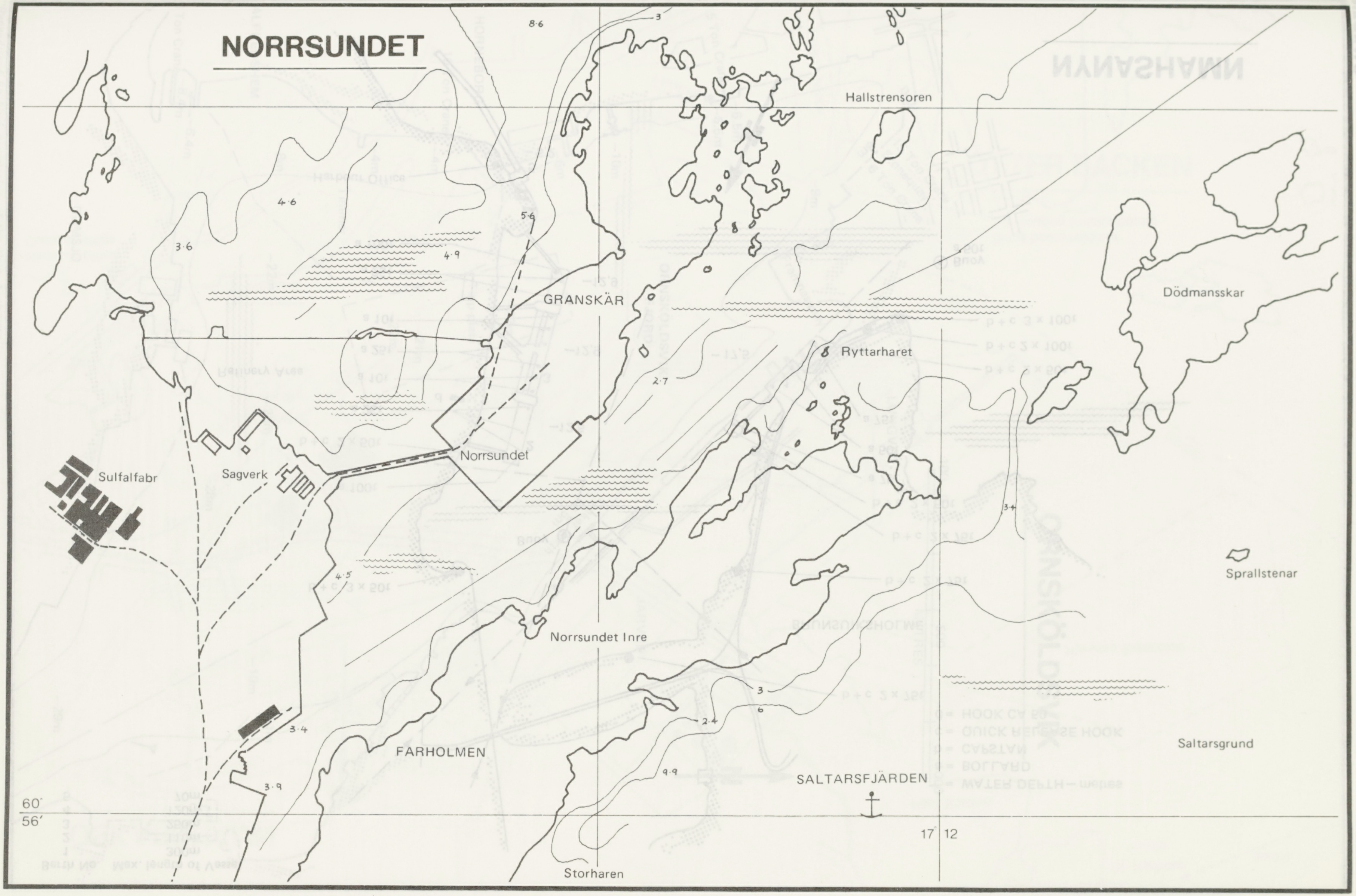
NORRSUNDET
8·6
3
Hallstrensoren
4·6
3·6
5·6
4·9
GRANSKÄR
Dödmansskar
Ryttarharet
2·7
Sulfalfabr
Sagverk
Norrsundet
3·4
4·5
Sprallstenar
Norrsundet Inre
3
6
2·4
3·4
Saltarsgrund
FARHOLMEN
9·9
SALTARSFJÄRDEN
3·9
60'
56'
17'
12
Storharen

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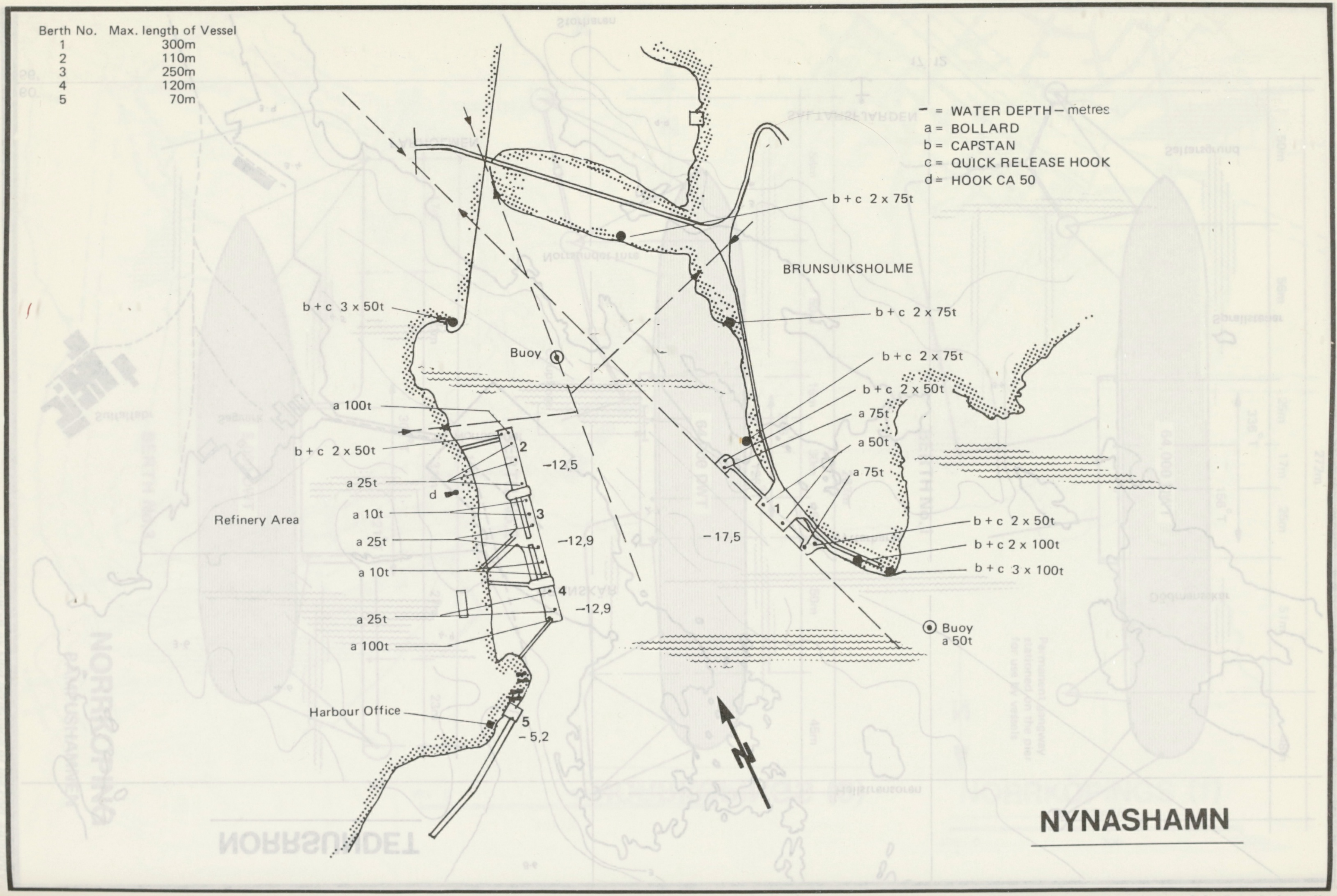
NYNASHAMN

Berth No.	Max. length of Vessel
1	300m
2	110m
3	250m
4	120m
5	70m



– = WATER DEPTH – metres
a = BOLLARD
b = CAPSTAN
c = QUICK RELEASE HOOK
d = HOOK CA 50
BRUNSUIKSHOLME
b + c 2 x 75t
b + c 2 x 75t
b + c 2 x 75t
b + c 2 x 50t
a 75t
a 50t
a 75t
b + c 2 x 50t
b + c 2 x 100t
b + c 3 x 100t
b + c 3 x 50t
Buoy
a 100t
b + c 2 x 50t
a 25t
d
a 10t
a 25t
a 10t
a 25t
a 100t
Refinery Area
Harbour Office
1
2
3
4
5
–12,5
–12,9
–12,9
–17,5
– 5,2
Buoy
a 50t
N

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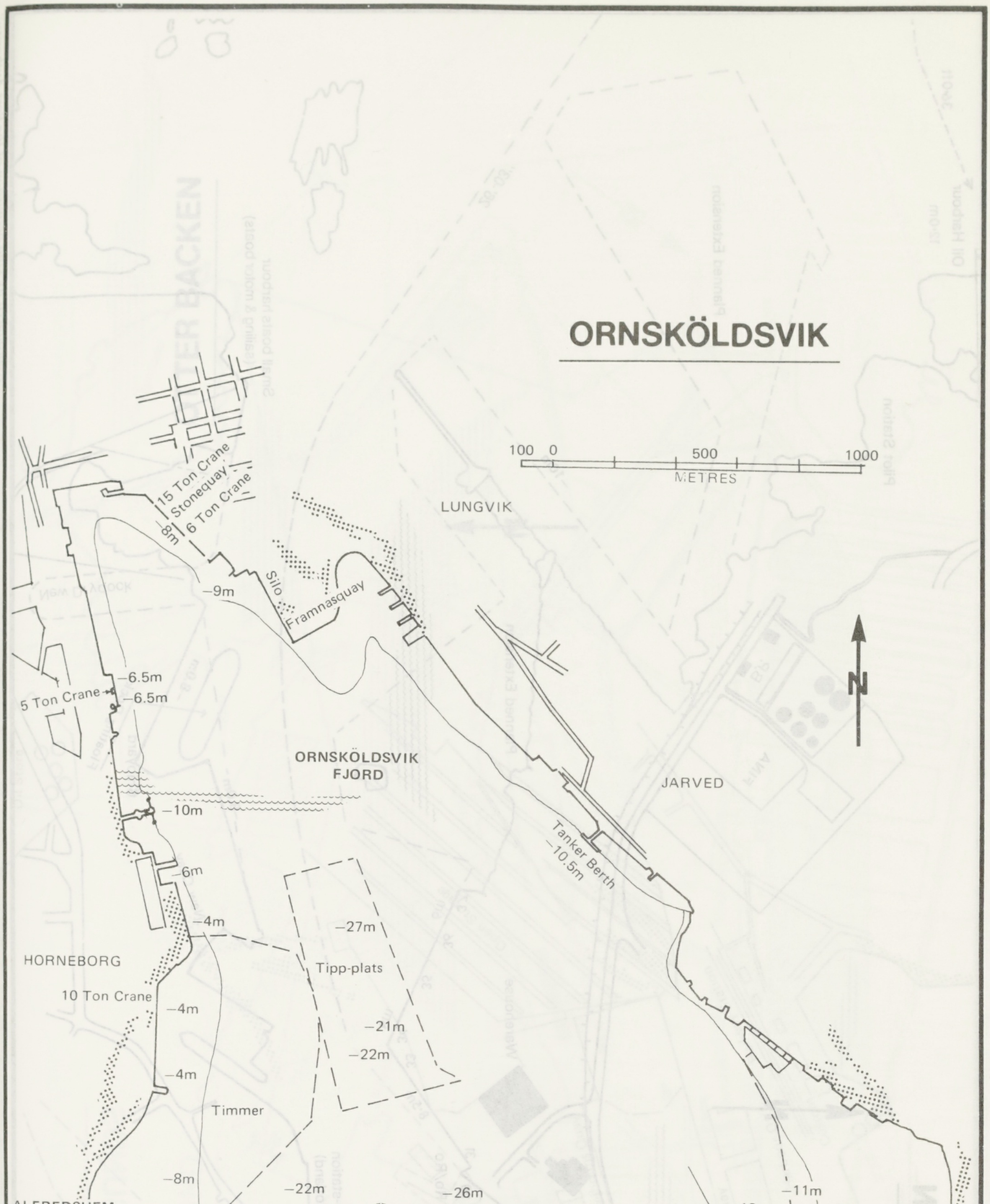
ORNSKÖLDSVIK
100 0 500 1000
METRES
LUNGVIK
15 Ton Crane
Stonequay
6 Ton Crane
8m
Silo
Framnasquay
-9m
-6.5m
5 Ton Crane
-6.5m
ORNSKÖLDSVIK
FJORD
N
JARVED
-10m
Tanker Berth
-10.5m
-6m
-4m
-27m
HORNEBORG
Tipp-plats
10 Ton Crane
-4m
-21m
-22m
-4m
Timmer
-8m
-22m
-26m
-11m
ALFREDSHEM
-19m
-28m
-6.4m
6 Ton Crane
-8.4m
DOMSJO
-29m

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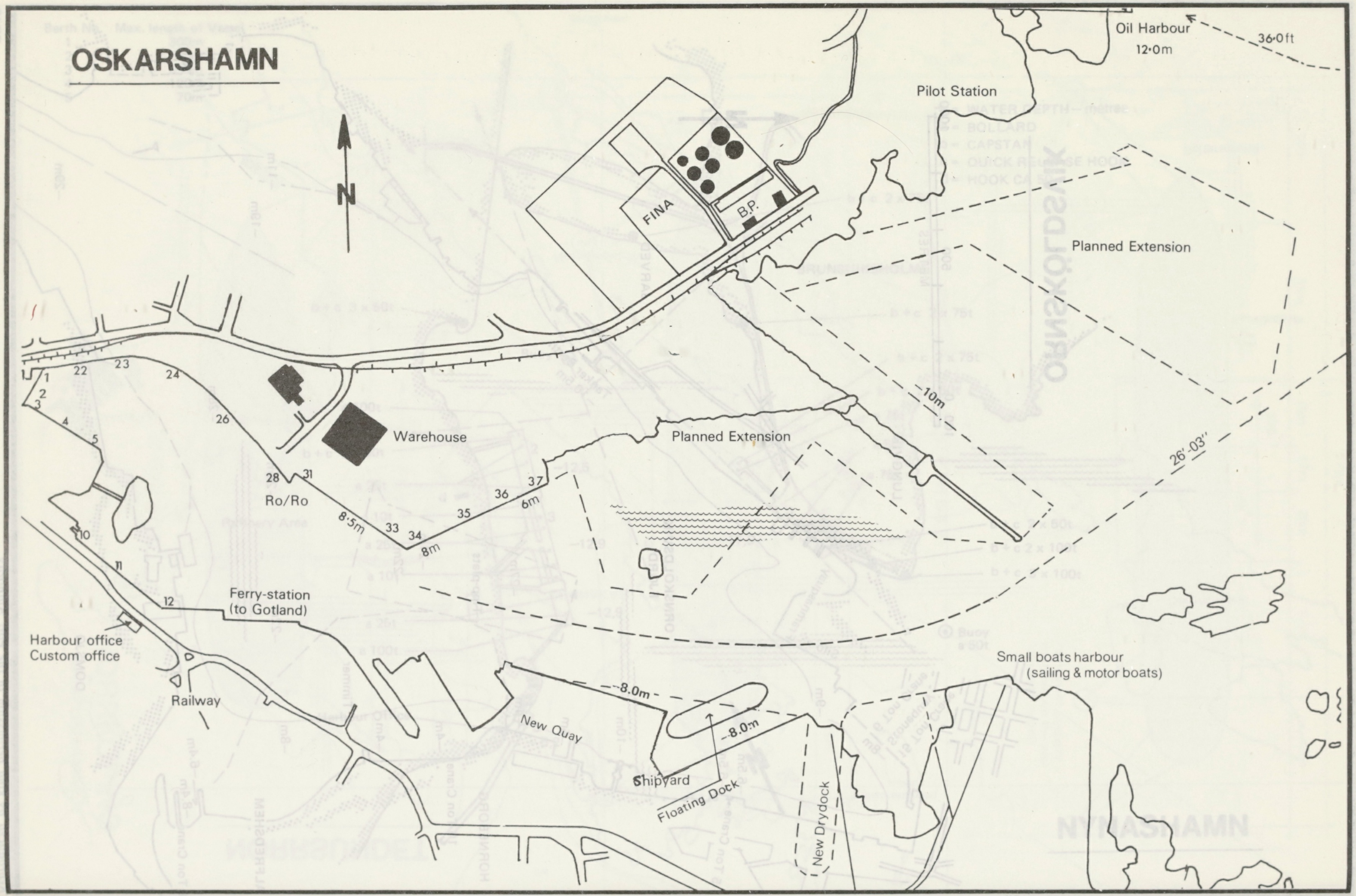
OSKARSHAMN


N
Oil Harbour
12·0m
36·0ft
Pilot Station
FINA
B.P.
Planned Extension
10m
Planned Extension
26'-03"
Warehouse
1
2
3
4
5
22
23
24
26
28
31
Ro/Ro
8·5m
33
34
8m
35
36
6m
37
10
11
12
Ferry-station
(to Gotland)
Harbour office
Custom office
Railway
New Quay
8.0m
8.0m
Shipyard
Floating Dock
New Drydock
Small boats harbour
(sailing & motor boats)

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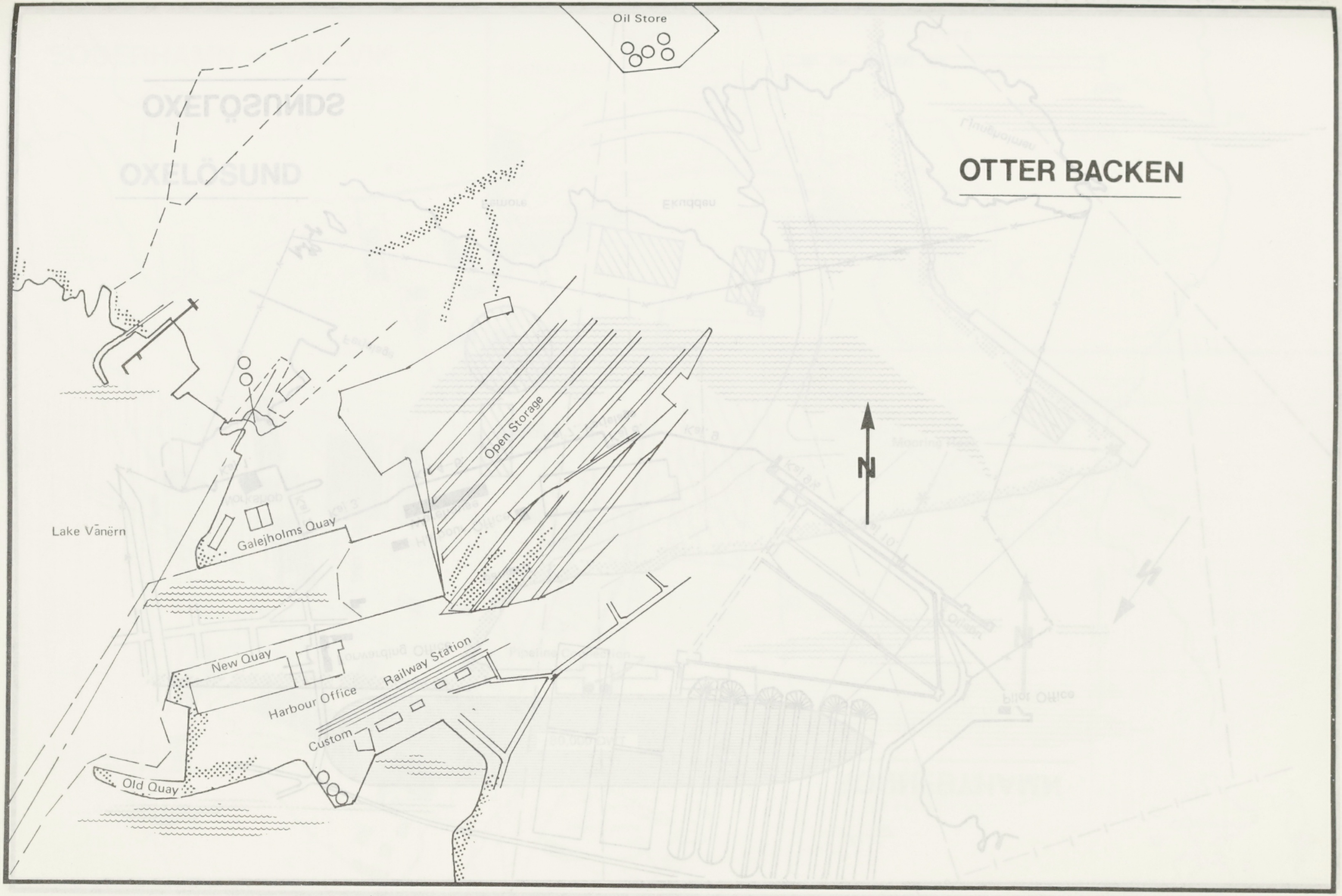
OTTER BACKEN


Oil Store
Open Storage
Lake Vänërn
Galejholms Quay
New Quay
Harbour Office
Railway Station
Custom
Old Quay
N

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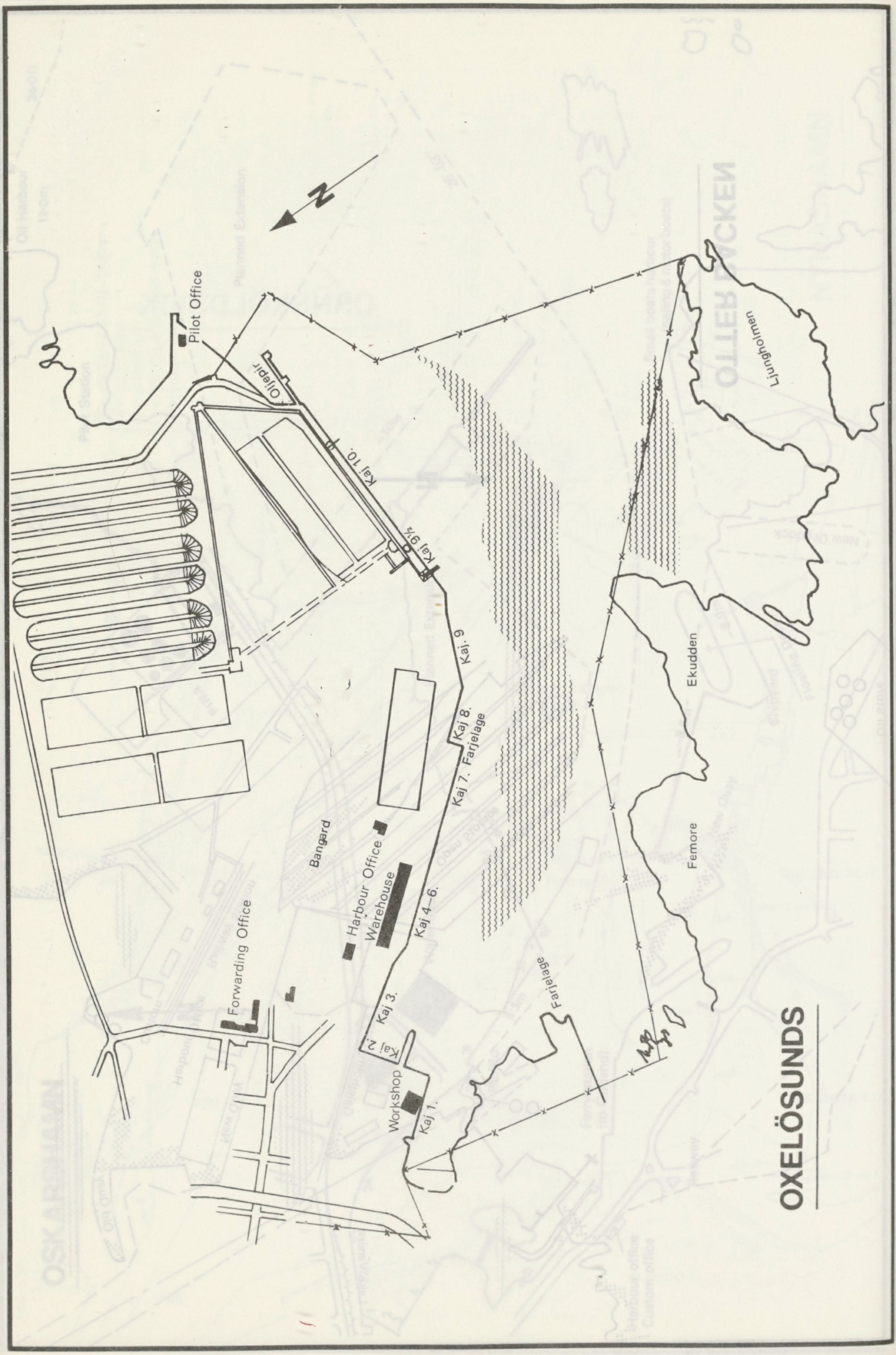

OXELÖSUNDS

N
Pilot Office
Oljepir
Kaj 10.
Kaj 9½
Kaj. 9
Kaj 8. Farjelage
Kaj 7.
Bangard
Harbour Office
Warehouse
Kaj 4–6.
Forwarding Office
Kaj 3.
Kaj 2.
Workshop
Kaj 1.
Farjelage
Femore
Ekudden
Ljungholmen

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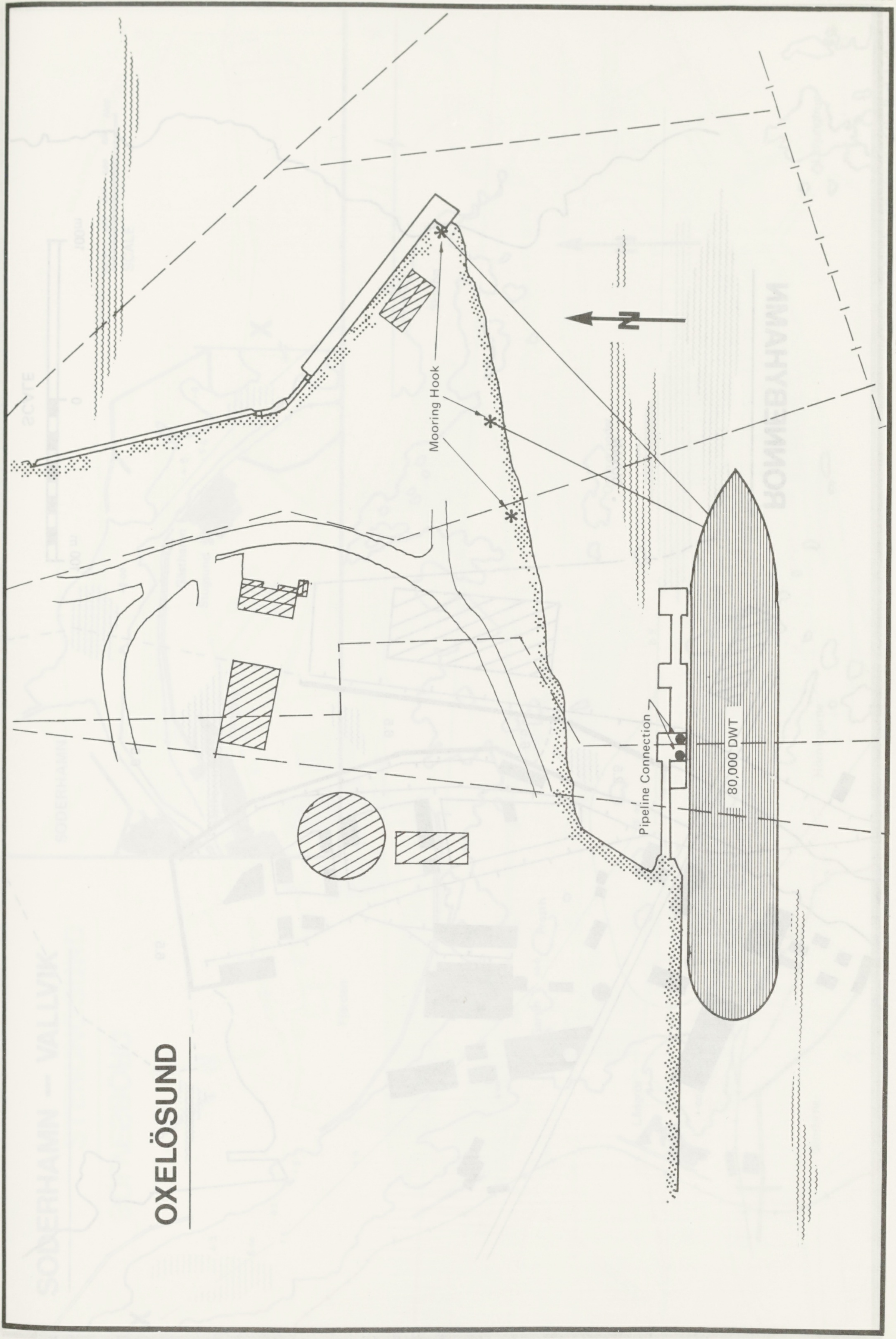

OXELÖSUND

Mooring Hook
Pipeline Connection
80,000 DWT
N

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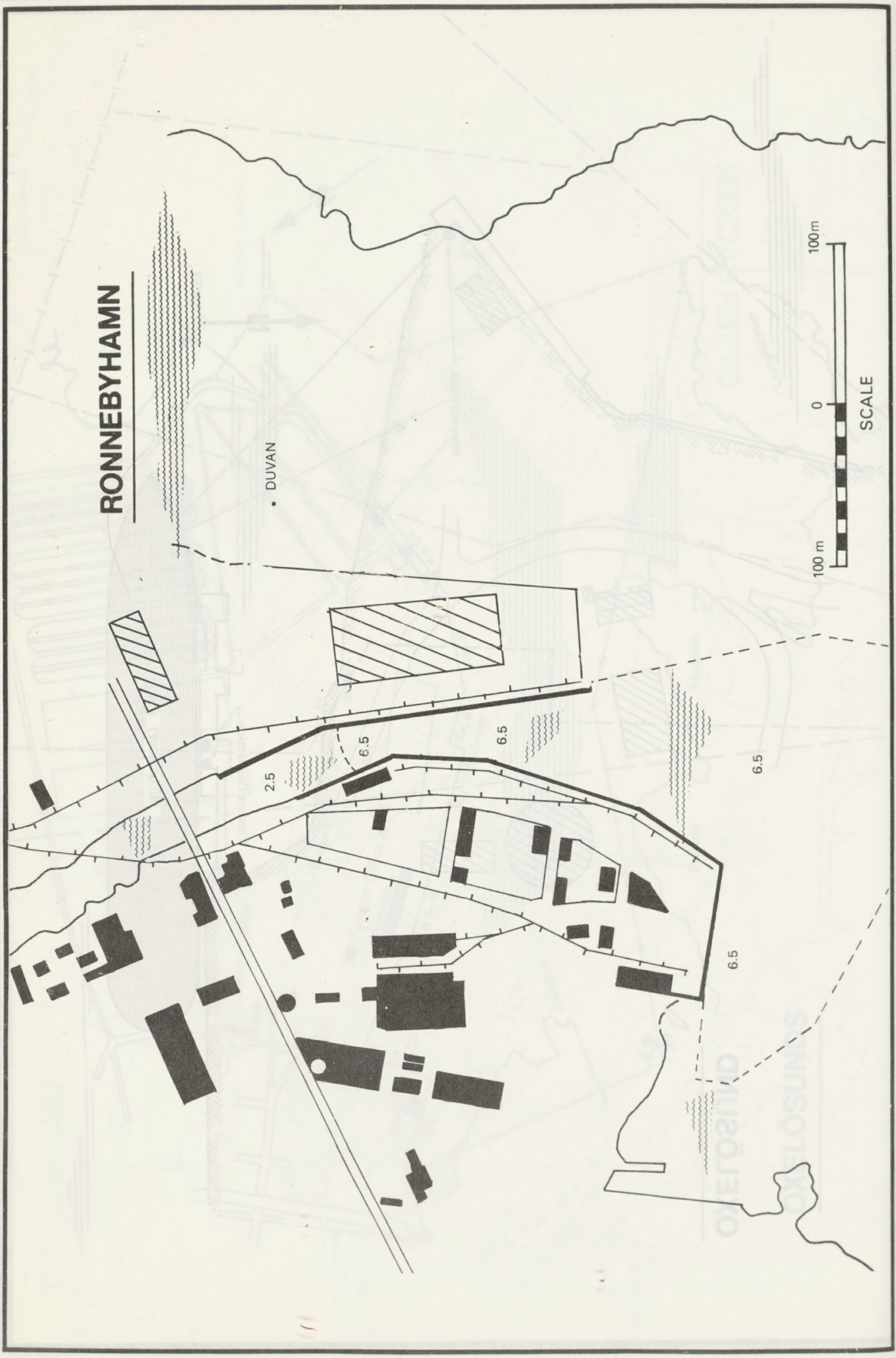
RONNEBYHAMN
DUVAN
2.5
6.5
6.5
6.5
6.5
6.5
SCALE
100 m
0
100m

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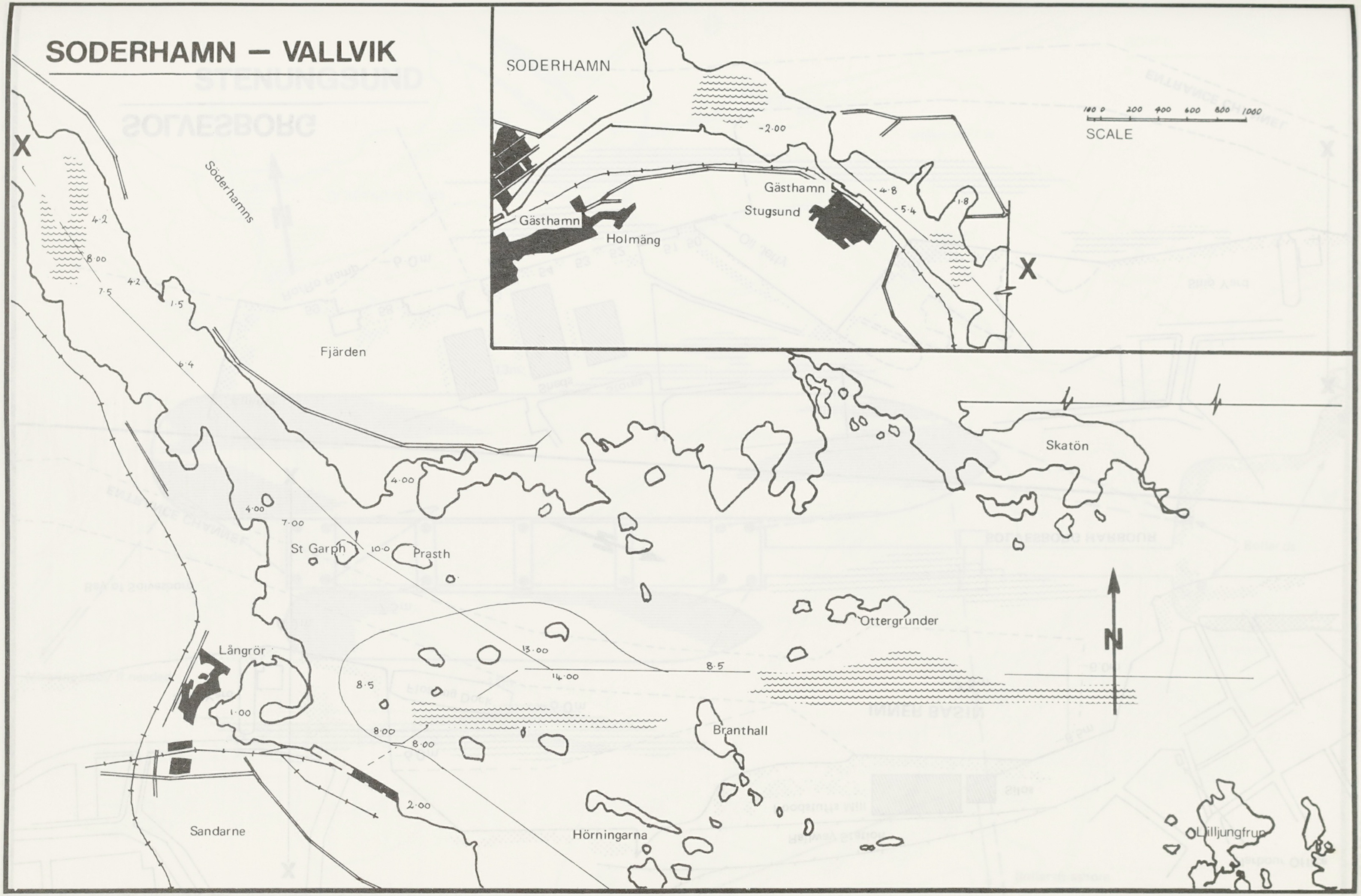
SODERHAMN — VALLVIK


SODERHAMN
-2.00
Gästhamn
-4.8
-5.4
1.8
Stugsund
Gästhamn
Holmäng
X
SCALE
100 0 200 400 600 800 1000
X
Söderhamns
4.2
8.00
4.2
7.5
1.5
Fjärden
6.4
4.00
4.00
7.00
St Garph
10.0
Prasth
Skatön
Ottergrunder
N
Långrör
13.00
14.00
8.5
8.5
1.00
8.00
8.00
Branthall
2.00
Sandarne
Hörningarna
Lilljungfrun

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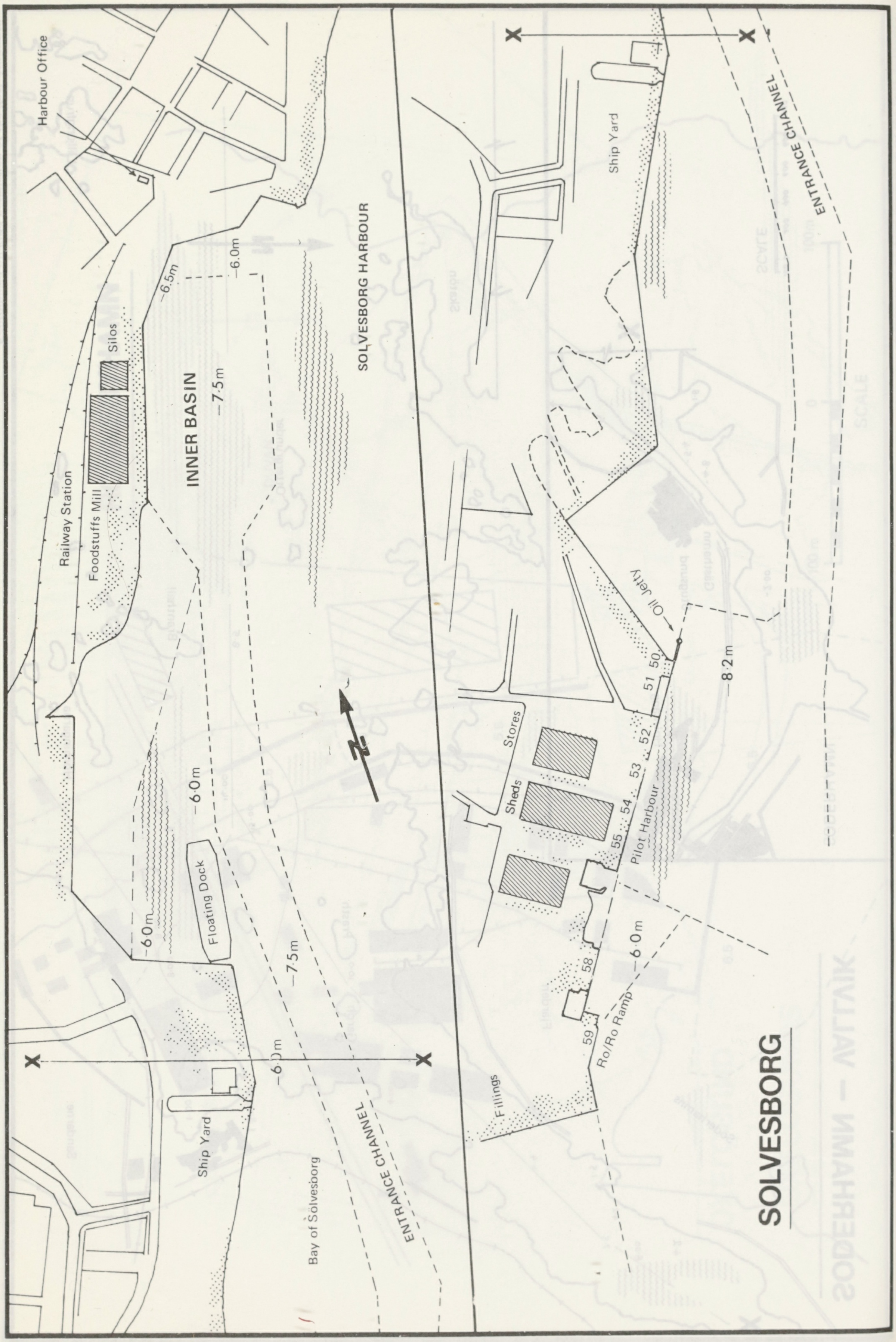

SOLVESBORG

Harbour Office
Railway Station
Foodstuffs Mill
Silos
INNER BASIN
−6.5m
−6.0m
−7.5m
−6.0m
−6.0m
Floating Dock
−7.5m
−6.0m
Ship Yard
Bay of Sölvesborg
ENTRANCE CHANNEL
X
X
SOLVESBORG HARBOUR
N
Ship Yard
X
X
ENTRANCE CHANNEL
Oil Jetty
−8.2m
50
51
52
53
54
55
Stores
Sheds
Pilot Harbour
−6.0m
58
59
Ro/Ro Ramp
Fillings

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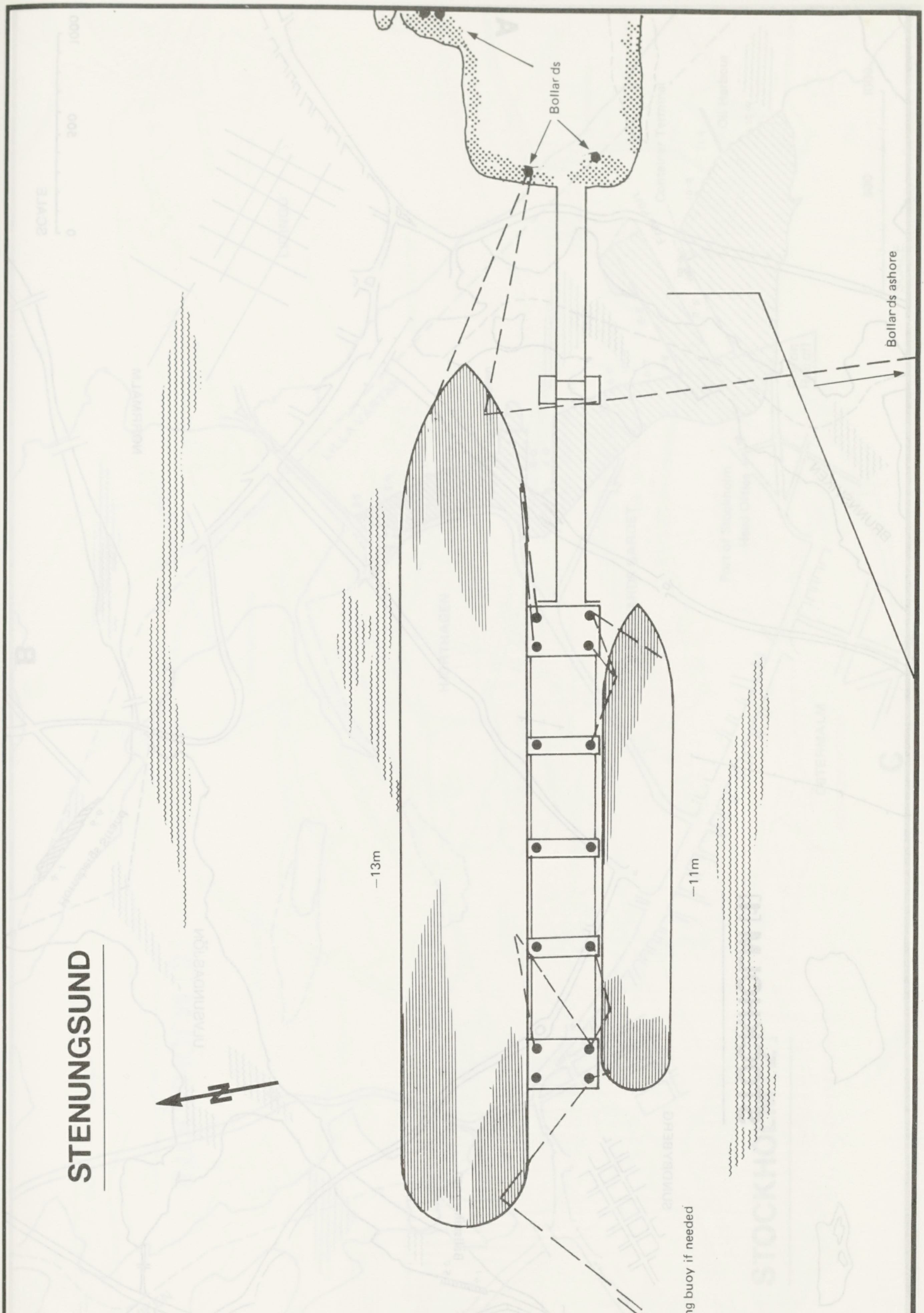
STENUNGSUND


Bollards
Bollards ashore
−13m
−11m
Mooring buoy if needed

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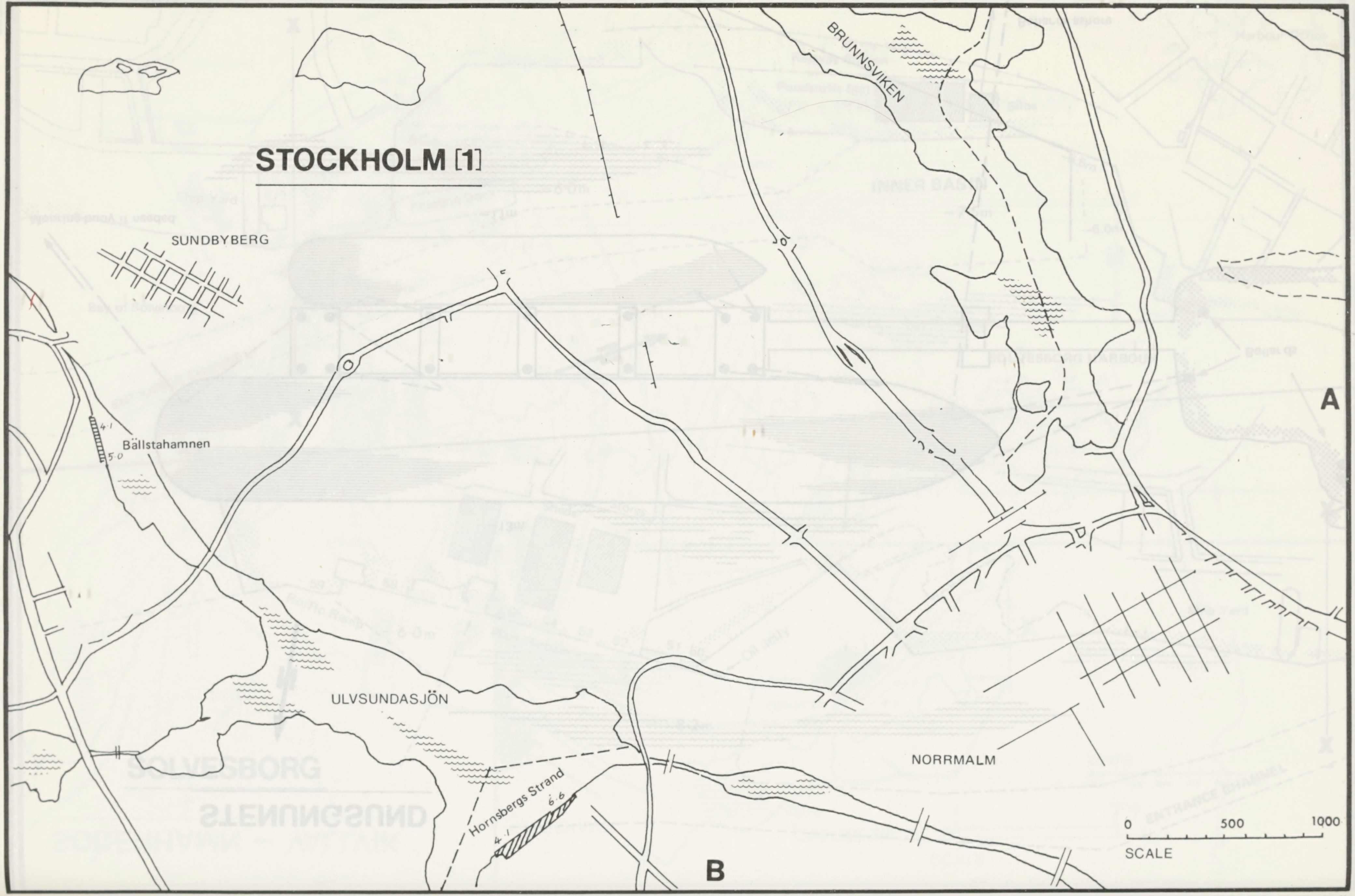
STOCKHOLM [1]


SUNDBYBERG
BRUNNSVIKEN
A
4·1
Bällstahamnen
5·0
ULVSUNDASJÖN
Hornsbergs Strand
6·6
4·1
B
NORRMALM
0
500
1000
SCALE

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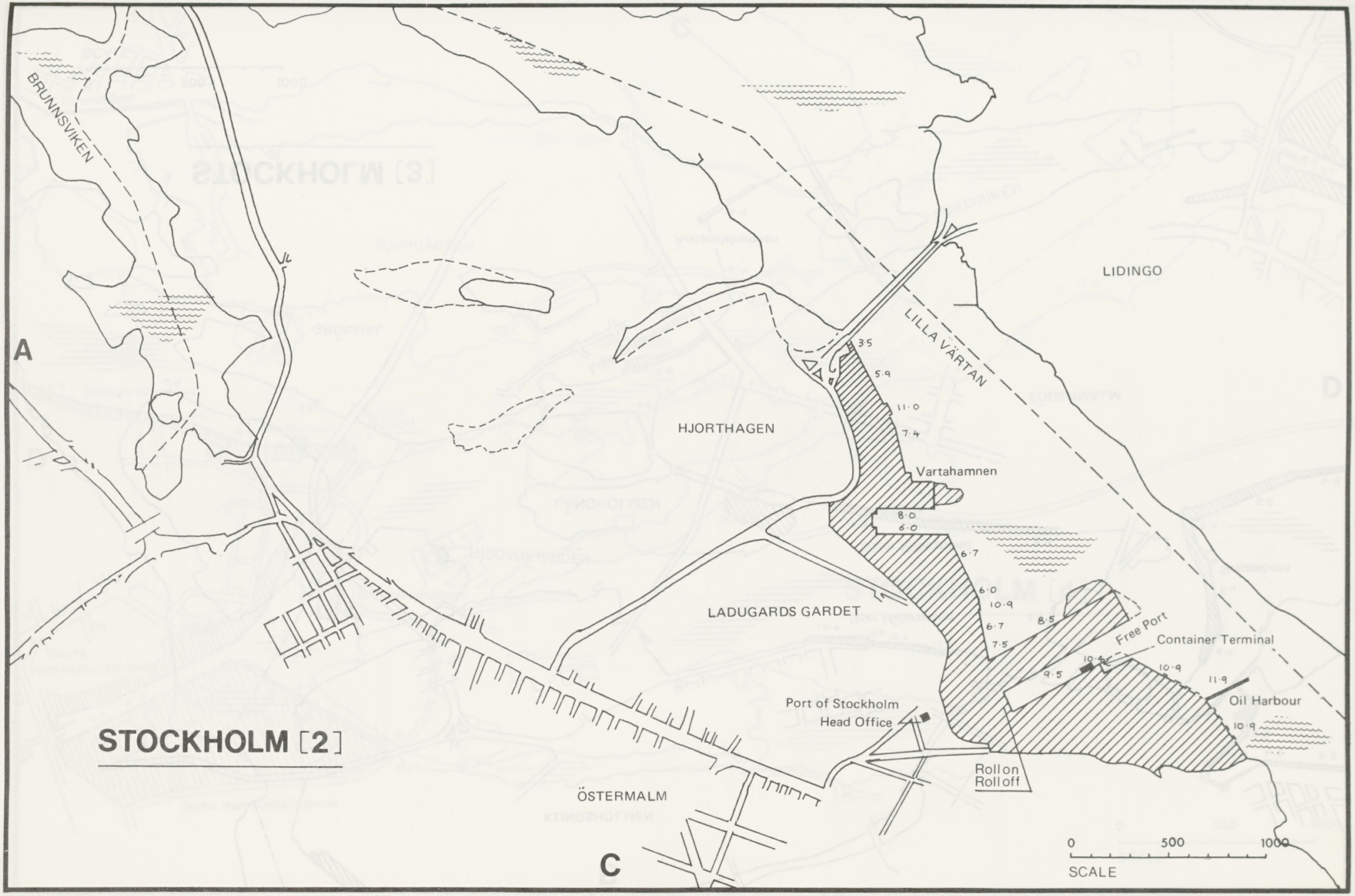
STOCKHOLM [2]


BRUNNSVIKEN
A
HJORTHAGEN
LIDINGO
LILLA VÄRTAN
3·5
5·9
11·0
7·4
Vartahamnen
8·0
6·0
6·7
LADUGARDS GARDET
6·0
10·9
8·5
6·7
7·5
Free Port
Container Terminal
10·4
9·5
10·9
11·9
Oil Harbour
10·9
Port of Stockholm
Head Office
Roll on
Roll off
ÖSTERMALM
C
0
500
1000
SCALE

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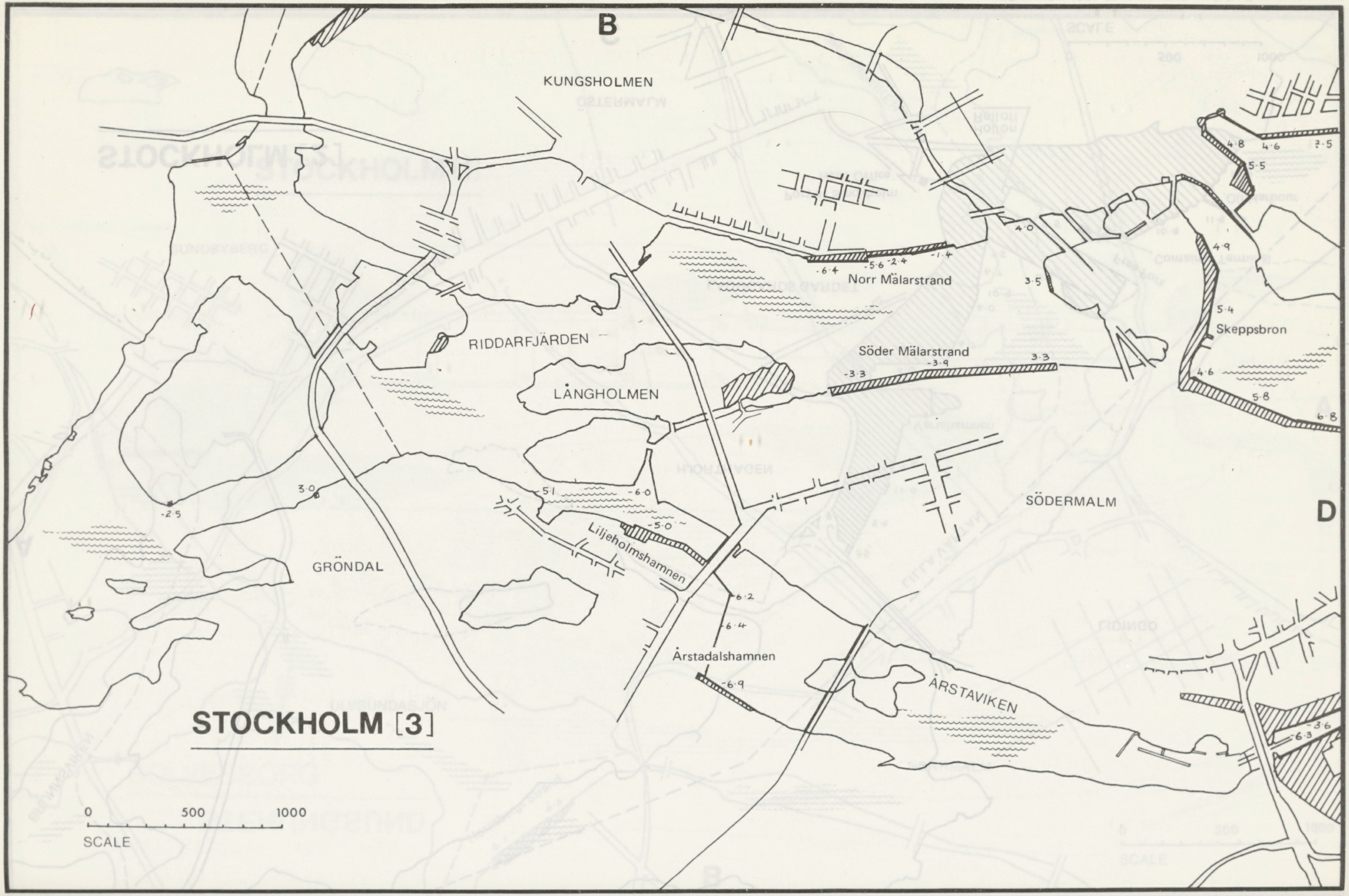
B
KUNGSHOLMEN
RIDDARFJÄRDEN
LÅNGHOLMEN
GRÖNDAL
SÖDERMALM
ÅRSTAVIKEN
D
Norr Mälarstrand
Söder Mälarstrand
Skeppsbron
Liljeholmshamnen
Årstadalshamnen
-6·4
-5·6
-2·4
-1·4
4·0
3·5
4·8
4·6
3·5
5·5
4·9
5·4
4·6
5·8
6·8
-3·3
-3·9
3·3
5·1
-6·0
-5·0
3·0
-2·5
-6·2
-6·4
-6·9
-3·6
-6·3
STOCKHOLM [3]
0
500
1000
SCALE

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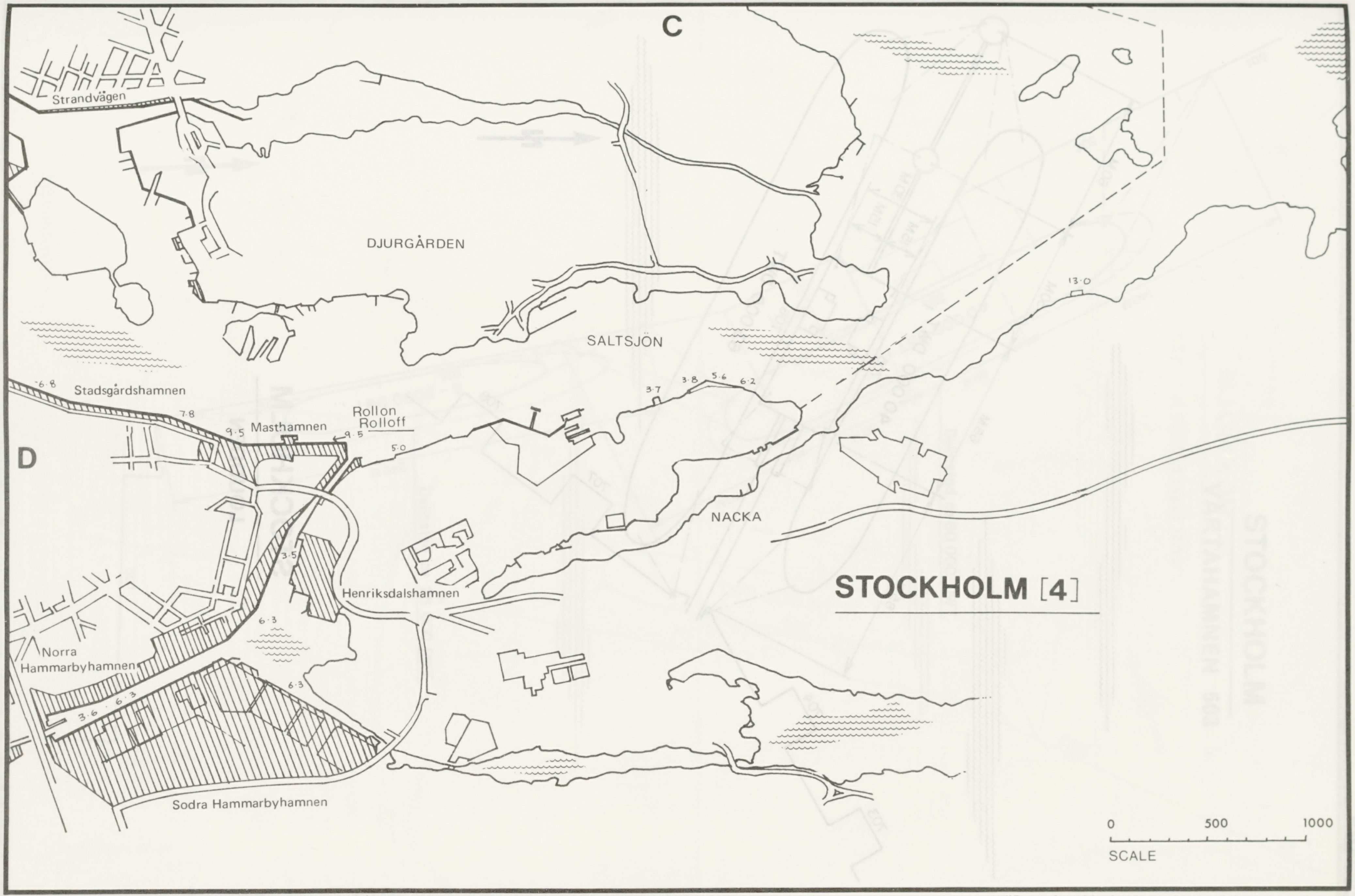
C
Strandvägen
DJURGÅRDEN
SALTSJÖN
13·0
D
6·8
Stadsgårdshamnen
7·8
9·5
Masthamnen
Rollon
Rolloff
9·5
5·0
3·7
3·8
5·6
6·2
NACKA
3·5
Henriksdalshamnen
STOCKHOLM [4]
6·3
Norra
Hammarbyhamnen
6·3
3·6
6·3
Sodra Hammarbyhamnen
0
500
1000
SCALE

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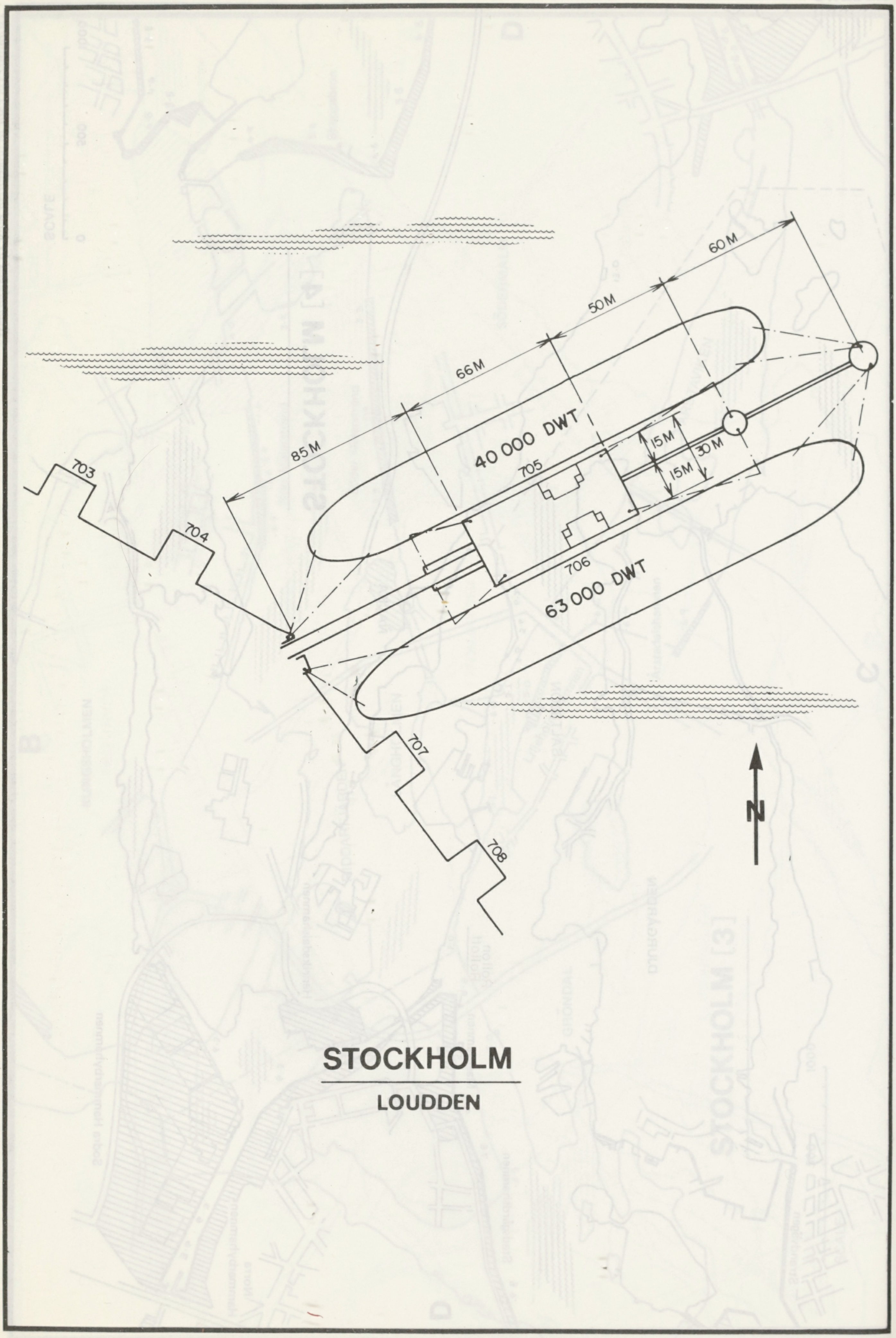
85 M
66 M
50 M
60 M
40 000 DWT
63 000 DWT
15 M
15 M
30 M
703
704
705
706
707
708
N

STOCKHOLM

LOUDDEN

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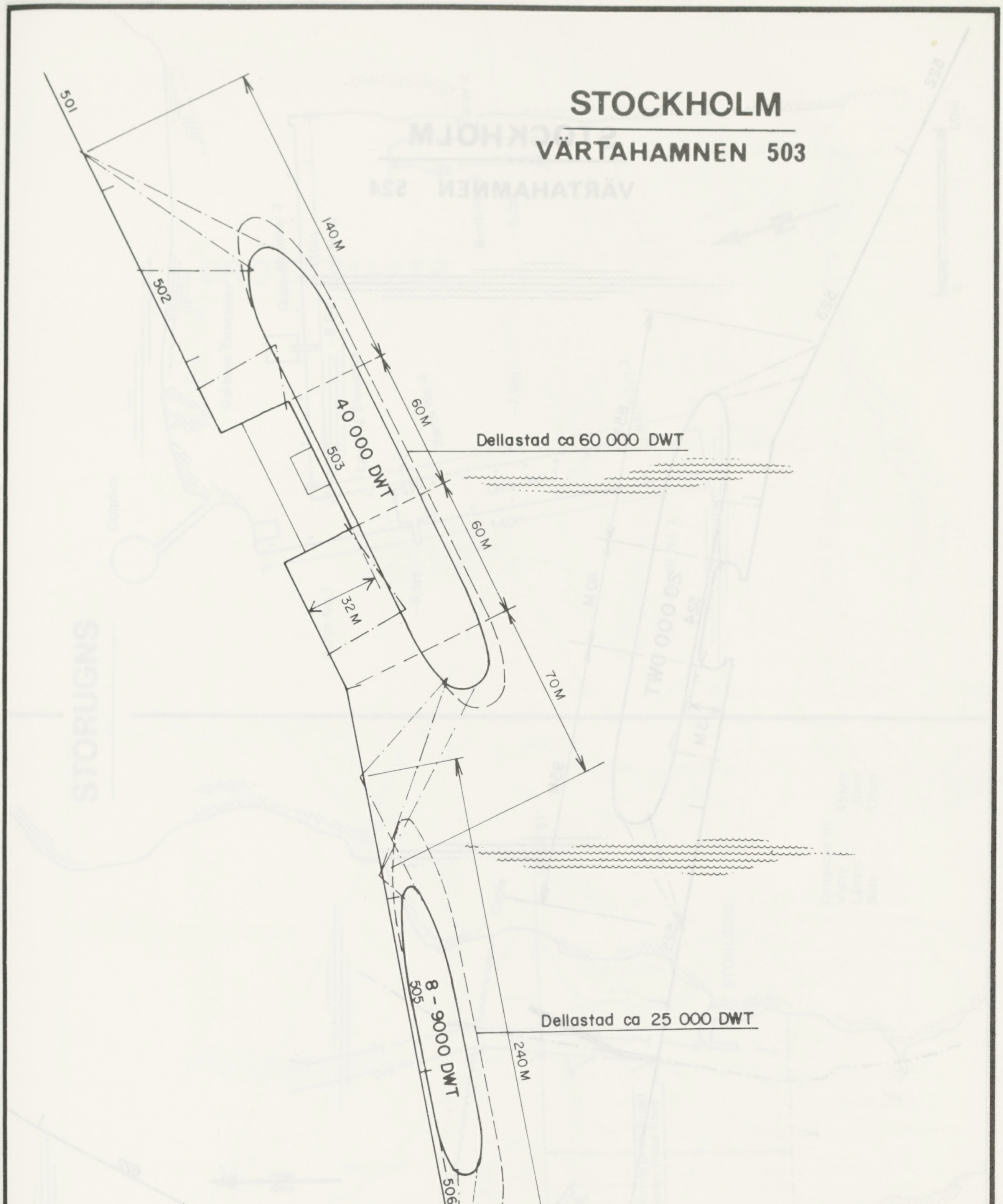
STOCKHOLM
VÄRTAHAMNEN 503
501
502
140 M
60 M
40 000 DWT
503
Dellastad ca 60 000 DWT
60 M
32 M
70 M
8 - 9000 DWT
505
Dellastad ca 25 000 DWT
240 M
506
507
N

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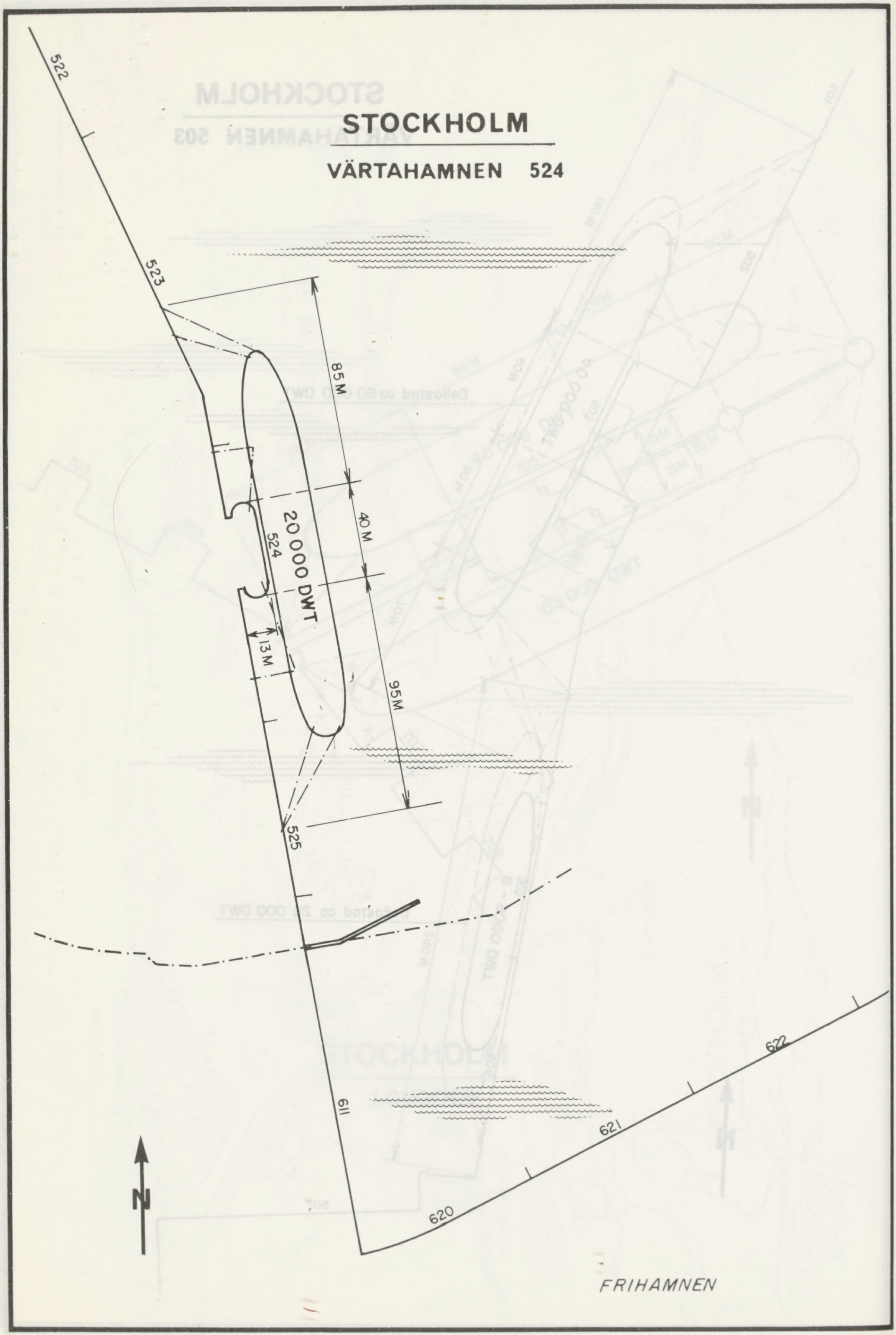

STOCKHOLM

VÄRTAHAMNEN 524

522
523
85 M
40 M
20 000 DWT
524
13 M
95M
525
611
620
621
622
N
FRIHAMNEN

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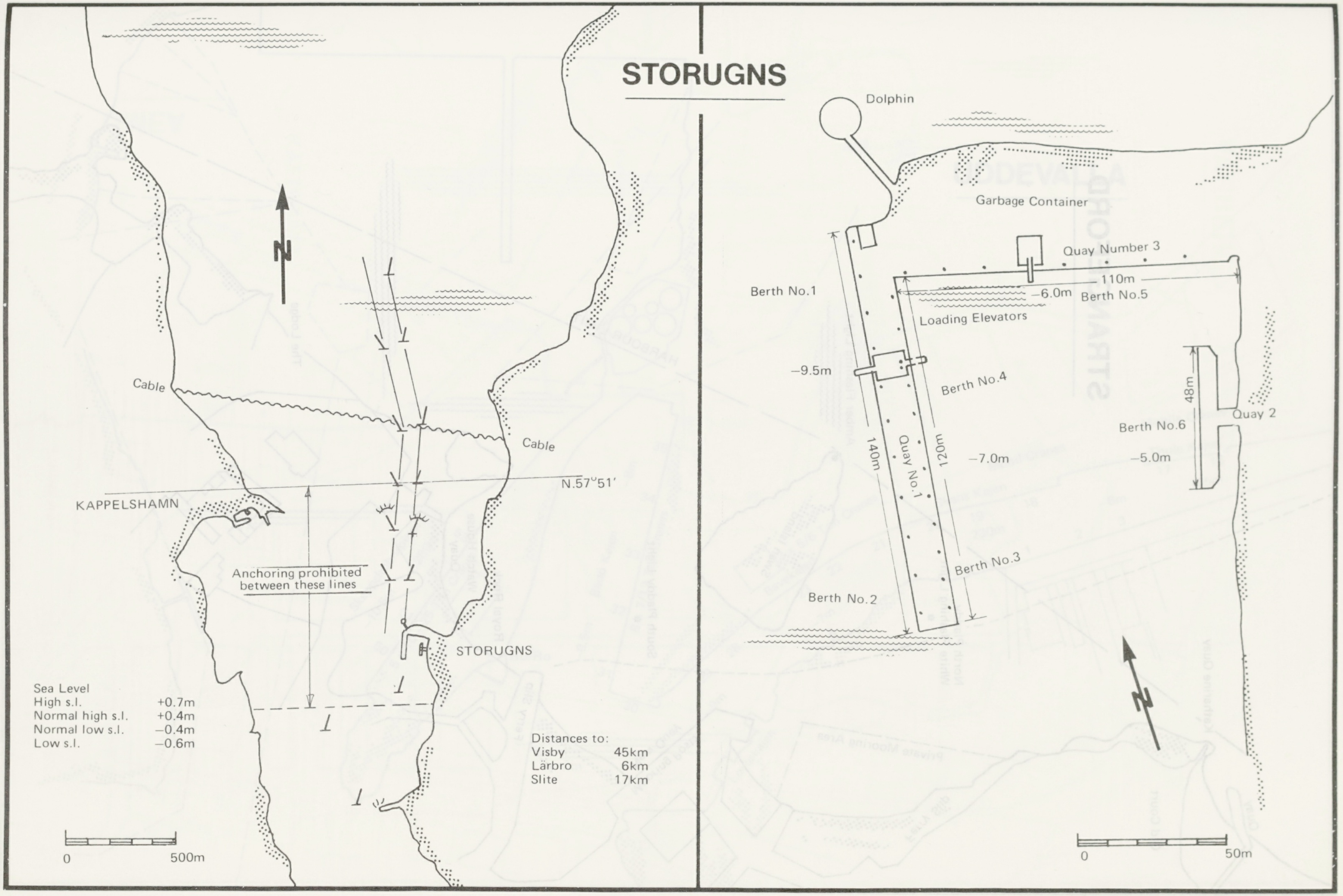
STORUGNS


Cable
Cable
N.57°51′
KAPPELSHAMN
Anchoring prohibited between these lines
STORUGNS
0
500m
Dolphin
Garbage Container
Quay Number 3
110m
−6.0m
Berth No.5
Berth No.1
Loading Elevators
−9.5m
Berth No.4
140m
Quay No.1
120m
−7.0m
−5.0m
48m
Quay 2
Berth No.6
Berth No.3
Berth No.2
0
50m

Sea Level	
High s.l.	+0.7m
Normal high s.l.	+0.4m
Normal low s.l.	−0.4m
Low s.l.	−0.6m

Distances to:	
Visby	45km
Lärbro	6km
Slite	17km

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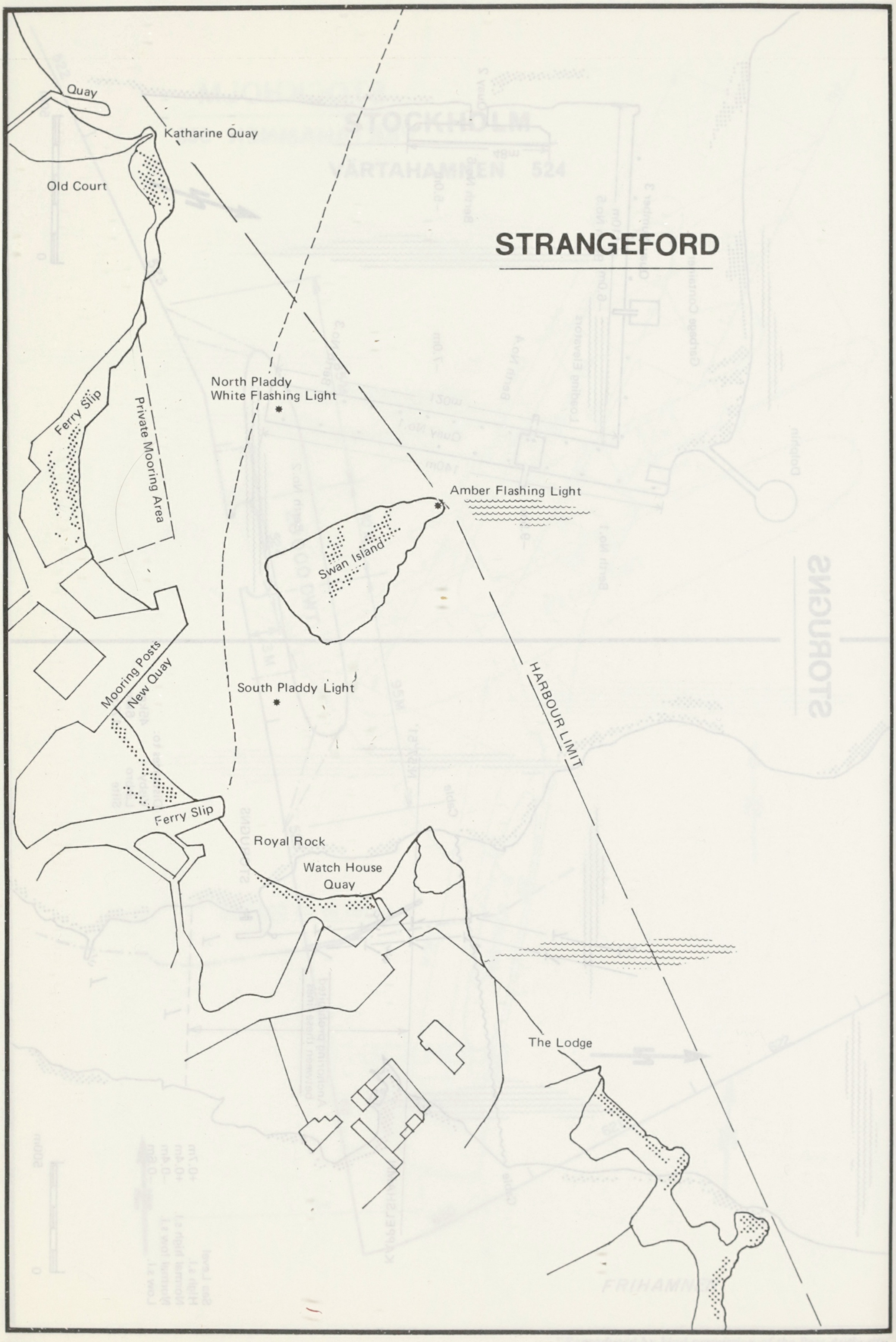
STRANGEFORD
Quay
Katharine Quay
Old Court
Ferry Slip
Private Mooring Area
North Pladdy
White Flashing Light
Amber Flashing Light
Swan Island
Mooring Posts
New Quay
South Pladdy Light
HARBOUR LIMIT
Ferry Slip
Royal Rock
Watch House
Quay
The Lodge

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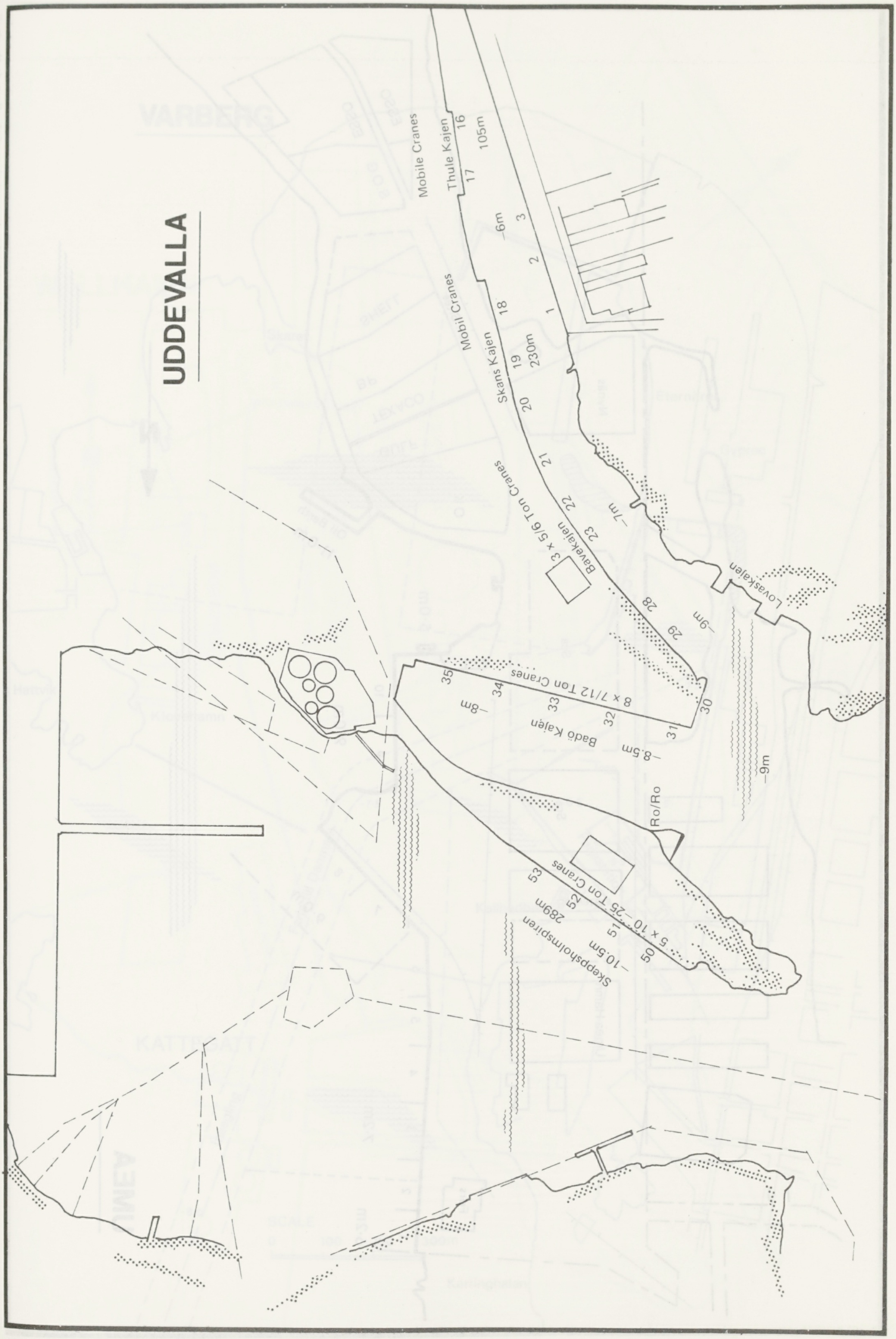
UDDEVALLA
N
Mobile Cranes
Thule Kajen
16
17
105m
-6m
3
2
1
18
Mobil Cranes
Skans Kajen
19
230m
20
21
3 x 5/6 Ton Cranes
22
Bavekajen
23
-7m
Lovaskajen
28
29
-9m
35
34
33
32
31
30
8 x 7/12 Ton Cranes
Badö Kajen
-8m
-8.5m
-9m
Ro/Ro
53
52
51
50
5 x 10 -25 Ton Cranes
289m
Skeppsholmspiren
10.5m

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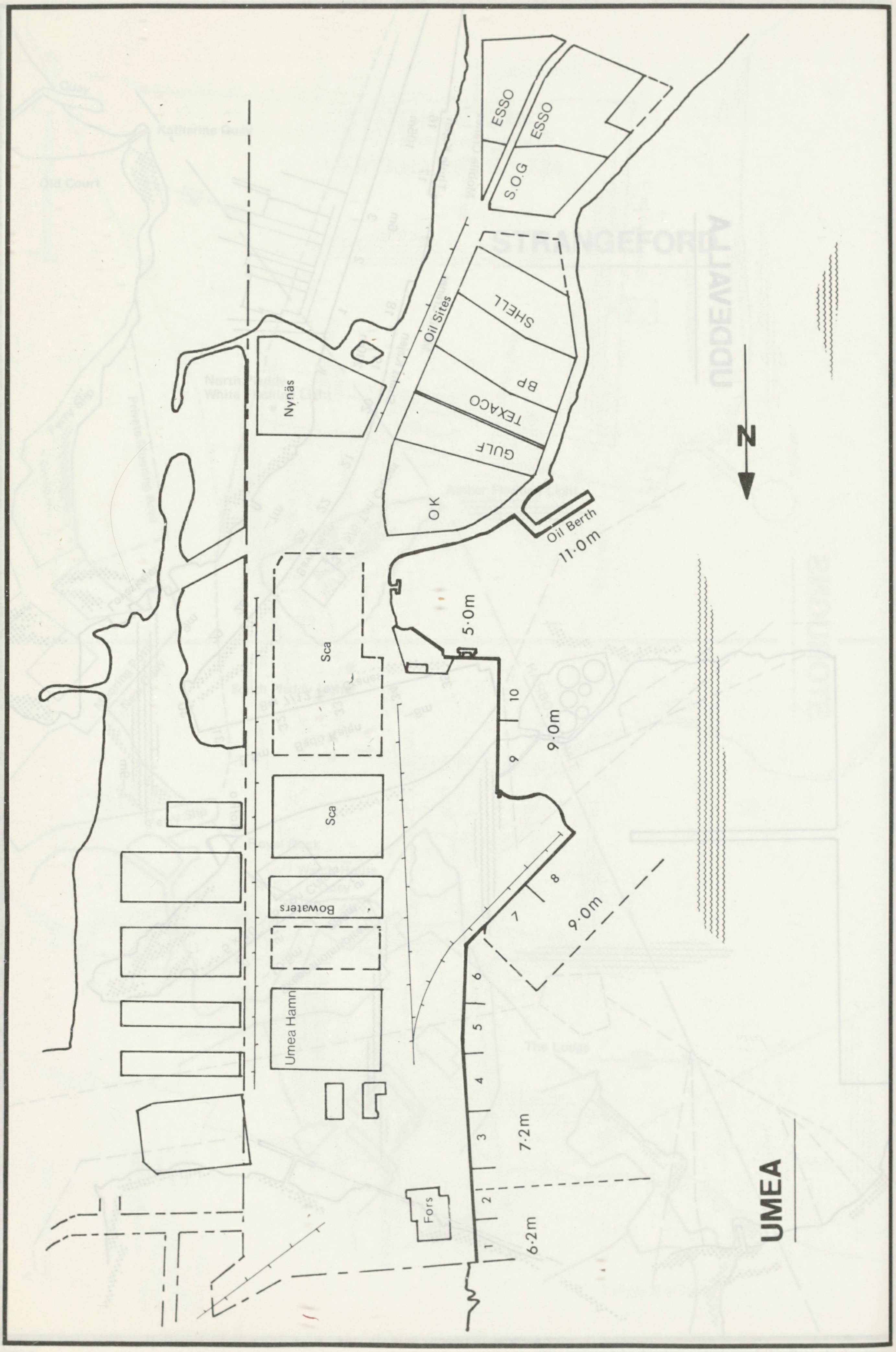
UMEA
N
ESSO
ESSO
S.O.G
SHELL
BP
TEXACO
GULF
OK
Oil Sites
Oil Berth
11·0m
Nynäs
Sca
Sca
5·0m
10
9·0m
9
8
7
9·0m
6
5
4
3
7·2m
2
1
6·2m
Fors
Umea Hamn
Bowaters

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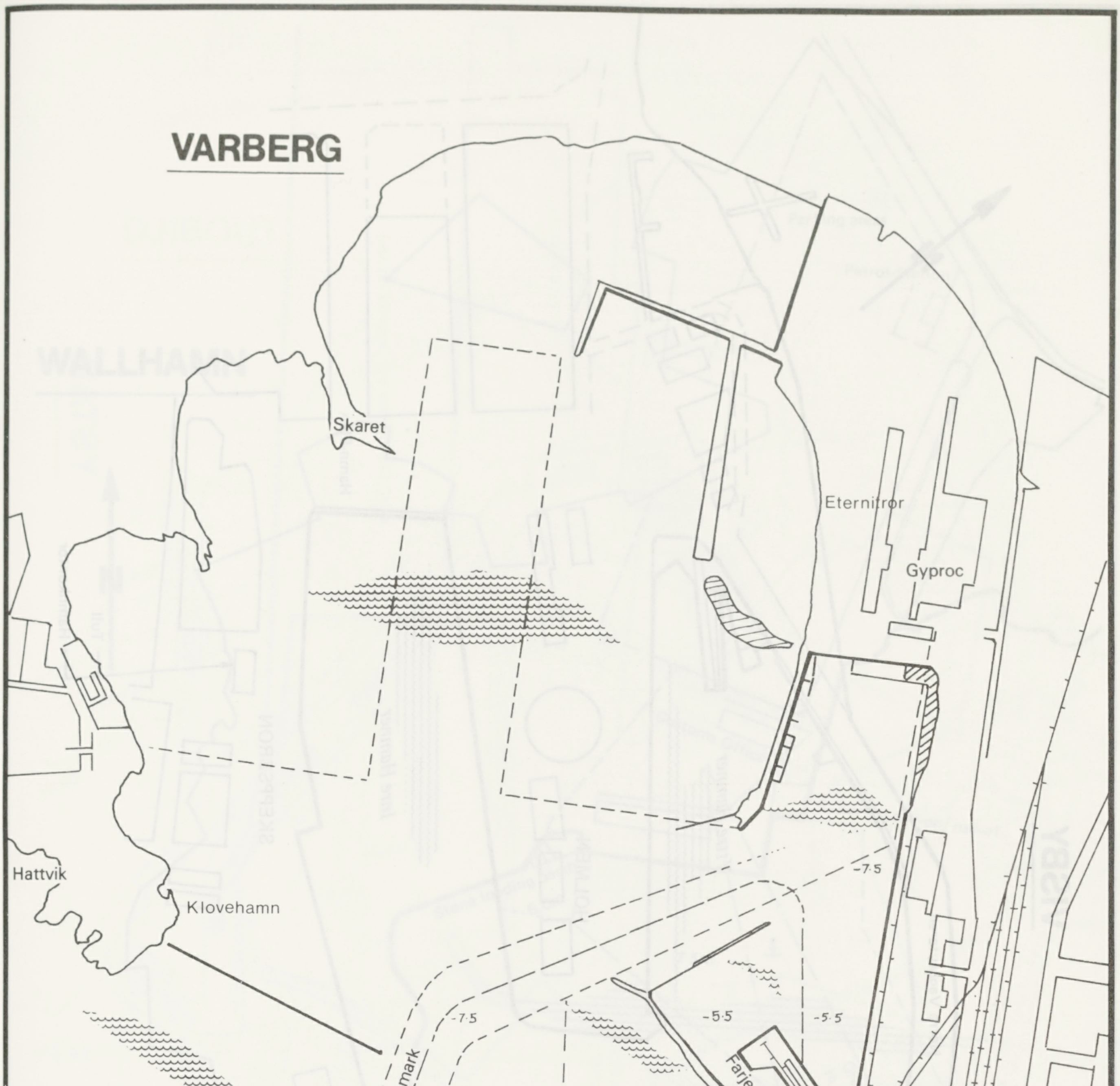
VARBERG
Skaret
Eternitror
Gyproc
Hattvik
Klovehamn
-7·5
-7·5
-5·5
-5·5
-5·5
Färjestation
Kallbadhus
Färja till Danmark
KATTEGATT
Insegling
-8·0
SCALE
0
100
200
300m
Karringhalan

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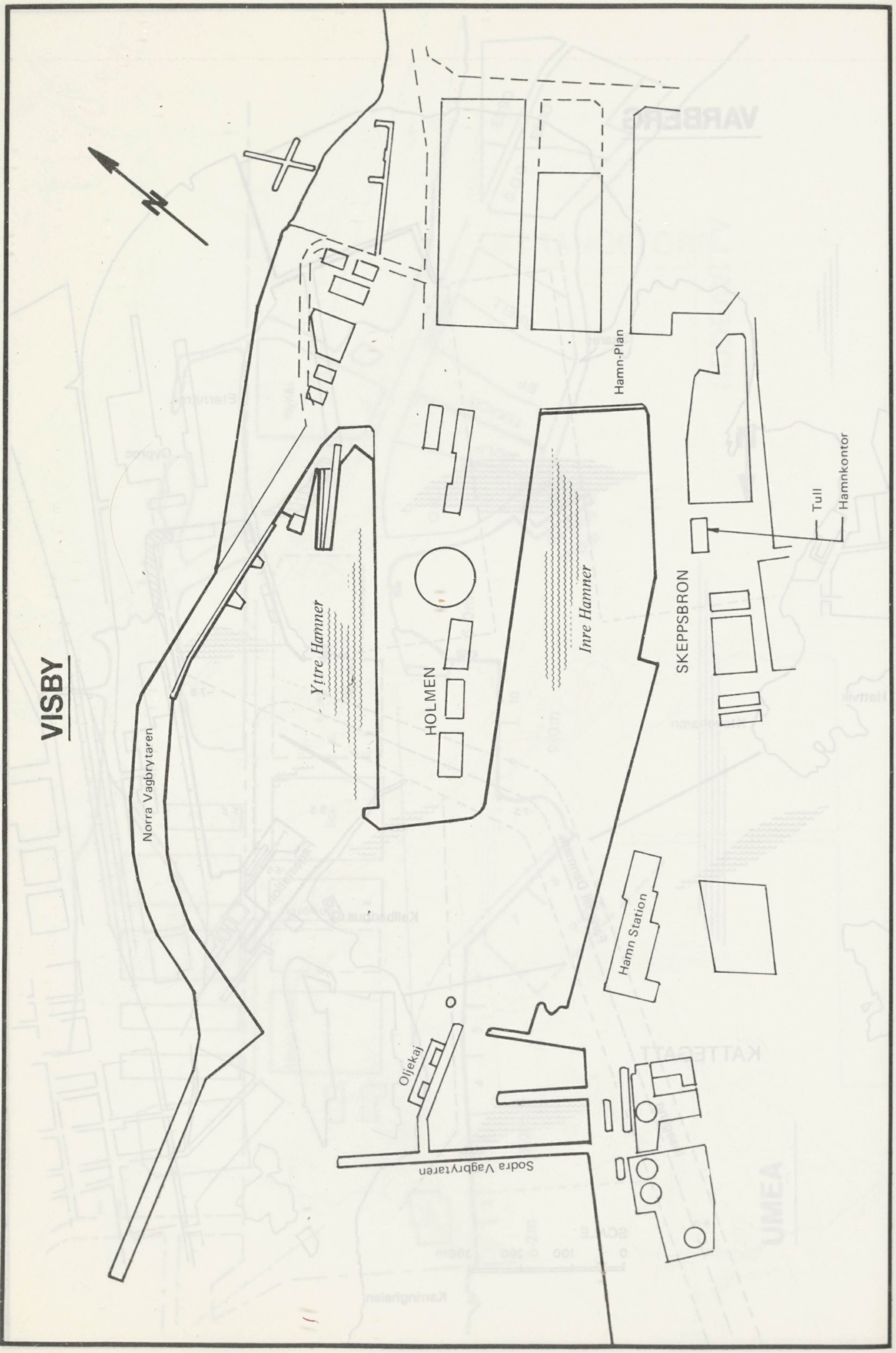
VISBY


Norra Vagbrytaren
Ytre Hamner
HOLMEN
Inre Hamner
Hamn-Plan
SKEPPSBRON
Tull
Hamnkontor
Hamn Station
Oljekaj
Sodra Vagbrytaren

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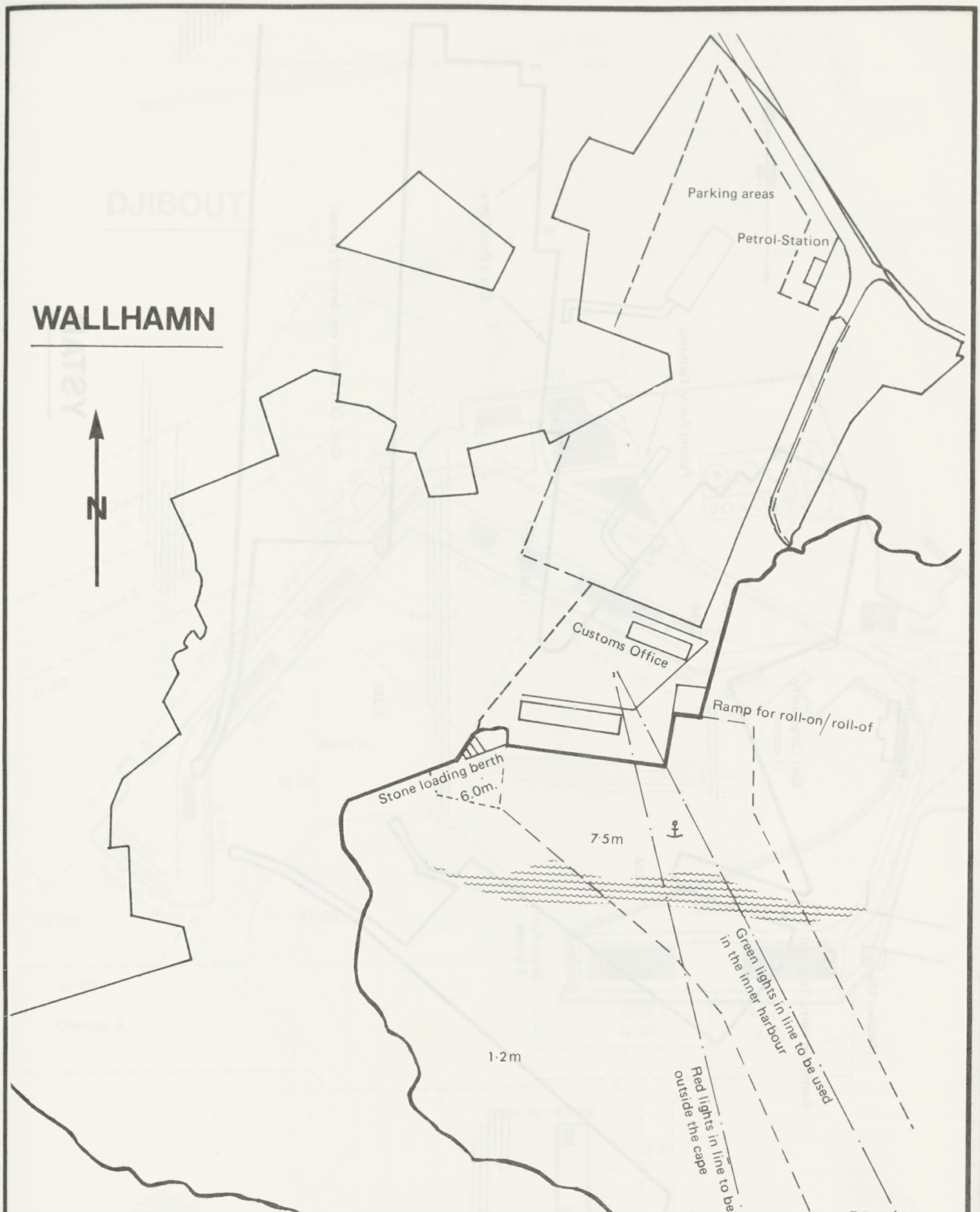
WALLHAMN
N
Parking areas
Petrol-Station
Customs Office
Ramp for roll-on/roll-of
Stone loading berth
6.0m.
7·5m
Green lights in line to be used in the inner harbour
Red lights in line to be used outside the cape
1·2m
7·5m

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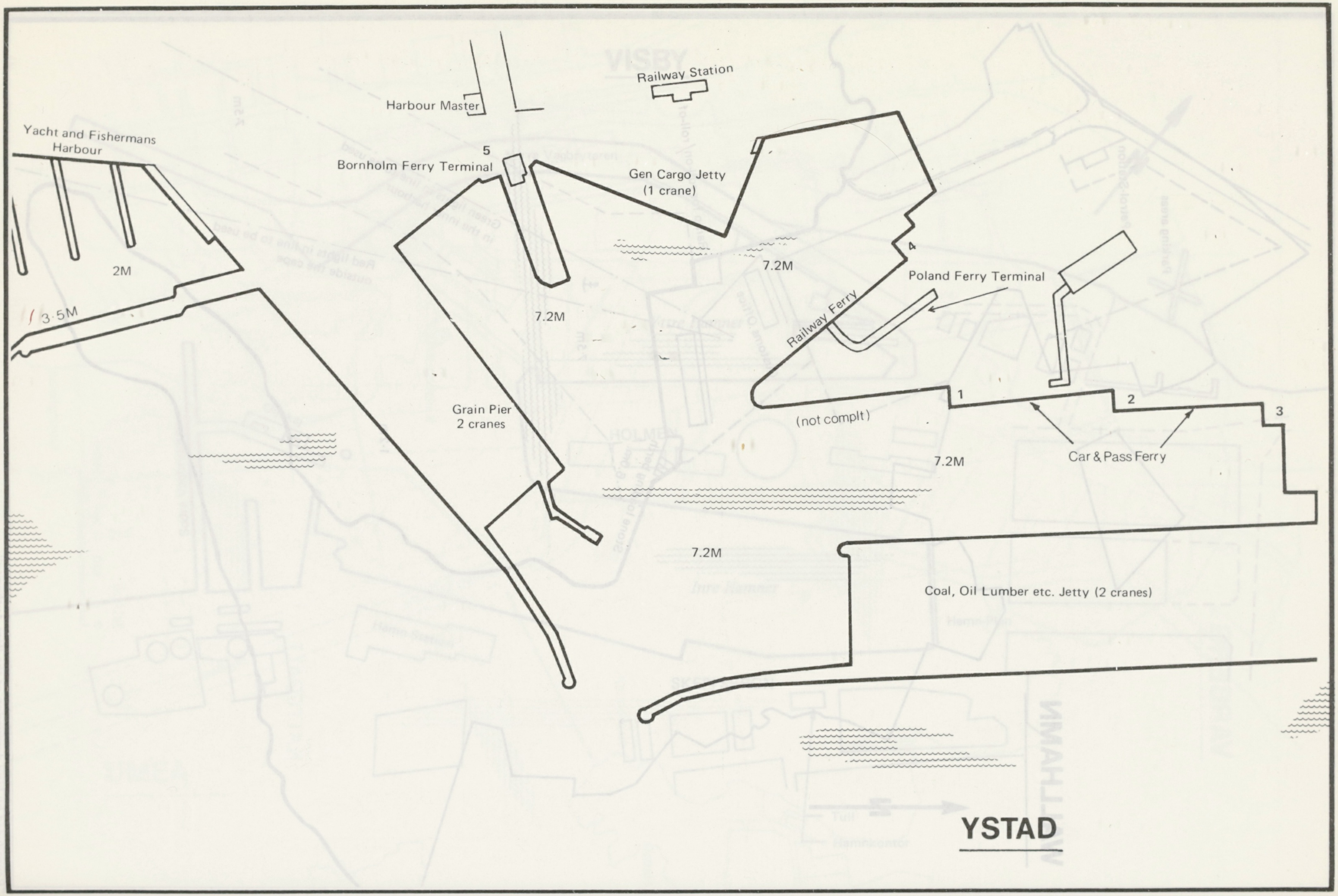
Railway Station
Harbour Master
Yacht and Fishermans Harbour
5
Bornholm Ferry Terminal
Gen Cargo Jetty (1 crane)
2M
3·5M
7.2M
4
Poland Ferry Terminal
Railway Ferry
7.2M
Grain Pier 2 cranes
(not complt)
1
2
3
7.2M
Car & Pass Ferry
7.2M
Coal, Oil Lumber etc. Jetty (2 cranes)
YSTAD

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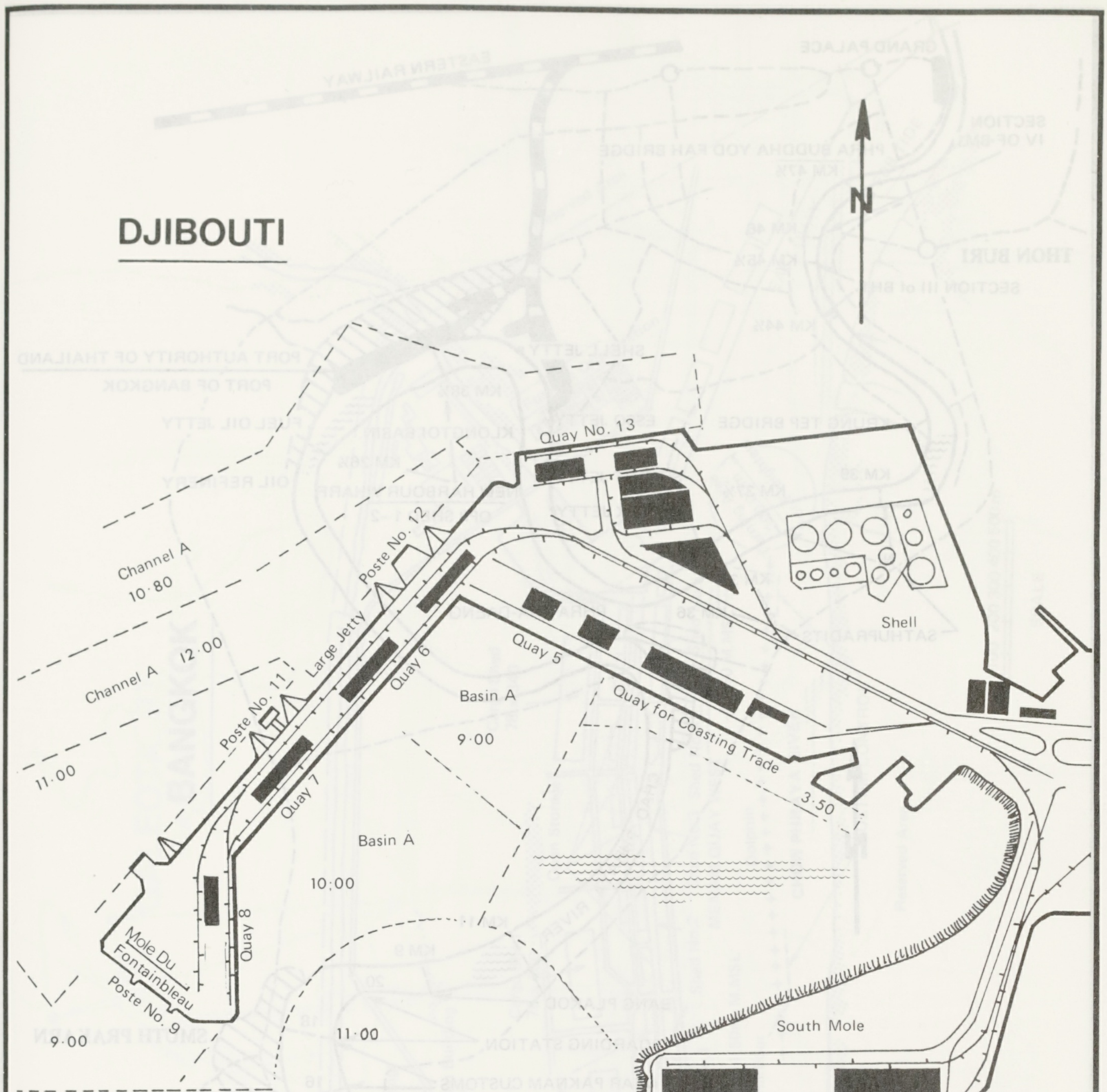
DJIBOUTI
N
Quay No. 13
Poste No. 2
Large Jetty
Poste No. 11
Quay 6
Quay 7
Quay 8
Quay 5
Quay for Coasting Trade
Shell
Channel A
10·80
Channel A
12·00
11·00
Basin A
9·00
Basin A
10·00
3·50
Mole Du Fontainbleau
Poste No. 9
9·00
11·00
11·00
Channel A
South Mole
Quay 2
12·00
Quay 1
9·50
Mole de l'Escale
3·00
Point D'Accostage pour bac Le Goubet

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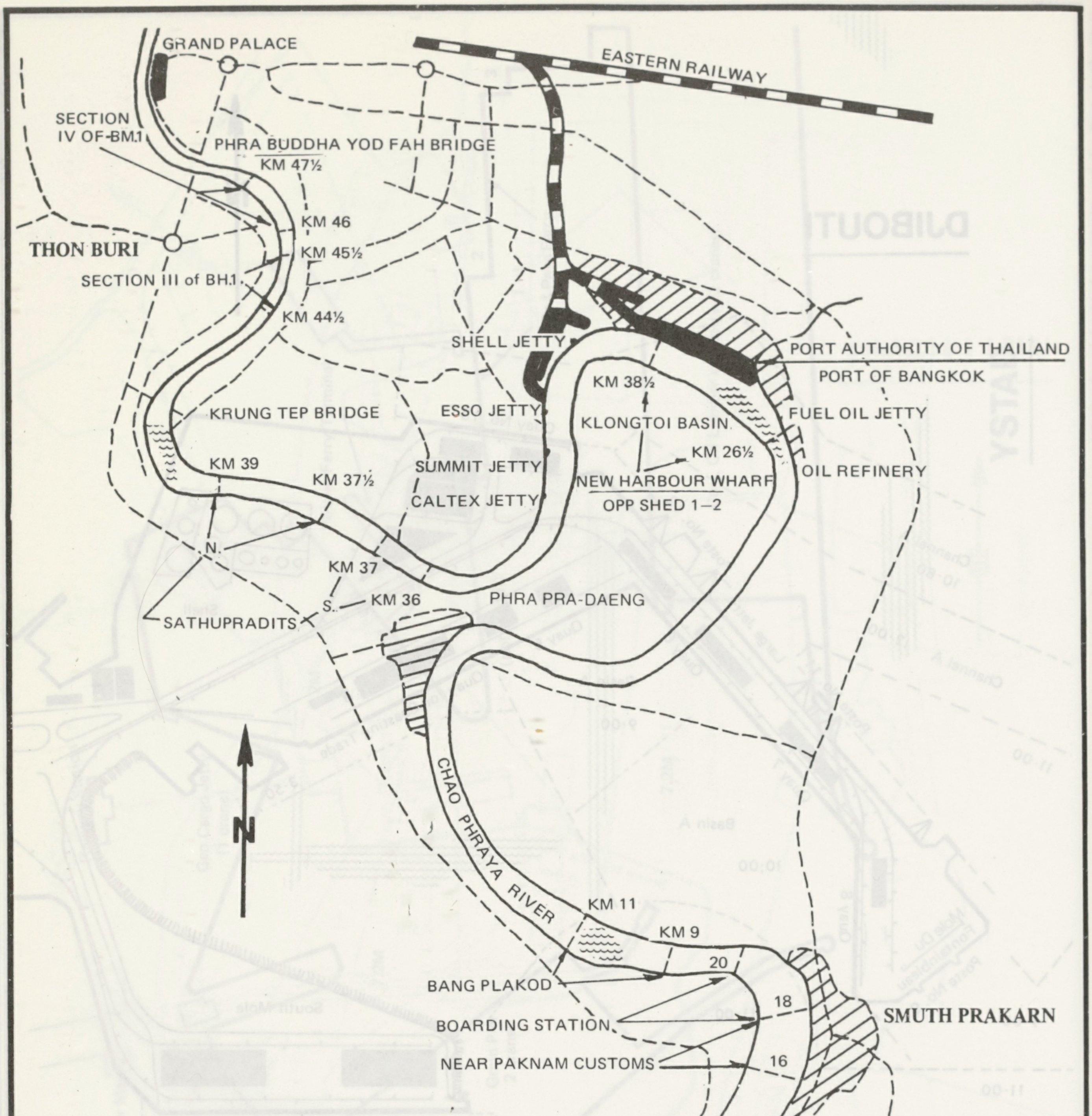
GRAND PALACE
EASTERN RAILWAY
SECTION
IV OF BM.1
PHRA BUDDHA YOD FAH BRIDGE
KM 47½
KM 46
THON BURI
KM 45½
SECTION III of BH.1
KM 44½
SHELL JETTY
PORT AUTHORITY OF THAILAND
PORT OF BANGKOK
KM 38½
KRUNG TEP BRIDGE
ESSO JETTY
KLONGTOI BASIN
FUEL OIL JETTY
KM 26½
KM 39
SUMMIT JETTY
OIL REFINERY
KM 37½
NEW HARBOUR WHARF
CALTEX JETTY
OPP SHED 1–2
N.
KM 37
S.
KM 36
PHRA PRA-DAENG
SATHUPRADITS
N
CHAO PHRAYA RIVER
KM 11
KM 9
20
BANG PLAKOD
18
SMUTH PRAKARN
BOARDING STATION
NEAR PAKNAM CUSTOMS
16
KM 3
KM 2.3
CO-OPERATIVE SALT WHARF
FORT PHRA CHULA
GULF OF THAILAND
BANGKOK

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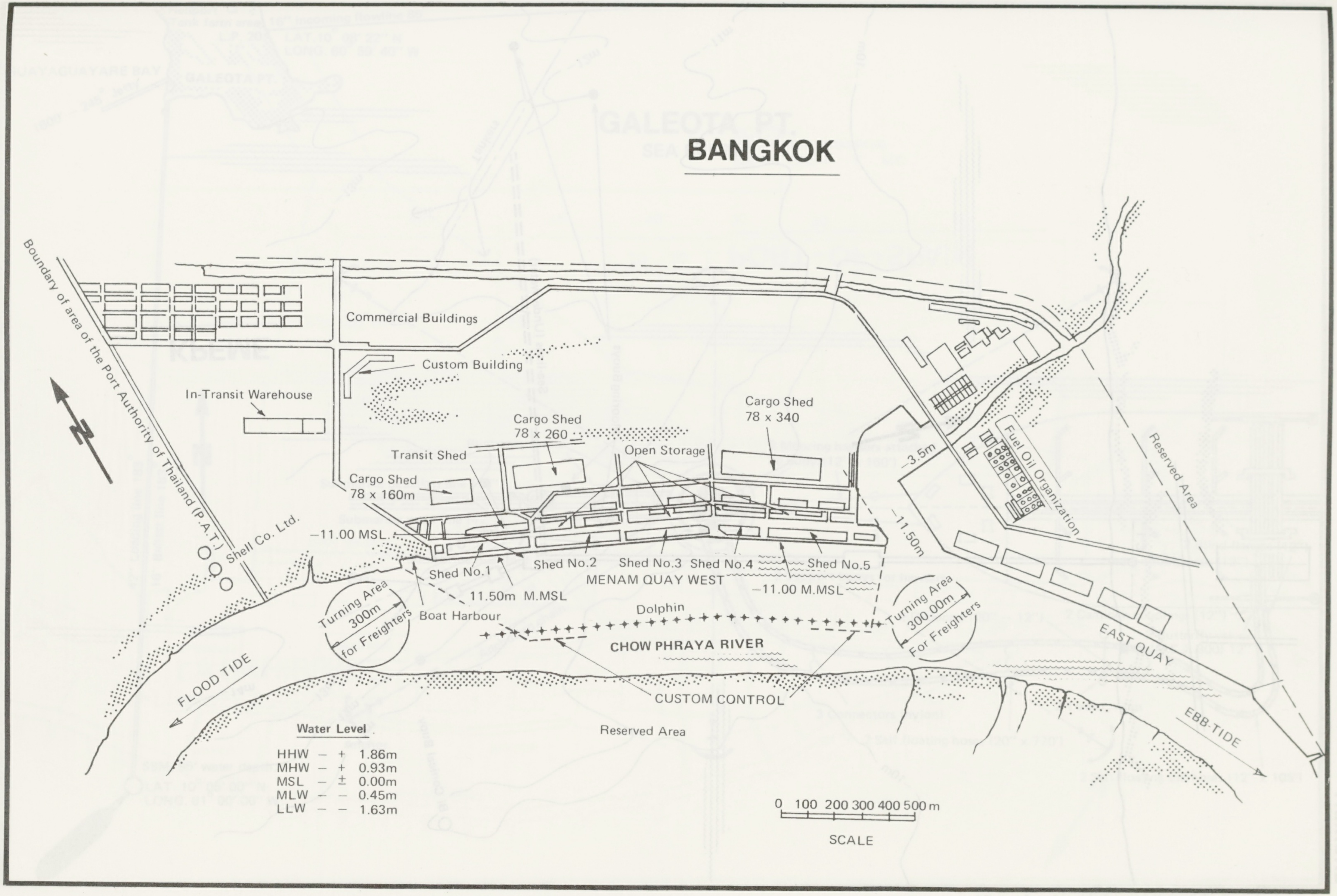
BANGKOK


BANGKOK
N
Boundary of area of the Port Authority of Thailand (P.A.T.)
Commercial Buildings
Custom Building
In-Transit Warehouse
Cargo Shed 78 x 260
Cargo Shed 78 x 340
Transit Shed
Open Storage
Cargo Shed 78 x 160m
−3.5m
Fuel Oil Organization
Reserved Area
−11.50m
−11.00 MSL.
Shell Co. Ltd.
Shed No.1
Shed No.2
Shed No.3
Shed No.4
Shed No.5
MENAM QUAY WEST
11.50m M.MSL
−11.00 M.MSL
Turning Area 300m for Freighters
Boat Harbour
Dolphin
Turning Area 300.00m For Freighters
CHOW PHRAYA RIVER
EAST QUAY
FLOOD TIDE
EBB-TIDE
CUSTOM CONTROL
Reserved Area
Water Level
HHW − + 1.86m
MHW − + 0.93m
MSL − ± 0.00m
MLW − − 0.45m
LLW − − 1.63m
0 100 200 300 400 500 m
SCALE

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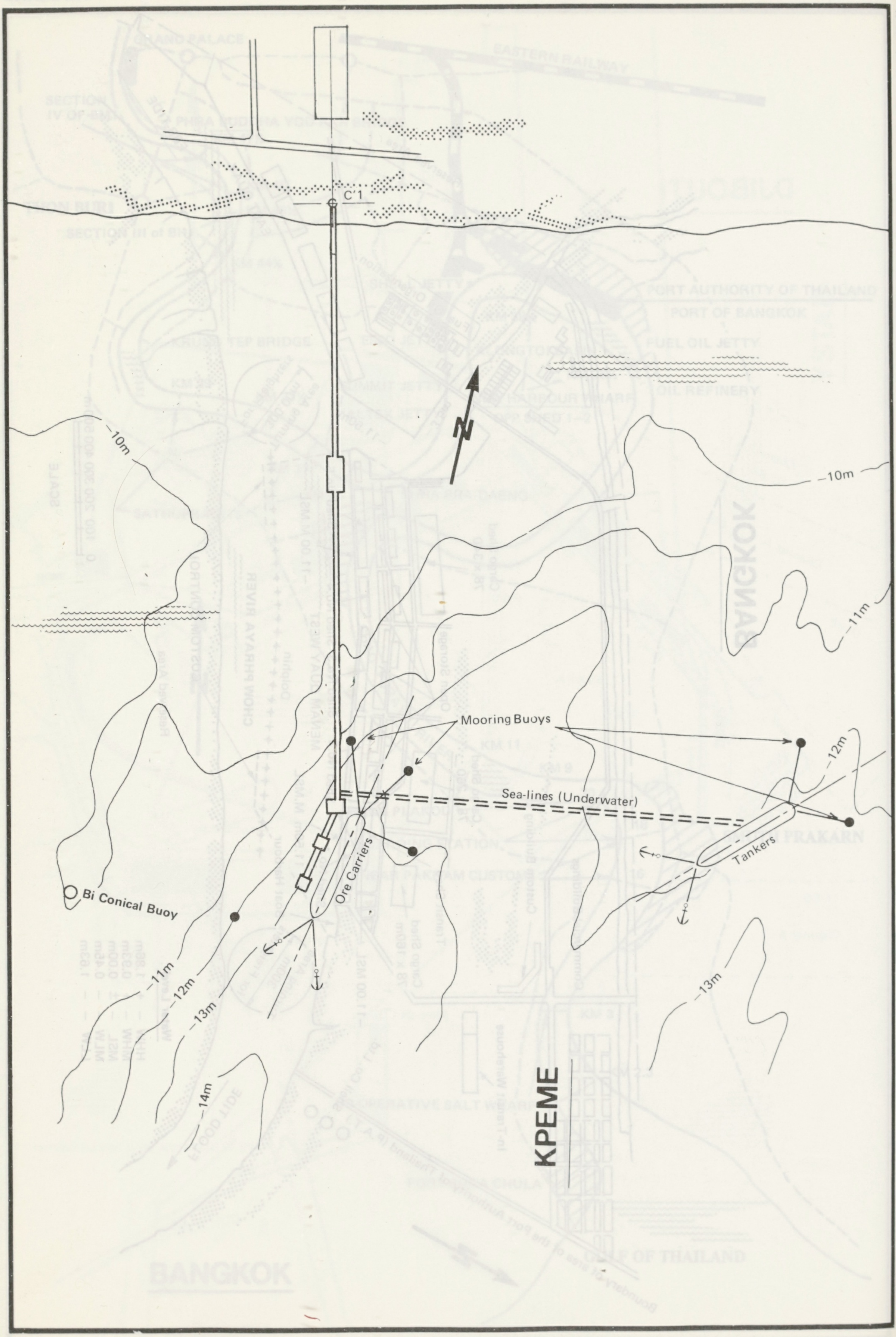
C'1
N
–10m
–10m
–11m
–11m
–12m
–12m
–13m
–13m
–14m
Mooring Buoys
Sea-lines (Underwater)
Tankers
Ore Carriers
Bi Conical Buoy
KPEME

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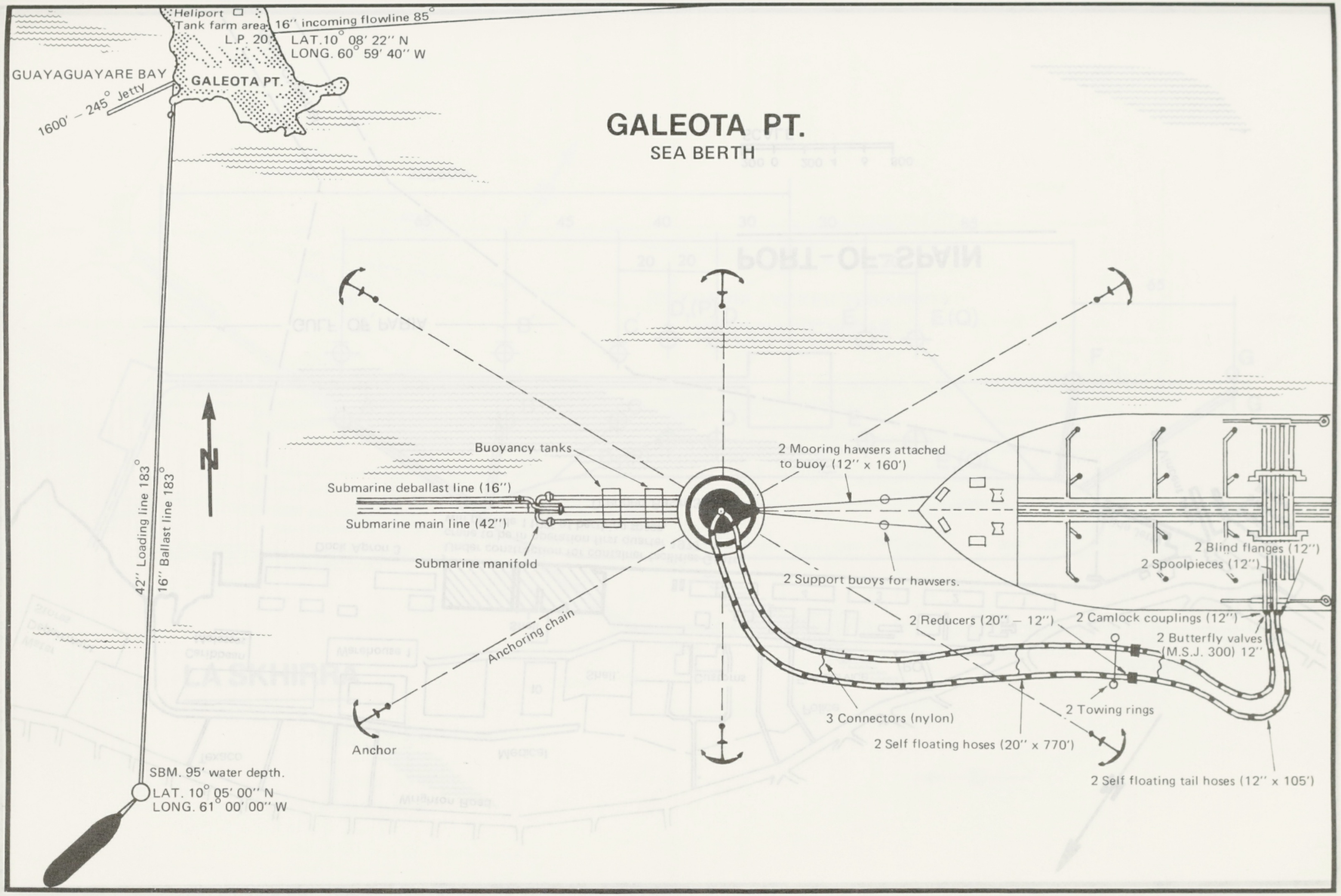
GALEOTA PT.
SEA BERTH
Heliport
Tank farm area
16" incoming flowline 85°
L.P. 20
LAT. 10° 08' 22" N
LONG. 60° 59' 40" W
GUAYAGUAYARE BAY
GALEOTA PT.
1600' – 245° Jetty
N
42" Loading line 183°
16" Ballast line 183°
Buoyancy tanks
2 Mooring hawsers attached to buoy (12" x 160')
Submarine deballast line (16")
Submarine main line (42")
Submarine manifold
2 Support buoys for hawsers.
2 Blind flanges (12")
2 Spoolpieces (12")
2 Reducers (20" – 12")
2 Camlock couplings (12")
2 Butterfly valves (M.S.J. 300) 12"
Anchoring chain
2 Towing rings
3 Connectors (nylon)
2 Self floating hoses (20" x 770')
Anchor
2 Self floating tail hoses (12" x 105')
SBM. 95' water depth.
LAT. 10° 05' 00" N
LONG. 61° 00' 00" W

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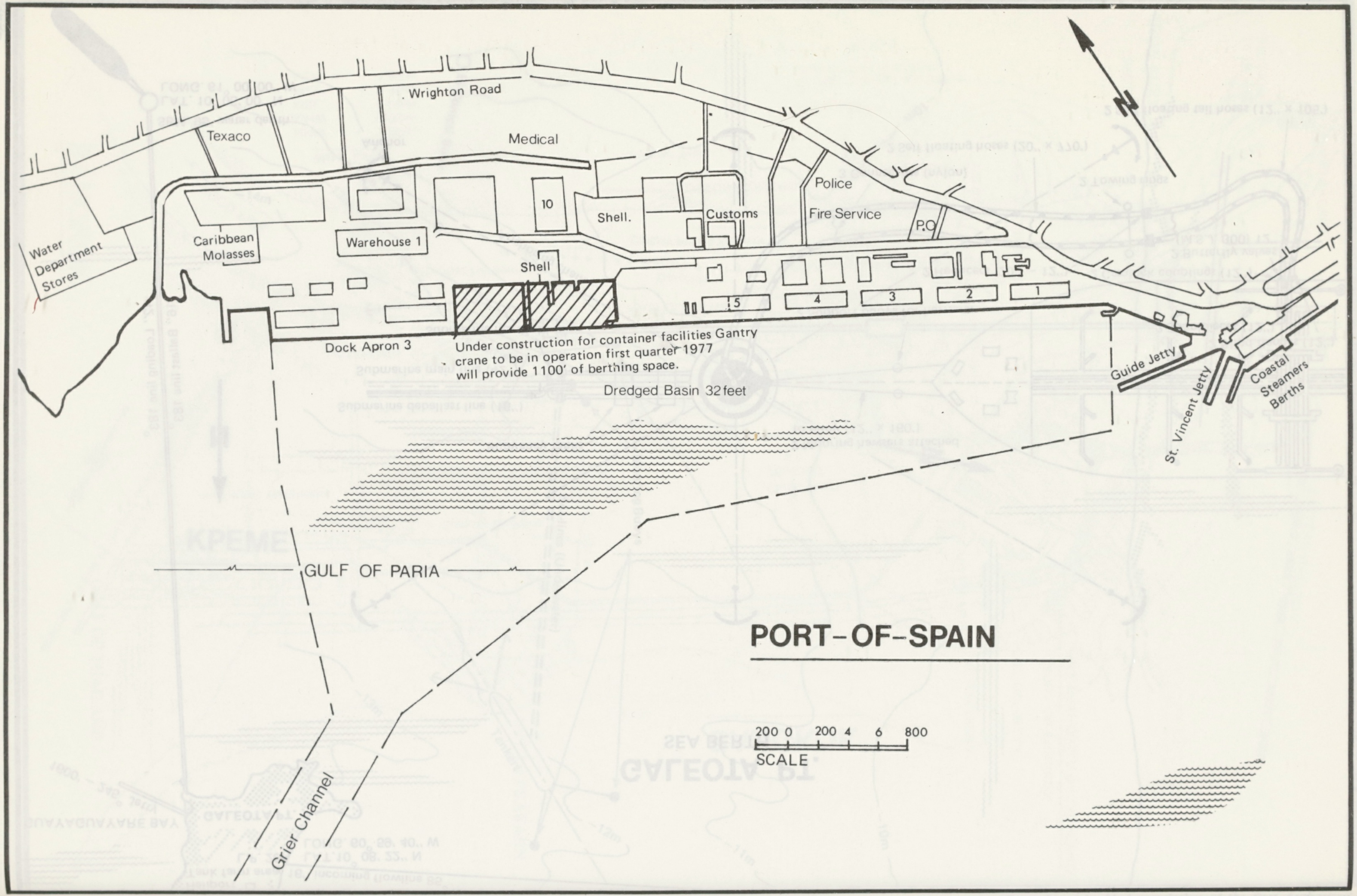
Wrighton Road
Texaco
Medical
Police
Customs
Fire Service
P.O.
Shell.
10
Warehouse 1
Caribbean Molasses
Water Department Stores
Shell
5
4
3
2
1
Dock Apron 3
Under construction for container facilities Gantry crane to be in operation first quarter 1977 will provide 1100' of berthing space.
Dredged Basin 32 feet
Guide Jetty
St. Vincent Jetty
Coastal Steamers Berths
GULF OF PARIA
Grier Channel
PORT-OF-SPAIN
200 0 200 4 6 800
SCALE

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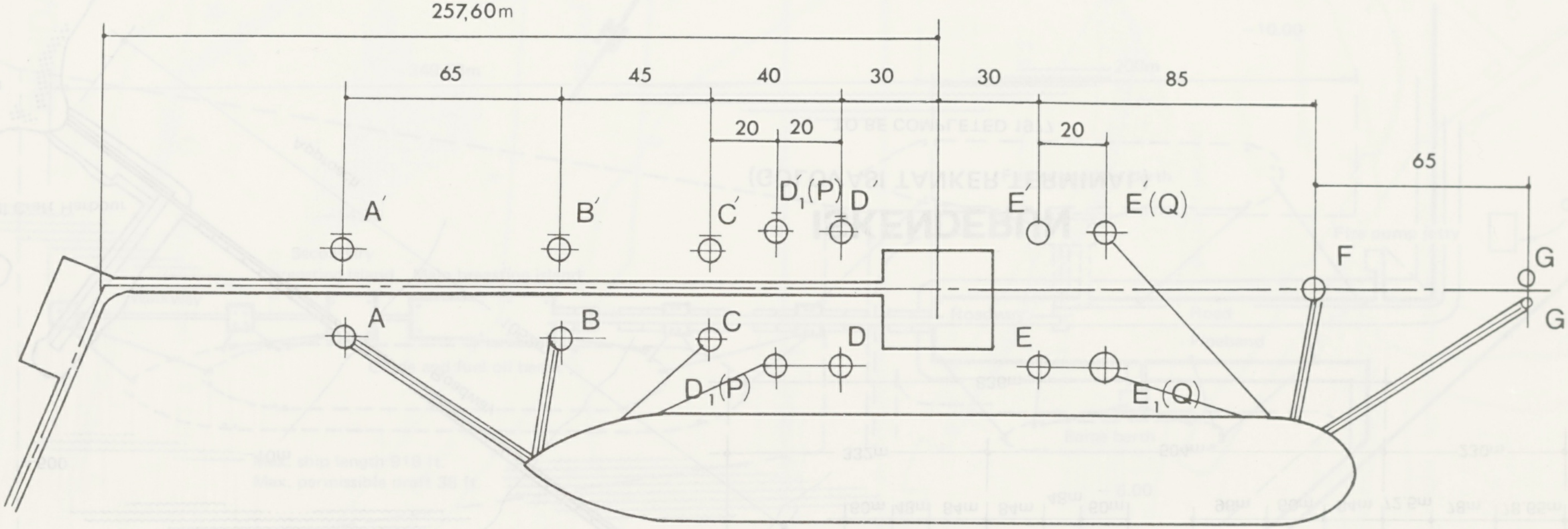
257,60m
65
45
40
30
30
85
20
20
20
65
A′
B′
C′
D′₁(P)
D
E′
E(Q)
F
G
G
A
B
C
D
E
D₁(P)
E₁(Q)

LA SKHIRRA

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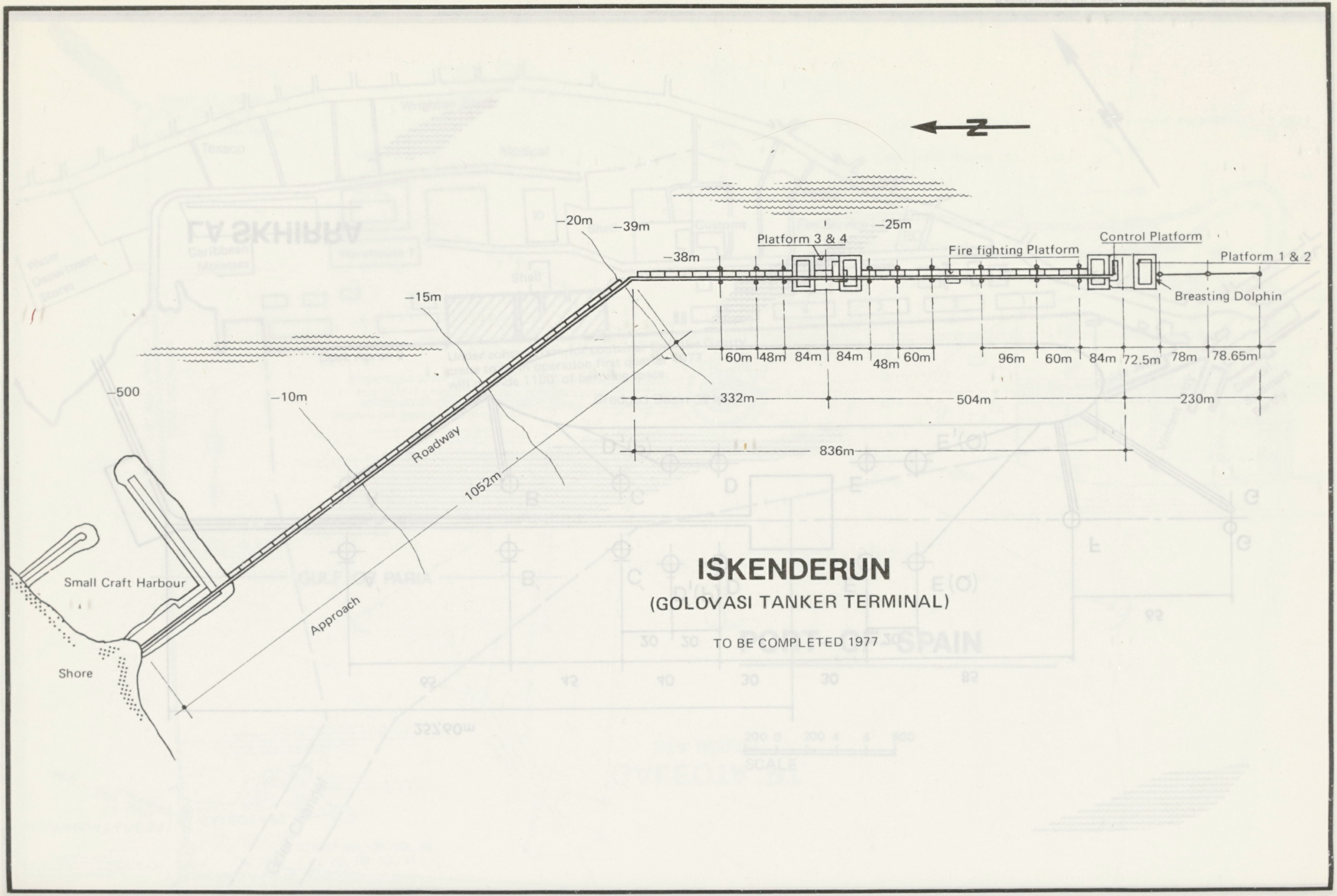
−20m
−39m
−25m
−38m
Platform 3 & 4
Control Platform
Fire fighting Platform
Platform 1 & 2
Breasting Dolphin
−15m
60m
48m
84m
84m
48m
60m
96m
60m
84m
72.5m
78m
78.65m
−500
−10m
332m
504m
230m
836m
Roadway
1052m
Small Craft Harbour
Approach
Shore

ISKENDERUN

(GOLOVASI TANKER TERMINAL)

TO BE COMPLETED 1977

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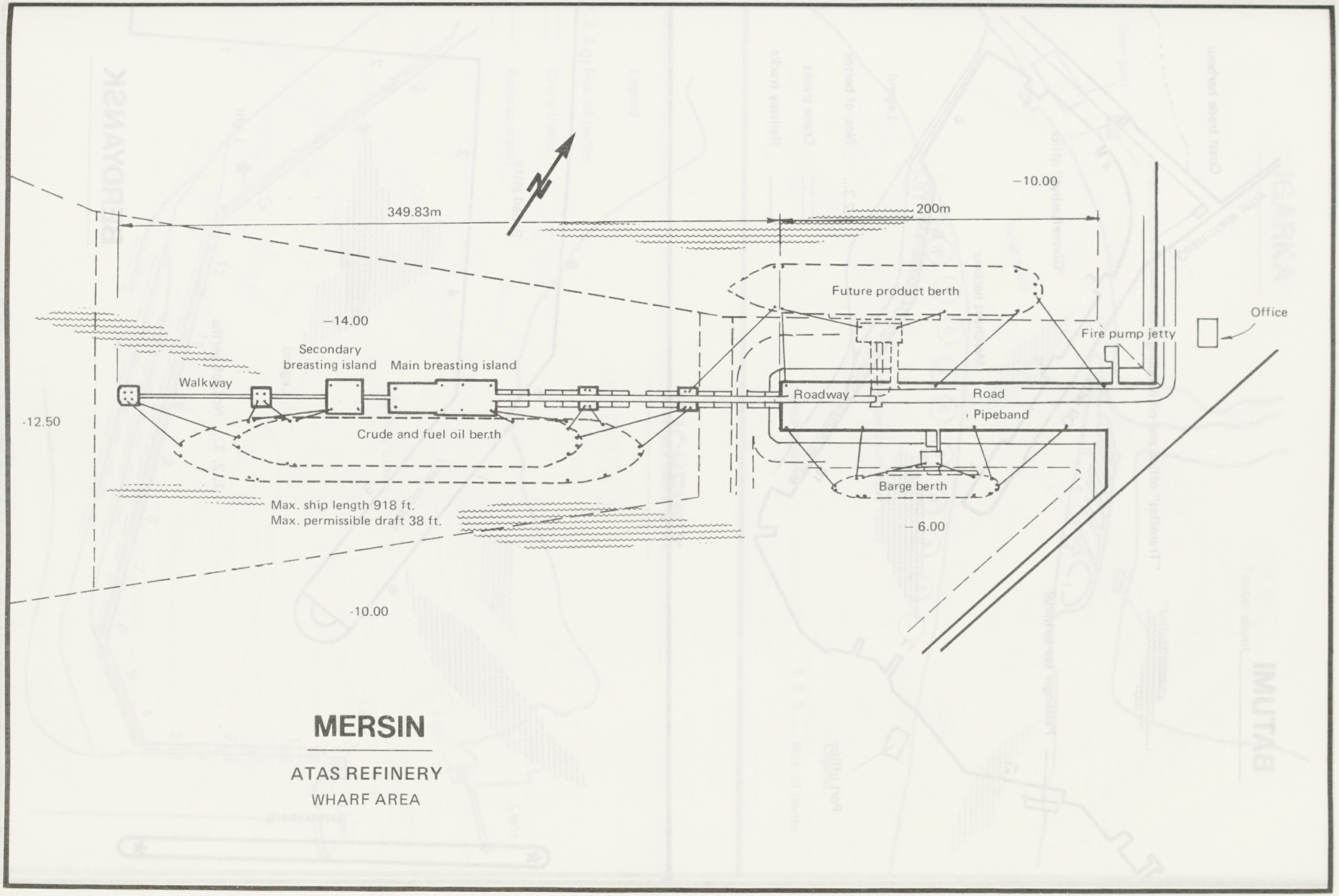

N
349.83m
200m
−10.00
Future product berth
Office
Fire pump jetty
−14.00
Secondary breasting island
Main breasting island
Walkway
Roadway
Road
Pipeband
-12.50
Crude and fuel oil berth
Barge berth
Max. ship length 918 ft.
Max. permissible draft 38 ft.
− 6.00
-10.00

MERSIN

ATAS REFINERY

WHARF AREA

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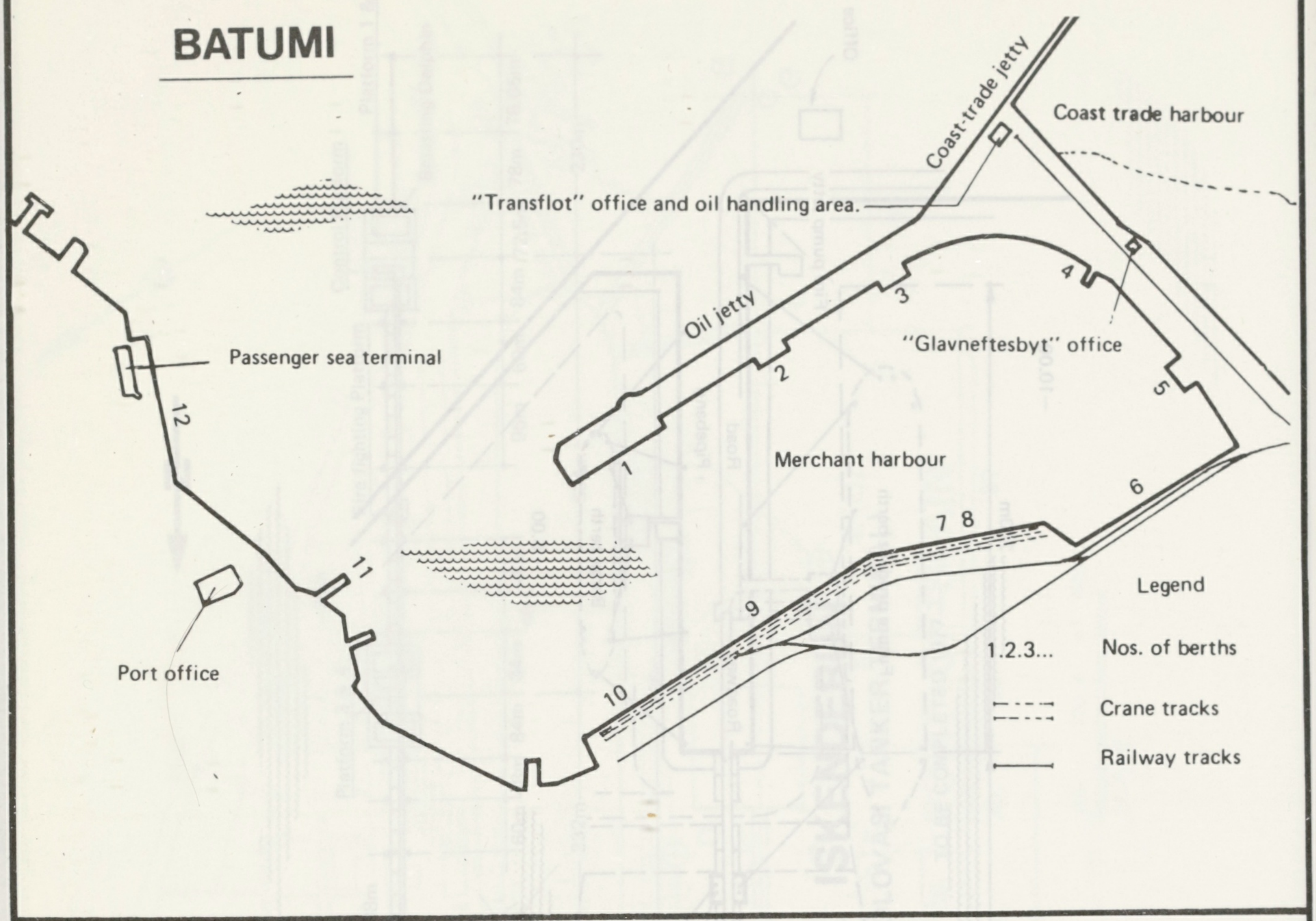
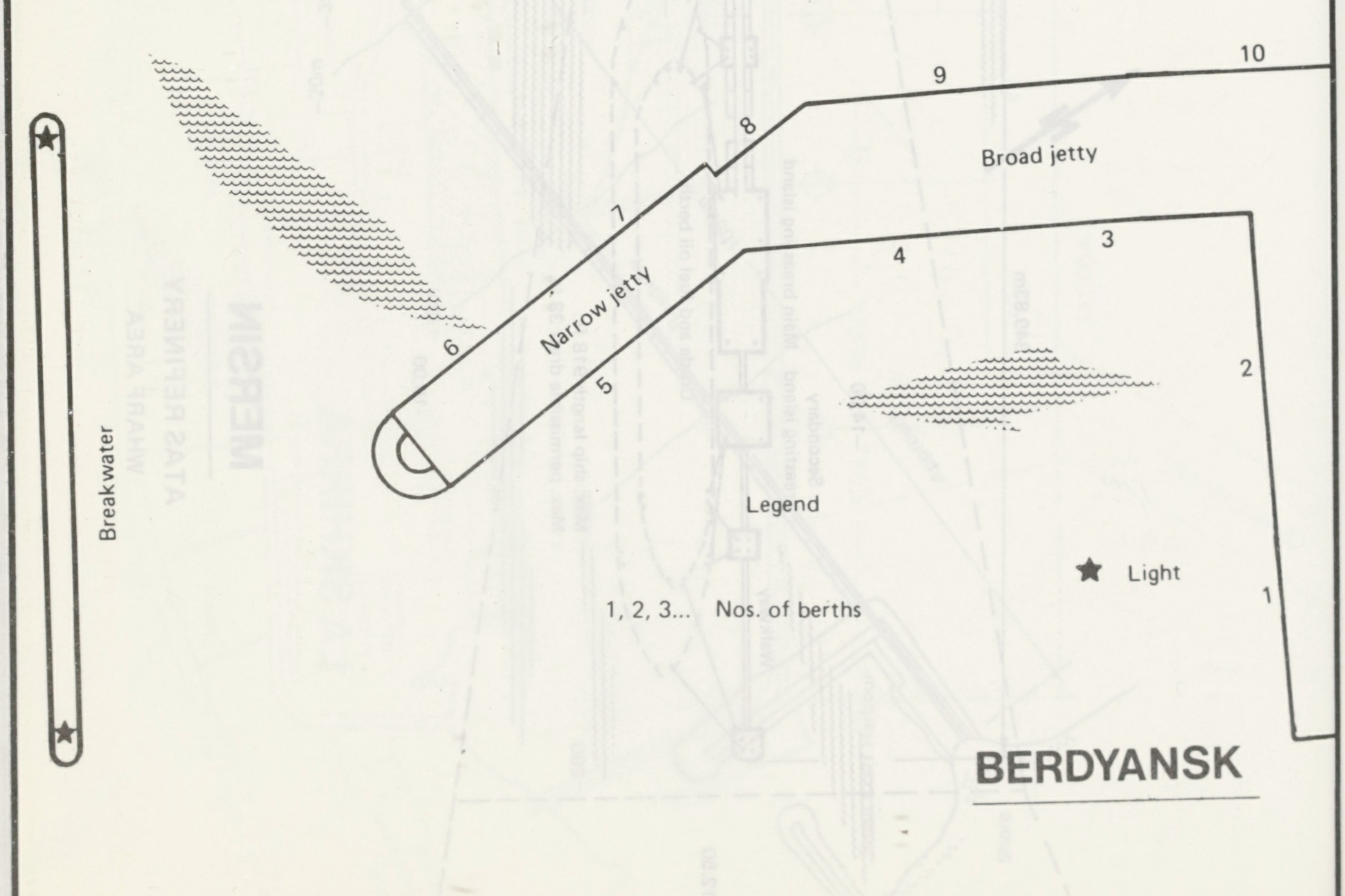
BATUMI


Coast-trade jetty
Coast trade harbour
"Transflot" office and oil handling area.
Oil jetty
"Glavneftesbyt" office
Passenger sea terminal
Merchant harbour
Port office
1
2
3
4
5
6
7 8
9
10
11
12
Legend
1.2.3... Nos. of berths
Crane tracks
Railway tracks

BERDYANSK


Broad jetty
Narrow jetty
Breakwater
Legend
1, 2, 3... Nos. of berths
★ Light
1
2
3
4
5
6
7
8
9
10

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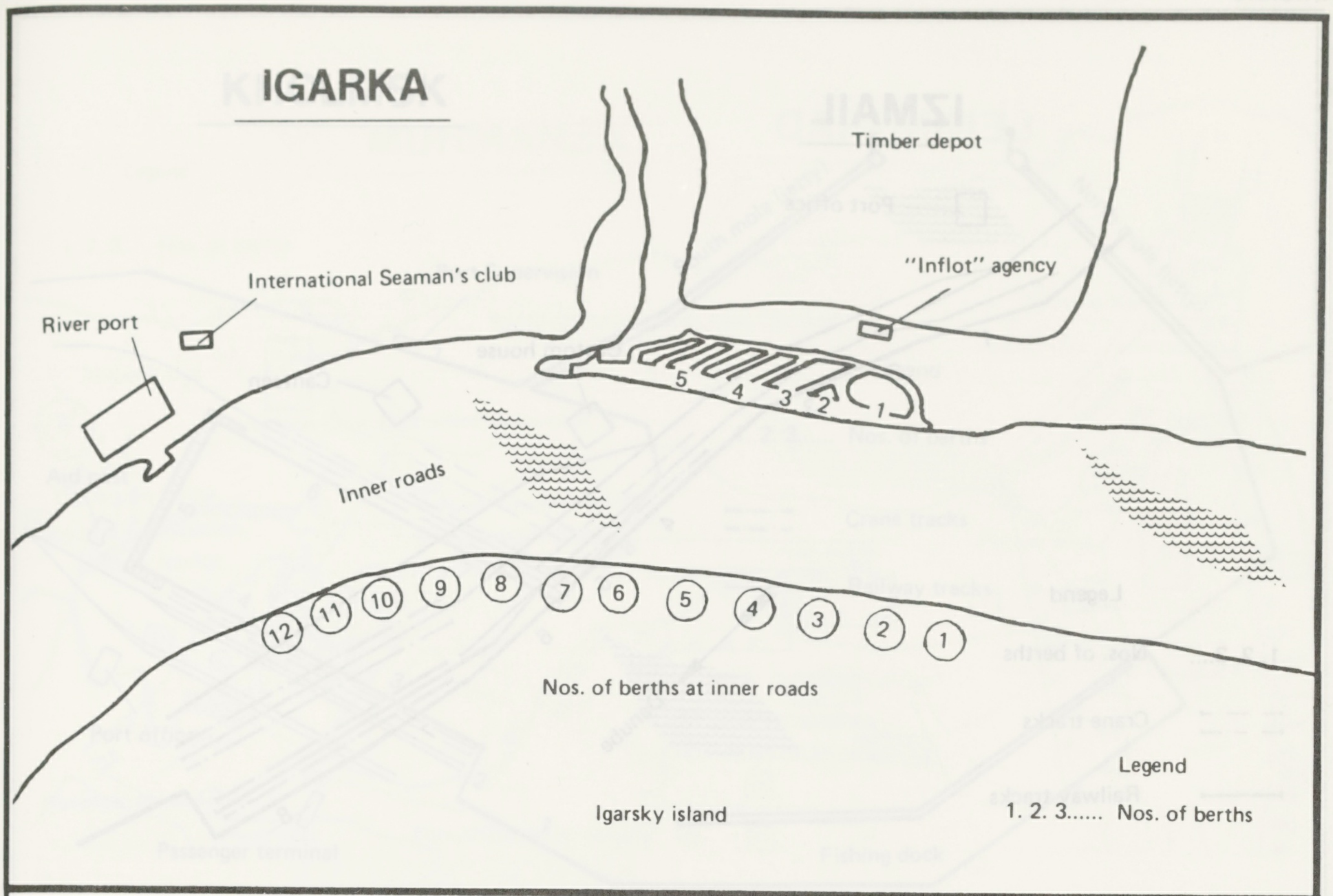
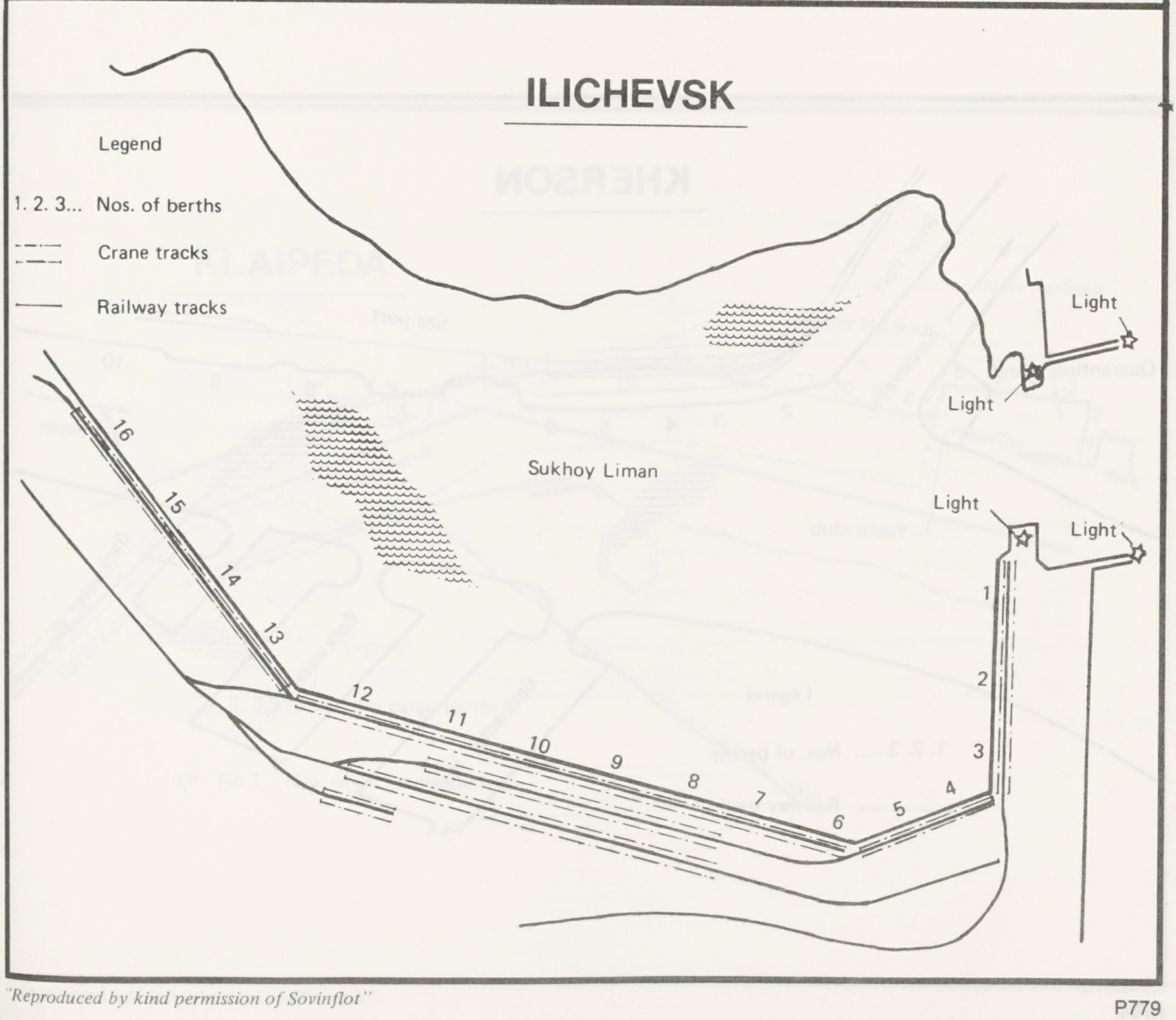
IGARKA


Timber depot
"Inflot" agency
International Seaman's club
River port
5
4
3
2
1
Inner roads
12
11
10
9
8
7
6
5
4
3
2
1
Nos. of berths at inner roads
Igarsky island
Legend
1. 2. 3...... Nos. of berths

ILICHEVSK


Legend
1. 2. 3... Nos. of berths
Crane tracks
Railway tracks
Light
Light
Sukhoy Liman
Light
Light
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1

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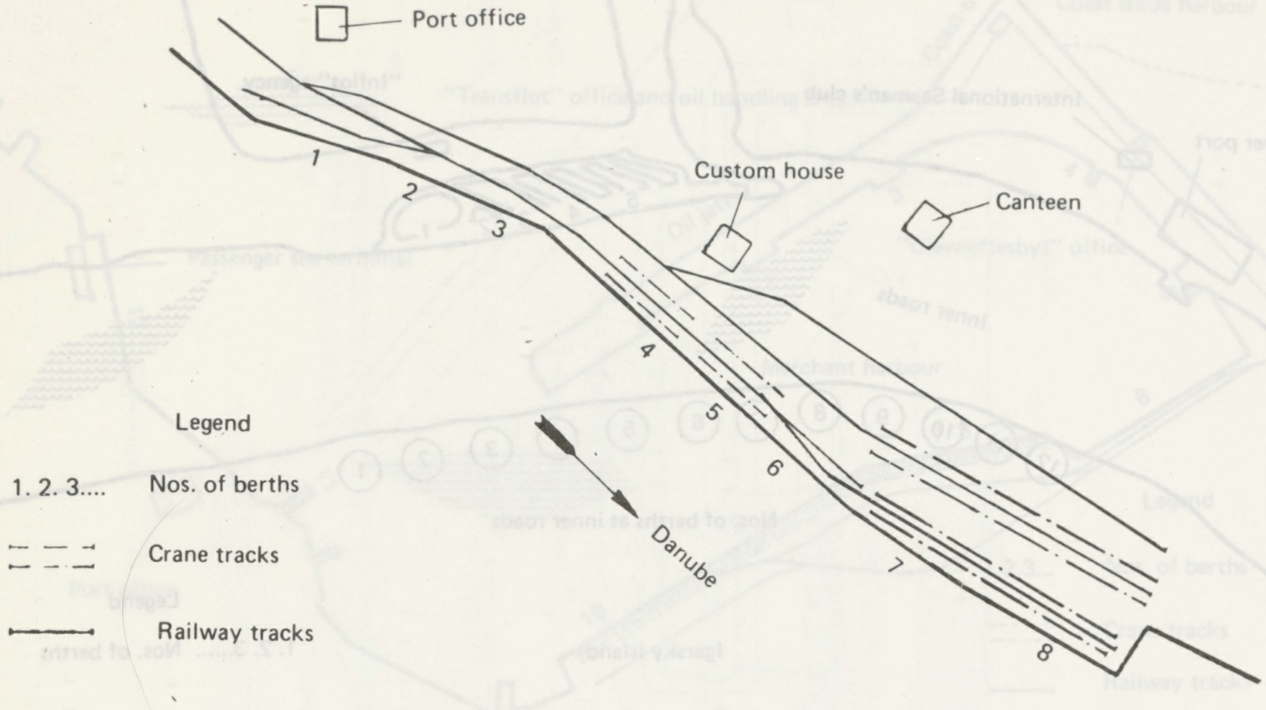
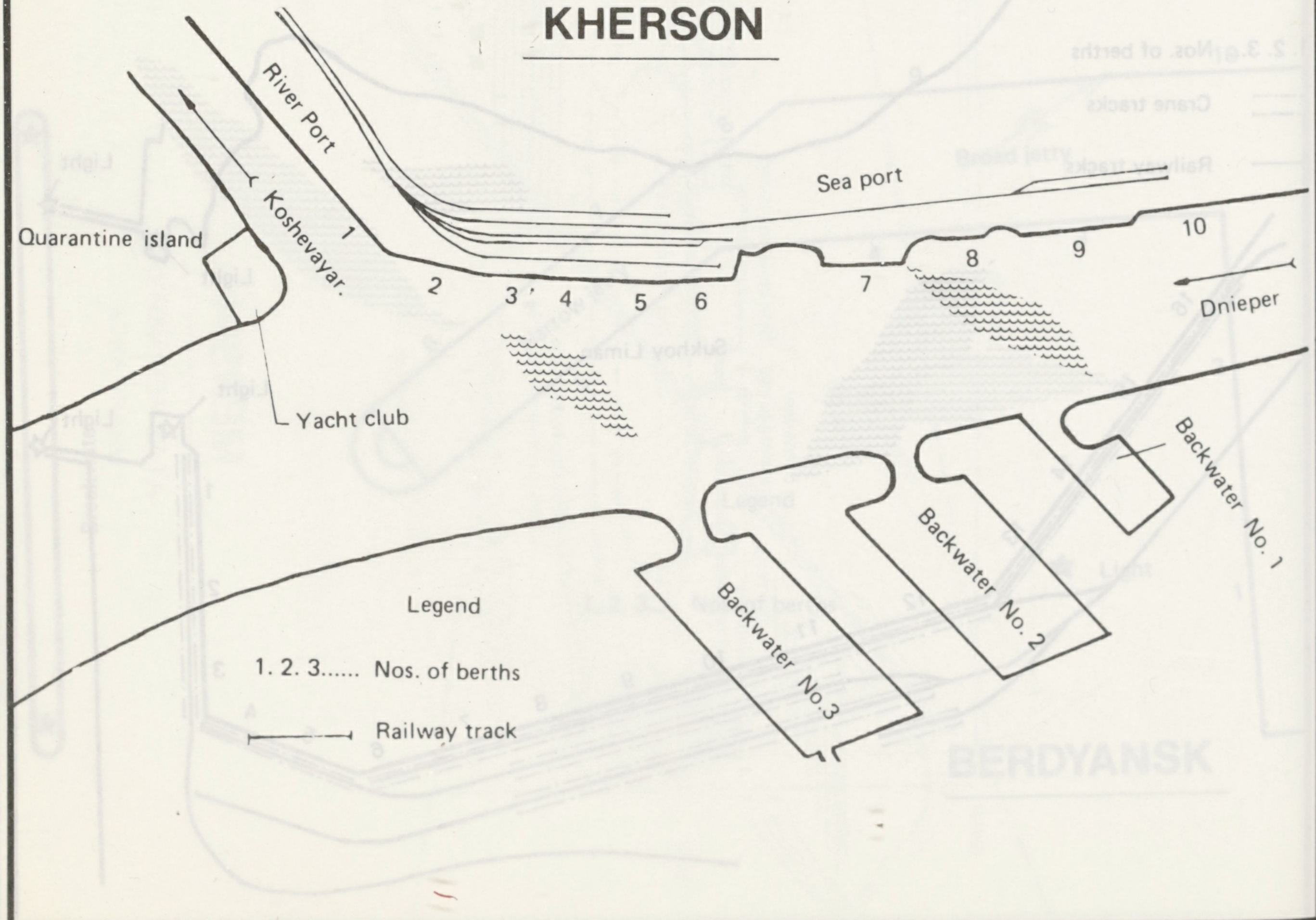
IZMAIL


Port office
Custom house
Canteen
1
2
3
4
5
6
7
8
Danube
Legend
1. 2. 3.... Nos. of berths
Crane tracks
Railway tracks

KHERSON


River Port
Koshevayar.
Quarantine island
Yacht club
Sea port
1
2
3
4
5
6
7
8
9
10
Dnieper
Backwater No. 1
Backwater No. 2
Backwater No.3
Legend
1. 2. 3...... Nos. of berths
Railway track

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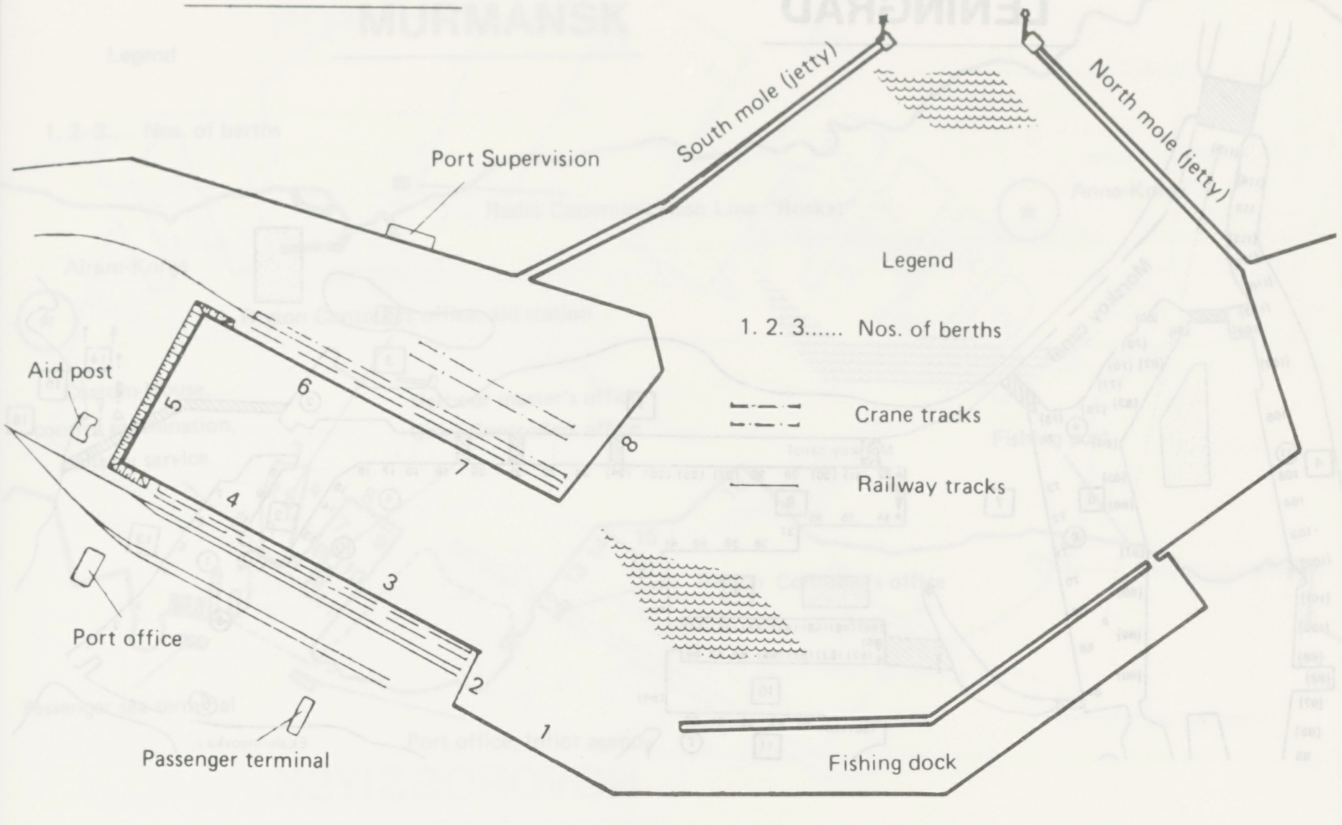
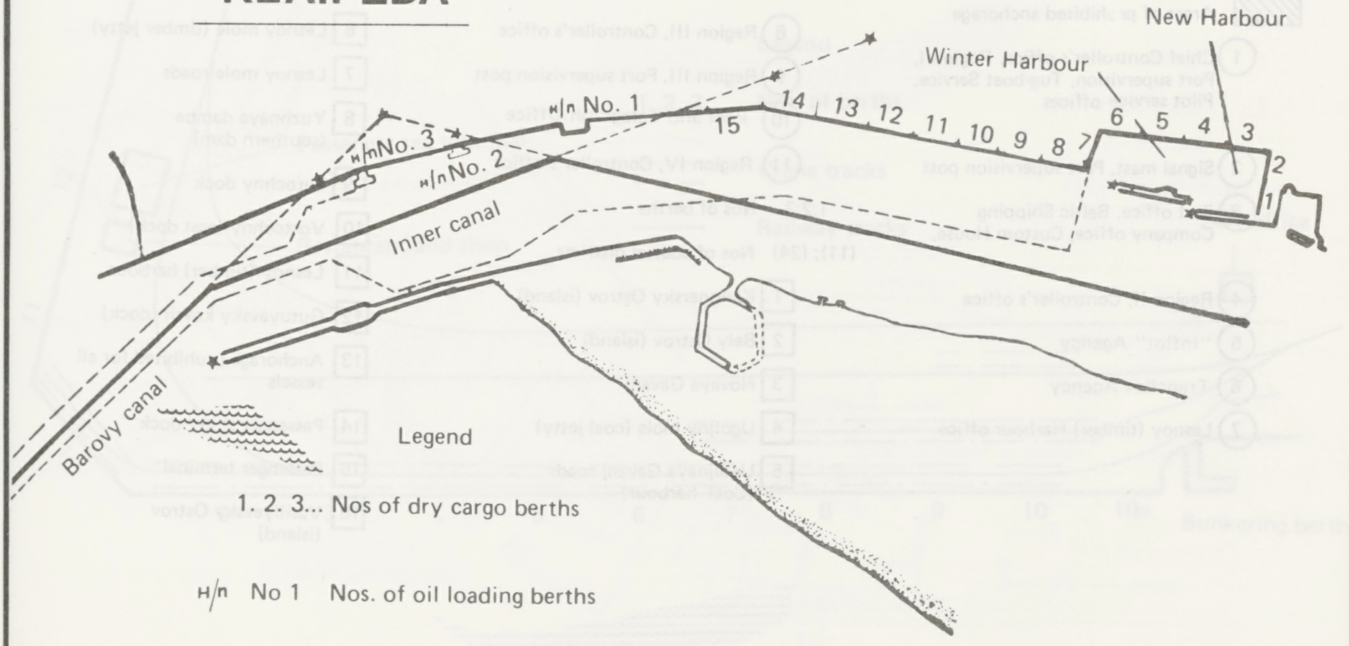
KHOLMSK


South mole (jetty)
North mole (jetty)
Port Supervision
Legend
1. 2. 3...... Nos. of berths
Crane tracks
Railway tracks
Aid post
Port office
Passenger terminal
Fishing dock
1
2
3
4
5
6
8

KLAIPEDA


New Harbour
Winter Harbour
н/п No. 1
н/п No. 2
н/п No. 3
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
Inner canal
Barovy canal
Legend
1. 2. 3... Nos of dry cargo berths
н/п No 1 Nos. of oil loading berths

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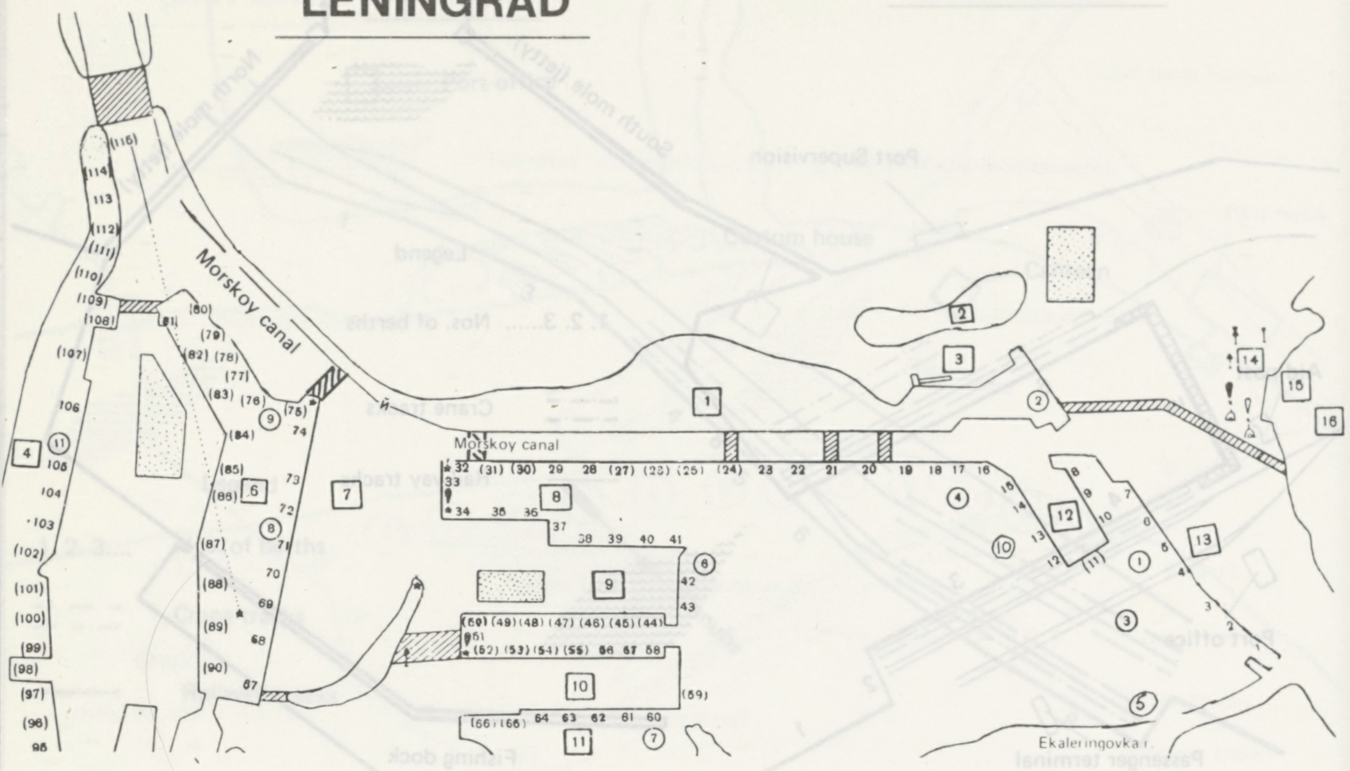
LENINGRAD


Morskoy canal
Morskoy canal
Ekaleringovka r.
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
32 (31) (30) 29 28 (27) (26) (25) (24) 23 22 21 20 19 18 17 16
33
34 35 36
37
38 39 40 41
42
43
(50) (49) (48) (47) (46) (45) (44)
(51)
(52) (53) (54) (55) 56 57 58
(59)
(66) (65) 64 63 62 61 60
67 68 69 70 71 72 73 74 (75) (76) (77) (78) (79) (80) 81 (82) (83) (84) (85) (86) (87) (88) (89) (90)
98 (96) (97) (98) (99) (100) (101) (102) 103 104 105 106 (107) (108) (109) (110) (111) (112) 113 (114) (116)

▨ Areas of anchorage for inland waterways vessels

▨ Areas of prohibited anchorage

① Chief Controller's office, Region I, Port supervision, Tug-boat Service, Pilot service offices

② Signal mast, Port supervision post

③ Port office, Baltic Shipping Company office, Custom House,

④ Region II, Controller's office

⑤ "Inflot" Agency

⑥ Transflot Agency

⑦ Lesnoy (timber) Harbour office

⑧ Region III, Controller's office

⑨ Region III, Port supervision post

⑩ Post and Telegraph Office

⑪ Region IV, Controller's office

1;2;3.. Nos of berths

(11); (24) Nos of coastal districts

1 Kanonersky Ostrov (island)

2 Bely Ostrov (island)

3 Novaya Gavanj

4 Ugoljny mole (coal jetty)

5 Ugoljnaya Gavanj roads (Coal harbour)

6 Lesnoy mole (timber jetty)

7 Lesnoy mole roads

8 Yuzhnaya damba (southern dam)

9 Barochny dock

10 Vostochny (east dock)

11 Lesnoy (timber) harbour

12 Gutuyevsky kovsh (dock)

13 Anchorage prohibited for all vessels

14 Passenger ships' dock

15 Passenger terminal

16 Vasiliyevsky Ostrov (island)

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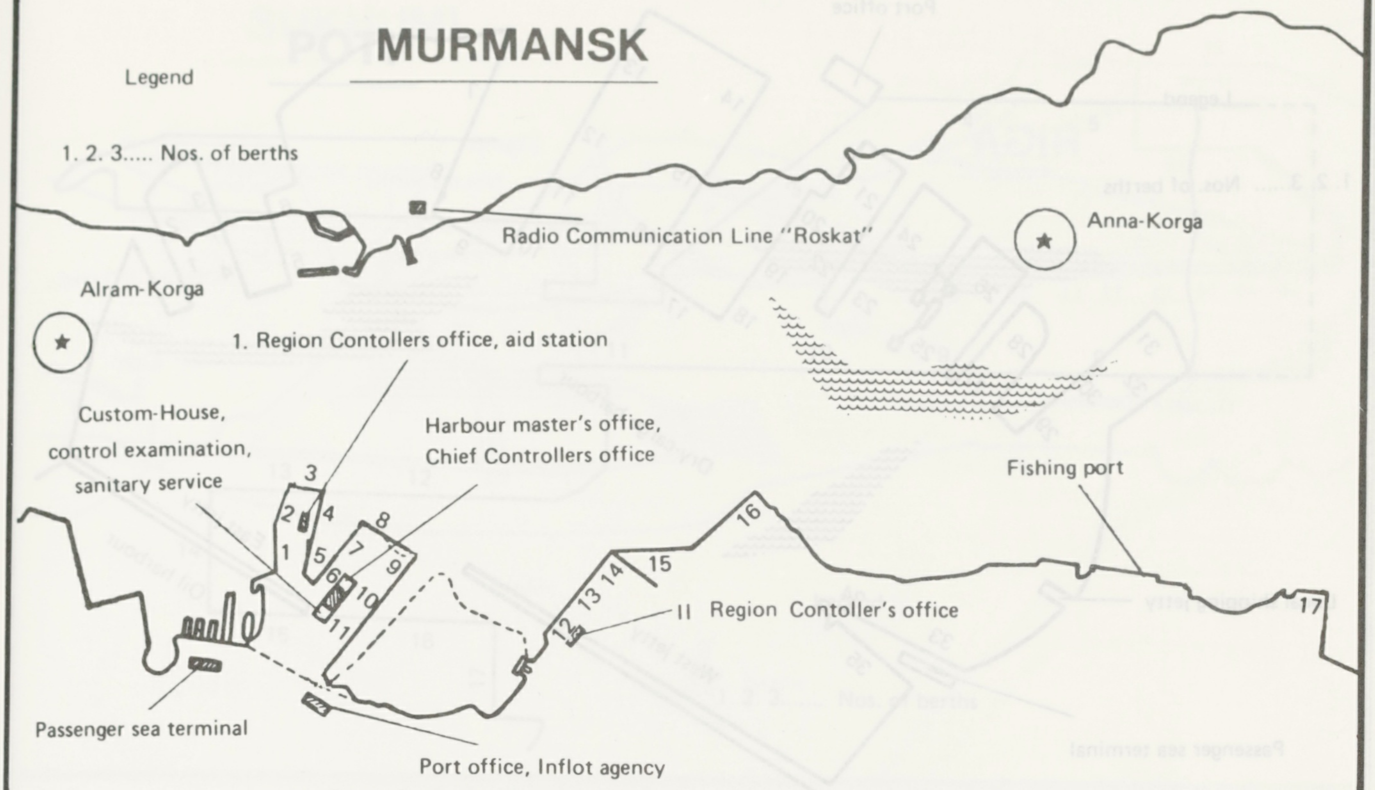
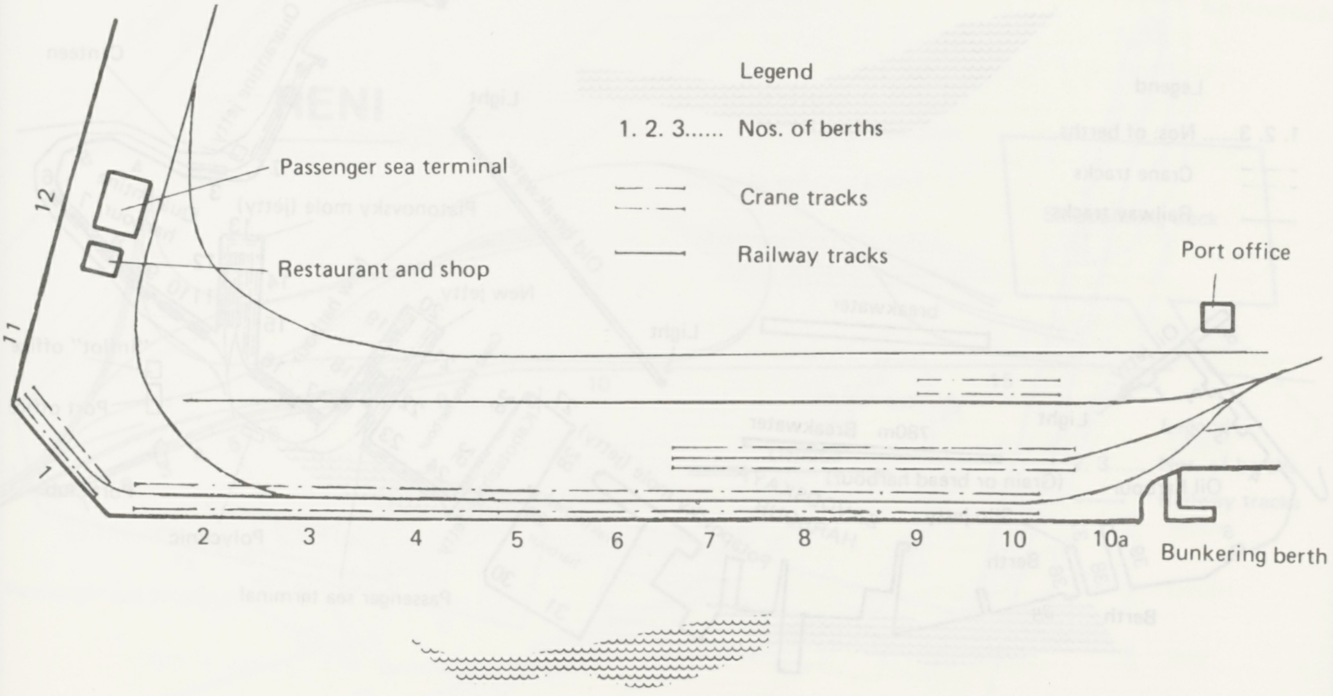
MURMANSK


Legend
1. 2. 3..... Nos. of berths
Radio Communication Line "Roskat"
Anna-Korga
Alram-Korga
1. Region Contollers office, aid station
Custom-House, control examination, sanitary service
Harbour master's office, Chief Controllers office
Fishing port
II Region Contoller's office
Passenger sea terminal
Port office, Inflot agency
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

NAKHODKA

(Timber berths area and tanker harbour left out)


Legend
1. 2. 3...... Nos. of berths
Crane tracks
Railway tracks
Passenger sea terminal
Restaurant and shop
Port office
Bunkering berth
1
2
3
4
5
6
7
8
9
10
10a
11
12

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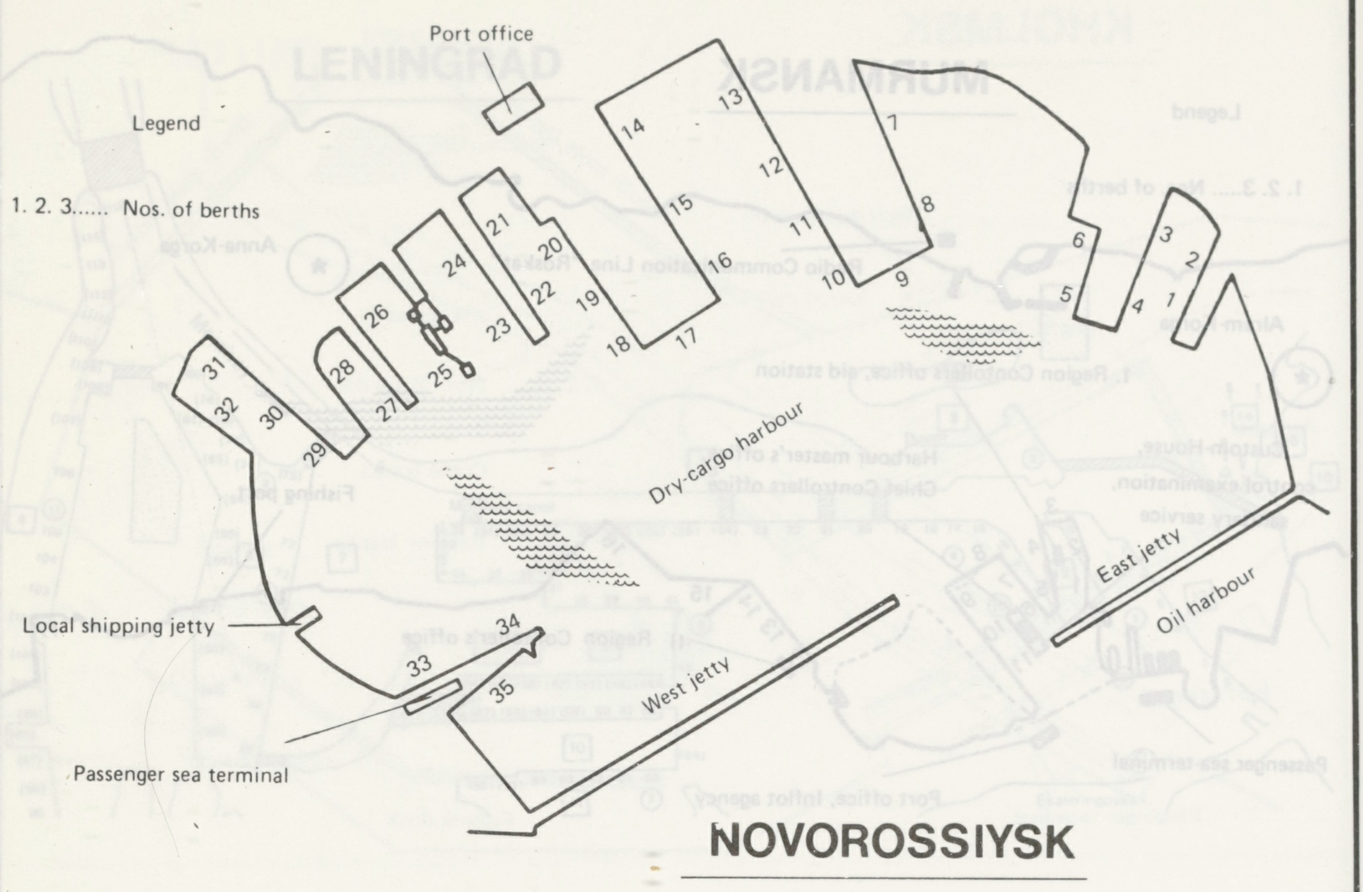
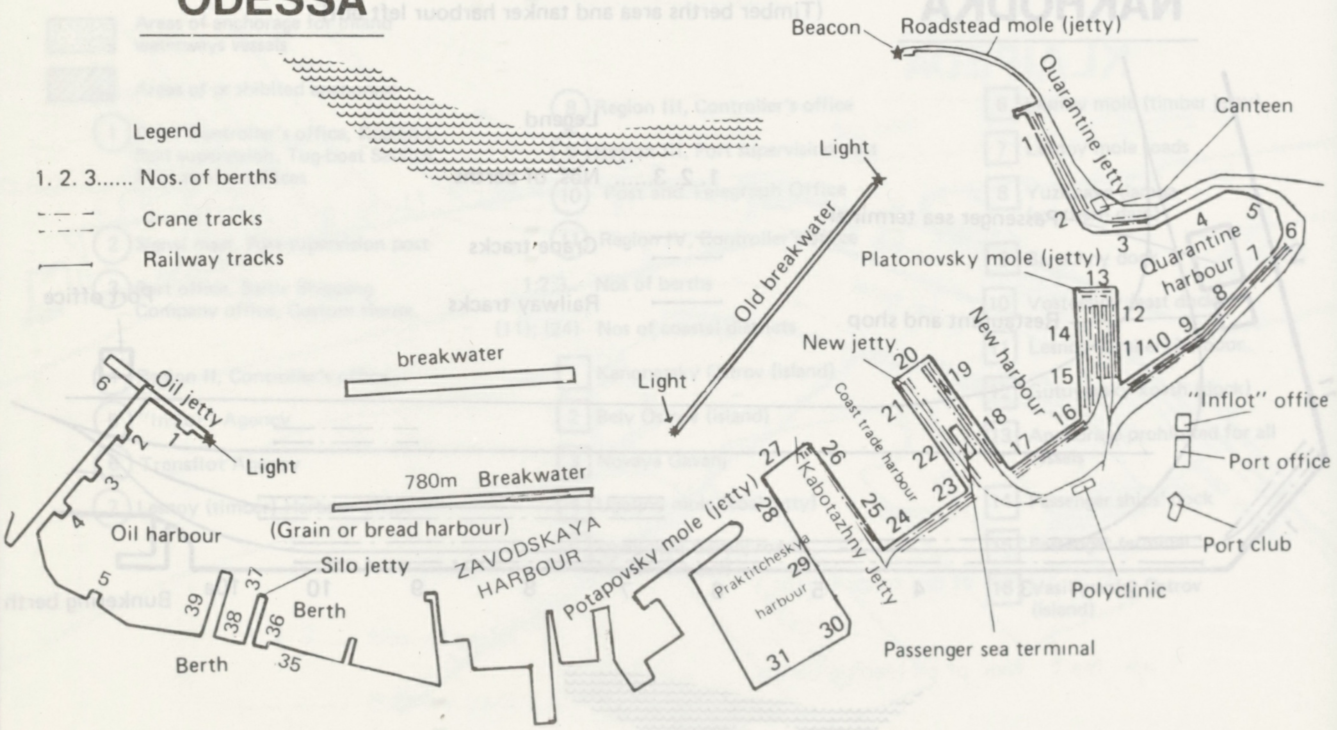
NOVOROSSIYSK


Port office
Legend
1. 2. 3...... Nos. of berths
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35
Dry-cargo harbour
East jetty
Oil harbour
Local shipping jetty
West jetty
Passenger sea terminal

ODESSA


Legend
1. 2. 3...... Nos. of berths
Crane tracks
Railway tracks
Beacon
Roadstead mole (jetty)
Quarantine jetty
Canteen
Light
Old breakwater
Passenger sea terminal
Platonovsky mole (jetty)
Quarantine harbour
New jetty
New harbour
Coast trade harbour
Kabotazhny Jetty
Praktitcheskya harbour
"Inflot" office
Port office
Port club
Polyclinic
Passenger sea terminal
breakwater
Light
Oil jetty
Light
780m Breakwater
Oil harbour
(Grain or bread harbour)
Silo jetty
ZAVODSKAYA HARBOUR
Potapovsky mole (jetty)
Berth
Berth
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 35 36 37 38 39

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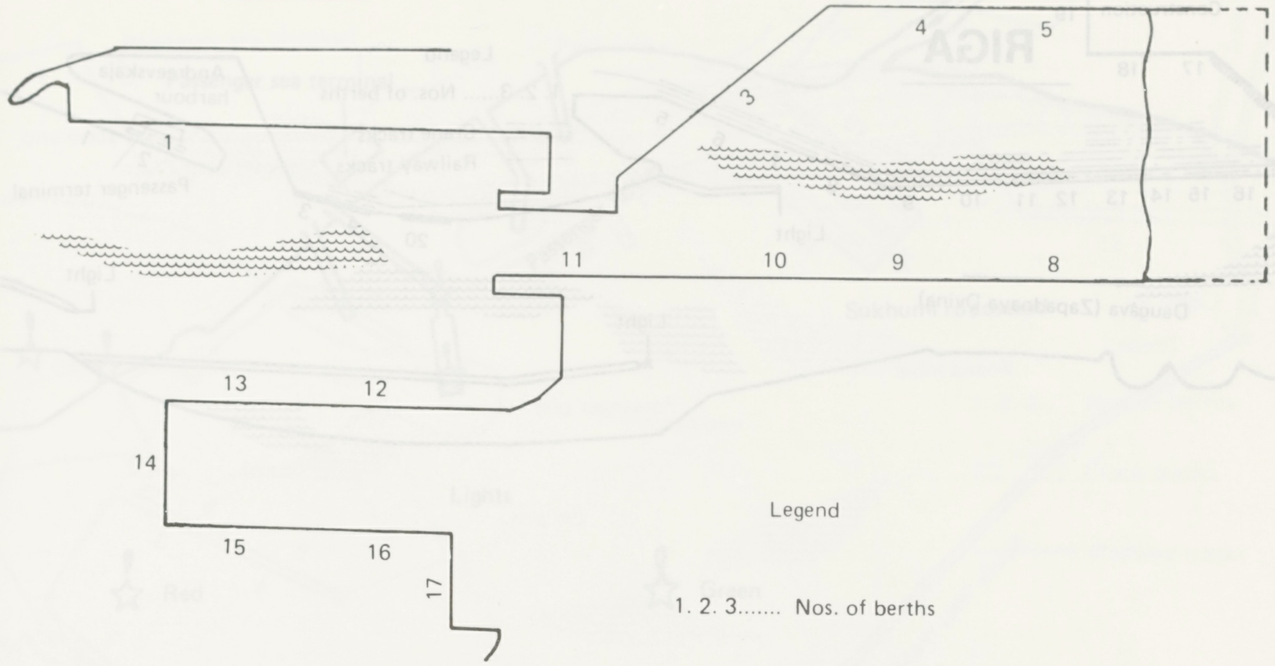
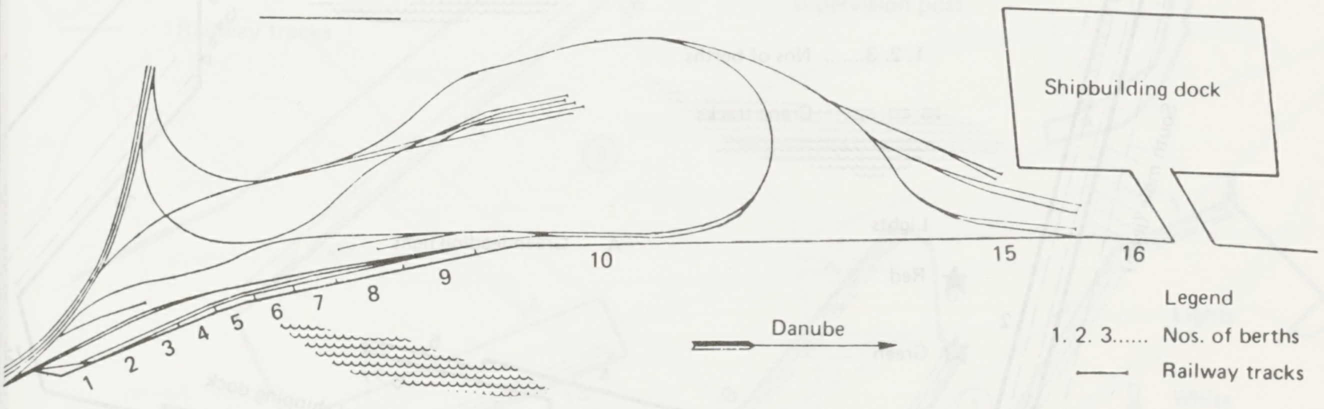
POTI


1
3
4
5
8
9
10
11
12
13
14
15
16
17
Legend
1. 2. 3....... Nos. of berths

RENI


Shipbuilding dock
1
2
3
4
5
6
7
8
9
10
15
16
Danube
Legend
1. 2. 3...... Nos. of berths
Railway tracks

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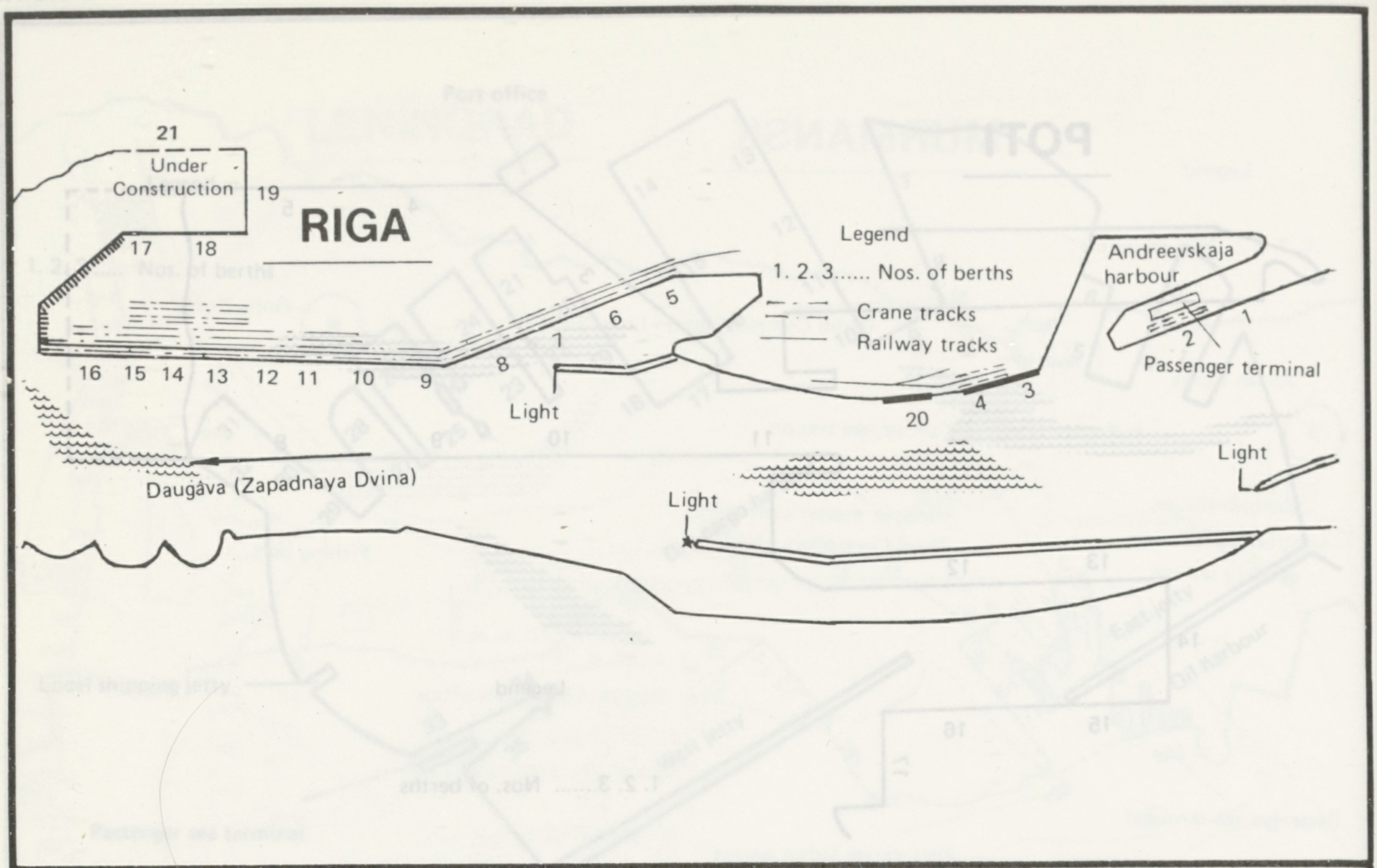
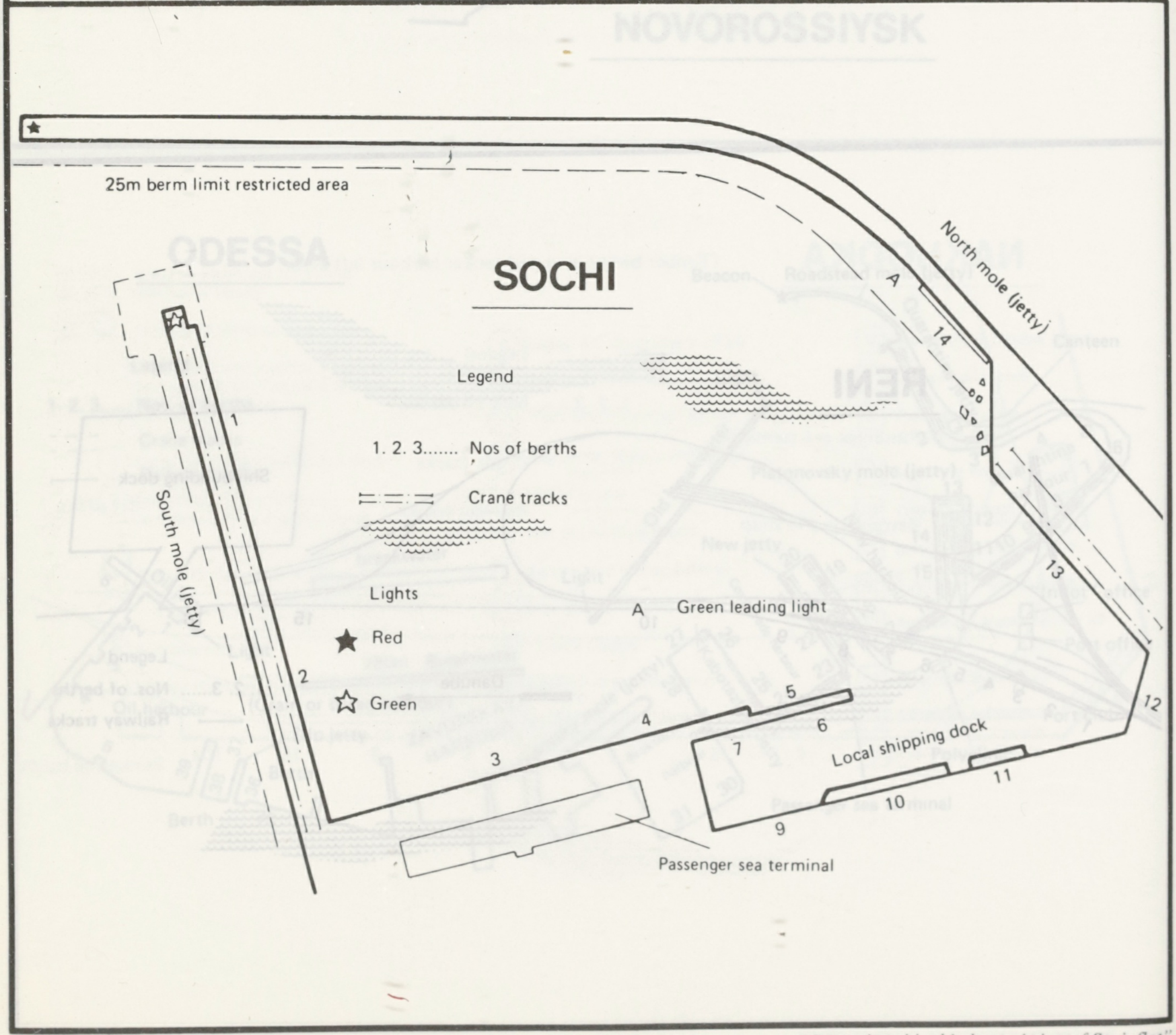

RIGA
21
Under Construction
19
17
18
Legend
1. 2. 3...... Nos. of berths
Crane tracks
Railway tracks
Andreevskaja harbour
2
1
Passenger terminal
5
6
1
16
15
14
13
12
11
10
9
8
Light
20
4
3
Light
Daugava (Zapadnaya Dvina)
Light


25m berm limit restricted area
SOCHI
North mole (jetty)
A
14
Legend
1. 2. 3....... Nos of berths
Crane tracks
Lights
Red
Green
A Green leading light
South mole (jetty)
1
2
3
4
5
6
7
13
12
Local shipping dock
11
10
9
Passenger sea terminal

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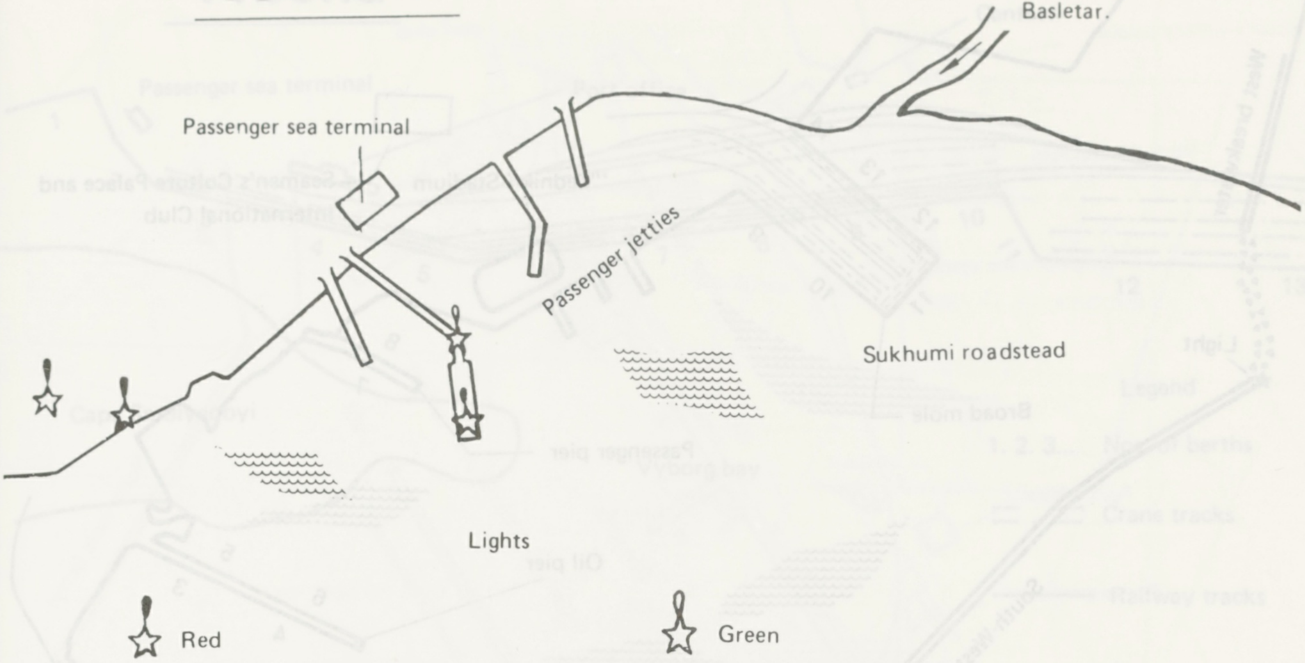
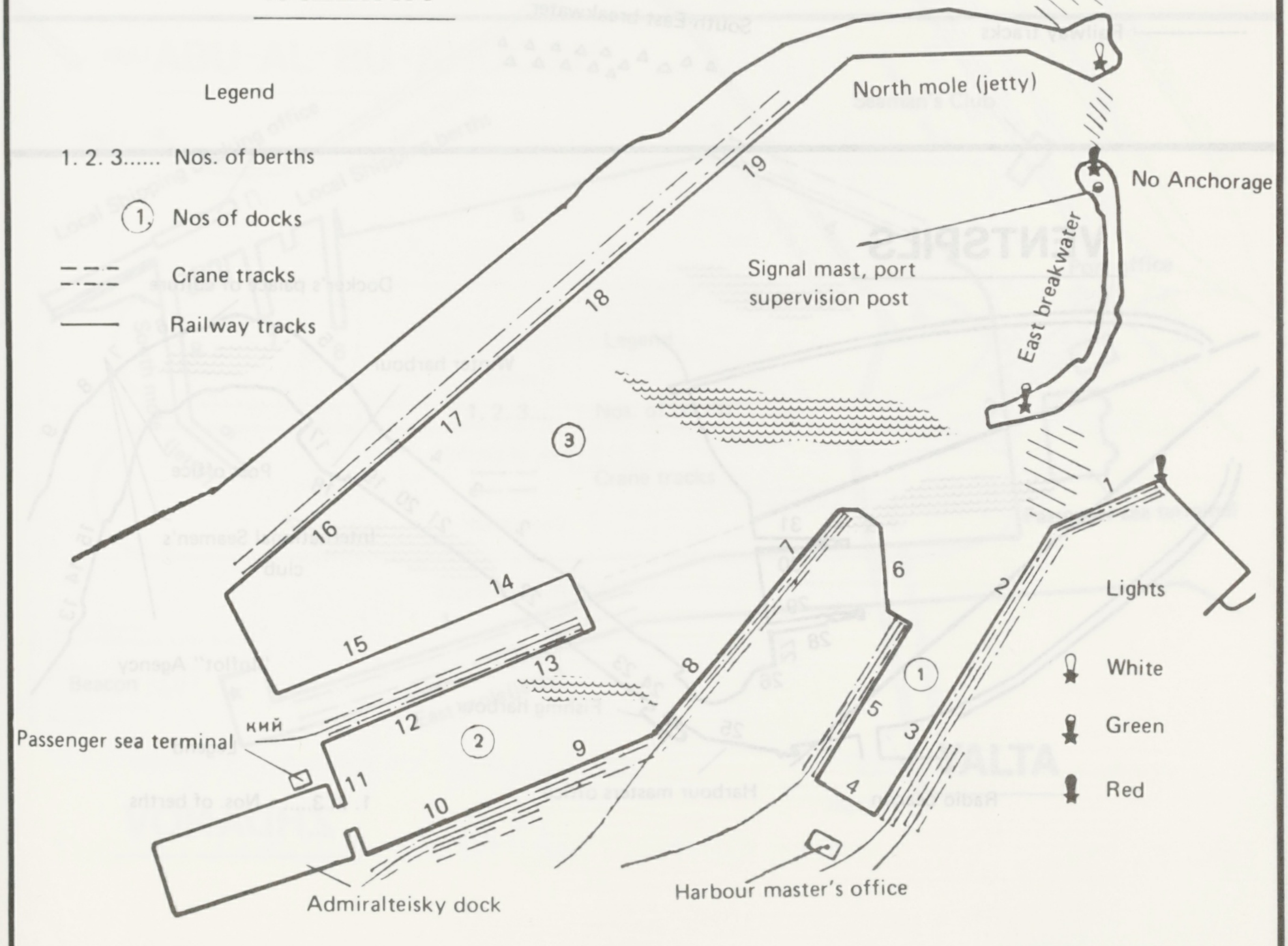
SUKHUMI


Basletar.
Passenger sea terminal
Passenger jetties
Sukhumi roadstead
Lights
Red
Green

TALLINN


Legend
1. 2. 3...... Nos. of berths
①, Nos of docks
Crane tracks
Railway tracks
North mole (jetty)
No Anchorage
Signal mast, port supervision post
East breakwater
Lights
White
Green
Red
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
③
②
①
кий
Passenger sea terminal
Admiralteisky dock
Harbour master's office

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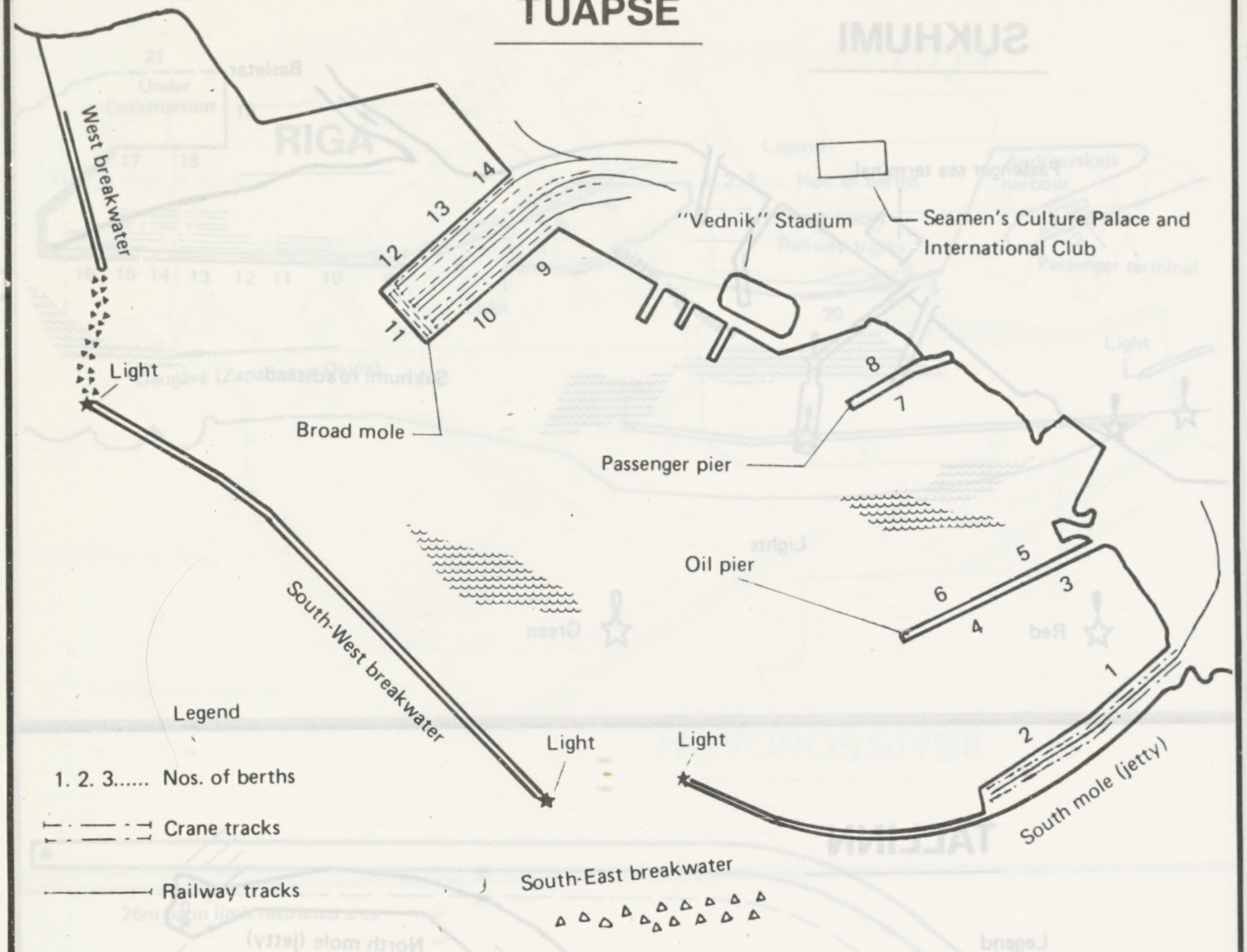
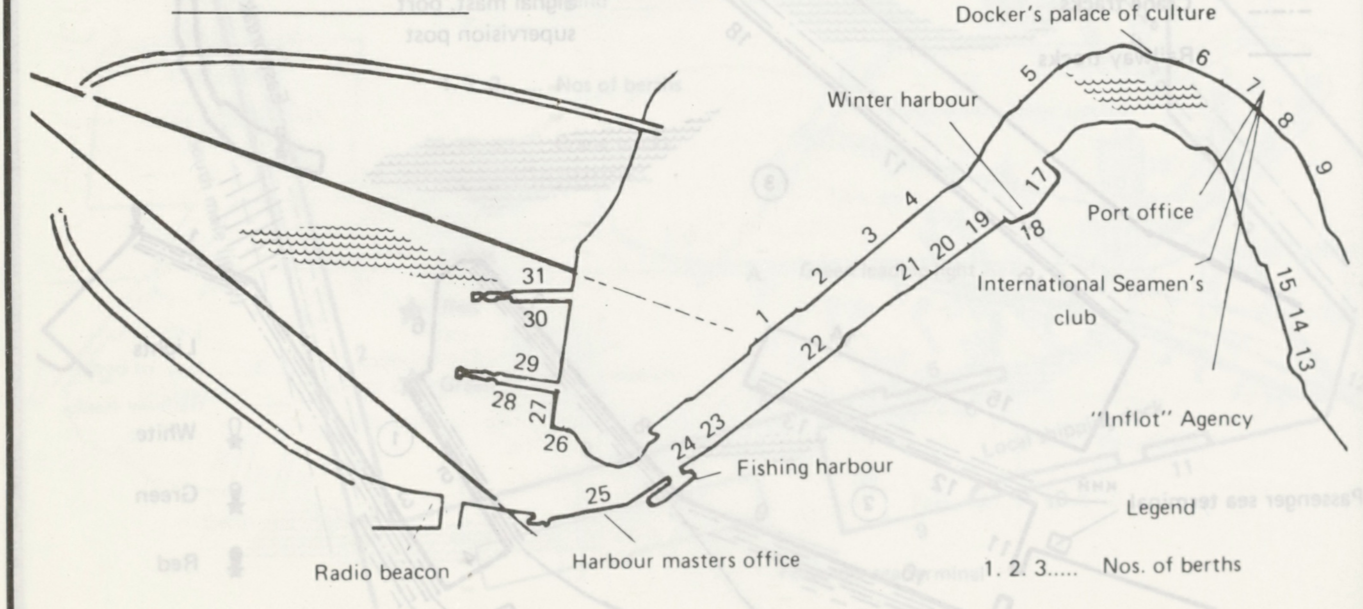
TUAPSE


West breakwater
Light
Broad mole
14
13
12
11
10
9
"Vednik" Stadium
Seamen's Culture Palace and International Club
8
7
Passenger pier
Oil pier
5
6
3
4
1
2
South-West breakwater
Light
Light
South mole (jetty)
South-East breakwater
Legend
1. 2. 3...... Nos. of berths
Crane tracks
Railway tracks

VENTSPILS


Docker's palace of culture
Winter harbour
6
5
7
8
9
4
17
3
19
18
20
2
21
Port office
31
30
1
22
International Seamen's club
15
14
13
29
28
27
26
24
23
"Inflot" Agency
Fishing harbour
25
Radio beacon
Harbour masters office
Legend
1. 2. 3..... Nos. of berths

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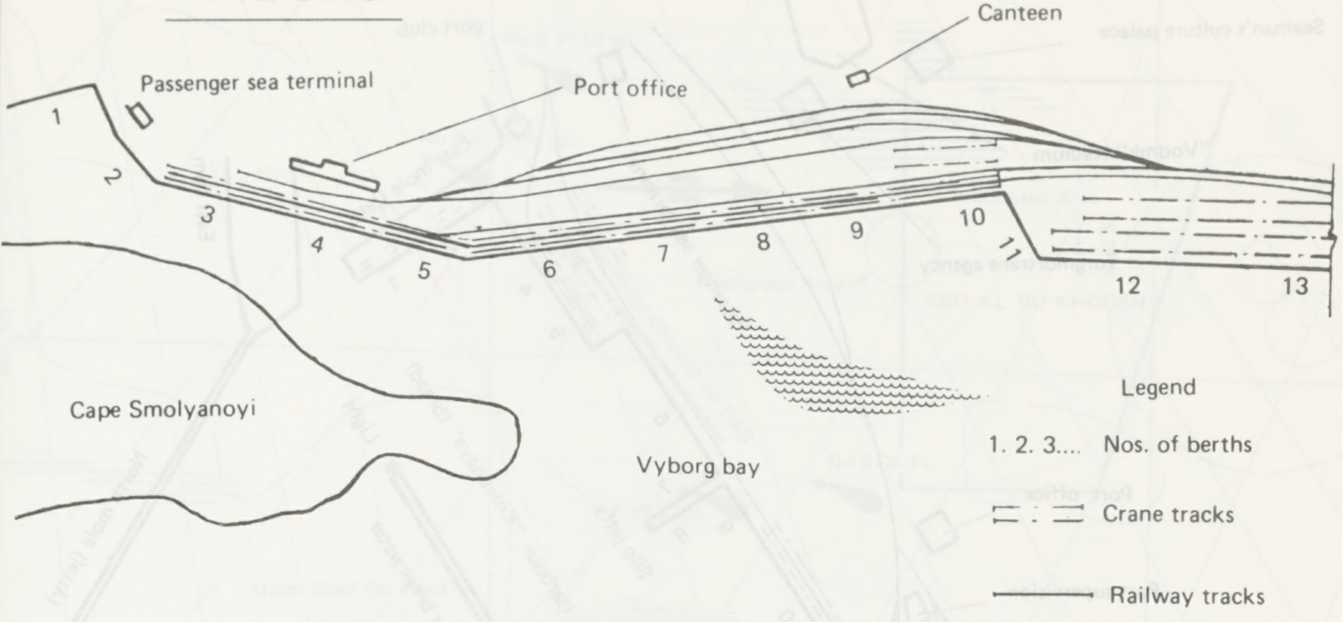
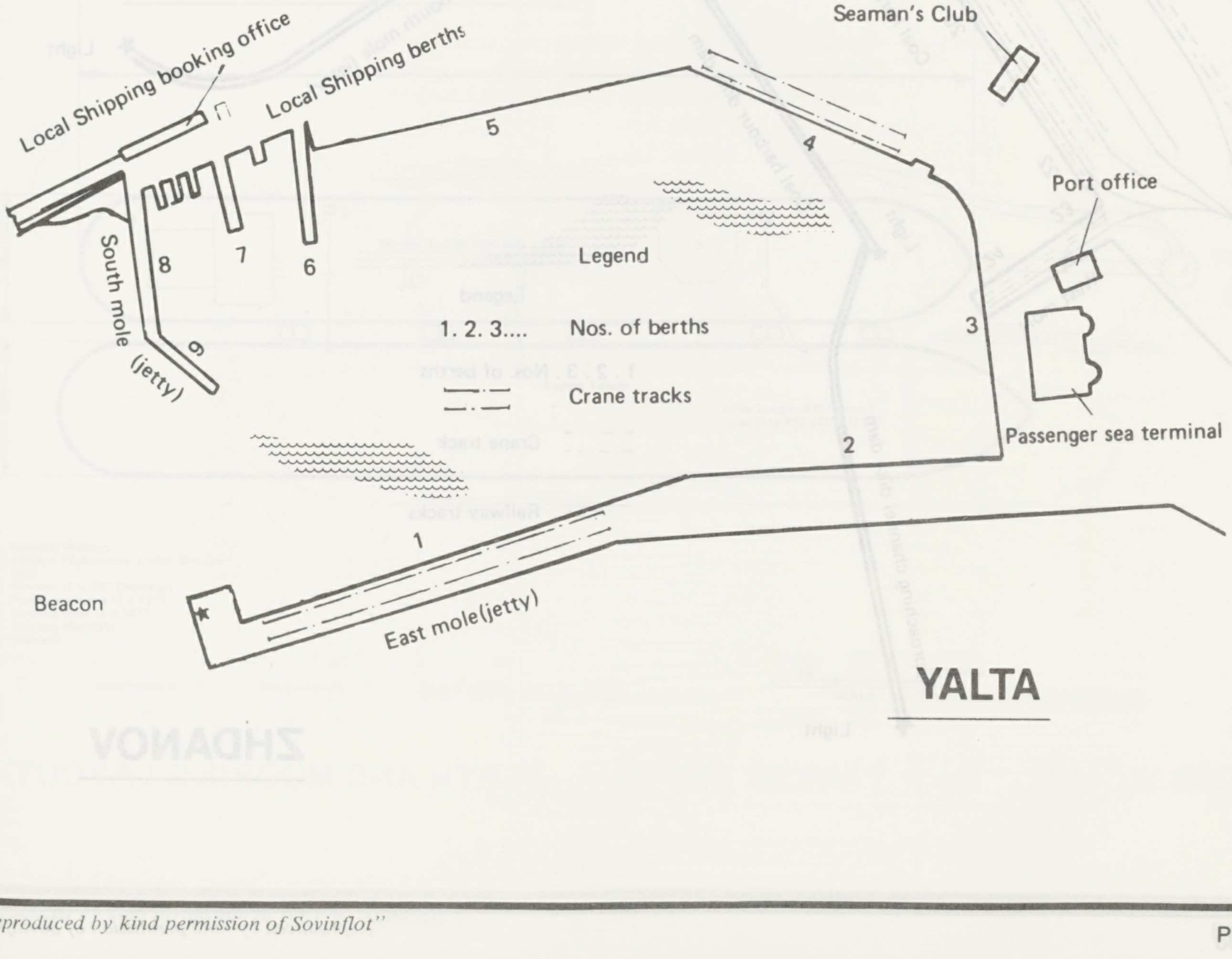
VYBORG


Canteen
Passenger sea terminal
Port office
1
2
3
4
5
6
7
8
9
10
11
12
13
Cape Smolyanoyi
Vyborg bay
Legend
1. 2. 3.... Nos. of berths
Crane tracks
Railway tracks


Seaman's Club
Local Shipping booking office
Local Shipping berths
5
4
8
7
6
South mole (jetty)
9
Legend
1. 2. 3.... Nos. of berths
Crane tracks
Port office
3
Passenger sea terminal
2
1
Beacon
East mole(jetty)

YALTA

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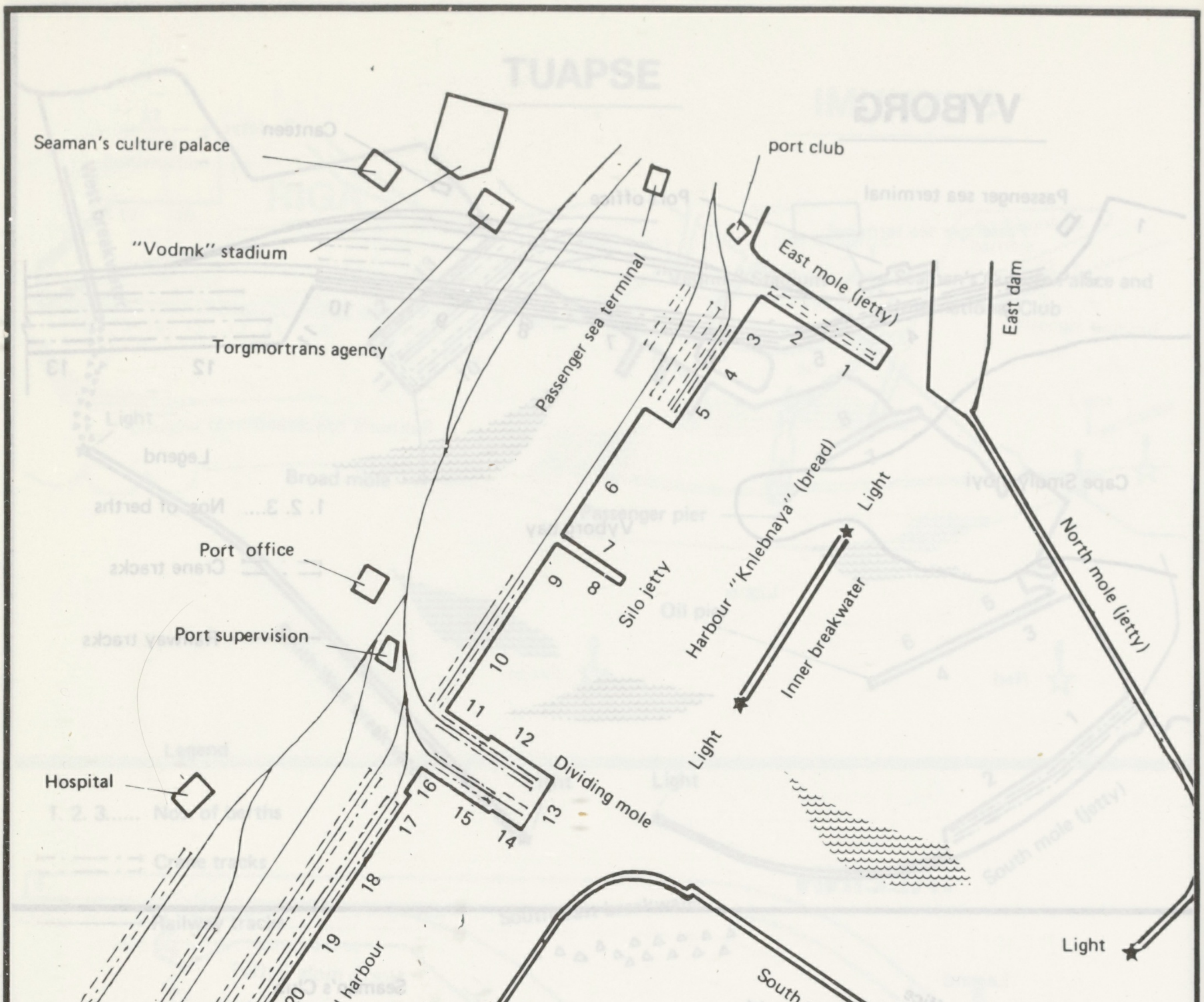
ZHDANOV


Seaman's culture palace
port club
"Vodmk" stadium
East mole (jetty)
East dam
Torgmortrans agency
Passenger sea terminal
1
2
3
4
5
6
7
8
9
Harbour "Knlebnaya" (bread)
Light
North mole (jetty)
Port office
Silo jetty
Inner breakwater
Port supervision
10
11
12
Light
Dividing mole
13
14
15
16
Hospital
17
18
19
20
Coal harbour
21
22
23
24
West mole
Light
South mole (jetty)
Light
Coal harbour dike dam
Light
Approaching channel dike dam
Light
Legend
1 . 2 . 3 . Nos. of berths
Crane track
Railway tracks

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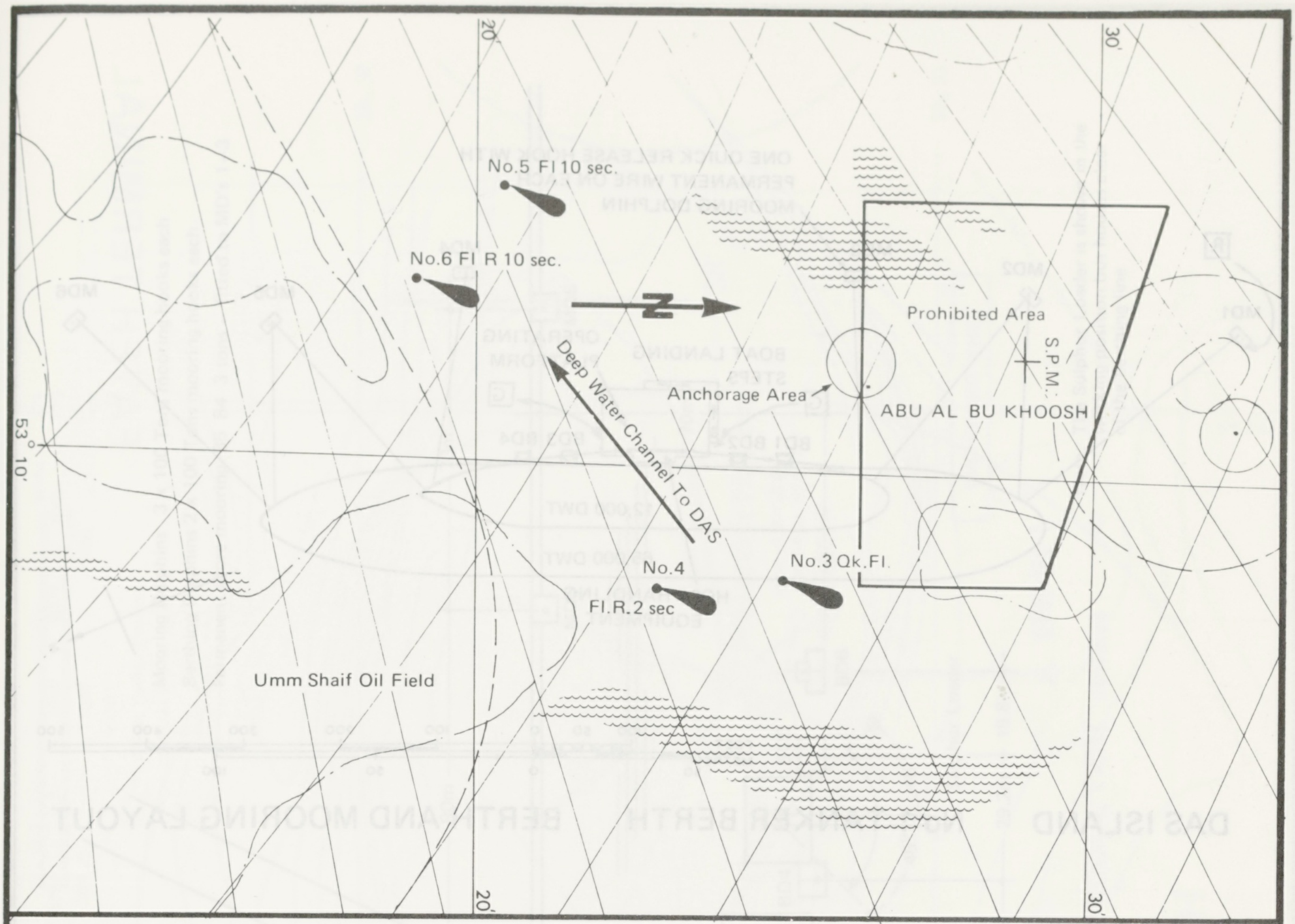
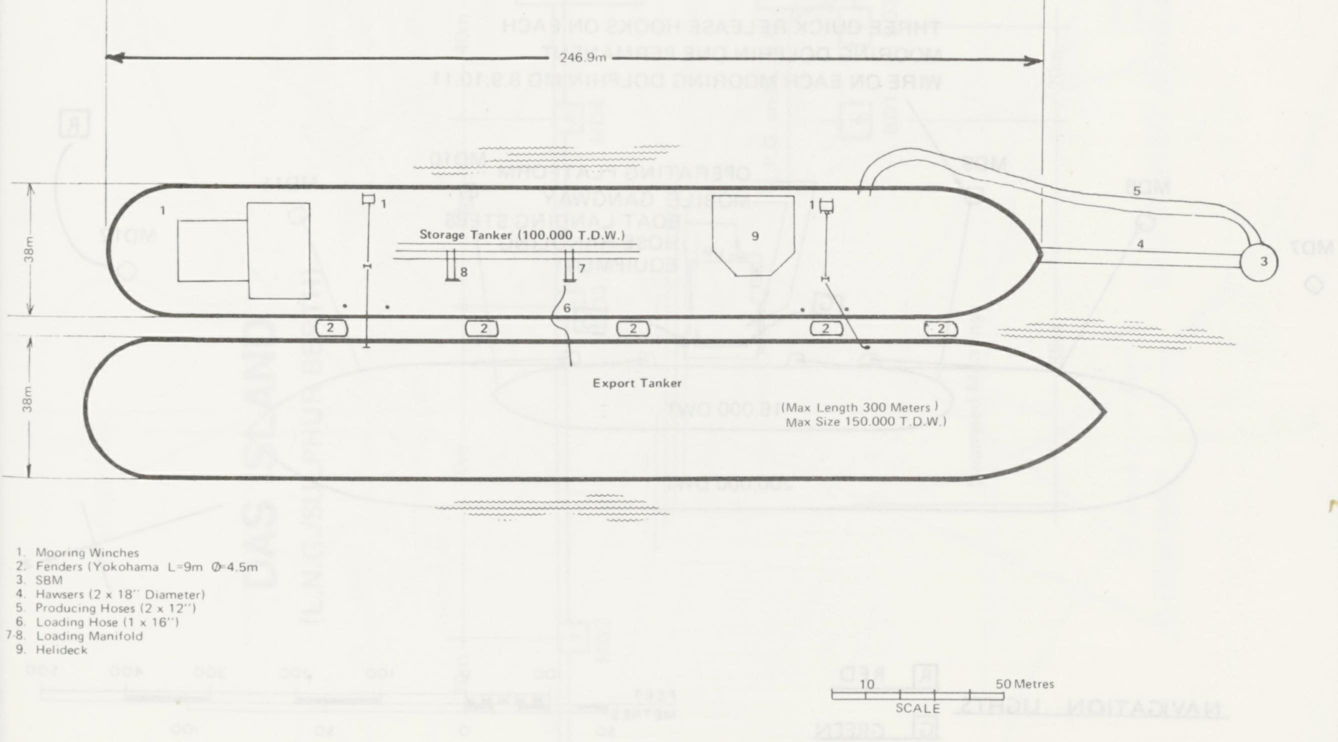

20'
30'
No.5 Fl 10 sec.
No.6 Fl R 10 sec.
N
Prohibited Area
S.P.M.
Deep Water Channel To DAS
Anchorage Area
ABU AL BU KHOOSH
53° 10'
No.4
Fl.R.2 sec
No.3 Qk.Fl.
Umm Shaif Oil Field
20'
30'

ABU-AL-BU-KHOOSH


246.9m
38m
38m
1
1
1
Storage Tanker (100.000 T.D.W.)
9
8
7
6
5
4
3
2
2
2
2
2
Export Tanker
(Max Length 300 Meters)
Max Size 150.000 T.D.W.)
10
50 Metres
SCALE

1. Mooring Winches
2. Fenders (Yokohama L=9m Ø=4.5m
3. SBM
4. Hawsers (2 x 18" Diameter)
5. Producing Hoses (2 x 12")
6. Loading Hose (1 x 16")

7-8. Loading Manifold

9. Helideck

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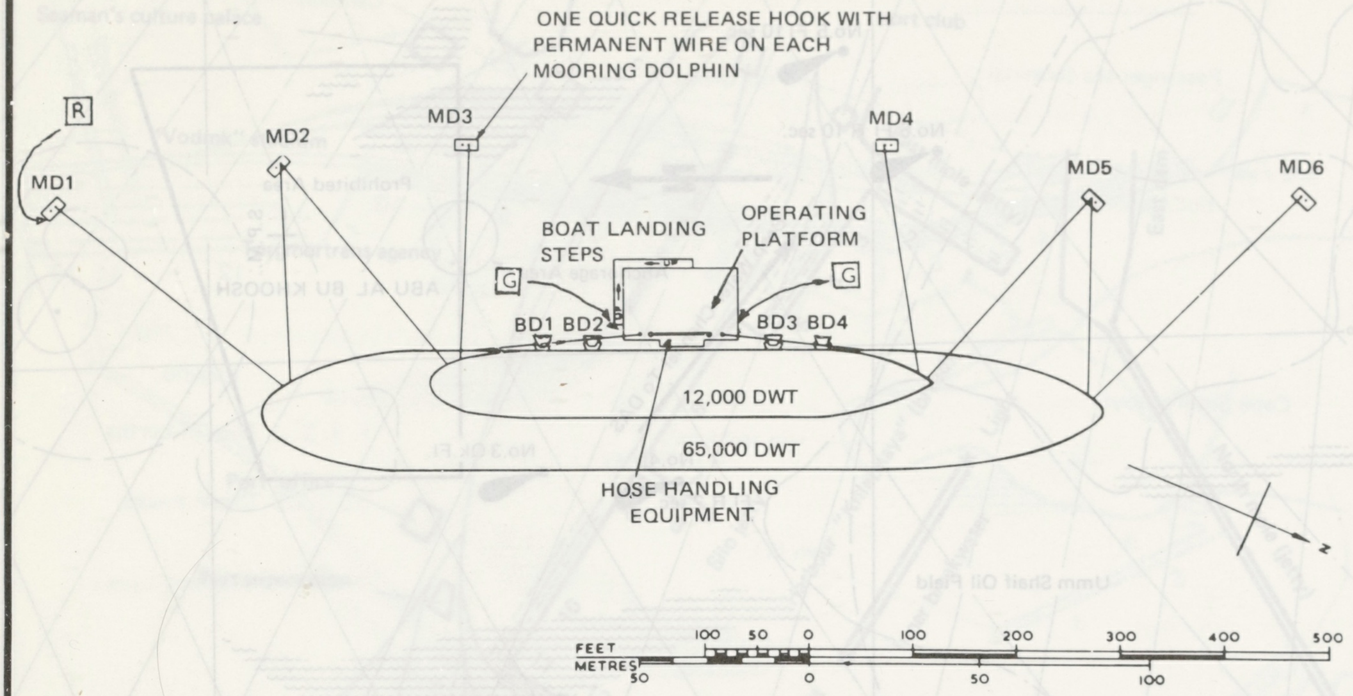
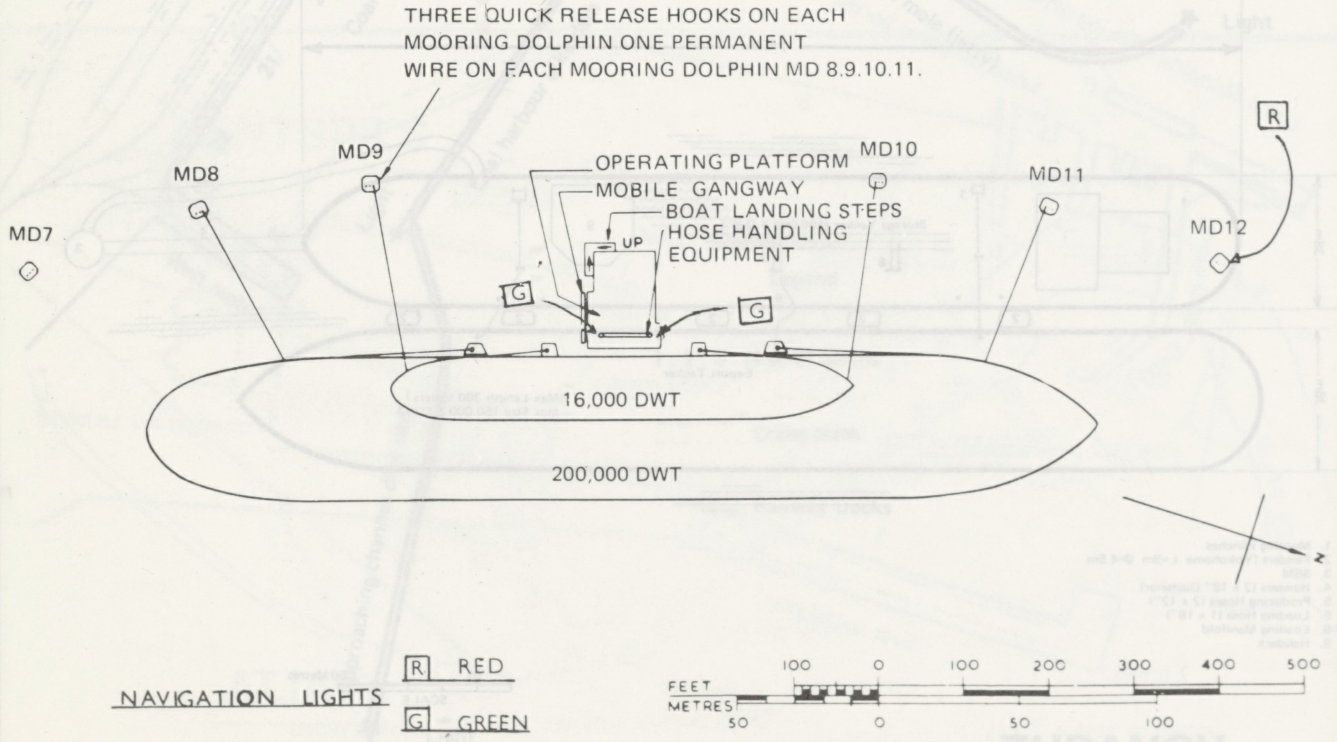

ONE QUICK RELEASE HOOK WITH PERMANENT WIRE ON EACH MOORING DOLPHIN
R
MD1
MD2
MD3
MD4
MD5
MD6
BOAT LANDING STEPS
OPERATING PLATFORM
G
G
BD1
BD2
BD3
BD4
12,000 DWT
65,000 DWT
HOSE HANDLING EQUIPMENT
N
FEET
METRES
100
50
0
100
200
300
400
500
50
0
50
100

DAS ISLAND No 1 TANKER BERTH BERTH AND MOORING LAYOUT


THREE QUICK RELEASE HOOKS ON EACH MOORING DOLPHIN ONE PERMANENT WIRE ON EACH MOORING DOLPHIN MD 8.9.10.11.
MD7
MD8
MD9
OPERATING PLATFORM
MOBILE GANGWAY
BOAT LANDING STEPS
HOSE HANDLING EQUIPMENT
UP
MD10
MD11
R
MD12
G
G
16,000 DWT
200,000 DWT
N
NAVIGATION LIGHTS
R RED
G GREEN
FEET
METRES
100
0
100
200
300
400
500
50
0
50
100

DAS ISLAND No 2 TANKER BERTH BERTH AND MOORING LAYOUT

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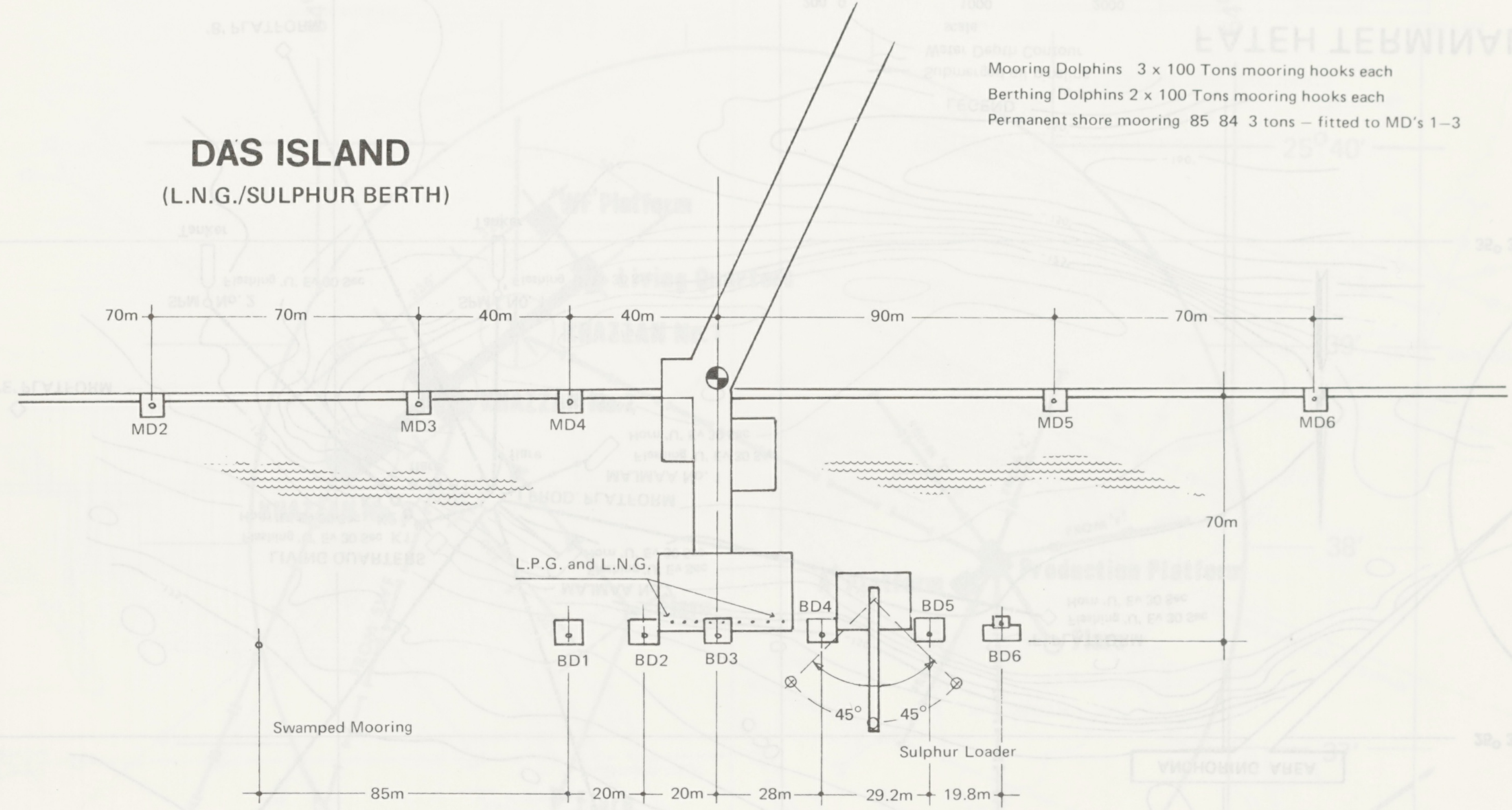
DAS ISLAND

(L.N.G./SULPHUR BERTH)


70m
70m
40m
40m
90m
70m
MD2
MD3
MD4
MD5
MD6
70m
L.P.G. and L.N.G.
BD1
BD2
BD3
BD4
BD5
BD6
45°
45°
Swamped Mooring
Sulphur Loader
85m
20m
20m
28m
29.2m
19.8m

Mooring Dolphins 3 x 100 Tons mooring hooks each

Berthing Dolphins 2 x 100 Tons mooring hooks each

Permanent shore mooring 85 84 3 tons – fitted to MD's 1–3

Note: The Sulphur Loader is shown in the working position but houses clear of the berthing line

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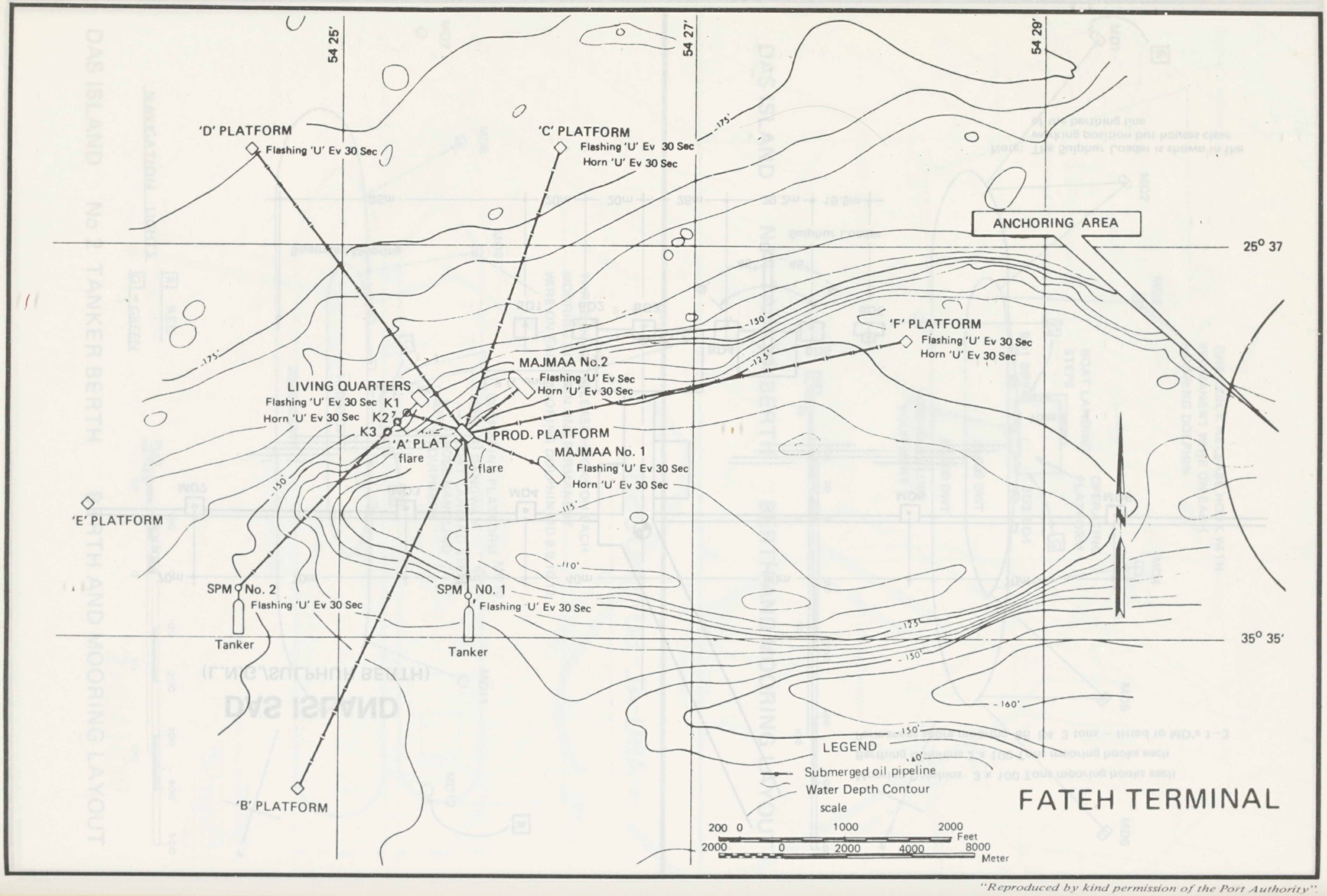
54 25'
54 27'
54 29'
25° 37
35° 35'
'D' PLATFORM
Flashing 'U' Ev 30 Sec
'C' PLATFORM
Flashing 'U' Ev 30 Sec
Horn 'U' Ev 30 Sec
ANCHORING AREA
'F' PLATFORM
Flashing 'U' Ev 30 Sec
Horn 'U' Ev 30 Sec
MAJMAA No.2
Flashing 'U' Ev Sec
Horn 'U' Ev 30 Sec
LIVING QUARTERS
Flashing 'U' Ev 30 Sec
Horn 'U' Ev 30 Sec
K1
K2
K3
'A' PLAT
flare
PROD. PLATFORM
flare
MAJMAA No. 1
Flashing 'U' Ev 30 Sec
Horn 'U' Ev 30 Sec
'E' PLATFORM
SPM No. 2
Flashing 'U' Ev 30 Sec
Tanker
SPM NO. 1
Flashing 'U' Ev 30 Sec
Tanker
'B' PLATFORM
-175'
-150'
-125'
-115'
-110'
-160'
LEGEND
Submerged oil pipeline
Water Depth Contour
scale
200 0 1000 2000 Feet
2000 0 2000 4000 8000 Meter

FATEH TERMINAL

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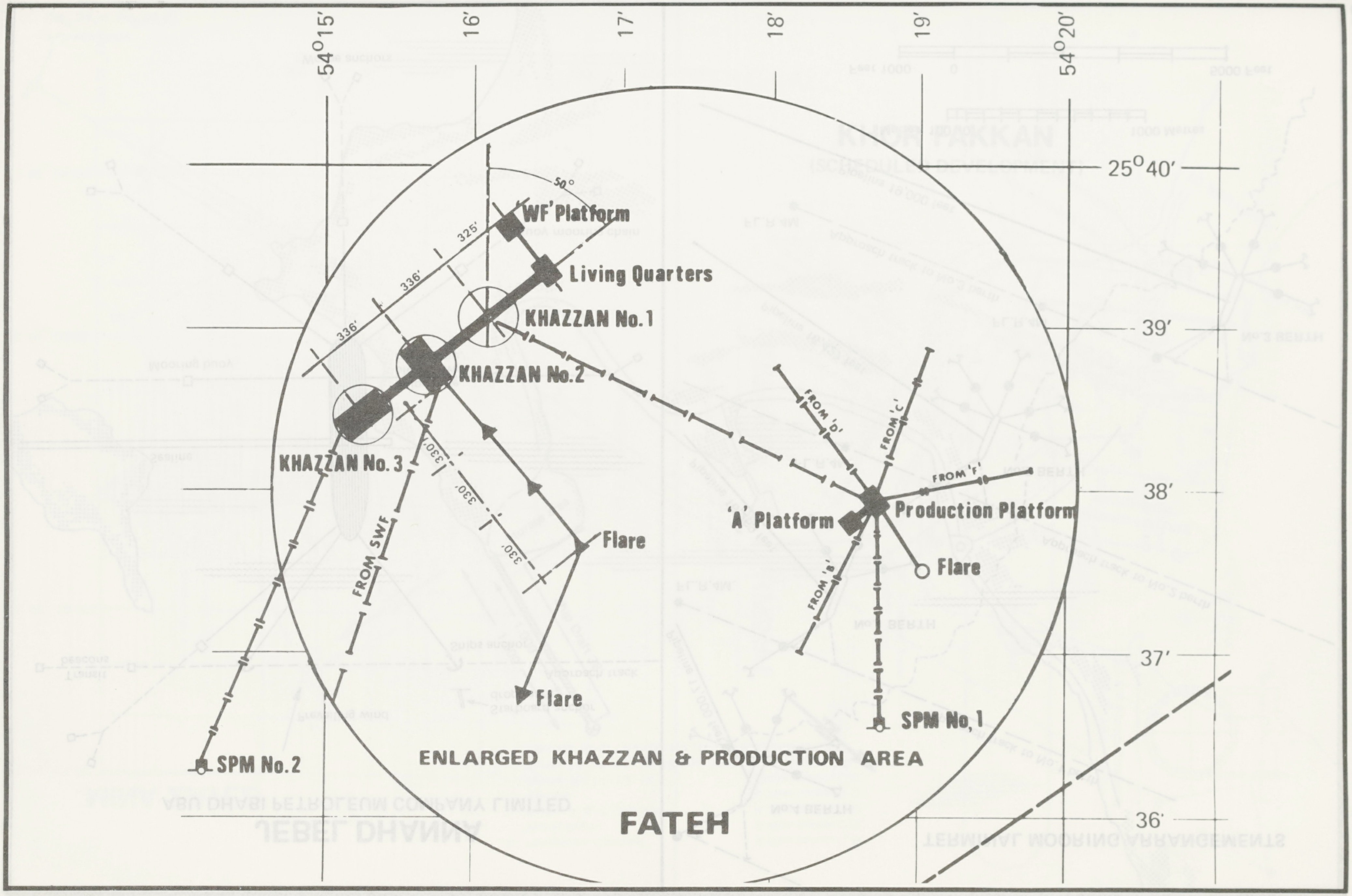
54°15'
16'
17'
18'
19'
54°20'
25°40'
39'
38'
37'
36'
50°
325'
336'
336'
336'
330'
330'
330'
WF' Platform
Living Quarters
KHAZZAN No.1
KHAZZAN No.2
KHAZZAN No.3
FROM SWF
Flare
Flare
FROM 'D'
FROM 'C'
FROM 'F'
FROM 'B'
'A' Platform
Production Platform
Flare
SPM No.1
SPM No.2
ENLARGED KHAZZAN & PRODUCTION AREA
FATEH

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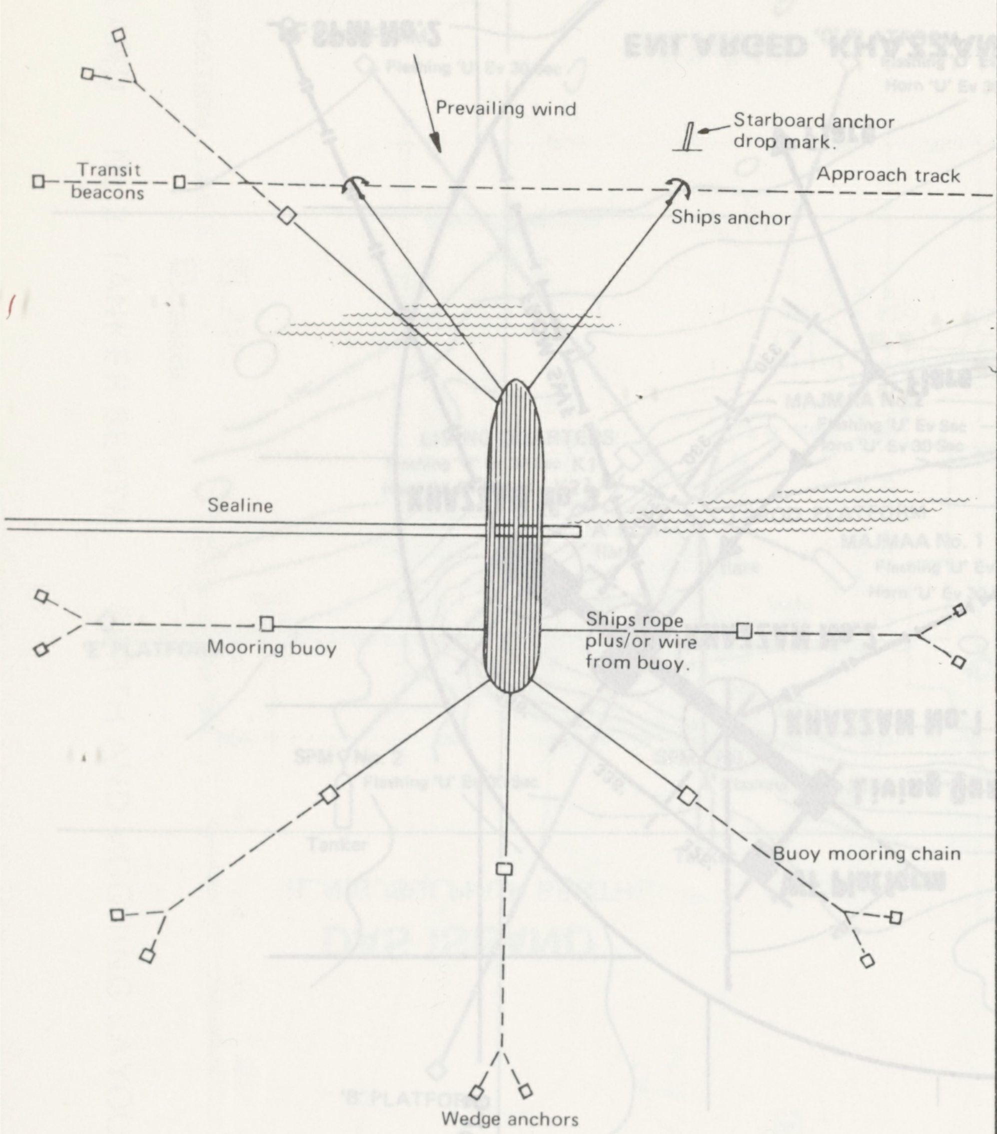
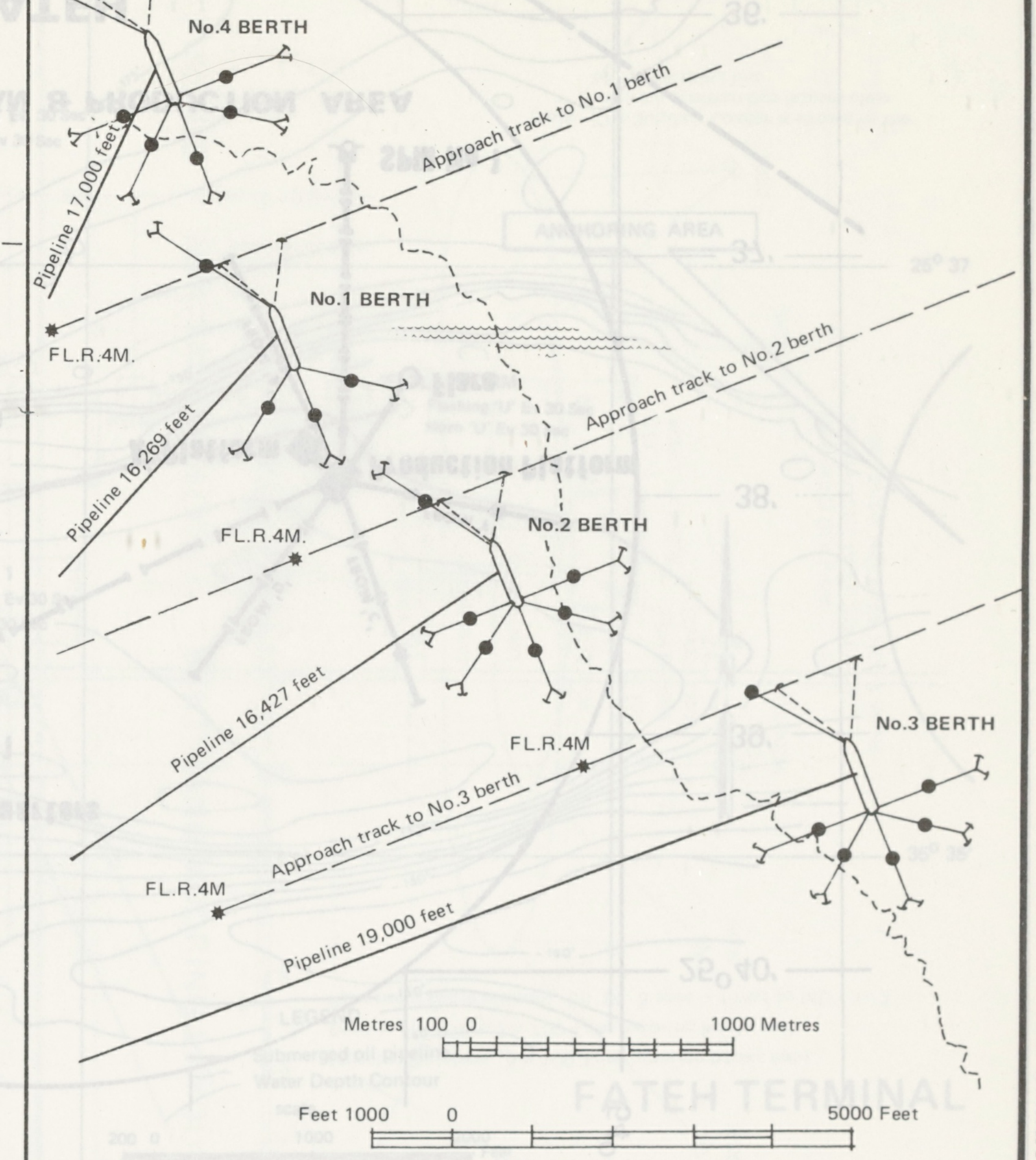
JEBEL DHANNA

ABU DHABI PETROLEUM COMPANY LIMITED


Prevailing wind
Starboard anchor drop mark.
Transit beacons
Approach track
Ships anchor
Sealine
Mooring buoy
Ships rope plus/or wire from buoy.
Buoy mooring chain
Wedge anchors

TERMINAL MOORING ARRANGEMENTS


No.4 BERTH
Approach track to No.1 berth
Pipeline 17,000 feet
No.1 BERTH
FL.R.4M.
Pipeline 16,269 feet
Approach track to No.2 berth
FL.R.4M.
No.2 BERTH
Pipeline 16,427 feet
FL.R.4M
No.3 BERTH
Approach track to No.3 berth
FL.R.4M
Pipeline 19,000 feet
Metres 100 0
1000 Metres
Feet 1000 0
5000 Feet

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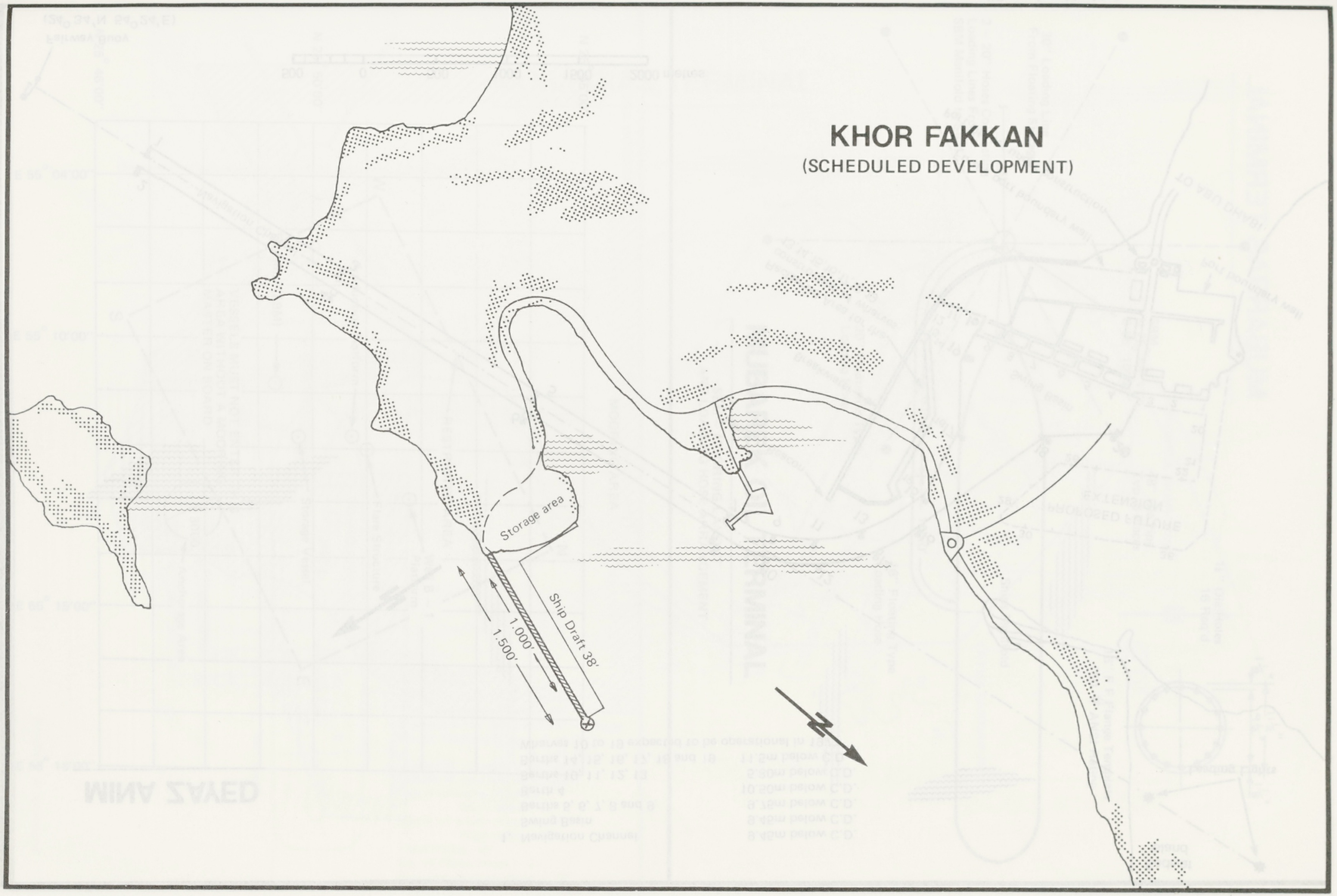
KHOR FAKKAN

(SCHEDULED DEVELOPMENT)


Storage area
Ship Draft 38'
1.000'
1.500'

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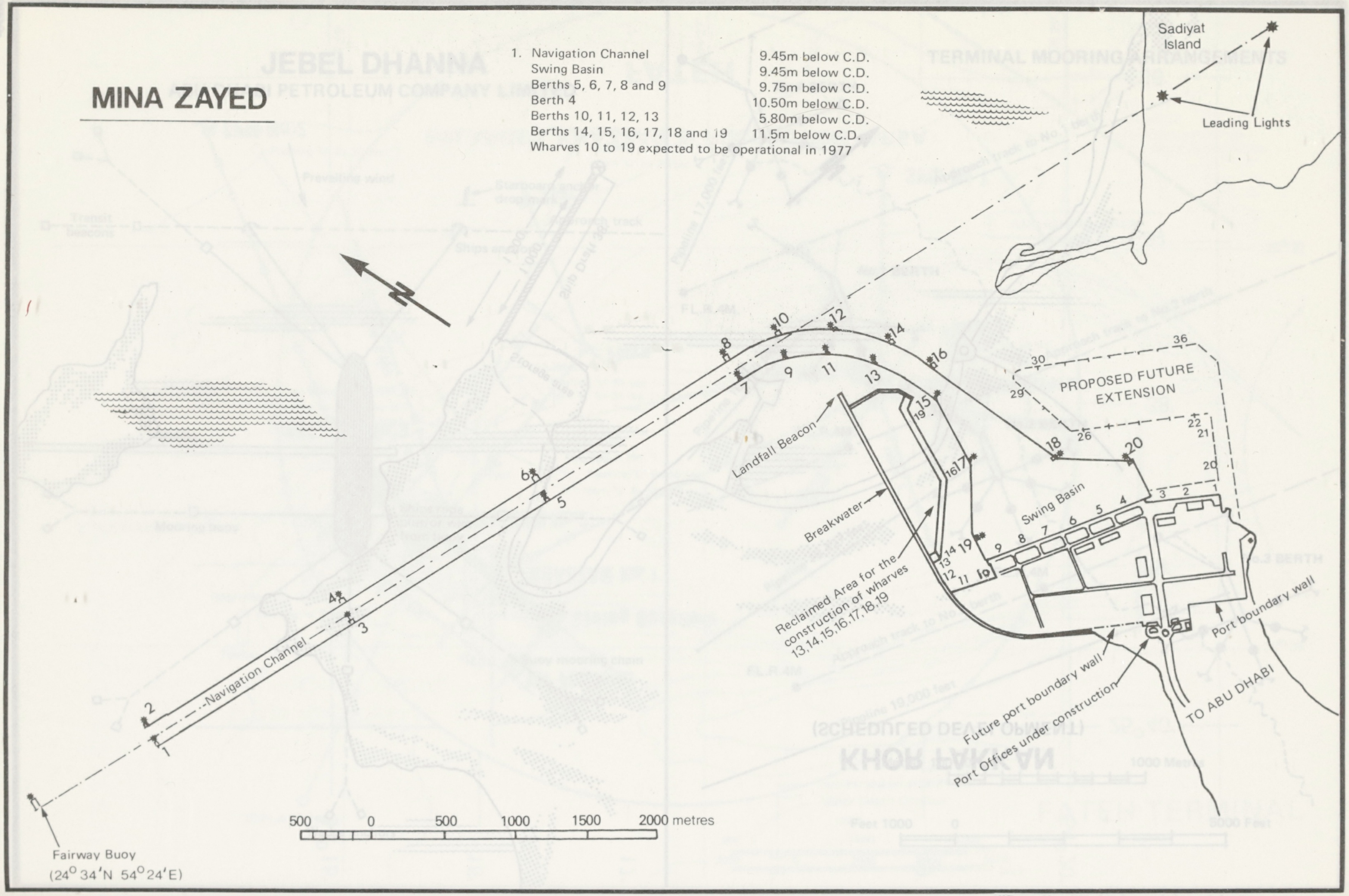

MINA ZAYED

1. Navigation Channel	9.45m below C.D.
Swing Basin	9.45m below C.D.
Berths 5, 6, 7, 8 and 9	9.75m below C.D.
Berth 4	10.50m below C.D.
Berths 10, 11, 12, 13	5.80m below C.D.
Berths 14, 15, 16, 17, 18 and 19	11.5m below C.D.

Wharves 10 to 19 expected to be operational in 1977

N
Sadiyat Island
Leading Lights
PROPOSED FUTURE EXTENSION
36
30
29
26
22
21
20
3
2
1
Landfall Beacon
Breakwater
Reclaimed Area for the construction of wharves 13,14,15,16,17,18,19
Swing Basin
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Navigation Channel
Fairway Buoy (24° 34′N 54° 24′E)
500 0 500 1000 1500 2000 metres
Future port boundary wall
Port Offices under construction
TO ABU DHABI
Port boundary wall

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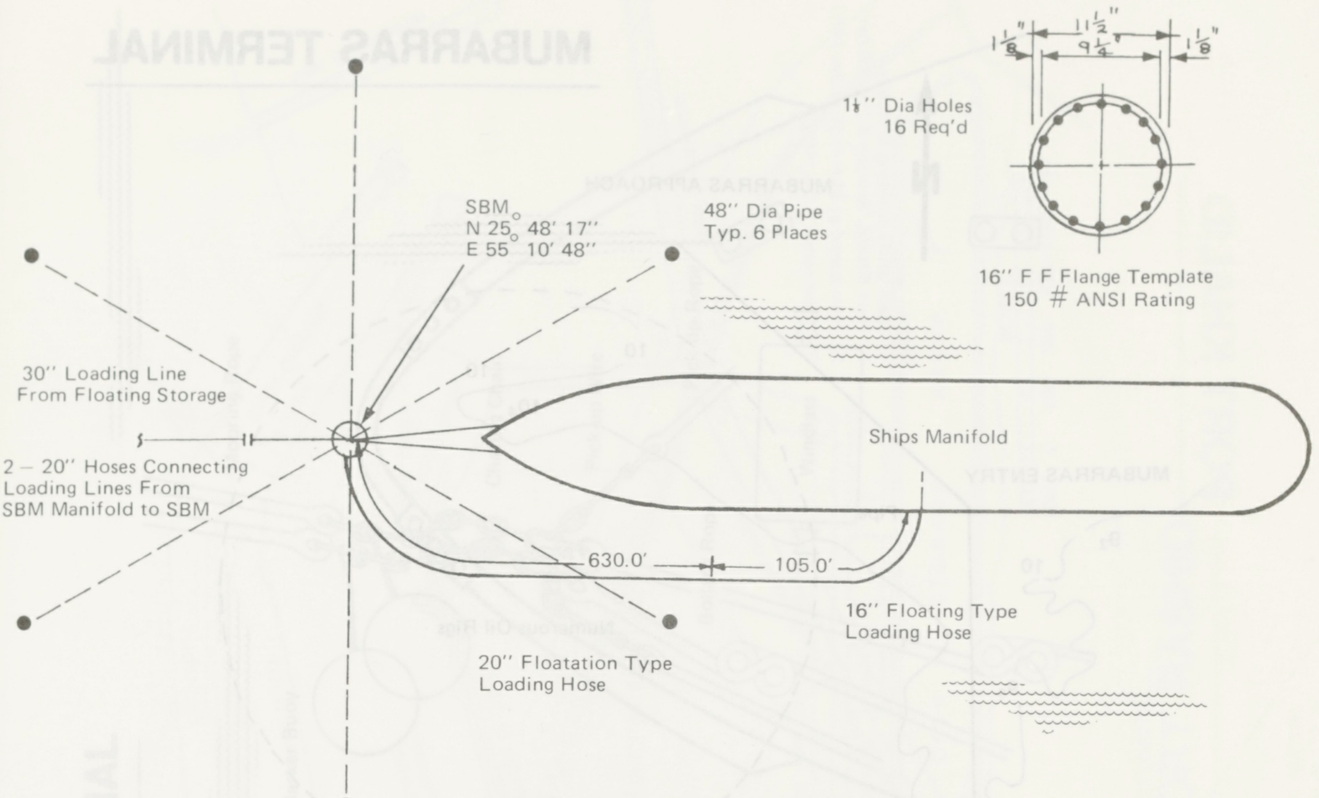
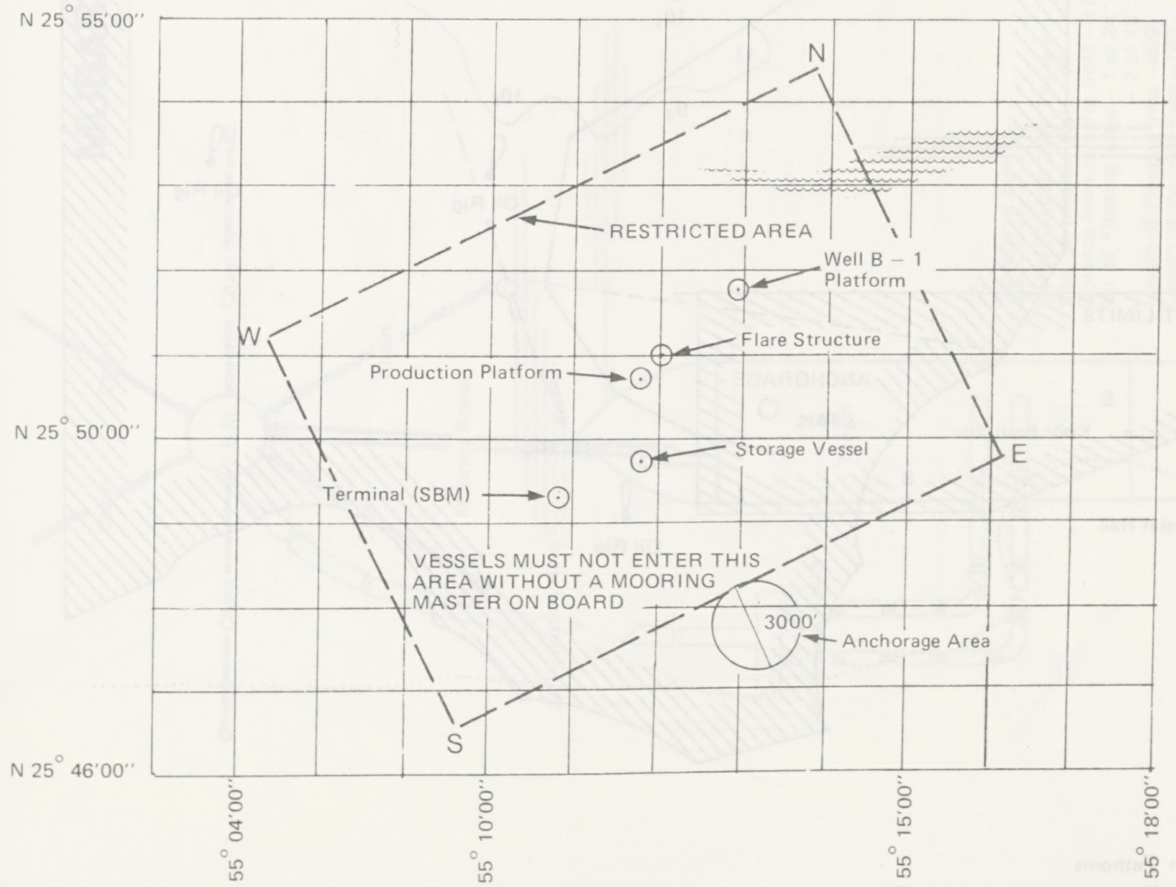

1⅛"
11½"
9¼"
1⅛"
1⅛" Dia Holes
16 Req'd
16" F F Flange Template
150 # ANSI Rating
SBM
N 25° 48' 17"
E 55° 10' 48"
48" Dia Pipe
Typ. 6 Places
30" Loading Line
From Floating Storage
2 – 20" Hoses Connecting
Loading Lines From
SBM Manifold to SBM
Ships Manifold
630.0'
105.0'
16" Floating Type
Loading Hose
20" Floatation Type
Loading Hose

MUBAREK OIL TERMINAL

SBM – MOORING LAYOUT
AND LOADING HOSE ARRANGEMENT

MOORING AREA


N 25° 55'00"
N 25° 50'00"
N 25° 46'00"
E 55° 04'00"
E 55° 10'00"
E 55° 15'00"
E 55° 18'00"
N
W
E
S
RESTRICTED AREA
Well B – 1
Platform
Flare Structure
Production Platform
Storage Vessel
Terminal (SBM)
VESSELS MUST NOT ENTER THIS
AREA WITHOUT A MOORING
MASTER ON BOARD
3000'
Anchorage Area

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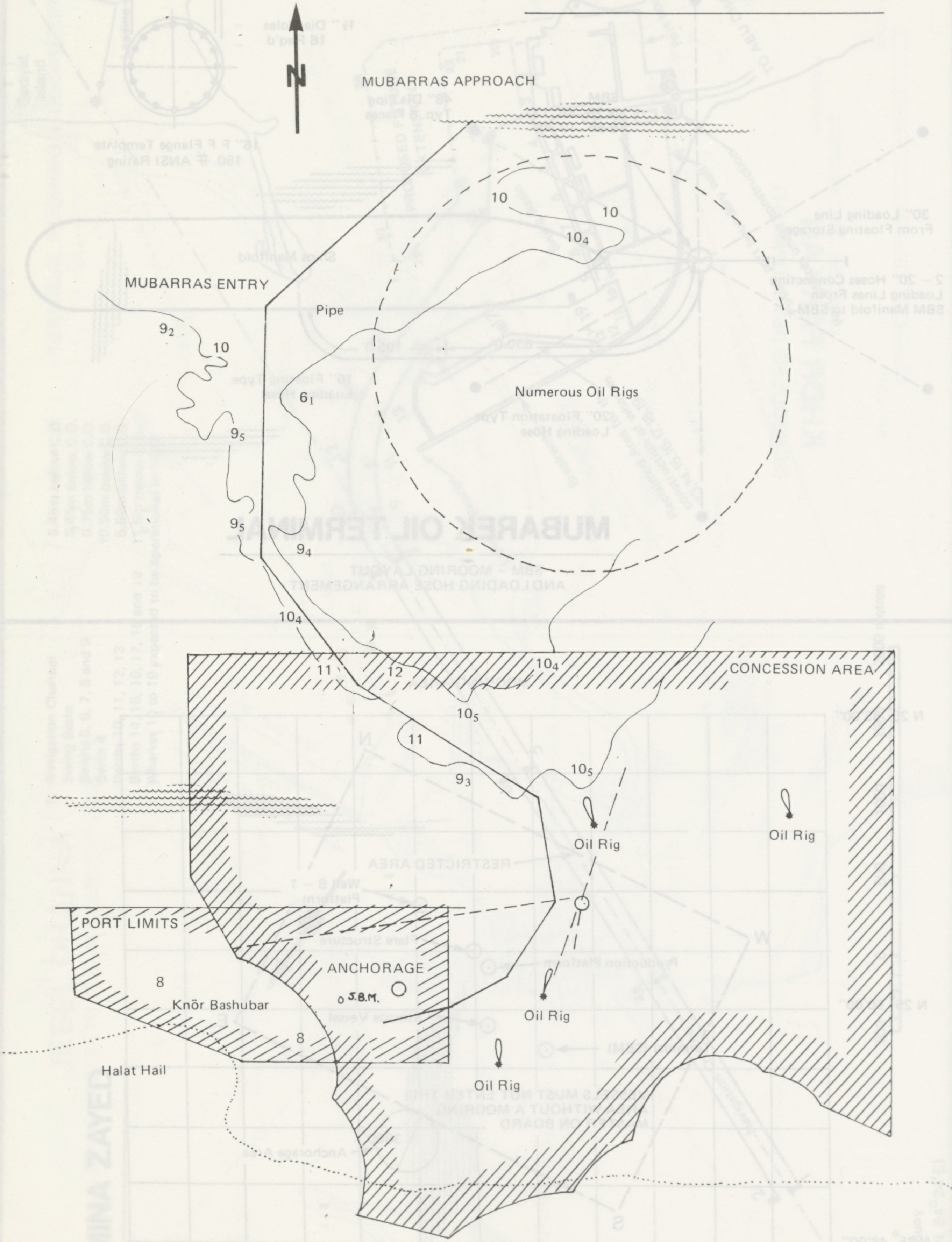
MUBARRAS TERMINAL


N
MUBARRAS APPROACH
MUBARRAS ENTRY
Pipe
Numerous Oil Rigs
CONCESSION AREA
Oil Rig
Oil Rig
Oil Rig
Oil Rig
PORT LIMITS
ANCHORAGE
S.B.M.
Knör Bashubar
Halat Hail
10
10
10_4
9_2
10
6_1
9_5
9_5
9_4
10_4
11
12
10_4
10_5
11
9_3
10_5
8
8

Soundings in Fathoms

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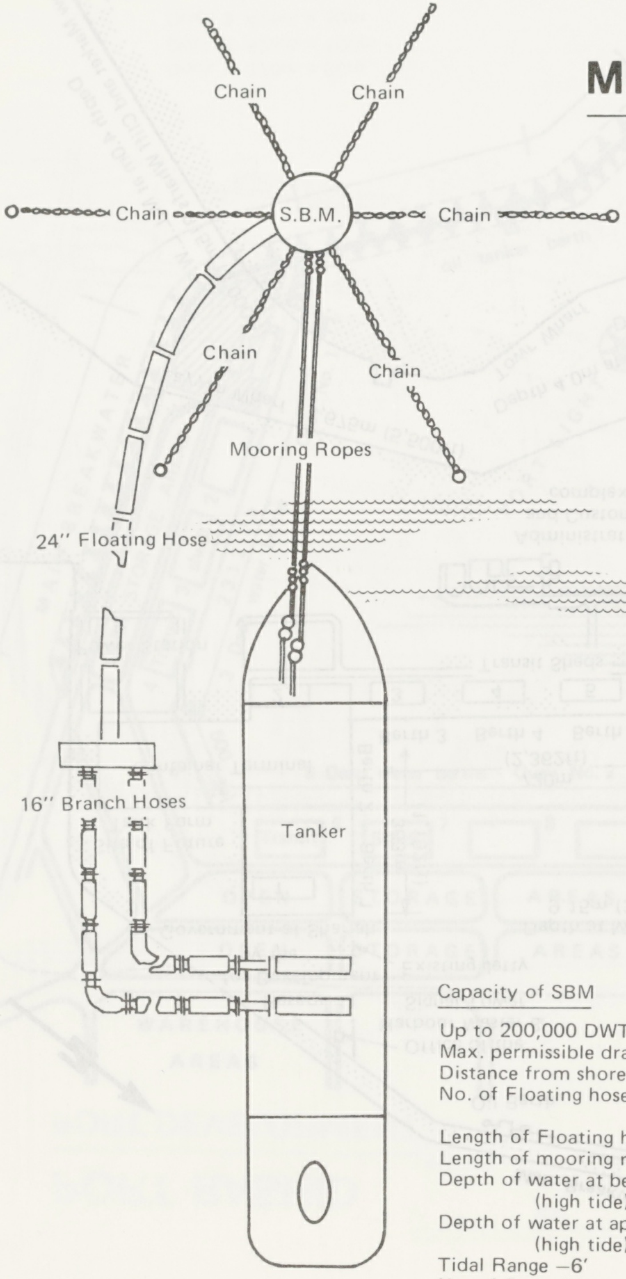
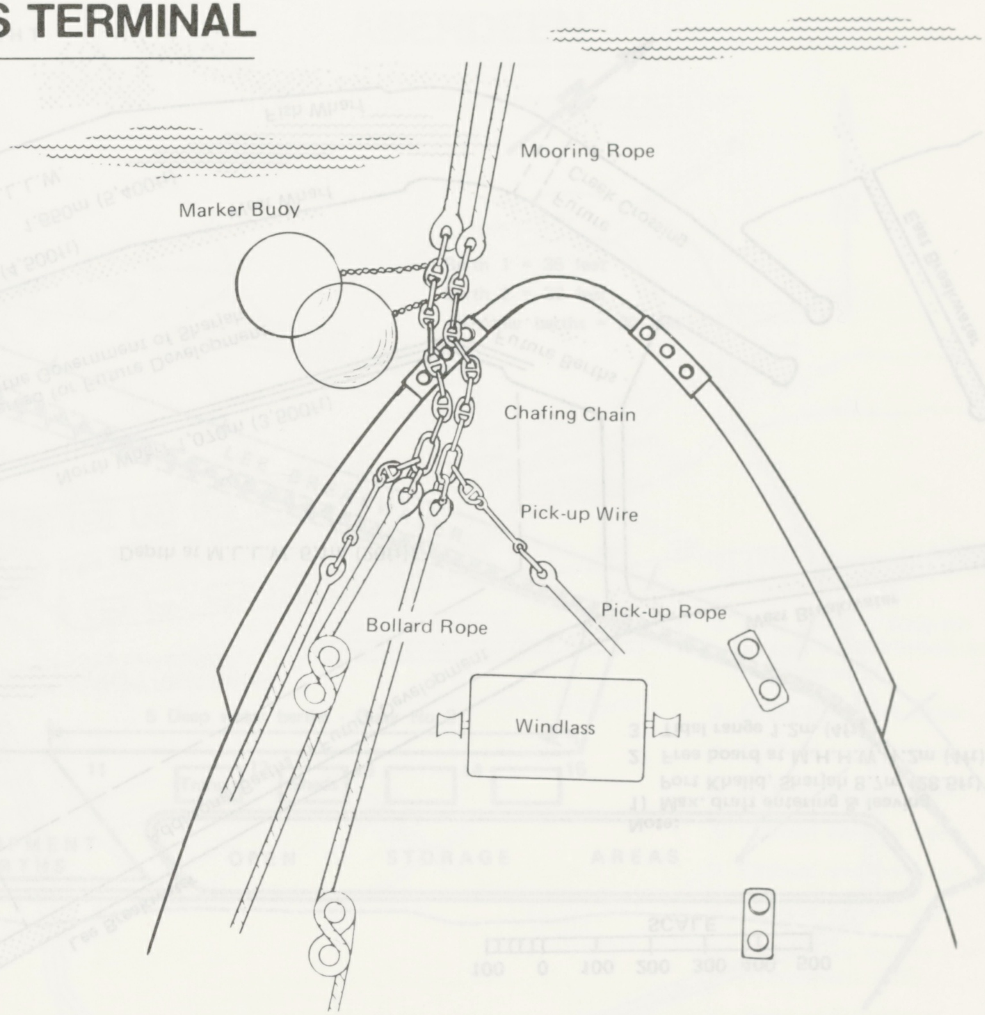
MUBARRAS TERMINAL


Chain
Chain
Chain
S.B.M.
Chain
Chain
Chain
Mooring Ropes
24" Floating Hose
16" Branch Hoses
Tanker

Capacity of SBM

Up to 200,000 DWT Tankers
Max. permissible draft –44'
Distance from shore to SBM –8 miles
No. of Floating hoses – 1 of 24"
– 2 of 16"
Length of Floating hose –869'
Length of mooring rope –160'
Depth of water at berth
(high tide) – 57'
Depth of water at approach
(high tide) – 82'
Tidal Range –6'
No. of Cargo hoses – 2
Diameter of cargo hose – 16"


Mooring Rope
Marker Buoy
Chafing Chain
Pick-up Wire
Pick-up Rope
Bollard Rope
Windlass

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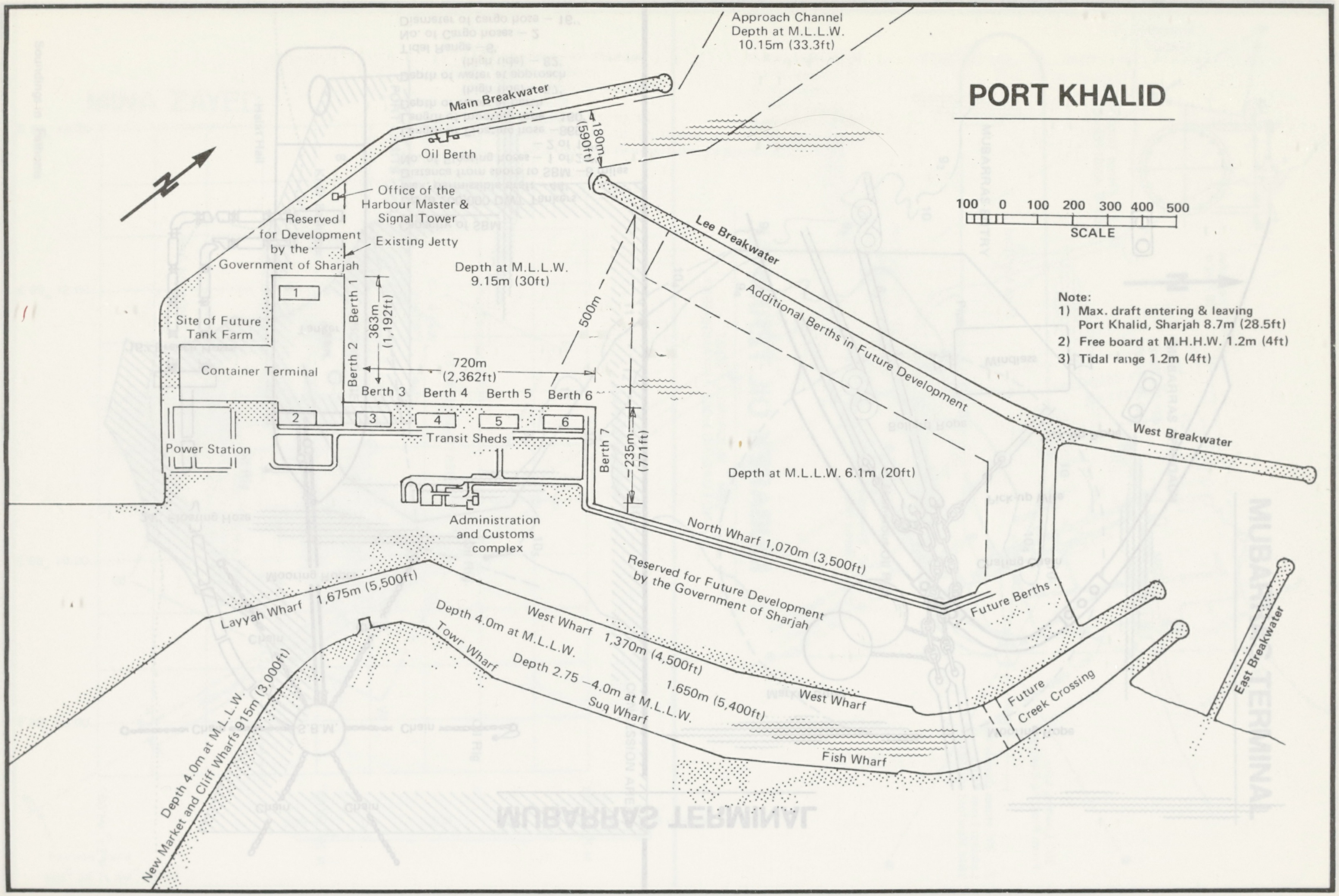

PORT KHALID

Note:
1) Max. draft entering & leaving Port Khalid, Sharjah 8.7m (28.5ft)
2) Free board at M.H.H.W. 1.2m (4ft)
3) Tidal range 1.2m (4ft)

N
Approach Channel Depth at M.L.L.W. 10.15m (33.3ft)
Main Breakwater
180m (590ft)
Oil Berth
Office of the Harbour Master & Signal Tower
Reserved for Development by the Government of Sharjah
Existing Jetty
Depth at M.L.L.W. 9.15m (30ft)
Lee Breakwater
500m
100 0 100 200 300 400 500
SCALE
Site of Future Tank Farm
Berth 1
363m (1,192ft)
Berth 2
Container Terminal
720m (2,362ft)
Berth 3
Berth 4
Berth 5
Berth 6
1
2
3
4
5
6
Additional Berths in Future Development
West Breakwater
Power Station
Transit Sheds
Berth 7
235m (771ft)
Depth at M.L.L.W. 6.1m (20ft)
Administration and Customs complex
North Wharf 1,070m (3,500ft)
Reserved for Future Development by the Government of Sharjah
Future Berths
Layyah Wharf 1,675m (5,500ft)
Depth 4.0m at M.L.L.W.
West Wharf 1,370m (4,500ft)
Towr Wharf
Depth 2.75 – 4.0m at M.L.L.W.
1,650m (5,400ft)
West Wharf
Suq Wharf
Future Creek Crossing
East Breakwater
Fish Wharf
Depth 4.0m at M.L.L.W.
New Market and Cliff Wharfs 915m (3,000ft)

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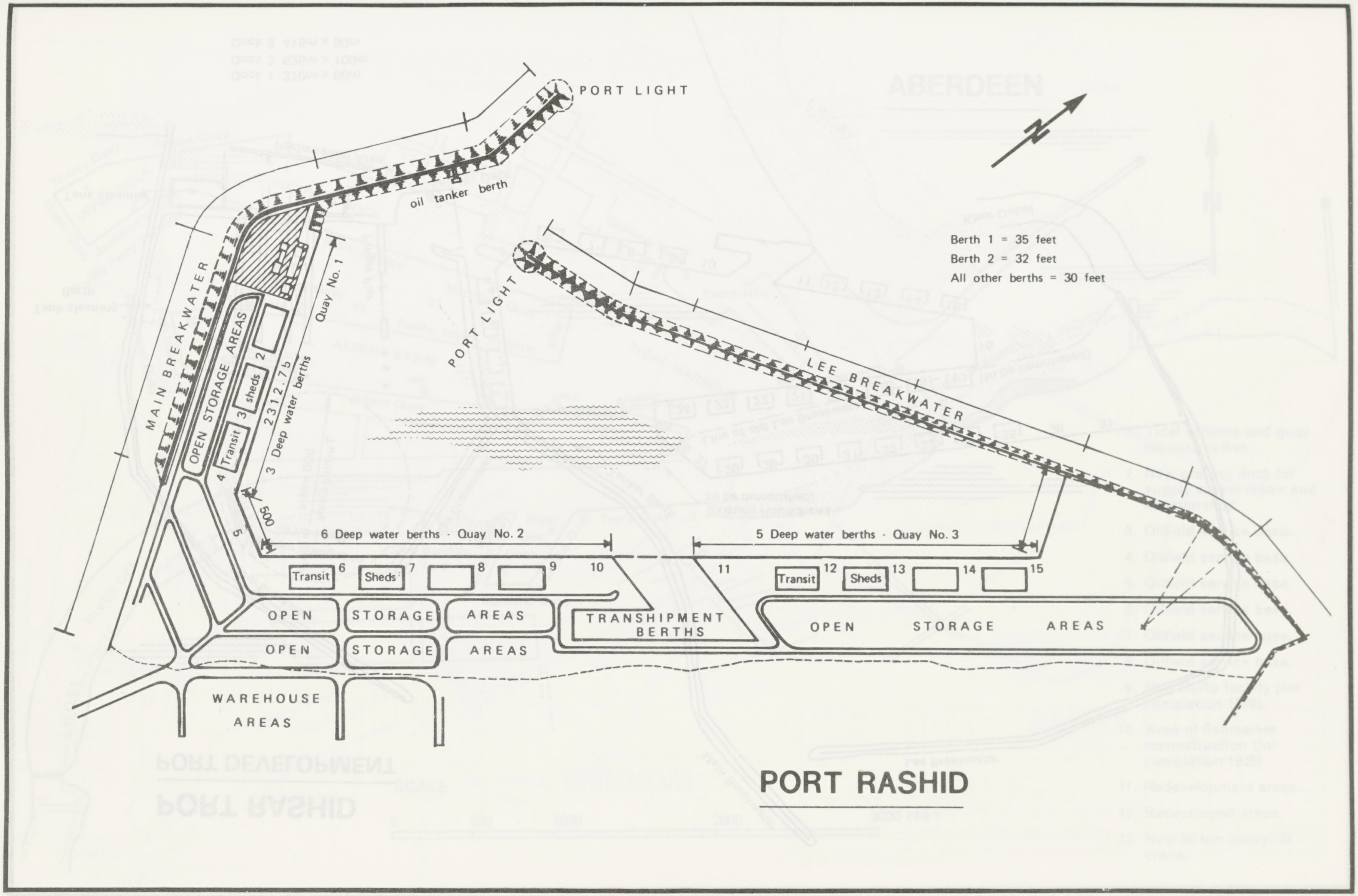
PORT LIGHT
oil tanker berth
Quay No. 1
PORT LIGHT
LEE BREAKWATER
MAIN BREAKWATER
OPEN STORAGE AREAS
Transit
sheds
2
3
4
2312.75
3 Deep water berths
500
5
6 Deep water berths · Quay No. 2
5 Deep water berths · Quay No. 3
6
7
8
9
10
11
12
13
14
15
Transit
Sheds
Transit
Sheds
OPEN STORAGE AREAS
OPEN STORAGE AREAS
TRANSHIPMENT BERTHS
OPEN STORAGE AREAS
WAREHOUSE AREAS
Berth 1 = 35 feet
Berth 2 = 32 feet
All other berths = 30 feet
N

PORT RASHID

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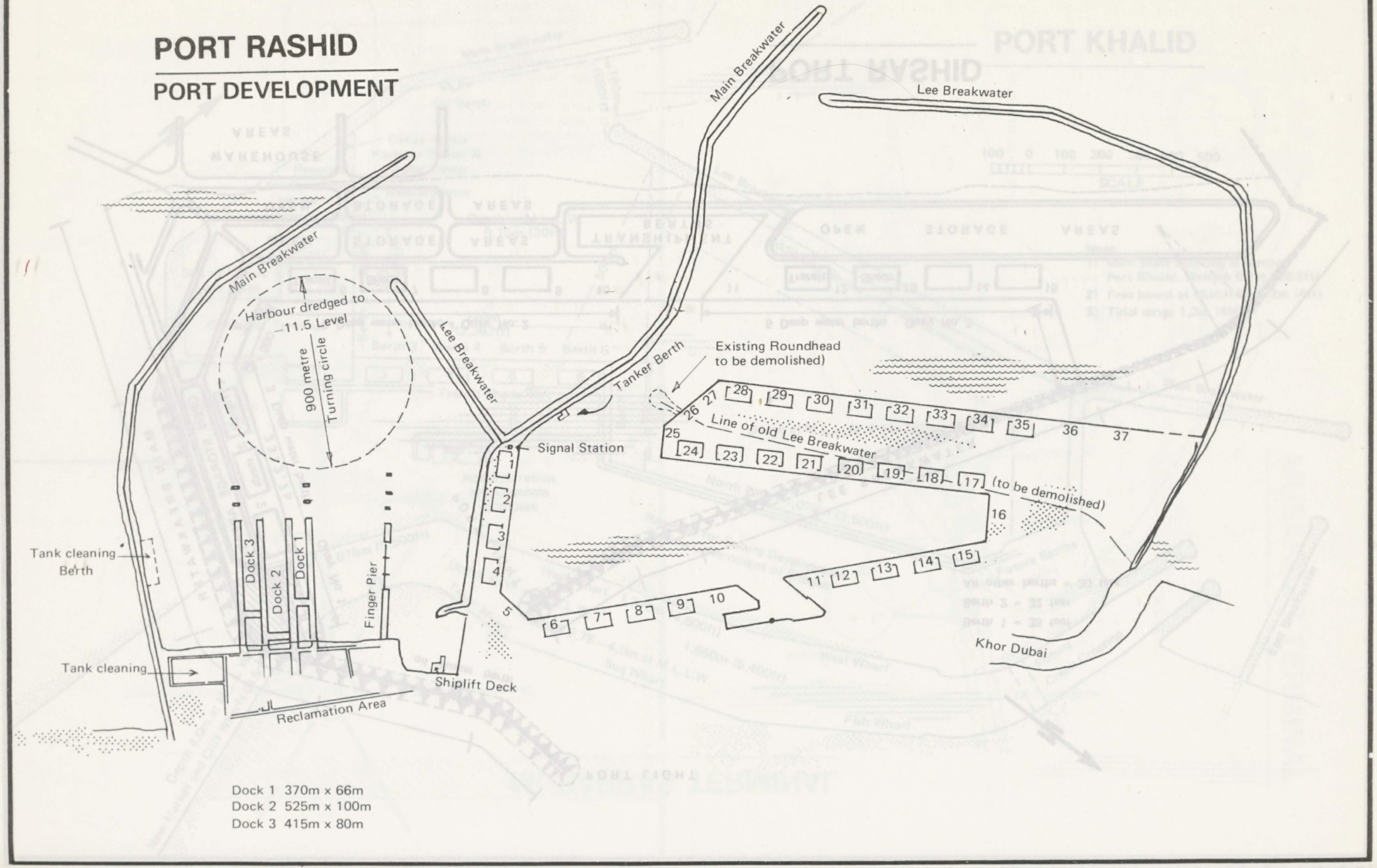
PORT RASHID

PORT DEVELOPMENT


Main Breakwater
Lee Breakwater
Main Breakwater
Lee Breakwater
Harbour dredged to -11.5 Level
900 metre Turning circle
Tanker Berth
Existing Roundhead to be demolished)
Signal Station
Line of old Lee Breakwater
(to be demolished)
Tank cleaning Berth
Tank cleaning
Dock 3
Dock 2
Dock 1
Finger Pier
Shiplift Deck
Reclamation Area
Khor Dubai
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37

Dock 1 370m x 66m
Dock 2 525m x 100m
Dock 3 415m x 80m

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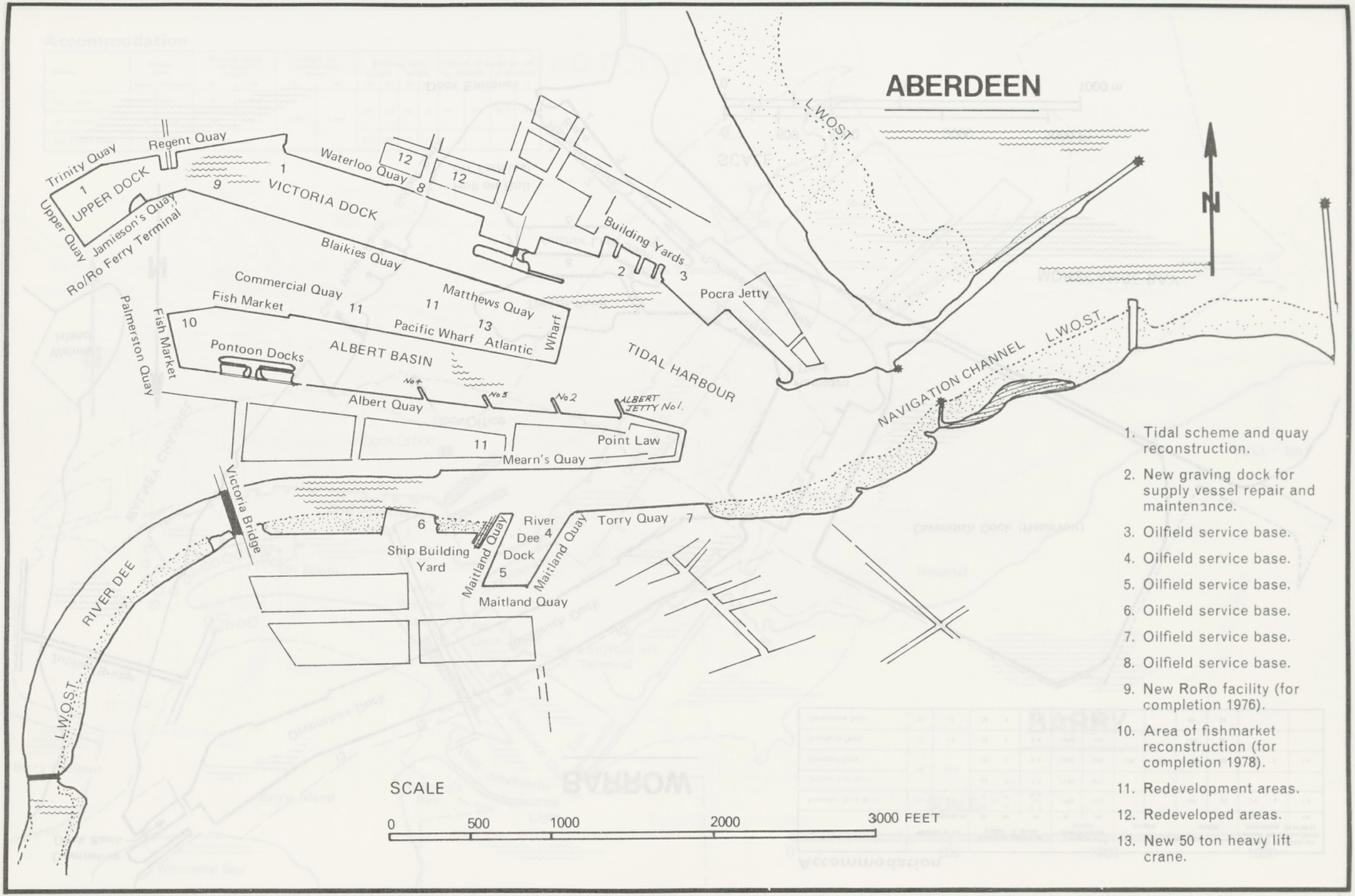
ABERDEEN
Trinity Quay
Regent Quay
UPPER DOCK
Upper Quay
Jamieson's Quay
Ro/Ro Ferry Terminal
VICTORIA DOCK
Waterloo Quay
Blaikies Quay
Building Yards
Pocra Jetty
Commercial Quay
Fish Market
Matthews Quay
Pacific Wharf
Atlantic Wharf
Palmerston Quay
Pontoon Docks
ALBERT BASIN
TIDAL HARBOUR
No 4
No 5
No 2
ALBERT JETTY No 1.
Albert Quay
Point Law
Mearn's Quay
NAVIGATION CHANNEL
L.W.O.S.T.
Victoria Bridge
RIVER DEE
Ship Building Yard
Maitland Quay
River Dee Dock
Torry Quay
SCALE
0
500
1000
2000
3000 FEET
1
2
3
4
5
6
7
8
9
10
11
12
13
N

1. Tidal scheme and quay reconstruction.
2. New graving dock for supply vessel repair and maintenance.
3. Oilfield service base.
4. Oilfield service base.
5. Oilfield service base.
6. Oilfield service base.
7. Oilfield service base.
8. Oilfield service base.
9. New RoRo facility (for completion 1976).
10. Area of fishmarket reconstruction (for completion 1978).
11. Redevelopment areas.
12. Redeveloped areas.
13. New 50 ton heavy lift crane.

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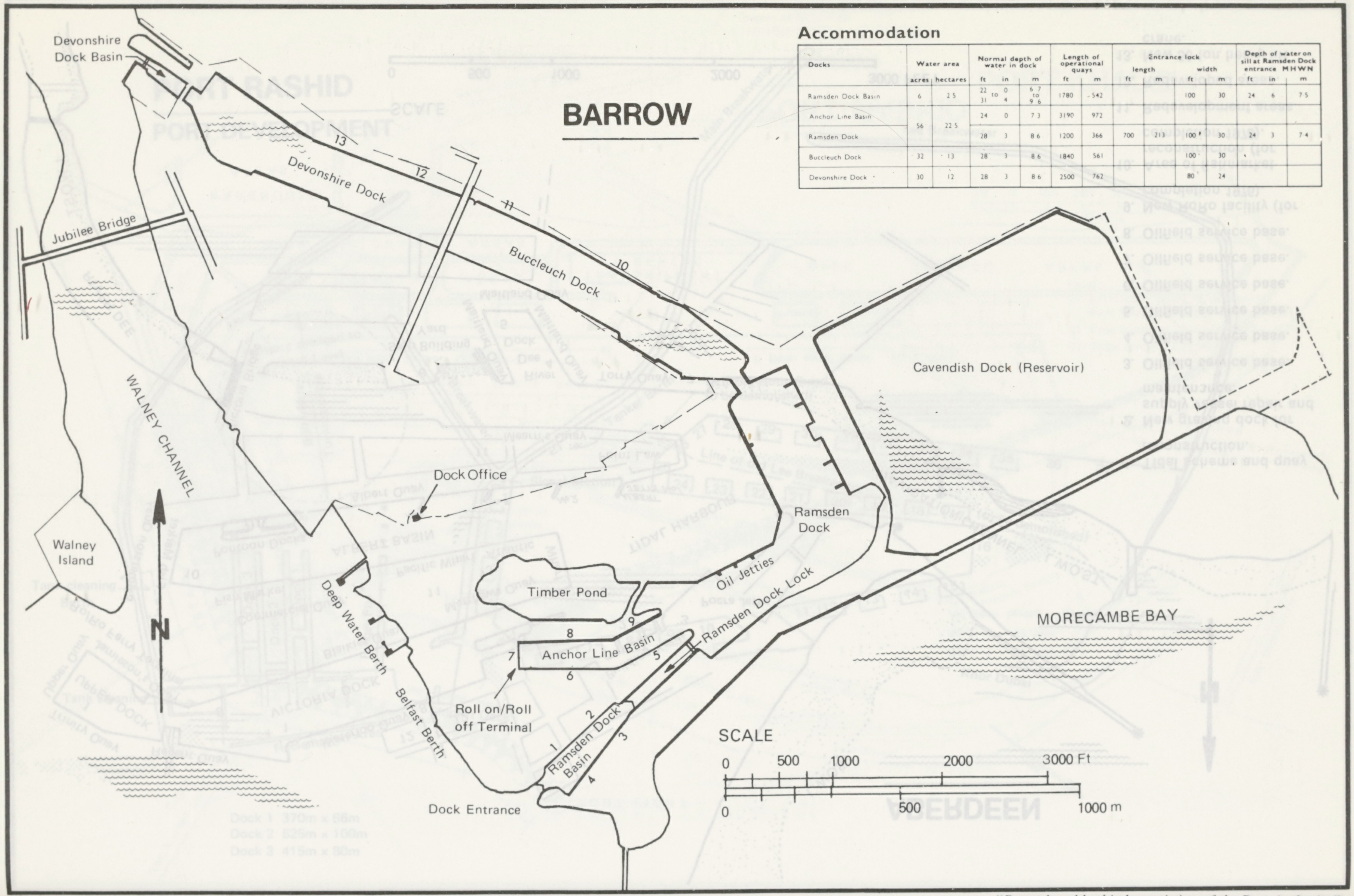
BARROW


Devonshire Dock Basin
13
12
11
10
Devonshire Dock
Buccleuch Dock
Jubilee Bridge
Walney Island
WALNEY CHANNEL
N
Dock Office
Cavendish Dock (Reservoir)
Ramsden Dock
Oil Jetties
Timber Pond
Deep Water Berth
Belfast Berth
8
9
7
Anchor Line Basin
5
6
Ramsden Dock Lock
Roll on/Roll off Terminal
2
1
Ramsden Dock Basin
3
4
Dock Entrance
MORECAMBE BAY
SCALE
0
500
1000
2000
3000 Ft
0
500
1000 m

Accommodation

Docks	Water area		Normal depth of water in dock			Length of operational quays		Entrance lock				Depth of water on sill at Ramsden Dock entrance MHWN		
								length		width				
	acres	hectares	ft	in	m	ft	m	ft	m	ft	m	ft	in	m
Ramsden Dock Basin	6	2.5	22 to 31	0 to 4	6.7 to 9.6	1780	542			100	30	24	6	7.5
Anchor Line Basin	56	22.5	24	0	7.3	3190	972							
Ramsden Dock			28	3	8.6	1200	366	700	213	100	30	24	3	7.4
Buccleuch Dock	32	13	28	3	8.6	1840	561			100	30			
Devonshire Dock	30	12	28	3	8.6	2500	762			80	24			

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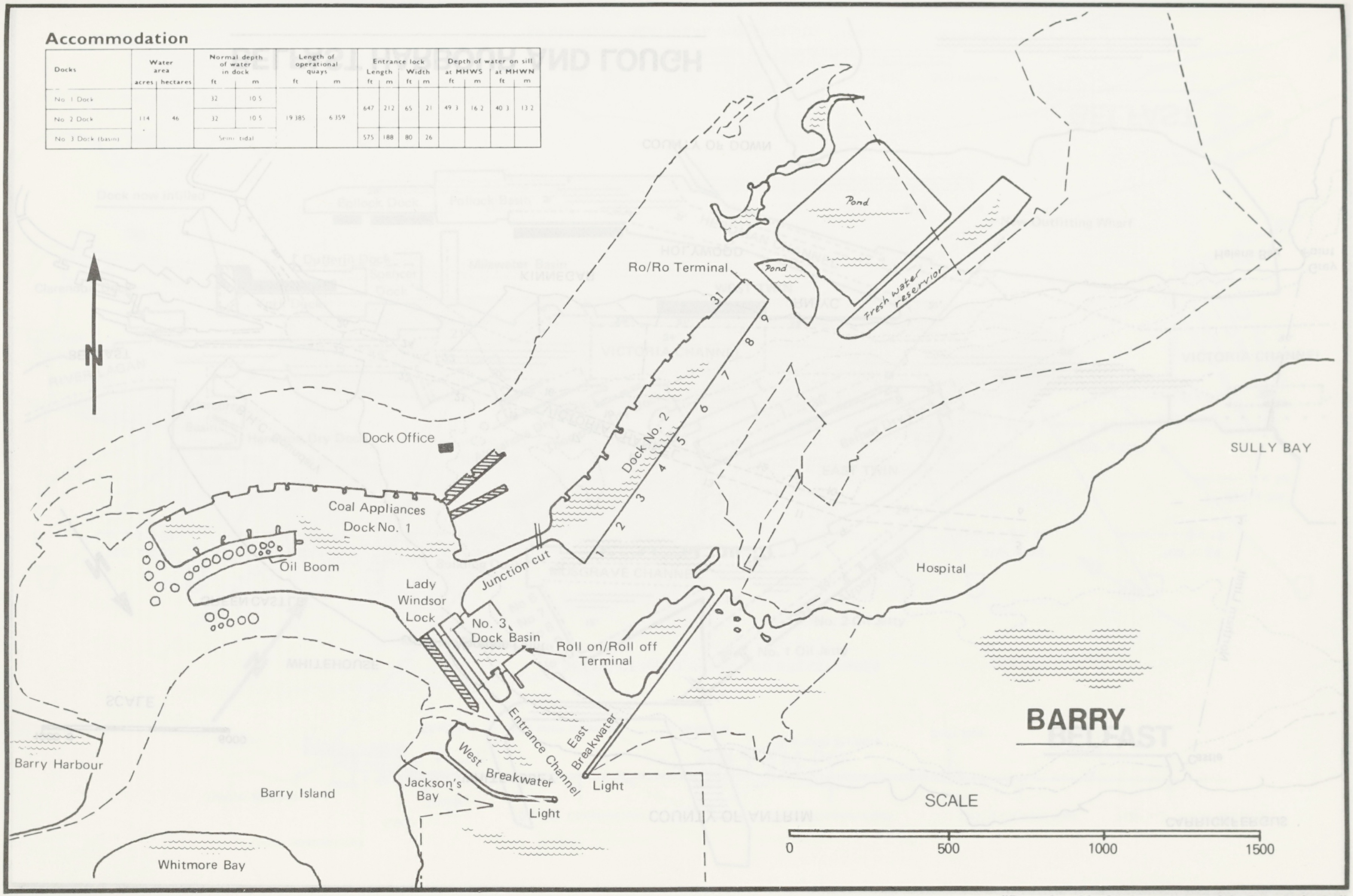
Accommodation

Docks	Water area		Normal depth of water in dock		Length of operational quays		Entrance lock				Depth of water on sill			
							Length		Width		at MHWS		at MHWN	
	acres	hectares	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m
No 1 Dock	114	46	32	10.5	19 385	6 359	647	212	65	21	49.3	16.2	40.3	13.2
No 2 Dock			32	10.5										
No 3 Dock (basin)			Semi tidal				575	188	80	26				


N
Dock Office
Ro/Ro Terminal
Pond
Pond
Fresh water reservior
31
9
8
7
6
5
4
3
2
Dock No. 2
Coal Appliances
Dock No. 1
Oil Boom
Junction cut
Lady Windsor Lock
No. 3 Dock Basin
Roll on/Roll off Terminal
Entrance Channel
East Breakwater
West Breakwater
Light
Light
Jackson's Bay
Barry Harbour
Barry Island
Whitmore Bay
Hospital
SULLY BAY
SCALE
0
500
1000
1500

BARRY

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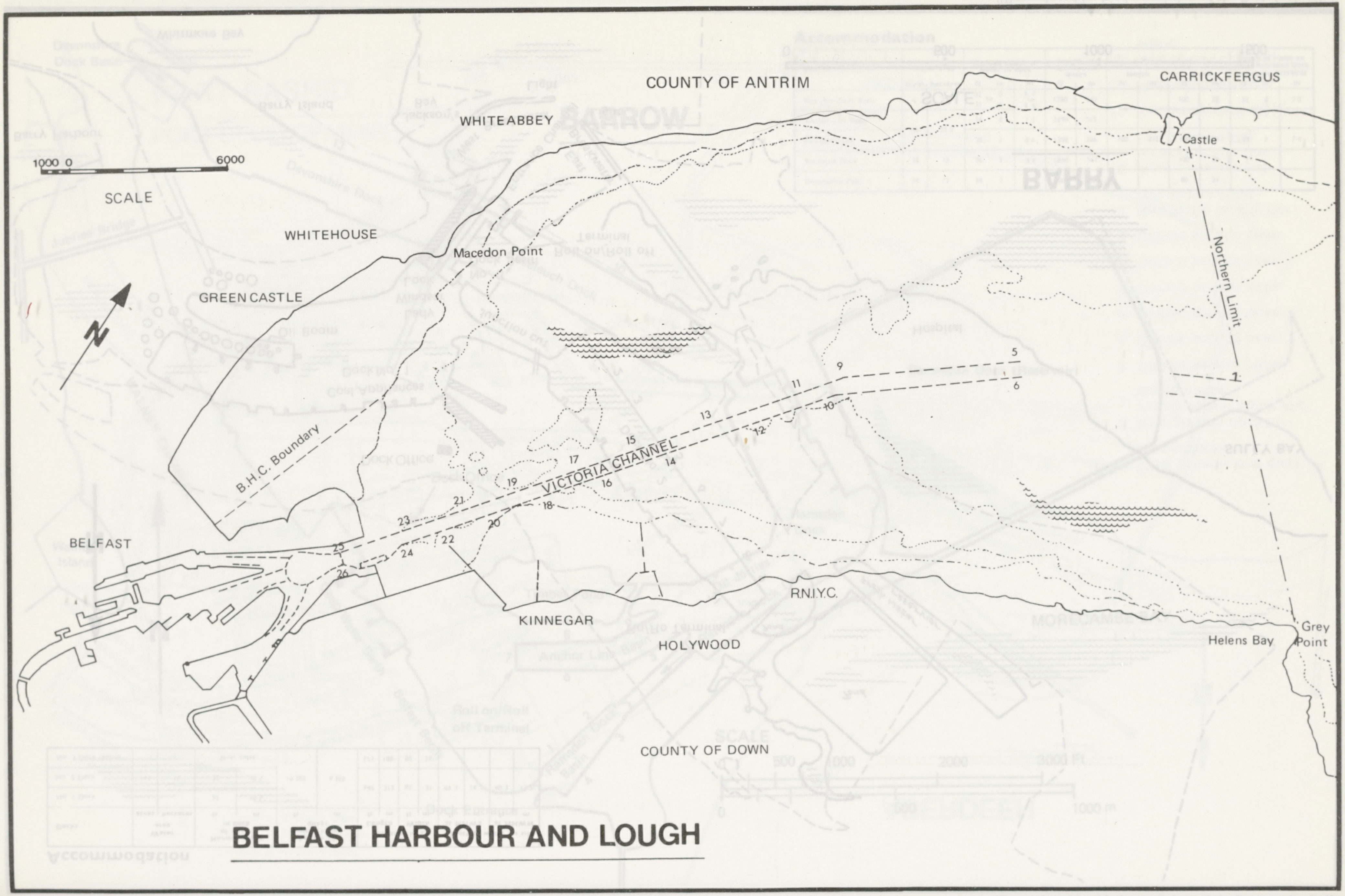
COUNTY OF ANTRIM
CARRICKFERGUS
Castle
WHITEABBEY
1000 0 6000
SCALE
WHITEHOUSE
Macedon Point
GREENCASTLE
N
Northern Limit
B.H.C. Boundary
VICTORIA CHANNEL
1
5
6
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
BELFAST
KINNEGAR
HOLYWOOD
R.N.I.Y.C.
Helens Bay
Grey Point
COUNTY OF DOWN

BELFAST HARBOUR AND LOUGH

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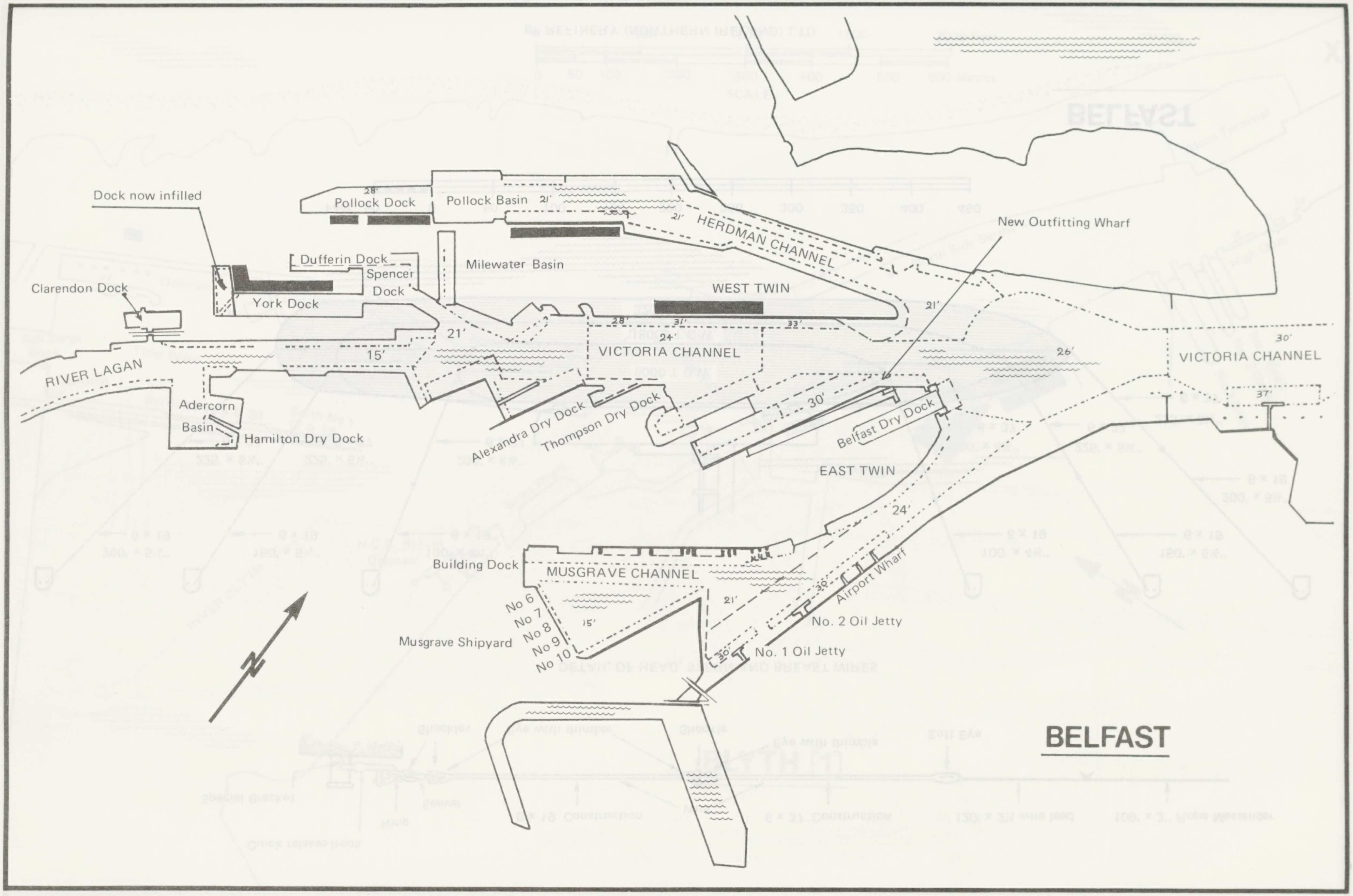
BELFAST
Dock now infilled
Pollock Dock
28′
Pollock Basin
21′
HERDMAN CHANNEL
New Outfitting Wharf
Dufferin Dock
Spencer Dock
Milewater Basin
Clarendon Dock
York Dock
WEST TWIN
21′
28′
31′
33′
24′
15′
VICTORIA CHANNEL
26′
30′
VICTORIA CHANNEL
37′
RIVER LAGAN
Adercorn Basin
Hamilton Dry Dock
Alexandra Dry Dock
Thompson Dry Dock
30′
Belfast Dry Dock
EAST TWIN
24′
Building Dock
MUSGRAVE CHANNEL
21′
30′
Airport Wharf
No 6
No 7
No 8
No 9
No 10
15′
Musgrave Shipyard
No. 2 Oil Jetty
30′
No. 1 Oil Jetty
N

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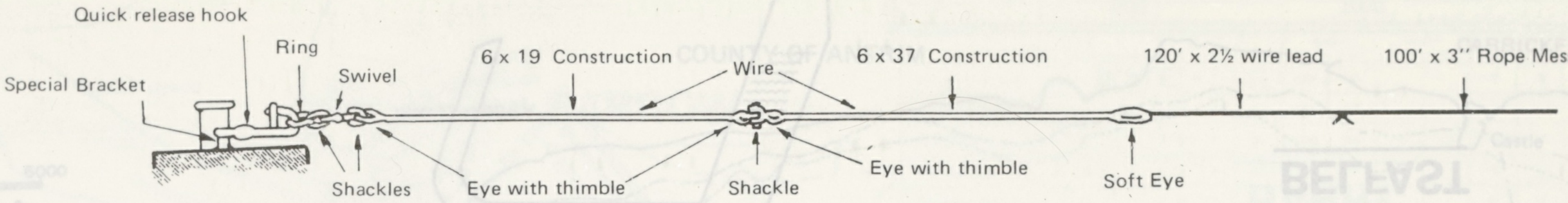
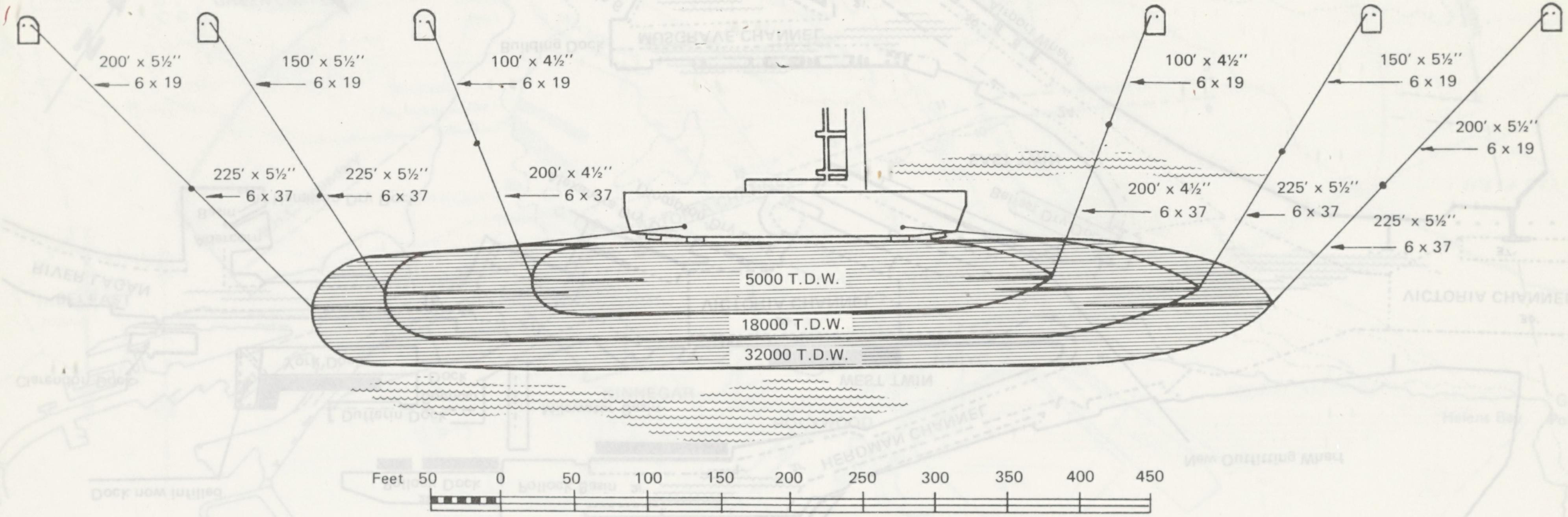

Quick release hook
Ring
Swivel
Special Bracket
6 x 19 Construction
Wire
6 x 37 Construction
120′ x 2½ wire lead
100′ x 3″ Rope Messenger
Shackles
Eye with thimble
Shackle
Eye with thimble
Soft Eye

DETAIL OF HEAD, STERN AND BREAST WIRES


200′ x 5½″
6 x 19
150′ x 5½″
6 x 19
100′ x 4½″
6 x 19
100′ x 4½″
6 x 19
150′ x 5½″
6 x 19
200′ x 5½″
6 x 19
225′ x 5½″
6 x 37
225′ x 5½″
6 x 37
200′ x 4½″
6 x 37
200′ x 4½″
6 x 37
225′ x 5½″
6 x 37
225′ x 5½″
6 x 37
5000 T.D.W.
18000 T.D.W.
32000 T.D.W.
Feet 50
0
50
100
150
200
250
300
350
400
450

BELFAST

BP REFINERY (NORTHERN IRELAND) LTD.

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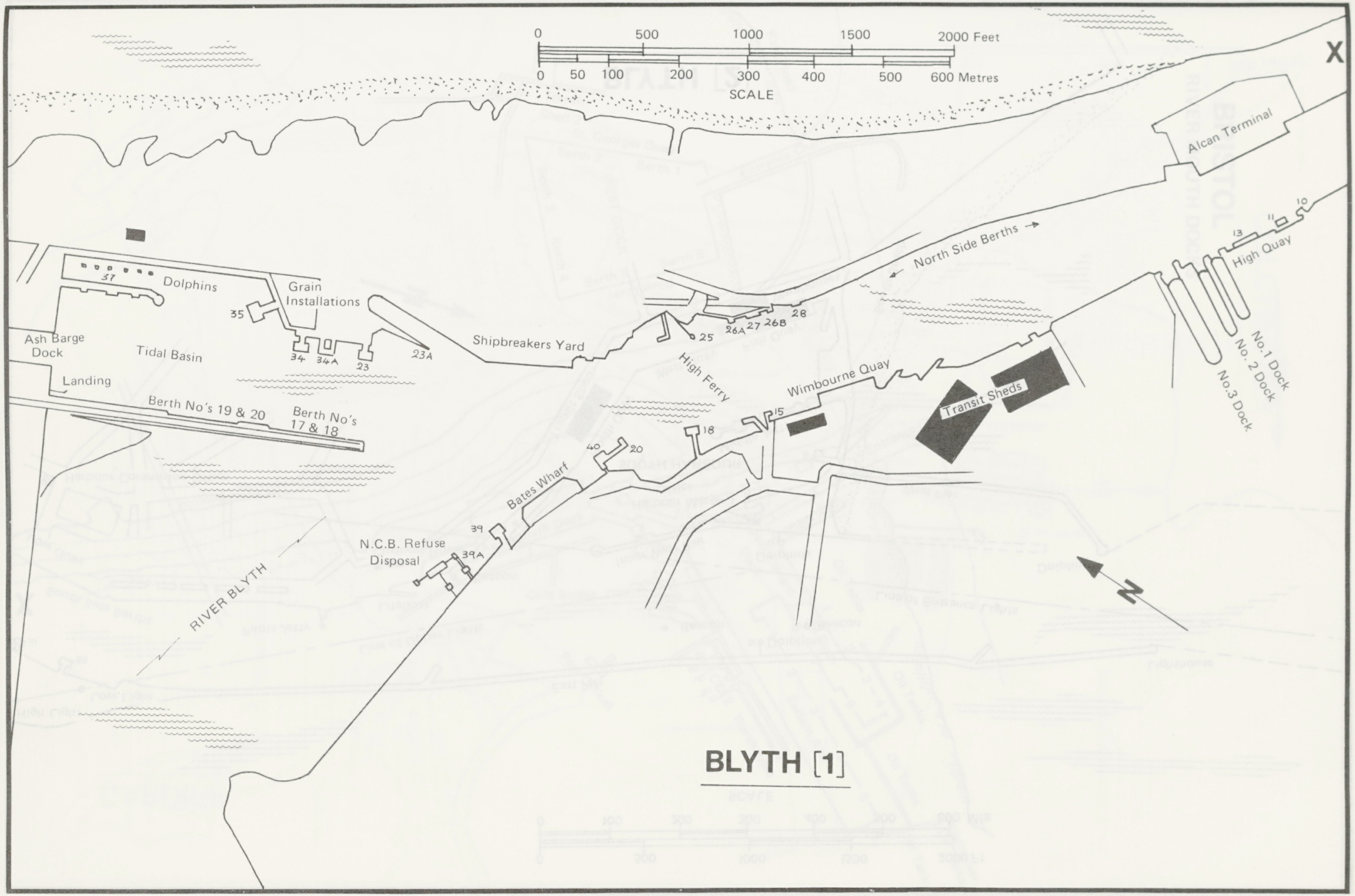
X
0
500
1000
1500
2000 Feet
0
50
100
200
300
400
500
600 Metres
SCALE
Alcan Terminal
North Side Berths →
10
11
13
High Quay
No.1 Dock
No.2 Dock
No.3 Dock
Transit Sheds
Wimbourne Quay
15
18
High Ferry
25
26A
27
26B
28
Shipbreakers Yard
37
Dolphins
Grain Installations
35
34
34A
23
23A
Ash Barge Dock
Tidal Basin
Landing
Berth No's 19 & 20
Berth No's 17 & 18
40
20
Bates Wharf
39
39A
N.C.B. Refuse Disposal
RIVER BLYTH
N

BLYTH [1]

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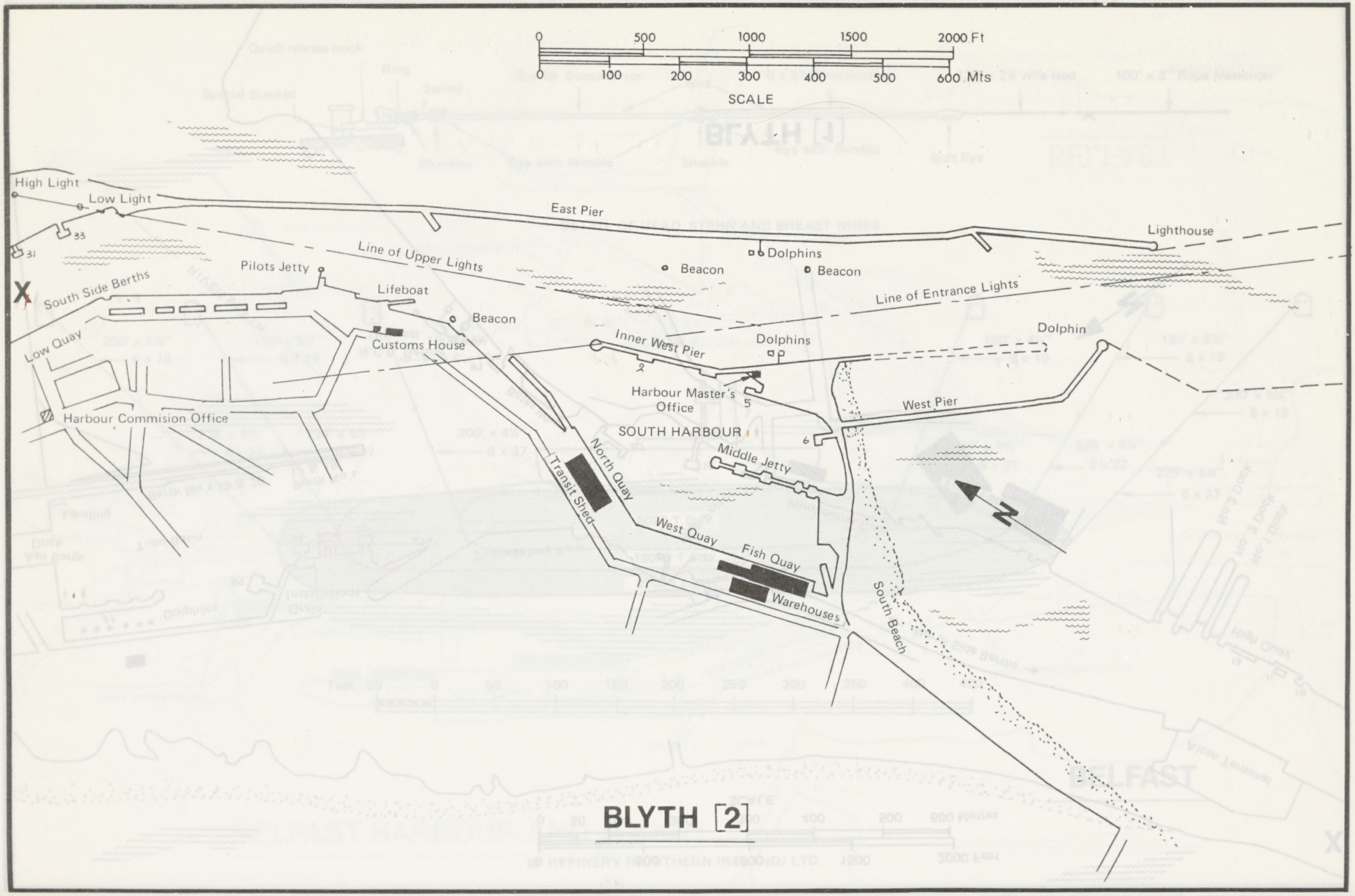
0
500
1000
1500
2000 Ft
0
100
200
300
400
500
600 Mts
SCALE
High Light
Low Light
33
31
East Pier
Lighthouse
Line of Upper Lights
Dolphins
Beacon
Beacon
Pilots Jetty
X
South Side Berths
Lifeboat
Beacon
Line of Entrance Lights
Dolphin
Low Quay
Customs House
Inner West Pier
Dolphins
Harbour Master's Office
5
West Pier
Harbour Commision Office
SOUTH HARBOUR
6
North Quay
Transit Shed
Middle Jetty
N
West Quay
Fish Quay
Warehouses
South Beach

BLYTH [2]

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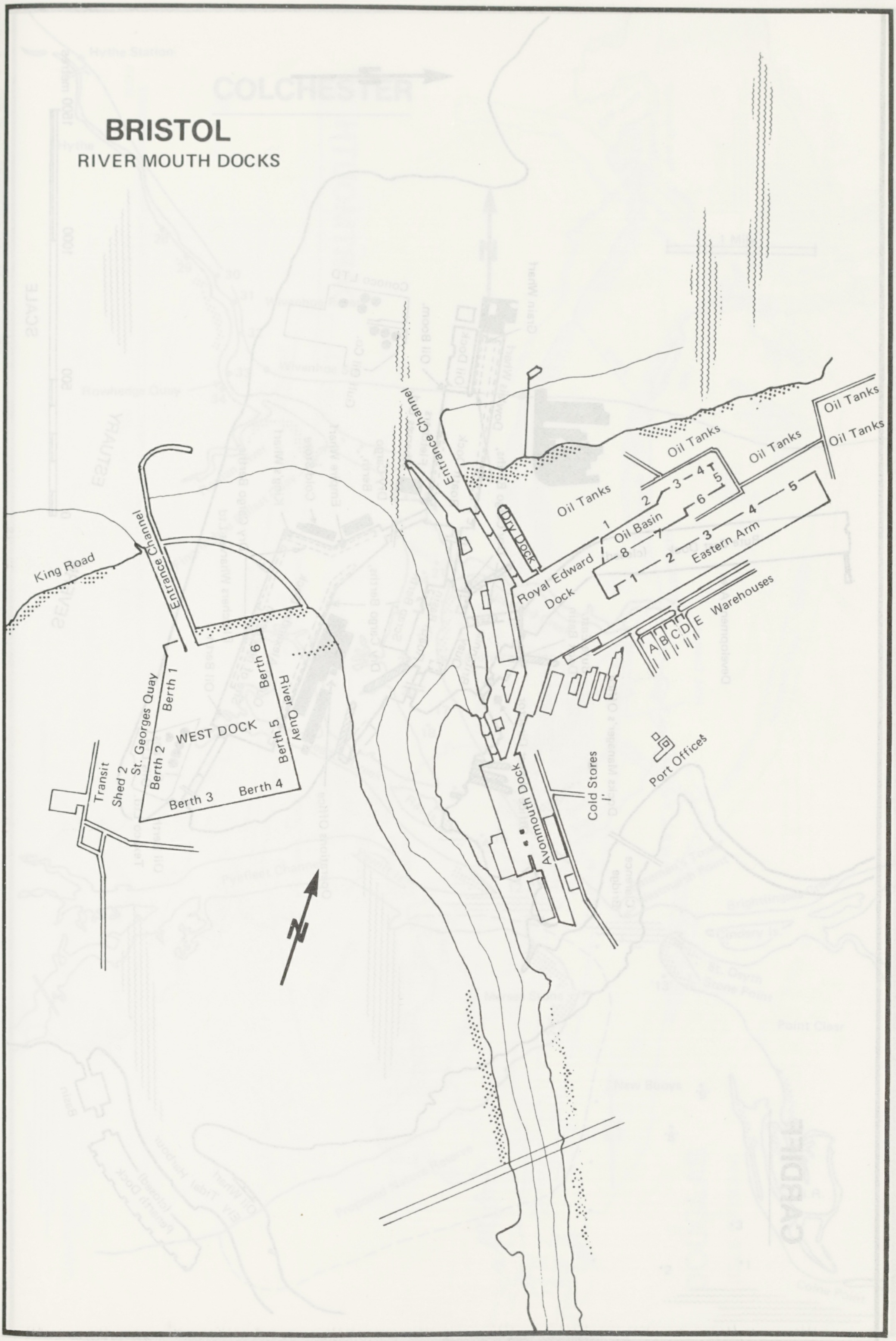
BRISTOL

RIVER MOUTH DOCKS


King Road
Entrance Channel
St. Georges Quay
Berth 1
Berth 2
WEST DOCK
Berth 3
Berth 4
Berth 5
Berth 6
River Quay
Transit Shed 2
Entrance Channel
Dry Dock
Royal Edward Dock
Oil Basin
1
2
3
4
5
6
7
8
Oil Tanks
Oil Tanks
Oil Tanks
Oil Tanks
Oil Tanks
Eastern Arm
1
2
3
4
5
Warehouses
A
B
C
D
E
Port Offices
Cold Stores
Avonmouth Dock
N

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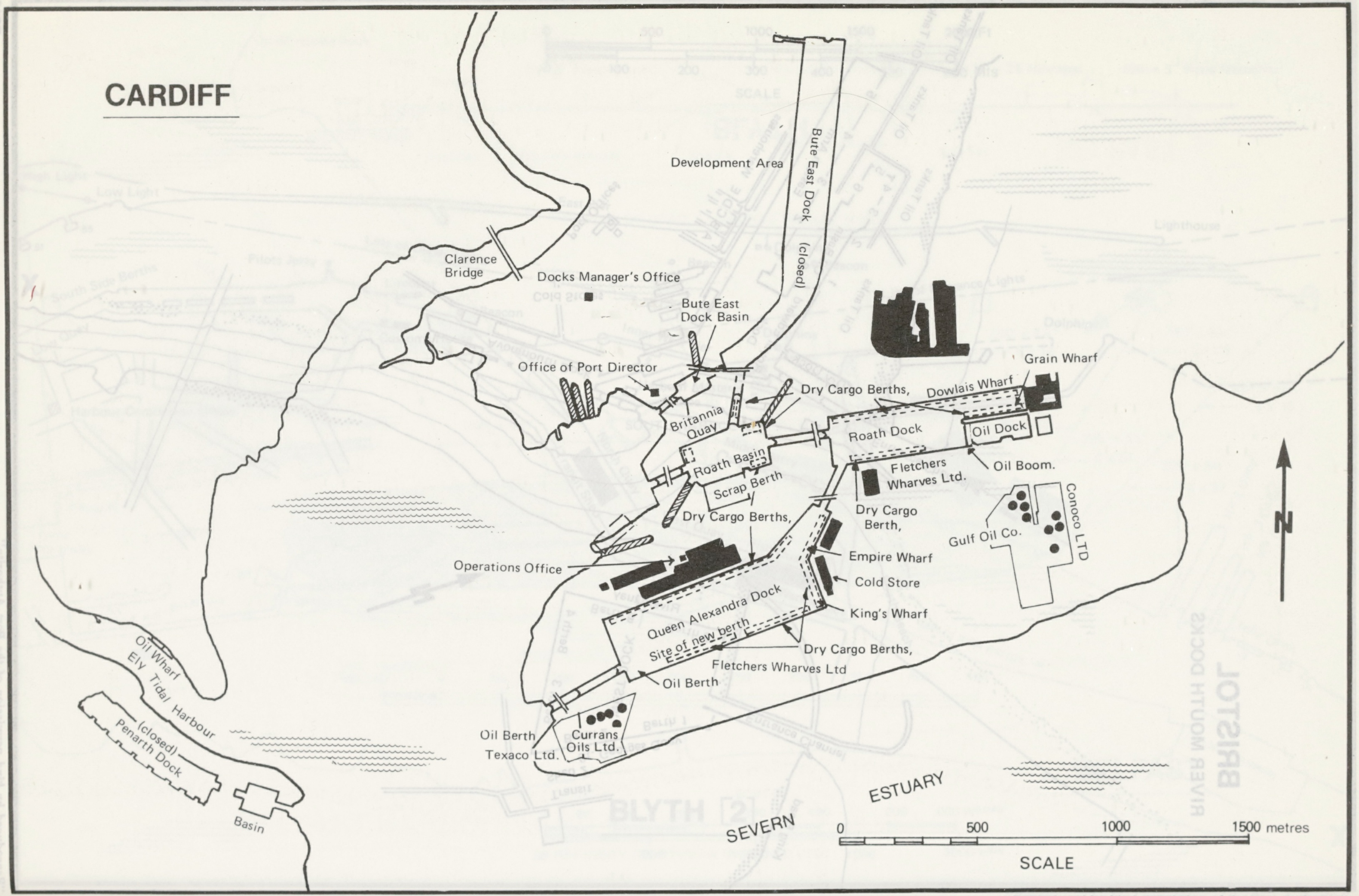
CARDIFF


Development Area
Bute East Dock (closed)
Clarence Bridge
Docks Manager's Office
Bute East Dock Basin
Office of Port Director
Britannia Quay
Dry Cargo Berths,
Dowlais Wharf
Grain Wharf
Roath Dock
Oil Dock
Roath Basin
Scrap Berth
Fletchers Wharves Ltd.
Oil Boom.
Dry Cargo Berths,
Dry Cargo Berth,
Conoco LTD
Gulf Oil Co.
Operations Office
Empire Wharf
Cold Store
Queen Alexandra Dock
King's Wharf
Site of new berth
Dry Cargo Berths,
Fletchers Wharves Ltd
Oil Berth
Oil Wharf
Ely Tidal Harbour
(closed)
Penarth Dock
Basin
Oil Berth
Texaco Ltd.
Currans Oils Ltd.
SEVERN ESTUARY
0
500
1000
1500 metres
SCALE
N

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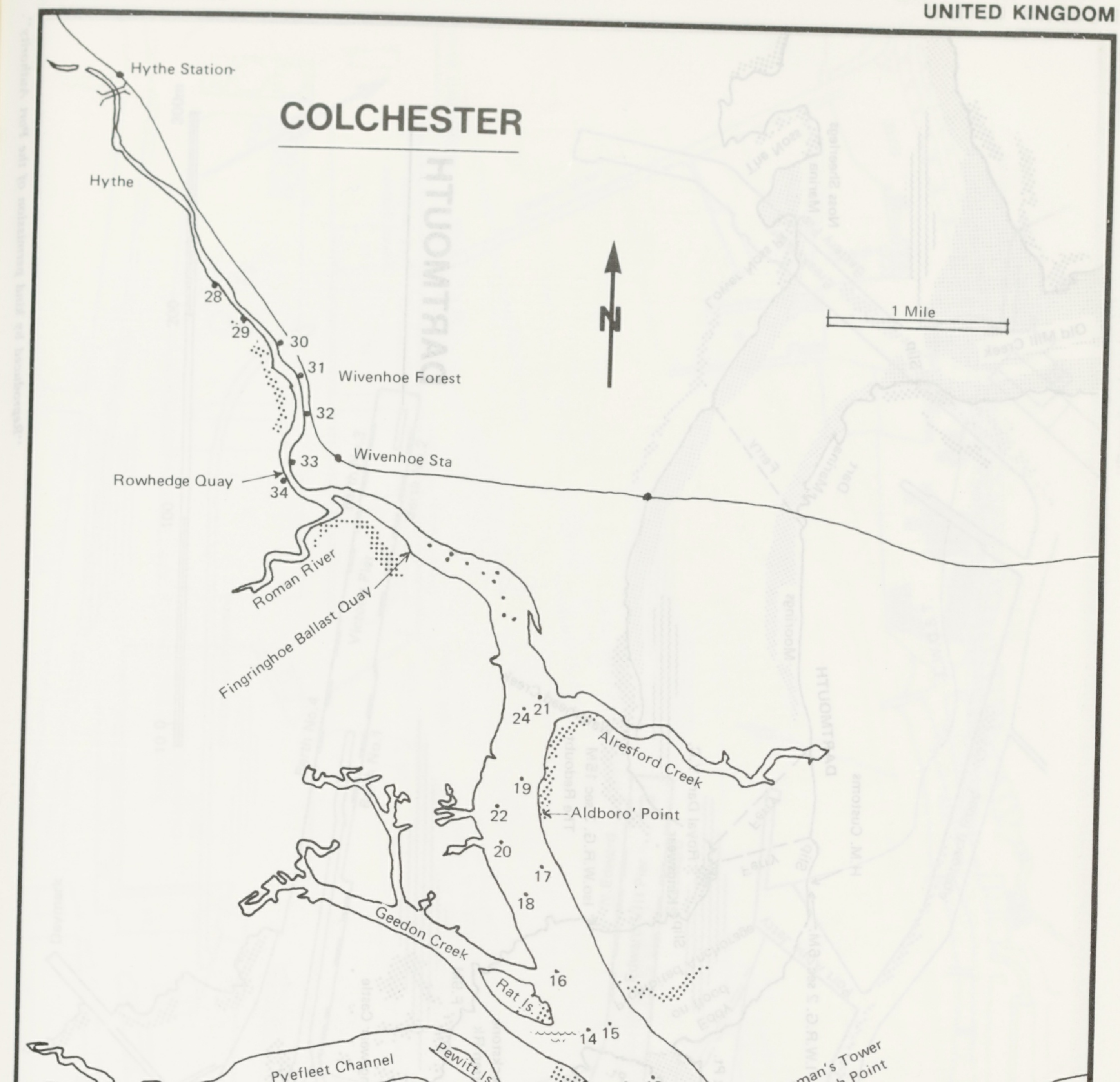
COLCHESTER


Hythe Station
Hythe
28
29
30
31
Wivenhoe Forest
32
33
Wivenhoe Sta
Rowhedge Quay
34
Roman River
Fingringhoe Ballast Quay
N
1 Mile
21
24
Alresford Creek
19
22
Aldboro' Point
20
17
18
Geedon Creek
16
Rat Is.
14
15
Pyefleet Channel
Pewitt Is.
12
13
Bateman's Tower
Westmarsh Point
Brightlingsea Creek
Cindery Is.
'13'
St. Osyth
Stone Point
Mersea Stone
Point Clear
New Buoys
'9'
'8'
Proposed Nature Reserve
N.R.
3
2
1
Colne Point

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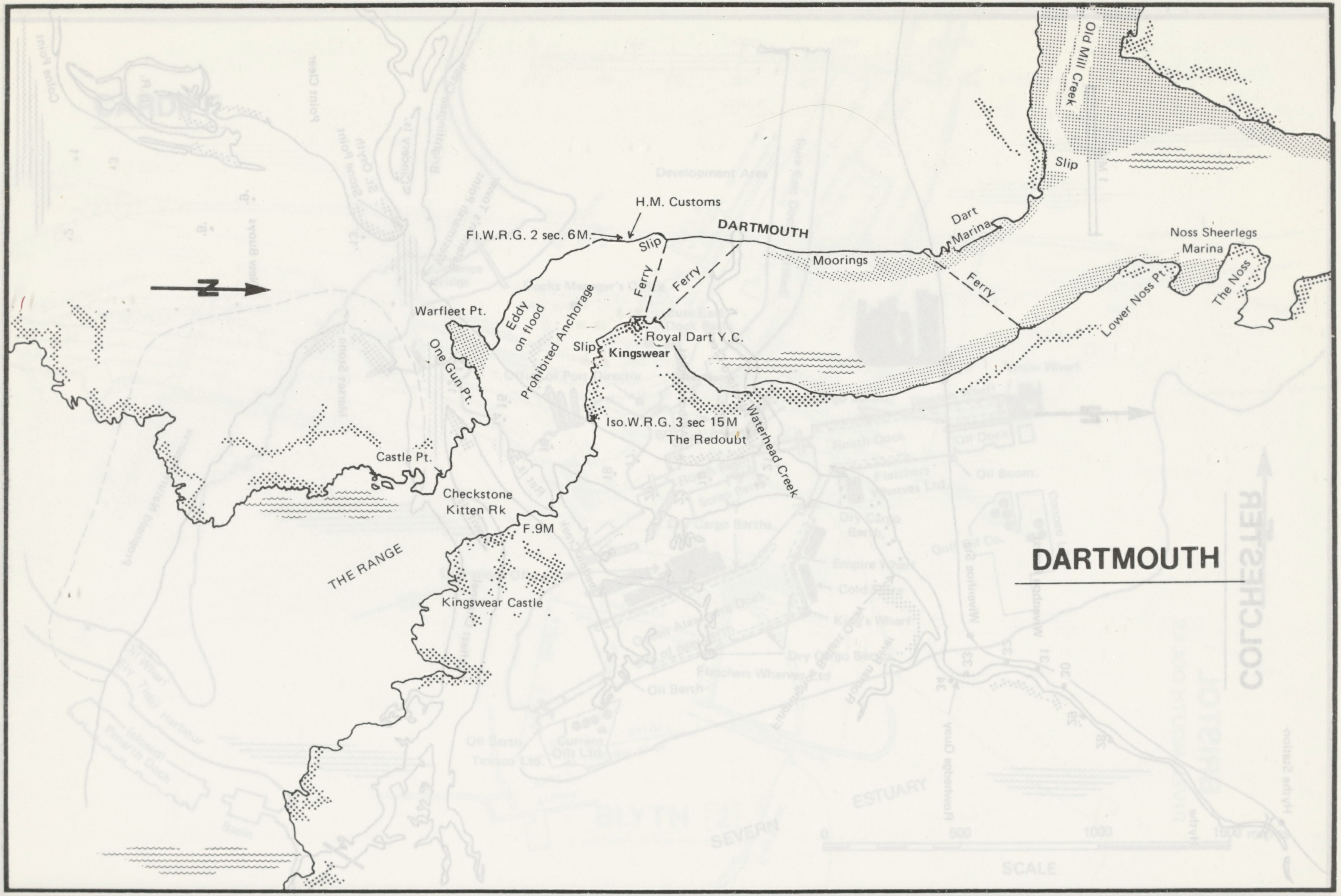
DARTMOUTH
N
H.M. Customs
Fl.W.R.G. 2 sec. 6M.
DARTMOUTH
Slip
Ferry
Ferry
Moorings
Dart Marina
Ferry
Old Mill Creek
Slip
Noss Sheerlegs Marina
The Noss
Lower Noss Pt.
Warfleet Pt.
Eddy on flood
Prohibited Anchorage
One Gun Pt.
Royal Dart Y.C.
Slip
Kingswear
Iso.W.R.G. 3 sec 15M
The Redoubt
Waterhead Creek
Castle Pt.
Checkstone
Kitten Rk
F.9M
THE RANGE
Kingswear Castle

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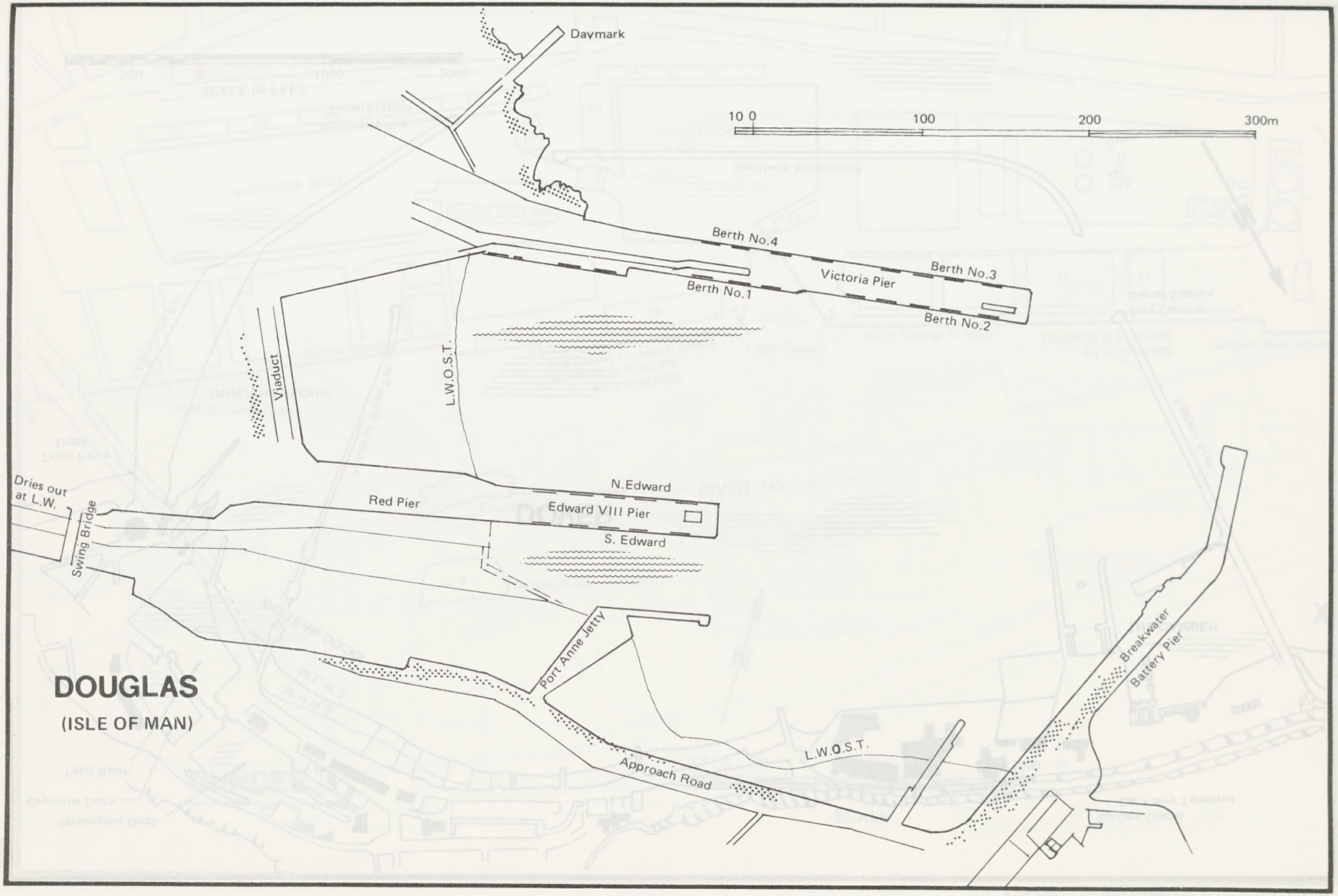

DOUGLAS

(ISLE OF MAN)

Daymark
10 0
100
200
300m
Berth No.4
Berth No.3
Victoria Pier
Berth No.1
Berth No.2
Viaduct
L.W.O.S.T.
Dries out at L.W.
Swing Bridge
Red Pier
N.Edward
Edward VIII Pier
S. Edward
Port Anne Jetty
Breakwater
Battery Pier
L.W.O.S.T.
Approach Road

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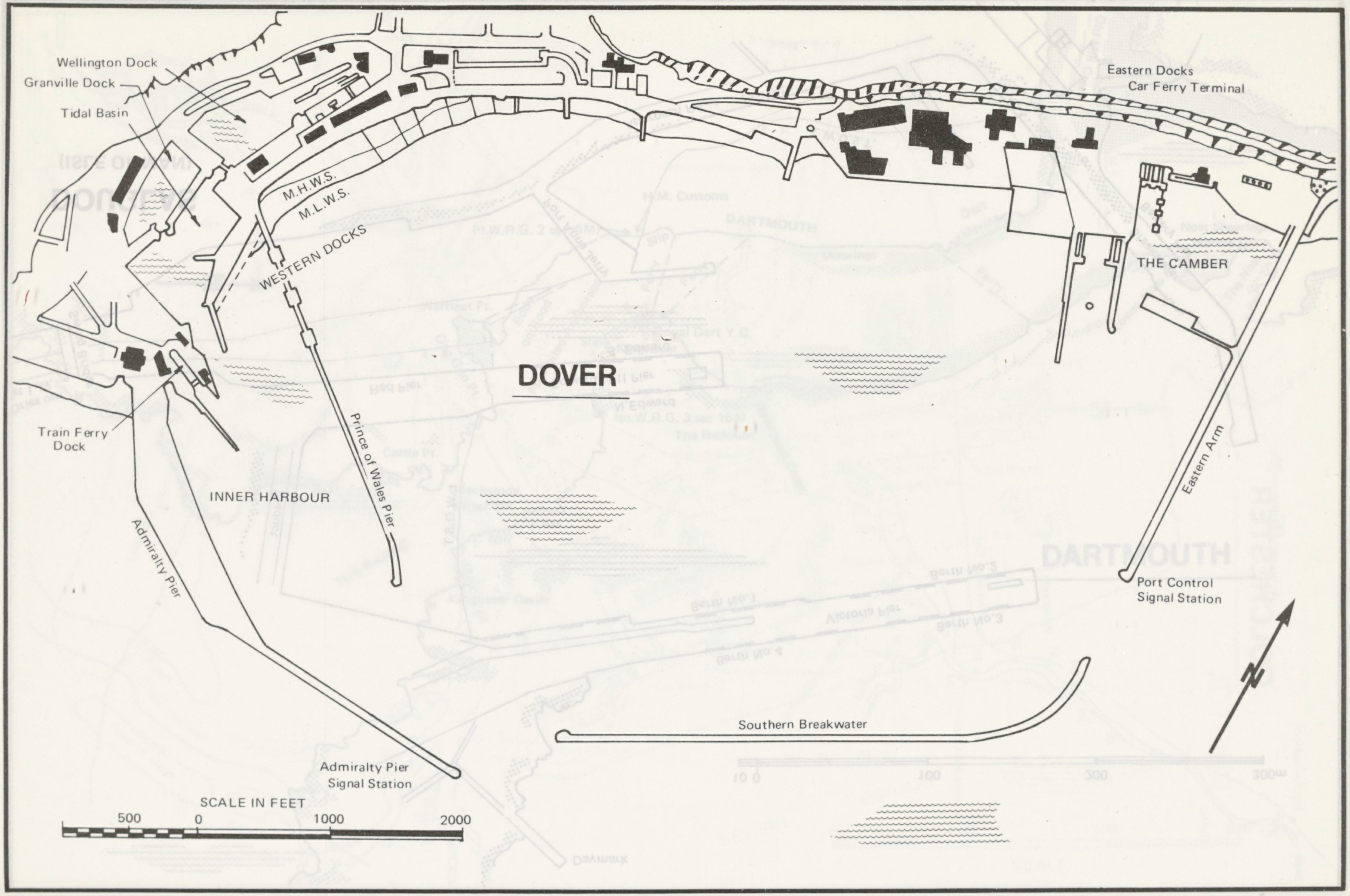
DOVER
Wellington Dock
Granville Dock
Tidal Basin
M.H.W.S.
M.L.W.S.
WESTERN DOCKS
Eastern Docks
Car Ferry Terminal
THE CAMBER
Train Ferry
Dock
INNER HARBOUR
Prince of Wales Pier
Admiralty Pier
Eastern Arm
Port Control
Signal Station
Southern Breakwater
Admiralty Pier
Signal Station
SCALE IN FEET
500
0
1000
2000

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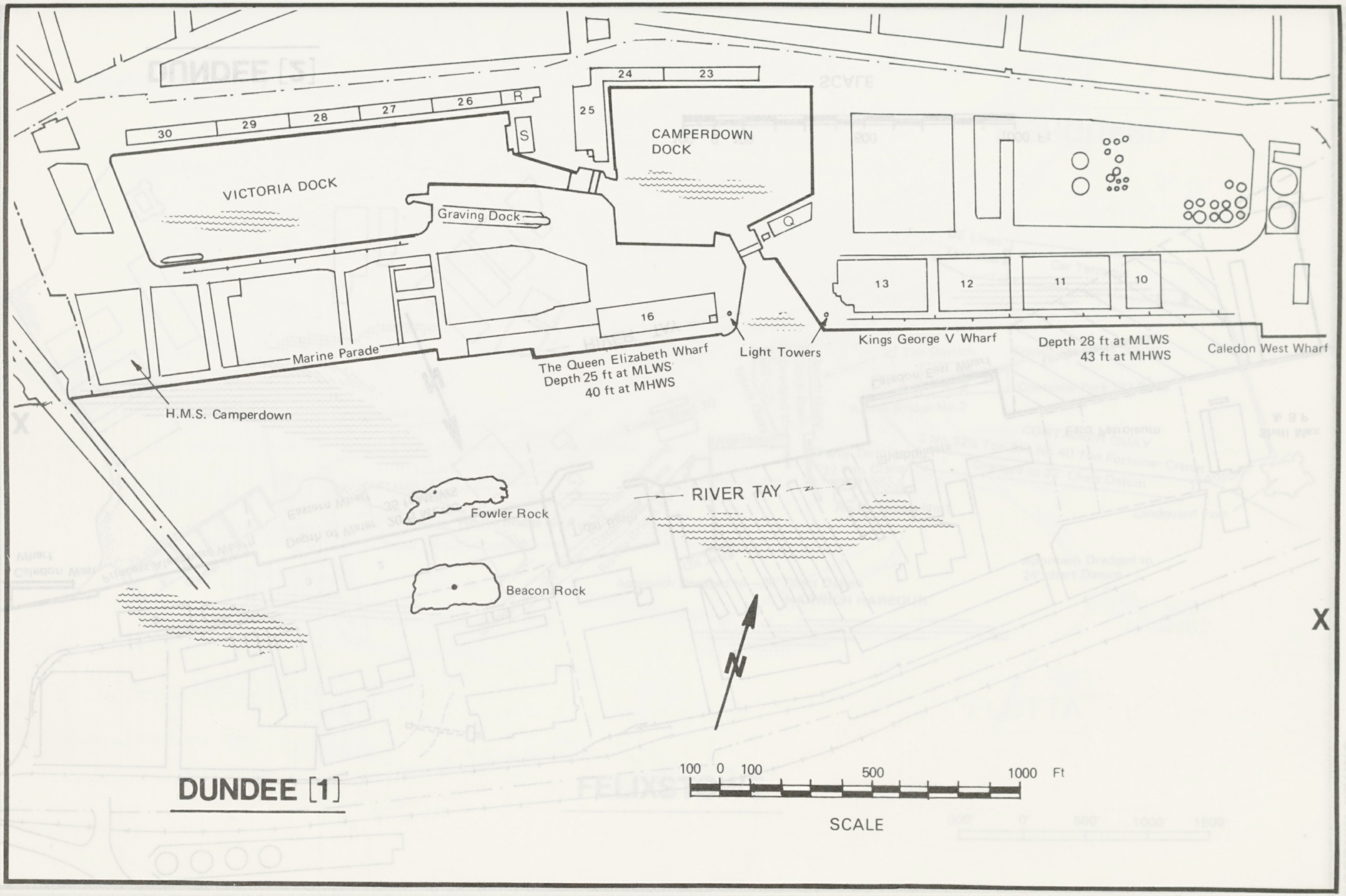
30
29
28
27
26
R
S
24
23
25
CAMPERDOWN DOCK
VICTORIA DOCK
Graving Dock
Q
13
12
11
10
16
Marine Parade
The Queen Elizabeth Wharf
Depth 25 ft at MLWS
40 ft at MHWS
Light Towers
Kings George V Wharf
Depth 28 ft at MLWS
43 ft at MHWS
Caledon West Wharf
H.M.S. Camperdown
X
RIVER TAY
Fowler Rock
Beacon Rock
N
X
100 0 100 500 1000 Ft
SCALE

DUNDEE [1]

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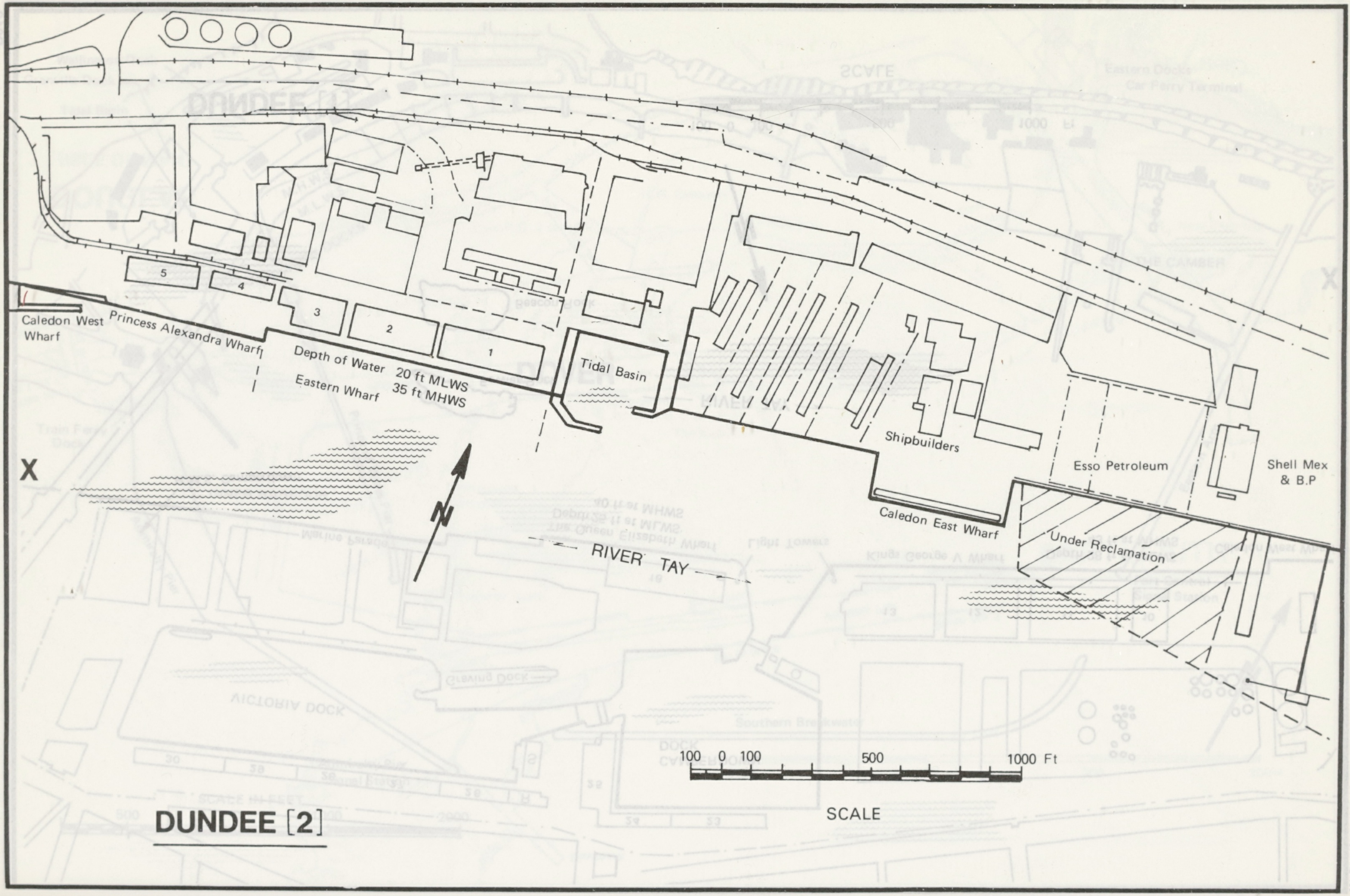
5
4
3
2
1
Caledon West Wharf
Princess Alexandra Wharf
Depth of Water 20 ft MLWS
35 ft MHWS
Eastern Wharf
Tidal Basin
Shipbuilders
Esso Petroleum
Shell Mex & B.P
Caledon East Wharf
Under Reclamation
RIVER TAY
N
X
X
100 0 100 500 1000 Ft
SCALE

DUNDEE [2]

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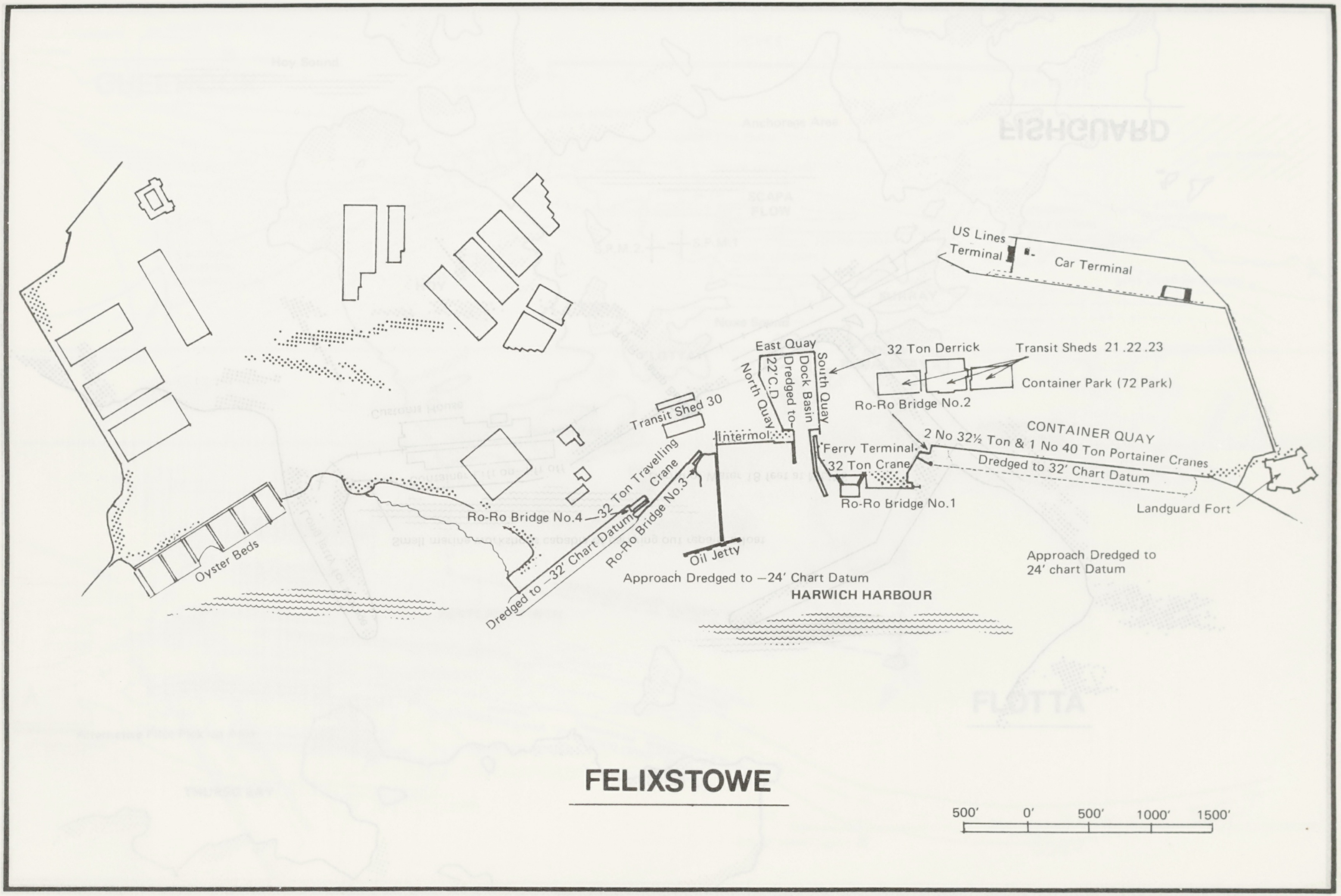
US Lines
Terminal
Car Terminal
East Quay
North Quay
Dock Basin
Dredged to
22'C.D.
South Quay
32 Ton Derrick
Transit Sheds 21.22.23
Container Park (72 Park)
Ro-Ro Bridge No.2
CONTAINER QUAY
2 No 32½ Ton & 1 No 40 Ton Portainer Cranes
Dredged to 32' Chart Datum
Ferry Terminal
32 Ton Crane
Ro-Ro Bridge No.1
Landguard Fort
Transit Shed 30
Intermol
32 Ton Travelling
Crane
Ro-Ro Bridge No.4
Ro-Ro Bridge No.3
Dredged to –32' Chart Datum
Oil Jetty
Oyster Beds
Approach Dredged to –24' Chart Datum
HARWICH HARBOUR
Approach Dredged to
24' chart Datum
500'
0'
500'
1000'
1500'

FELIXSTOWE

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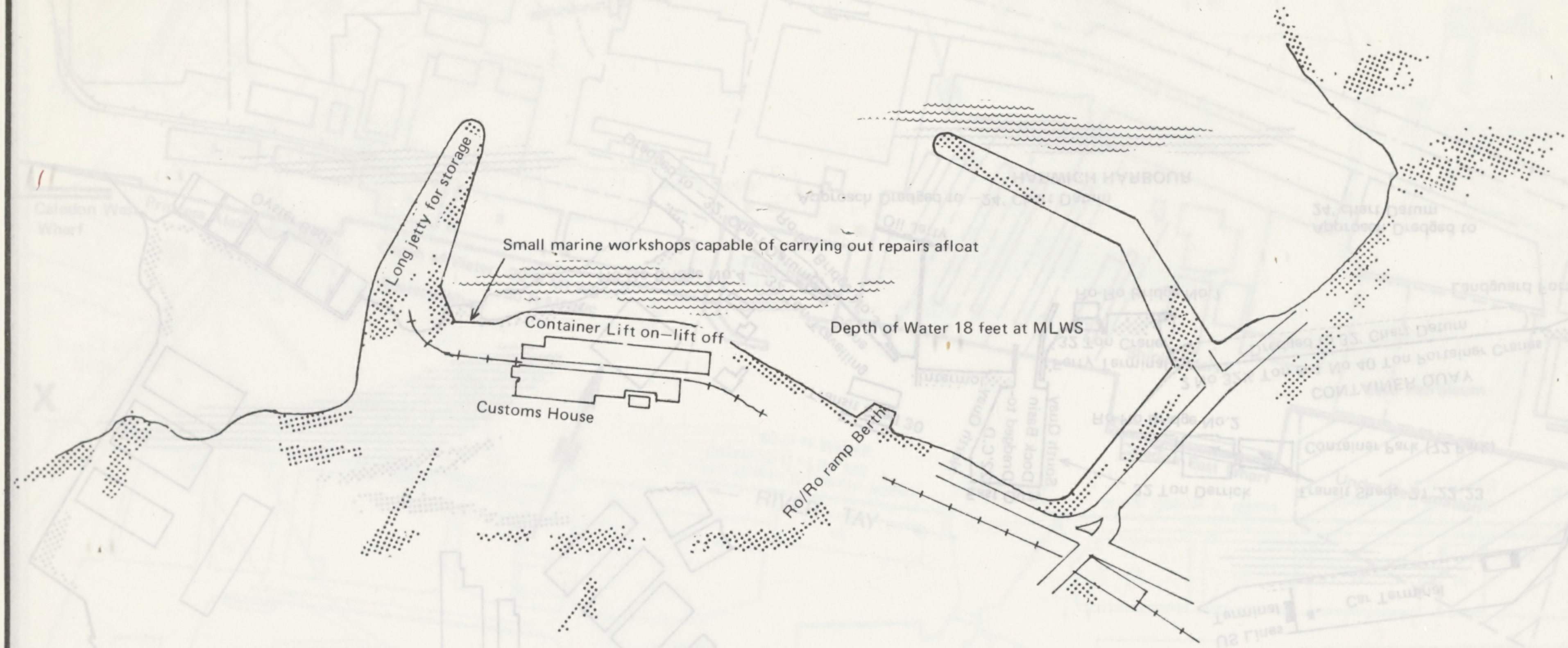
FISHGUARD


Long jetty for storage
Small marine workshops capable of carrying out repairs afloat
Container Lift on—lift off
Depth of Water 18 feet at MLWS
Customs House
Ro/Ro ramp Berth

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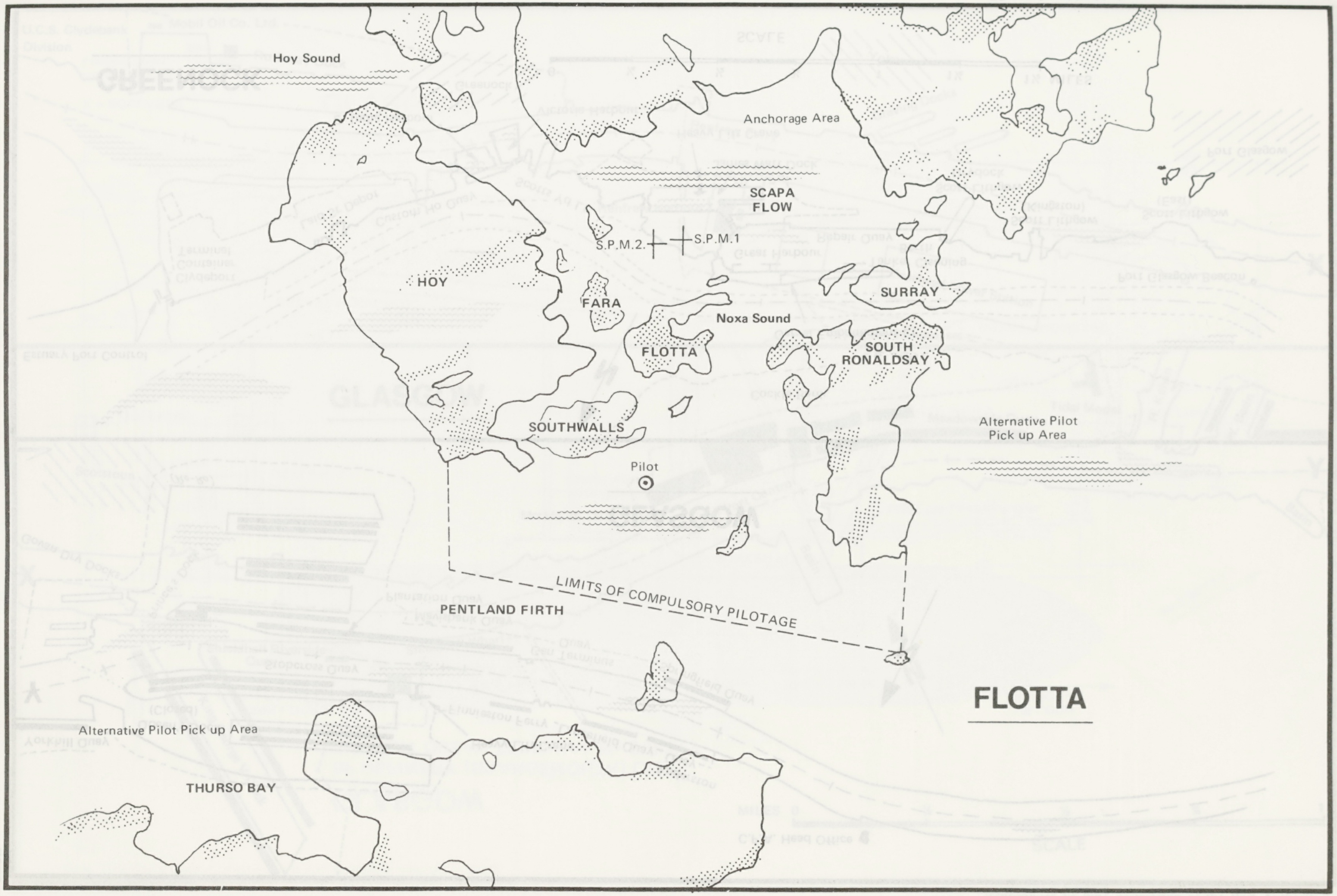
Hoy Sound
Anchorage Area
SCAPA FLOW
S.P.M.2.
S.P.M.1
HOY
FARA
Noxa Sound
SURRAY
FLOTTA
SOUTH RONALDSAY
SOUTHWALLS
Alternative Pilot Pick up Area
Pilot
LIMITS OF COMPULSORY PILOTAGE
PENTLAND FIRTH
Alternative Pilot Pick up Area
THURSO BAY

FLOTTA

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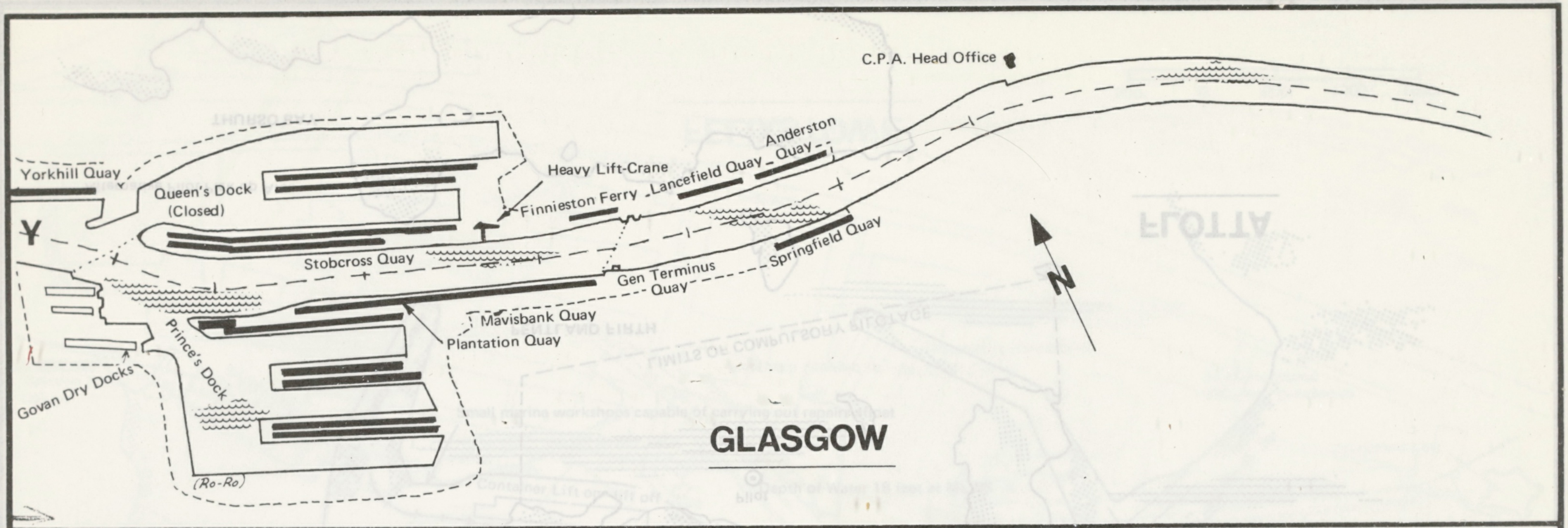
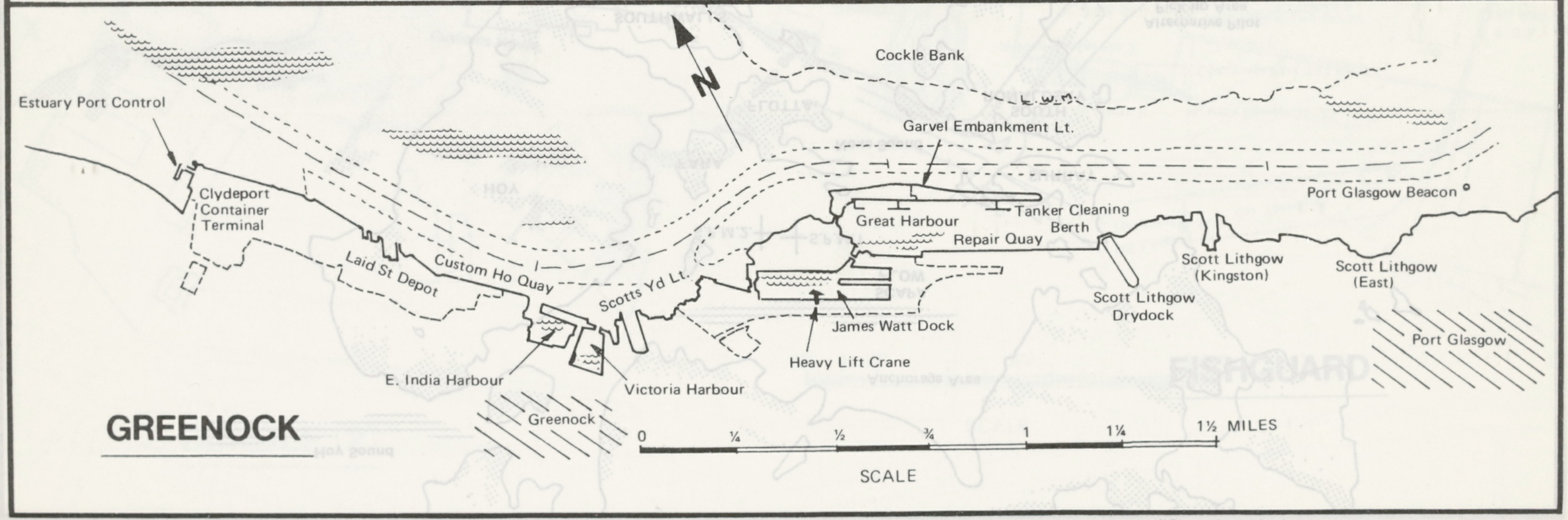

GLASGOW
C.P.A. Head Office
Yorkhill Quay
Queen's Dock
(Closed)
Heavy Lift-Crane
Finnieston Ferry
Lancefield Quay
Anderston
Quay
Stobcross Quay
Springfield Quay
Gen Terminus
Quay
Mavisbank Quay
Plantation Quay
Prince's Dock
Govan Dry Docks
(Ro-Ro)
N


GREENOCK
Cockle Bank
Estuary Port Control
Garvel Embankment Lt.
Clydeport
Container
Terminal
Port Glasgow Beacon
Great Harbour
Tanker Cleaning
Berth
Repair Quay
Custom Ho Quay
Laid St Depot
Scotts Yd Lt.
Scott Lithgow
(Kingston)
Scott Lithgow
(East)
Scott Lithgow
Drydock
James Watt Dock
Heavy Lift Crane
Port Glasgow
E. India Harbour
Victoria Harbour
Greenock
0
¼
½
¾
1
1¼
1½ MILES
SCALE
N

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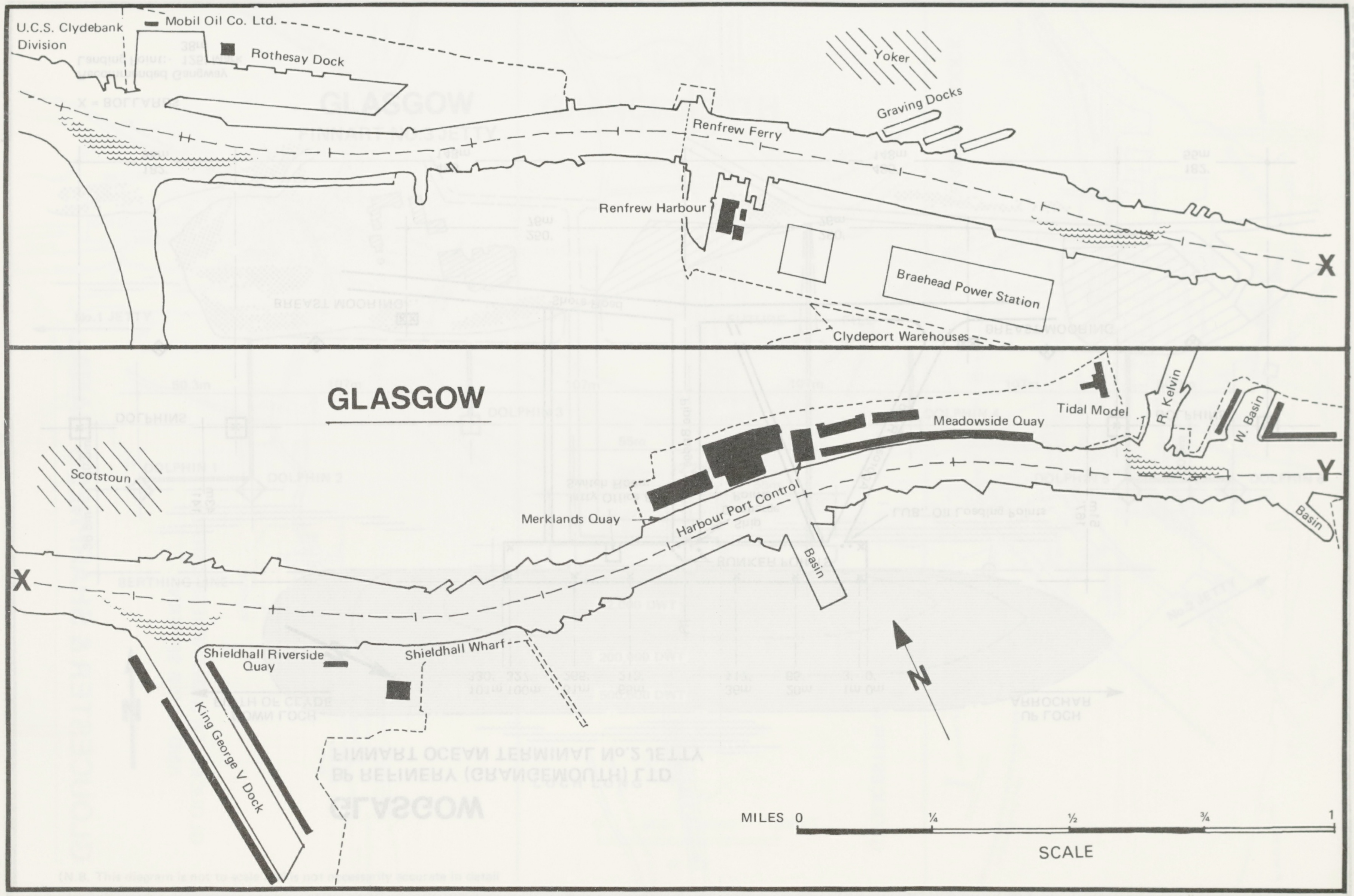
U.C.S. Clydebank Division
Mobil Oil Co. Ltd.
Rothesay Dock
Yoker
Graving Docks
Renfrew Ferry
Renfrew Harbour
Braehead Power Station
Clydeport Warehouses
X
GLASGOW
Tidal Model
R. Kelvin
W. Basin
Meadowside Quay
Y
Scotstoun
Merklands Quay
Harbour Port Control
Basin
Basin
X
Shieldhall Riverside Quay
Shieldhall Wharf
King George V Dock
N
MILES 0
¼
½
¾
1
SCALE

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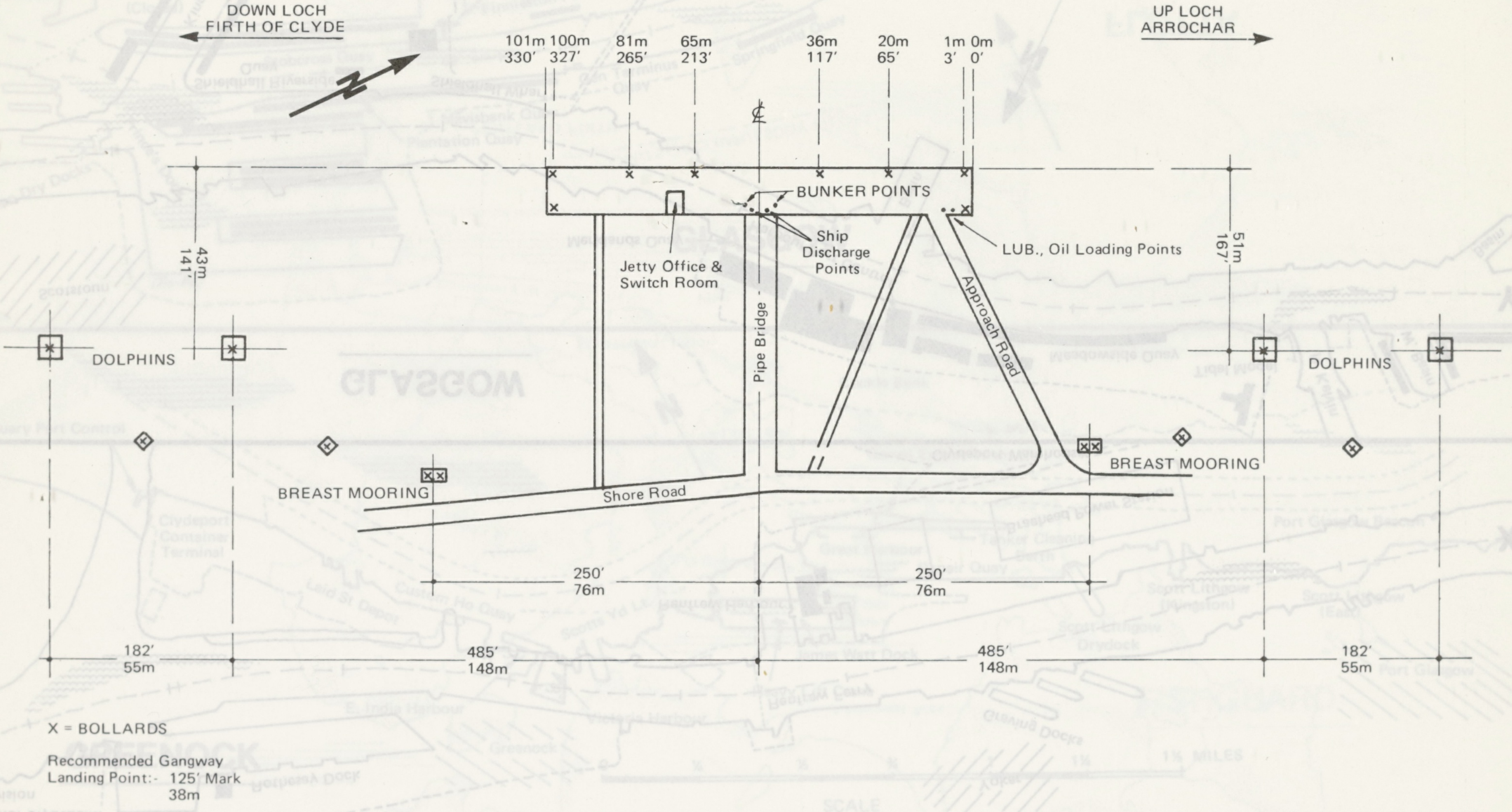
GLASGOW

BP REFINERY (GRANGEMOUTH) LTD
FINNART OCEAN TERMINAL No.2 JETTY


DOWN LOCH
FIRTH OF CLYDE
UP LOCH
ARROCHAR
101m 330'
100m 327'
81m 265'
65m 213'
36m 117'
20m 65'
1m 3'
0m 0'
℄
BUNKER POINTS
Ship Discharge Points
LUB., Oil Loading Points
Jetty Office & Switch Room
Pipe Bridge
Approach Road
43m 141'
51m 167'
DOLPHINS
DOLPHINS
BREAST MOORING
BREAST MOORING
Shore Road
250' 76m
250' 76m
182' 55m
485' 148m
485' 148m
182' 55m
X = BOLLARDS
Recommended Gangway Landing Point:- 125' Mark 38m

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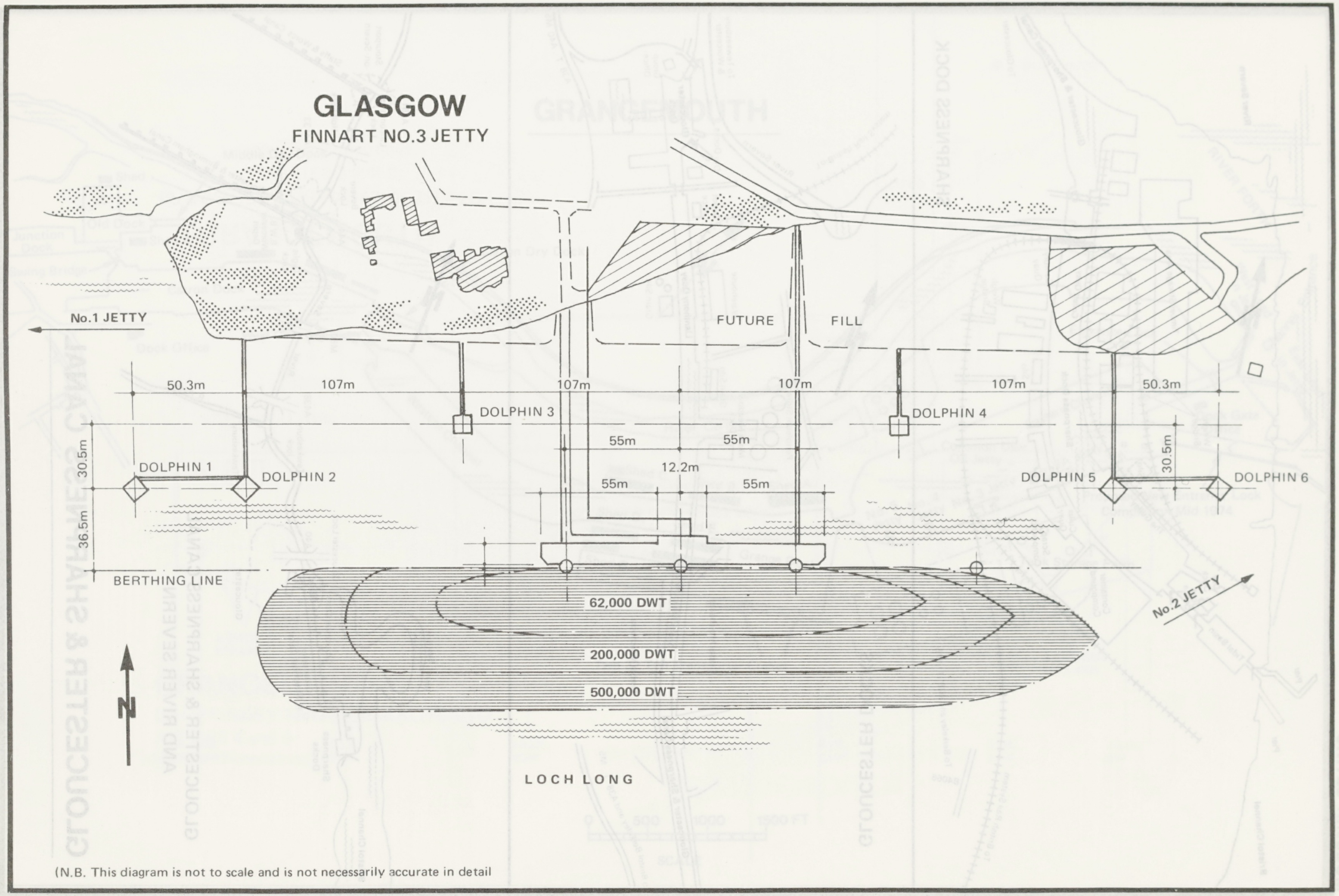
GLASGOW

FINNART NO.3 JETTY


No.1 JETTY
50.3m
107m
107m
107m
107m
50.3m
DOLPHIN 3
DOLPHIN 4
55m
55m
12.2m
55m
55m
30.5m
36.5m
DOLPHIN 1
DOLPHIN 2
DOLPHIN 5
DOLPHIN 6
30.5m
FUTURE FILL
BERTHING LINE
62,000 DWT
200,000 DWT
500,000 DWT
No.2 JETTY
N
LOCH LONG

(N.B. This diagram is not to scale and is not necessarily accurate in detail

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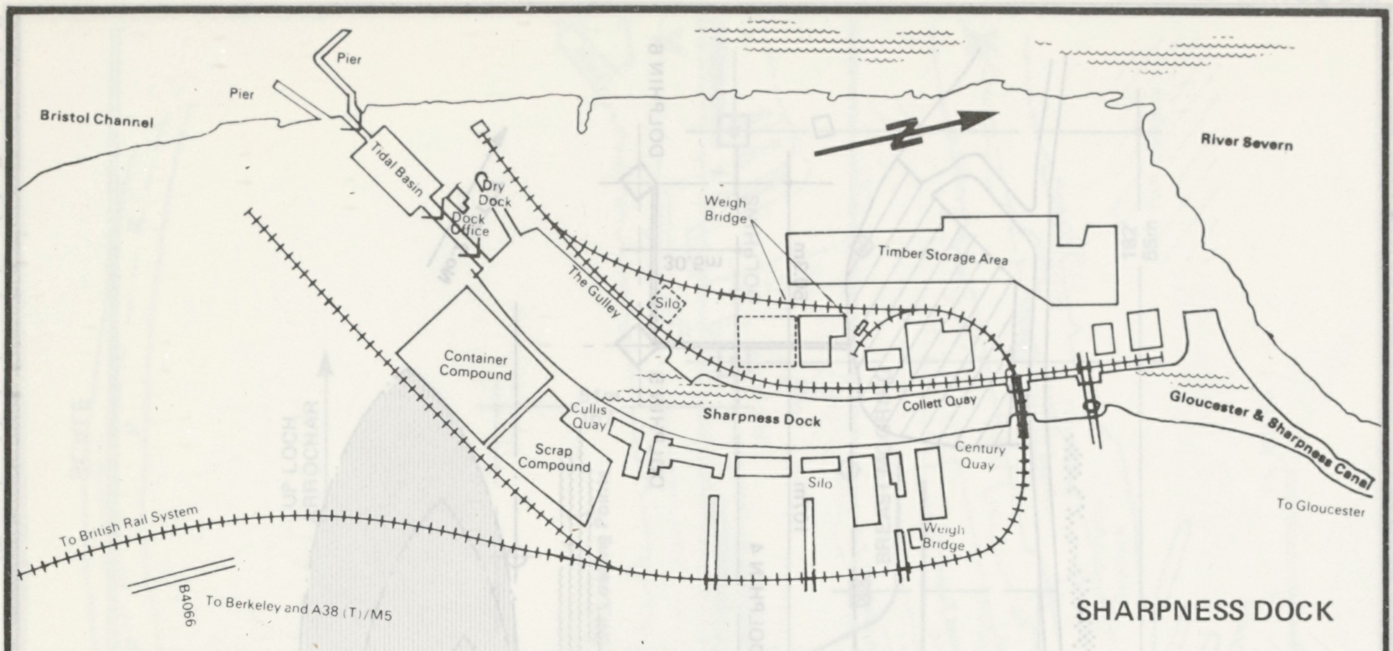
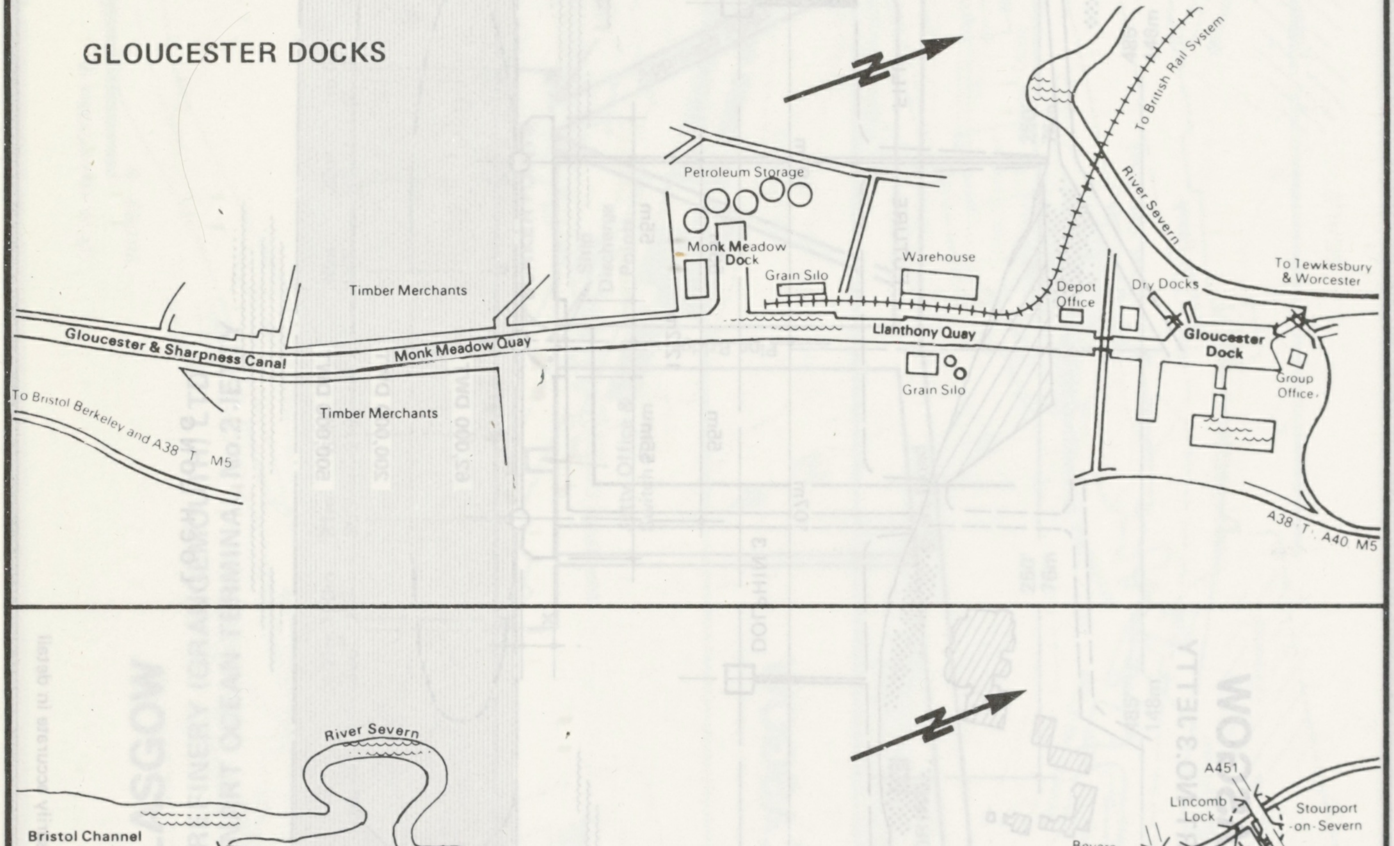
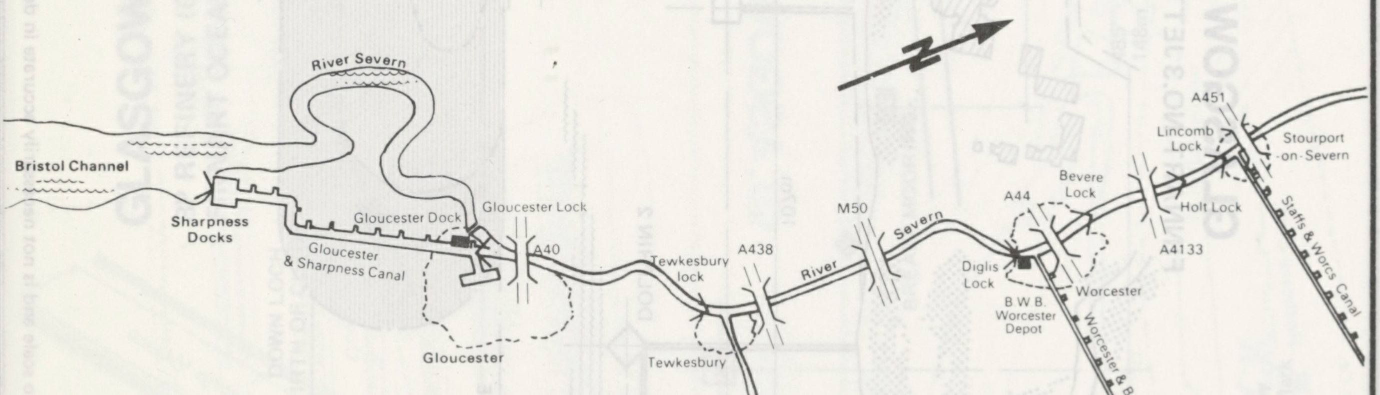

Pier
Pier
Bristol Channel
Tidal Basin
Dry Dock
Dock Office
Weigh Bridge
Timber Storage Area
River Severn
The Gulley
Silo
Container Compound
Cullis Quay
Scrap Compound
Sharpness Dock
Collett Quay
Century Quay
Gloucester & Sharpness Canal
To Gloucester
Silo
Weigh Bridge
To British Rail System
B4066
To Berkeley and A38 (T)/M5

SHARPNESS DOCK

GLOUCESTER DOCKS


Petroleum Storage
Monk Meadow Dock
Timber Merchants
Grain Silo
Warehouse
To British Rail System
River Severn
Depot Office
Dry Docks
To Tewkesbury & Worcester
Gloucester & Sharpness Canal
Monk Meadow Quay
Llanthony Quay
Gloucester Dock
Grain Silo
Group Office
Timber Merchants
To Bristol Berkeley and A38 T M5
A38 T A40 M5


River Severn
Bristol Channel
Sharpness Docks
Gloucester Dock
Gloucester & Sharpness Canal
Gloucester Lock
A40
Gloucester
Tewkesbury lock
Tewkesbury
A438
R. Avon
M50
River Severn
A44
Diglis Lock
B.W.B. Worcester Depot
Worcester
Bevere Lock
Worcester & Birmingham Canal
Lincomb Lock
Holt Lock
A4133
A451
Stourport -on-Severn
Staffs & Worcs Canal

GLOUCESTER & SHARPNESS CANAL AND RIVER SEVERN

GLOUCESTER & SHARPNESS CANAL

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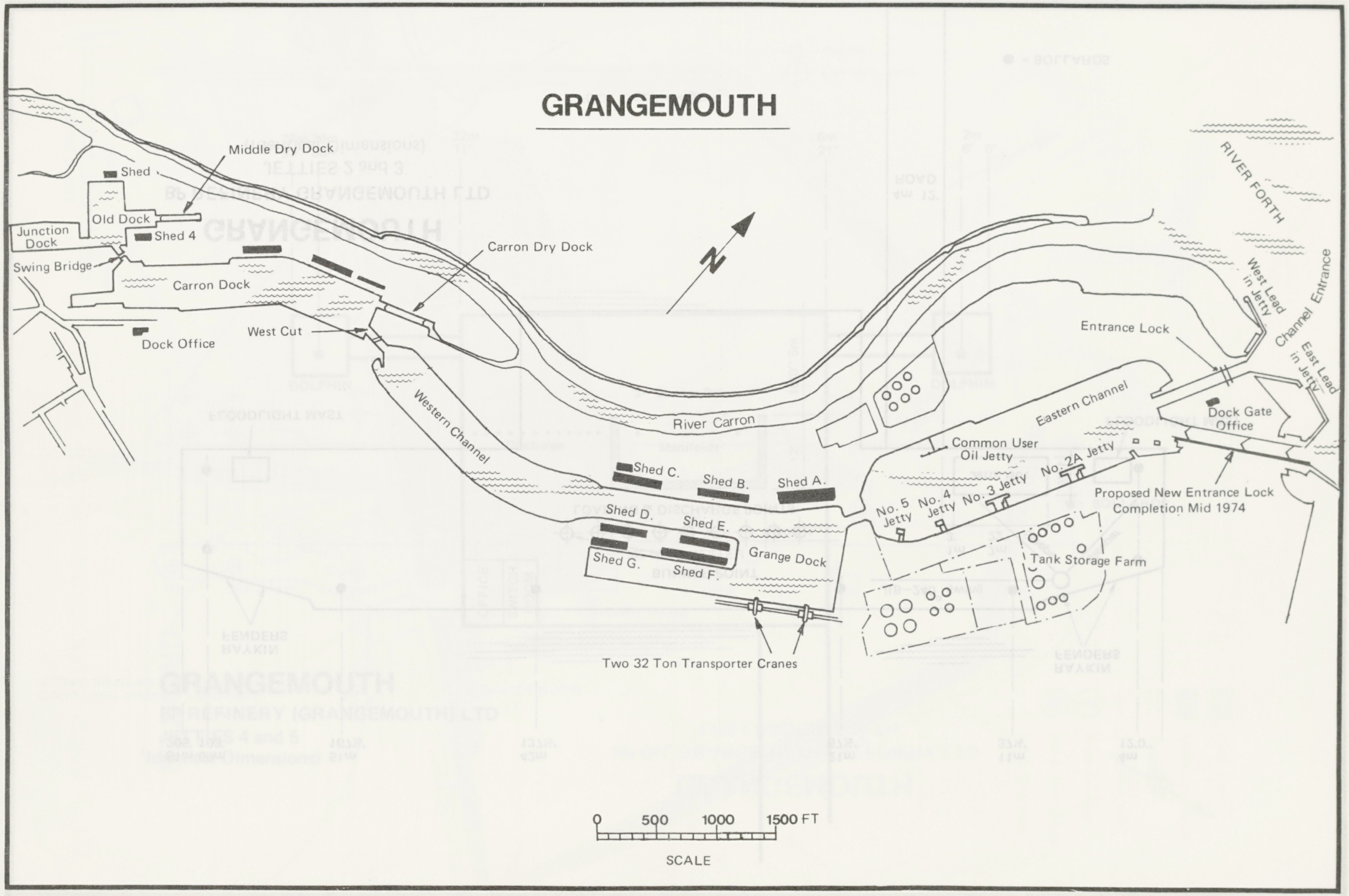
GRANGEMOUTH
Middle Dry Dock
Shed
Old Dock
Junction Dock
Shed 4
Swing Bridge
Carron Dock
Carron Dry Dock
West Cut
Dock Office
Western Channel
River Carron
N
RIVER FORTH
West Lead in Jetty
Channel Entrance
East Lead in Jetty
Entrance Lock
Dock Gate Office
Eastern Channel
Common User Oil Jetty
No. 2A Jetty
No. 3 Jetty
No. 4 Jetty
No. 5 Jetty
Shed C.
Shed B.
Shed A.
Shed D.
Shed E.
Shed G.
Shed F.
Grange Dock
Tank Storage Farm
Proposed New Entrance Lock Completion Mid 1974
Two 32 Ton Transporter Cranes
0
500
1000
1500 FT
SCALE

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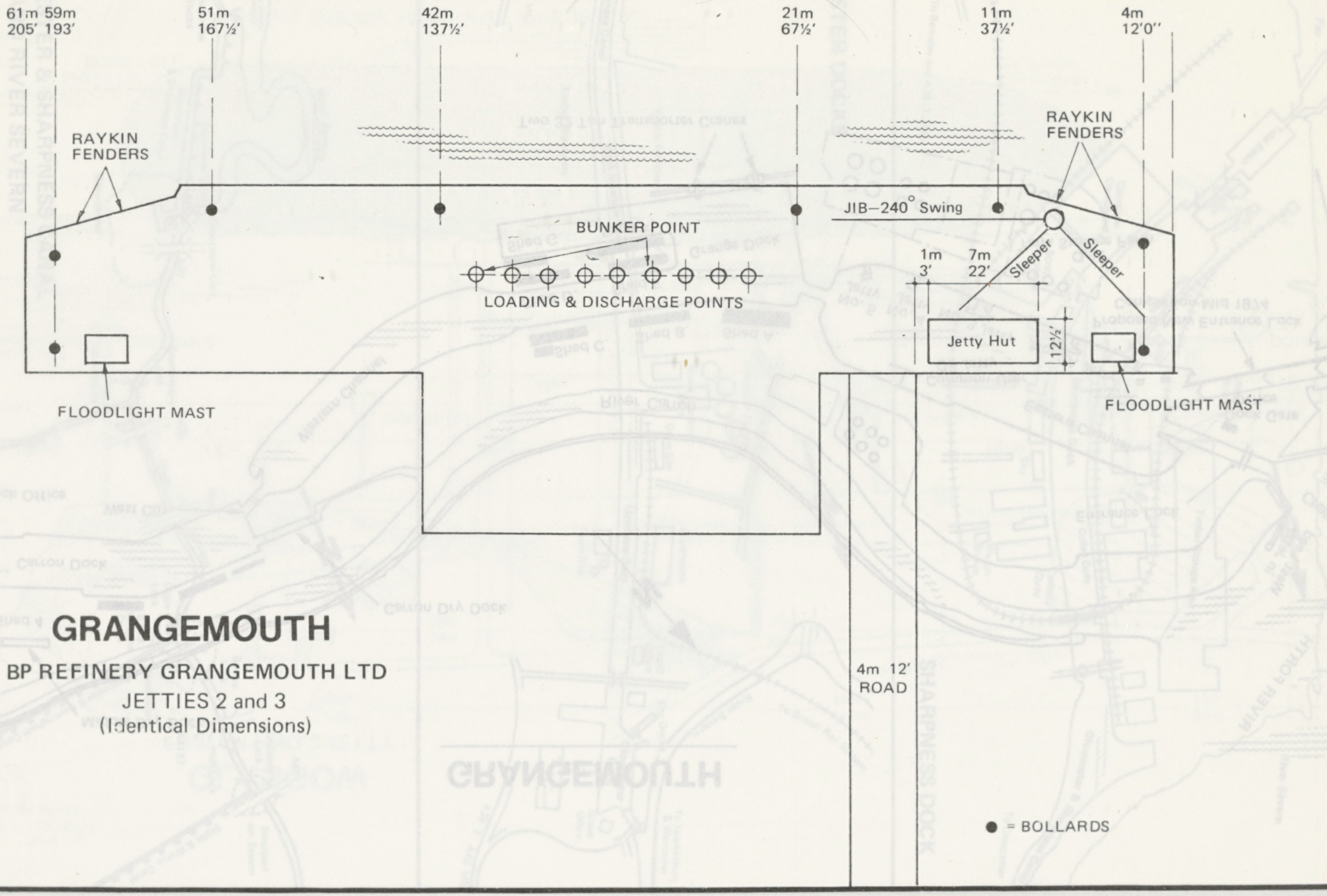
61m 59m
205′ 193′
51m
167½′
42m
137½′
21m
67½′
11m
37½′
4m
12′0″
RAYKIN FENDERS
RAYKIN FENDERS
JIB–240° Swing
BUNKER POINT
1m
3′
7m
22′
Sleeper
Sleeper
LOADING & DISCHARGE POINTS
Jetty Hut
12½′
FLOODLIGHT MAST
FLOODLIGHT MAST
4m 12′
ROAD
● = BOLLARDS

GRANGEMOUTH

BP REFINERY GRANGEMOUTH LTD

JETTIES 2 and 3
(Identical Dimensions)

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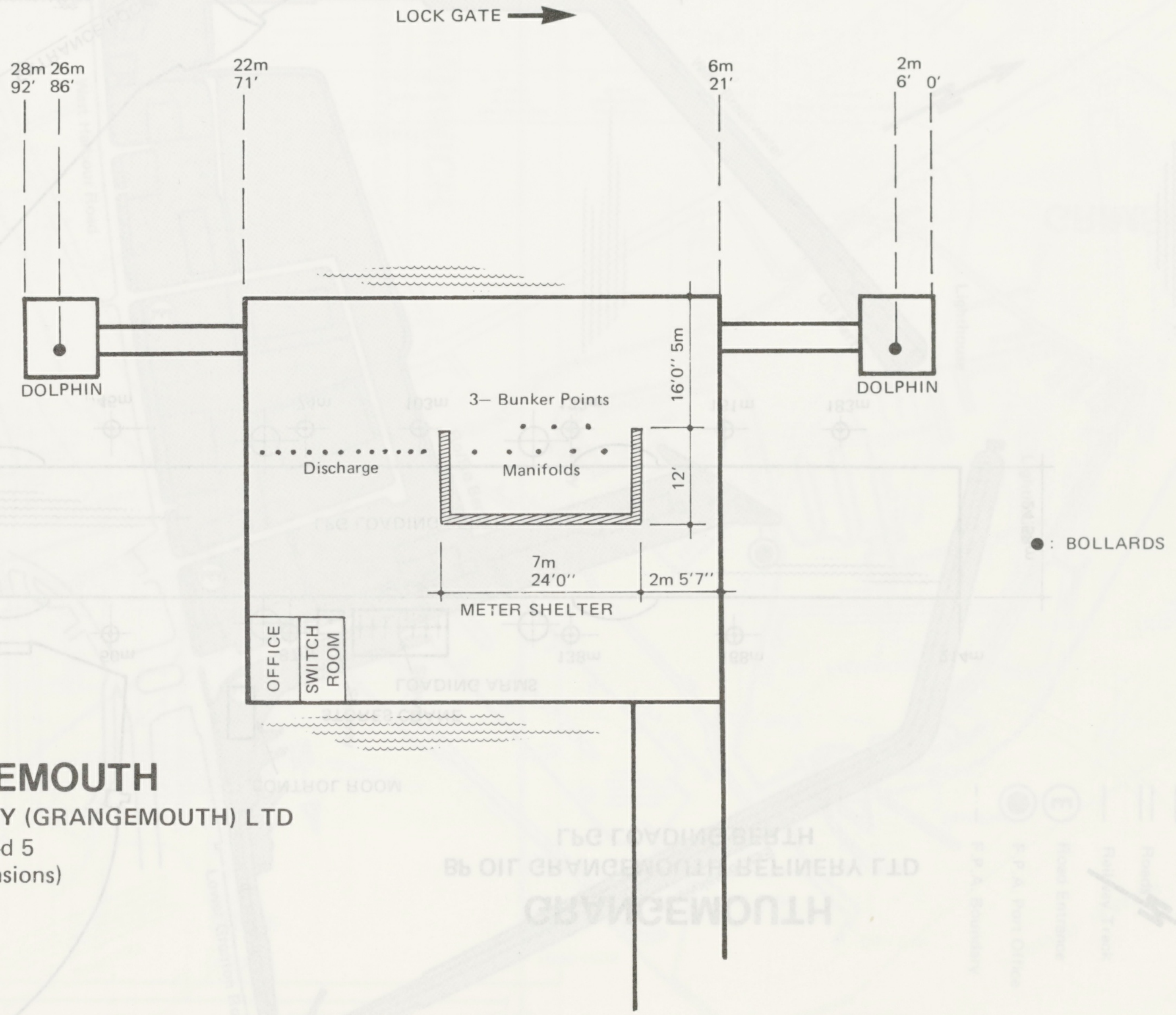
LOCK GATE
28m 92'
26m 86'
22m 71'
6m 21'
2m
6'
0'
DOLPHIN
DOLPHIN
16'0'' 5m
3— Bunker Points
Discharge
Manifolds
12'
: BOLLARDS
7m 24'0''
2m 5'7''
METER SHELTER
OFFICE
SWITCH ROOM

GRANGEMOUTH

BP REFINERY (GRANGEMOUTH) LTD
JETTIES 4 and 5
'Identical Dimensions)

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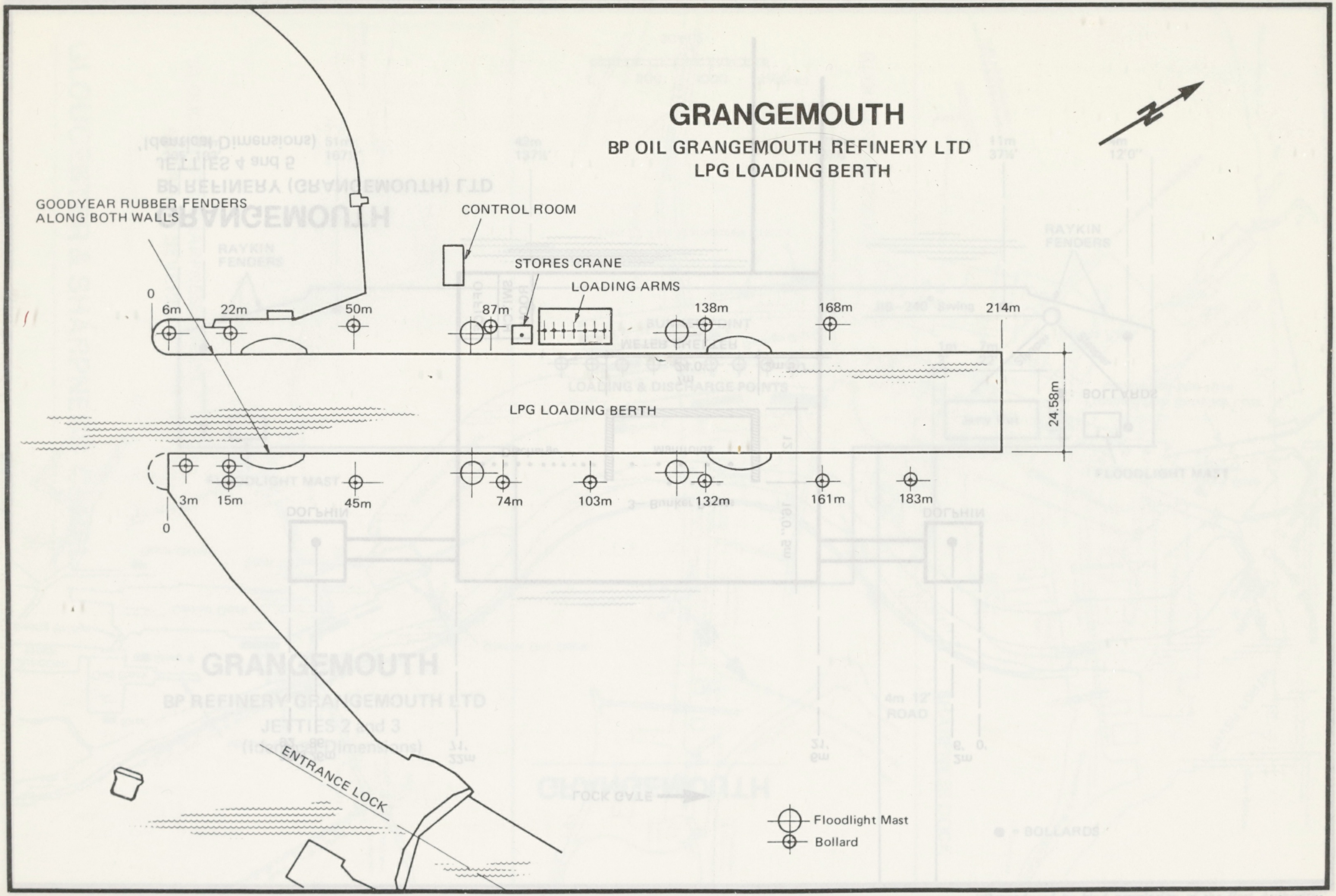
GRANGEMOUTH

BP OIL GRANGEMOUTH REFINERY LTD
LPG LOADING BERTH


GOODYEAR RUBBER FENDERS
ALONG BOTH WALLS
CONTROL ROOM
STORES CRANE
LOADING ARMS
0
6m
22m
50m
87m
138m
168m
214m
LPG LOADING BERTH
24.58m
3m
15m
45m
74m
103m
132m
161m
183m
0
ENTRANCE LOCK
Floodlight Mast
Bollard

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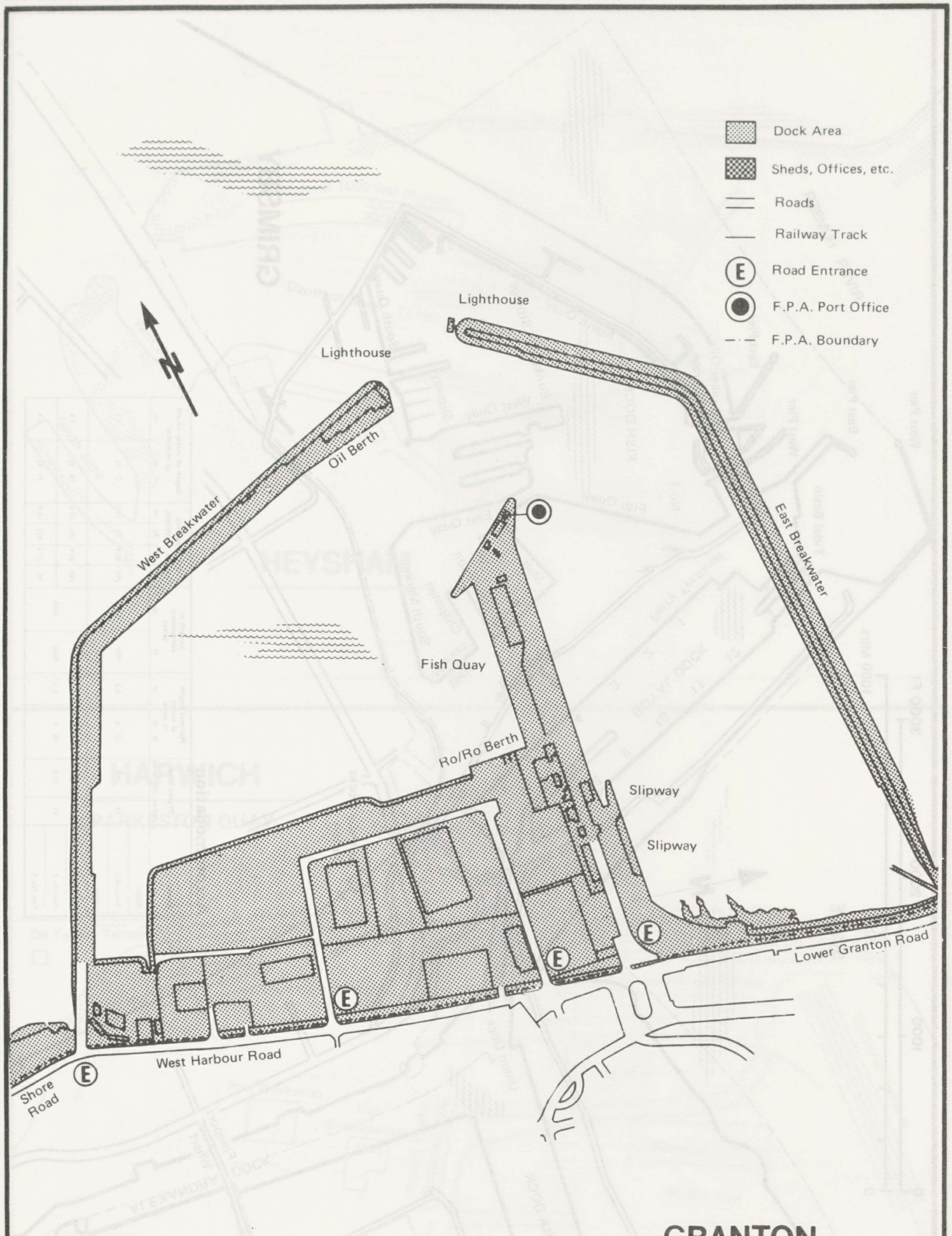
Dock Area
Sheds, Offices, etc.
Roads
Railway Track
Road Entrance
F.P.A. Port Office
F.P.A. Boundary
N
Lighthouse
Lighthouse
Oil Berth
West Breakwater
East Breakwater
Fish Quay
Ro/Ro Berth
Slipway
Slipway
E
Lower Granton Road
West Harbour Road
Shore Road
GRANTON
0
500
1000
SCALE OF FEET

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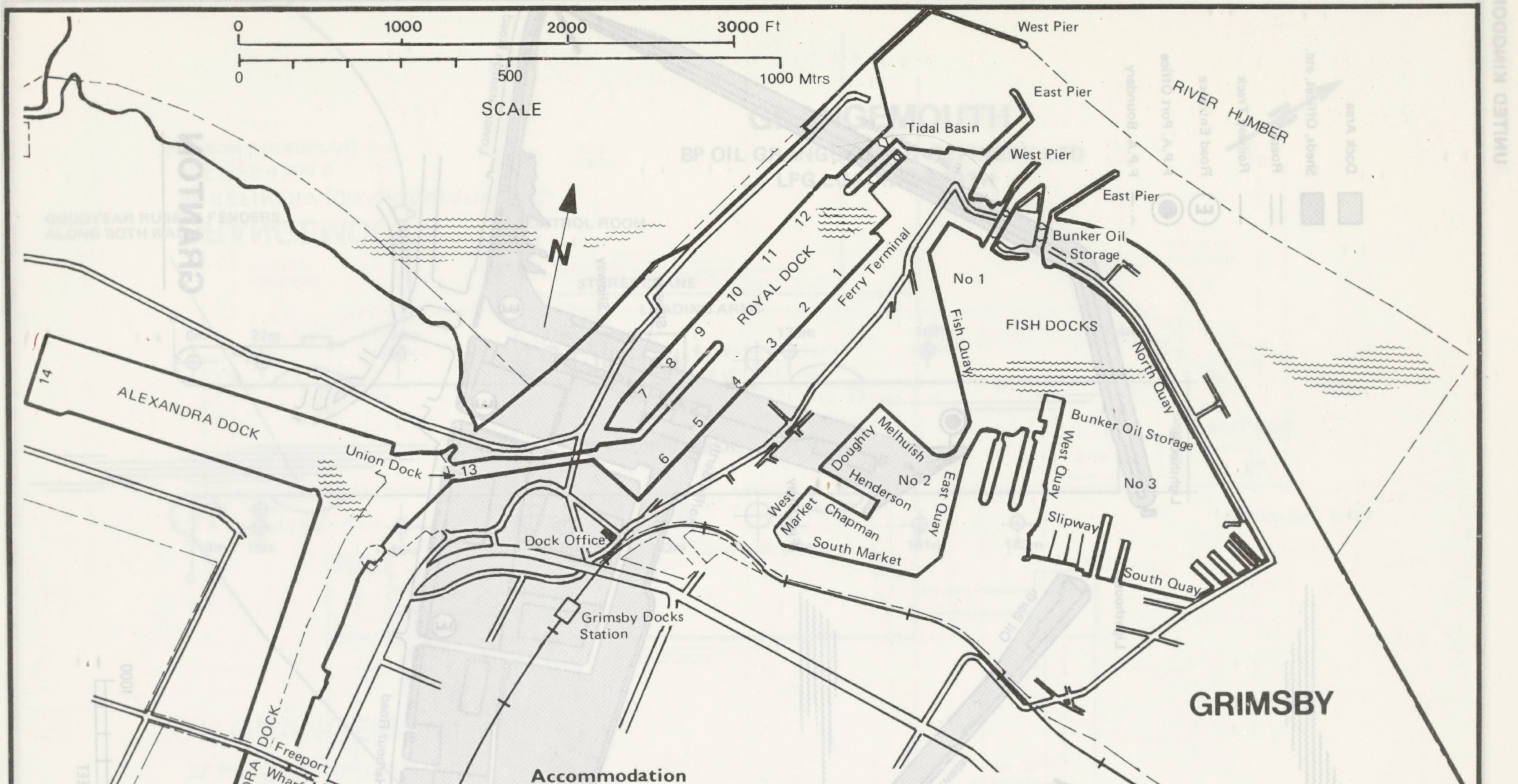
0
1000
2000
3000 Ft
0
500
1000 Mtrs
SCALE
N
West Pier
East Pier
RIVER HUMBER
Tidal Basin
West Pier
East Pier
Bunker Oil Storage
ROYAL DOCK
1
2
3
4
5
6
7
8
9
10
11
12
Ferry Terminal
No 1
Fish Quay
FISH DOCKS
North Quay
Bunker Oil Storage
West Quay
No 3
Slipway
South Quay
Doughty
Melhuish
Henderson
No 2
East Quay
West Market
Chapman
South Market
14
ALEXANDRA DOCK
Union Dock
13
Dock Office
Grimsby Docks Station
ALEXANDRA DOCK
Freeport Wharf
River Freshney
GRIMSBY

Accommodation

Docks	Water area		Normal depth of water in dock		Length of operational quays		Entrance lock Length		Width		Depth of water on sill at MHWN	
	acres	hectares	ft in	m	ft	m	ft	m	ft	m	ft in	m
Royal Alexandra Union	74	29·9	20 6	6·2	4951	1509	295	89·9	70	21·3	21 6½	6·5
Fish No. 1 Fish No. 2 Fish No. 3	63	25·5	20 6	6·2	8645	2635	143 70	43·6 21·3	34¼ 42½	10·6 13·0	18 4¼ 21 9½	5·6 6·6

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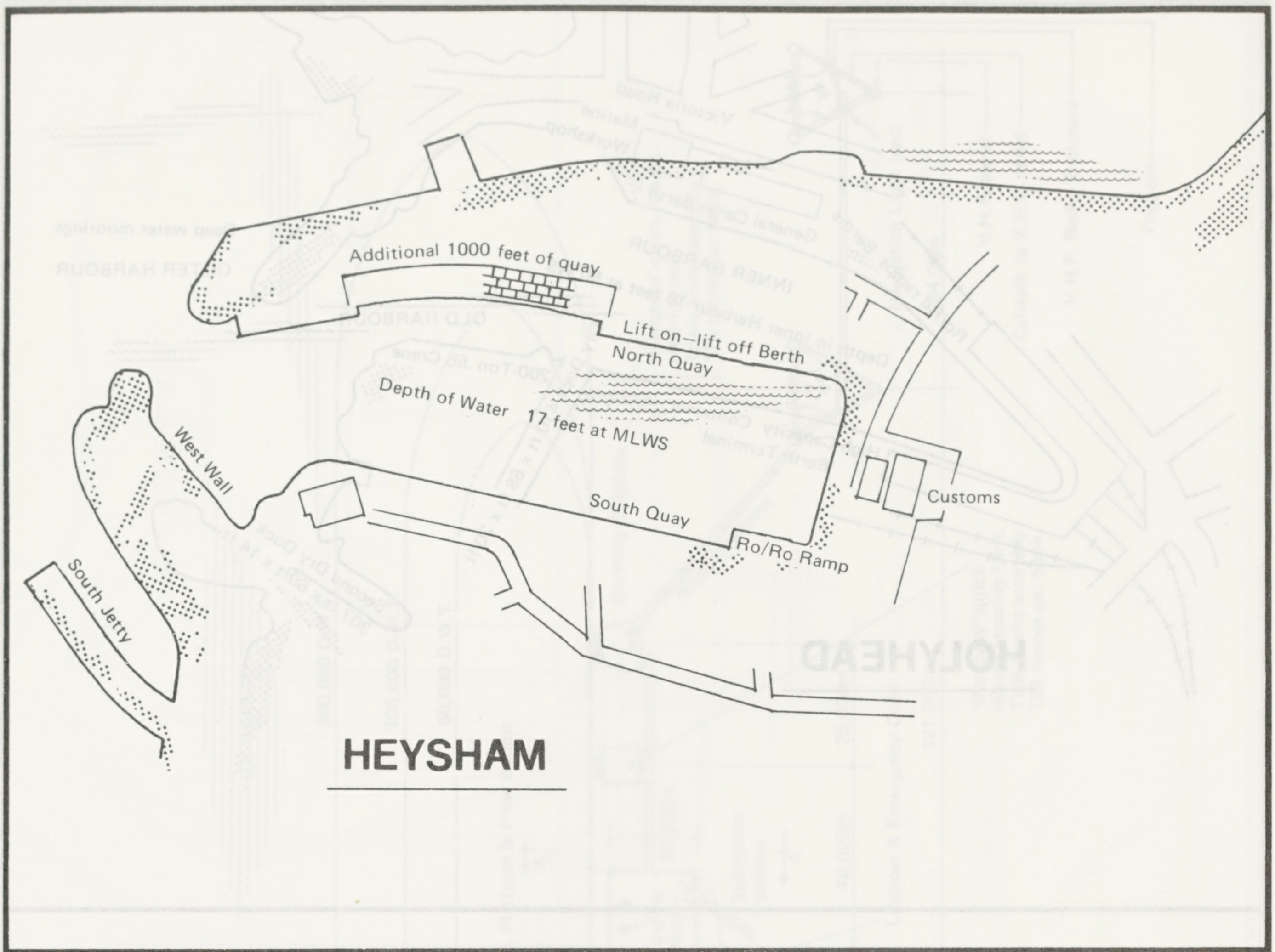
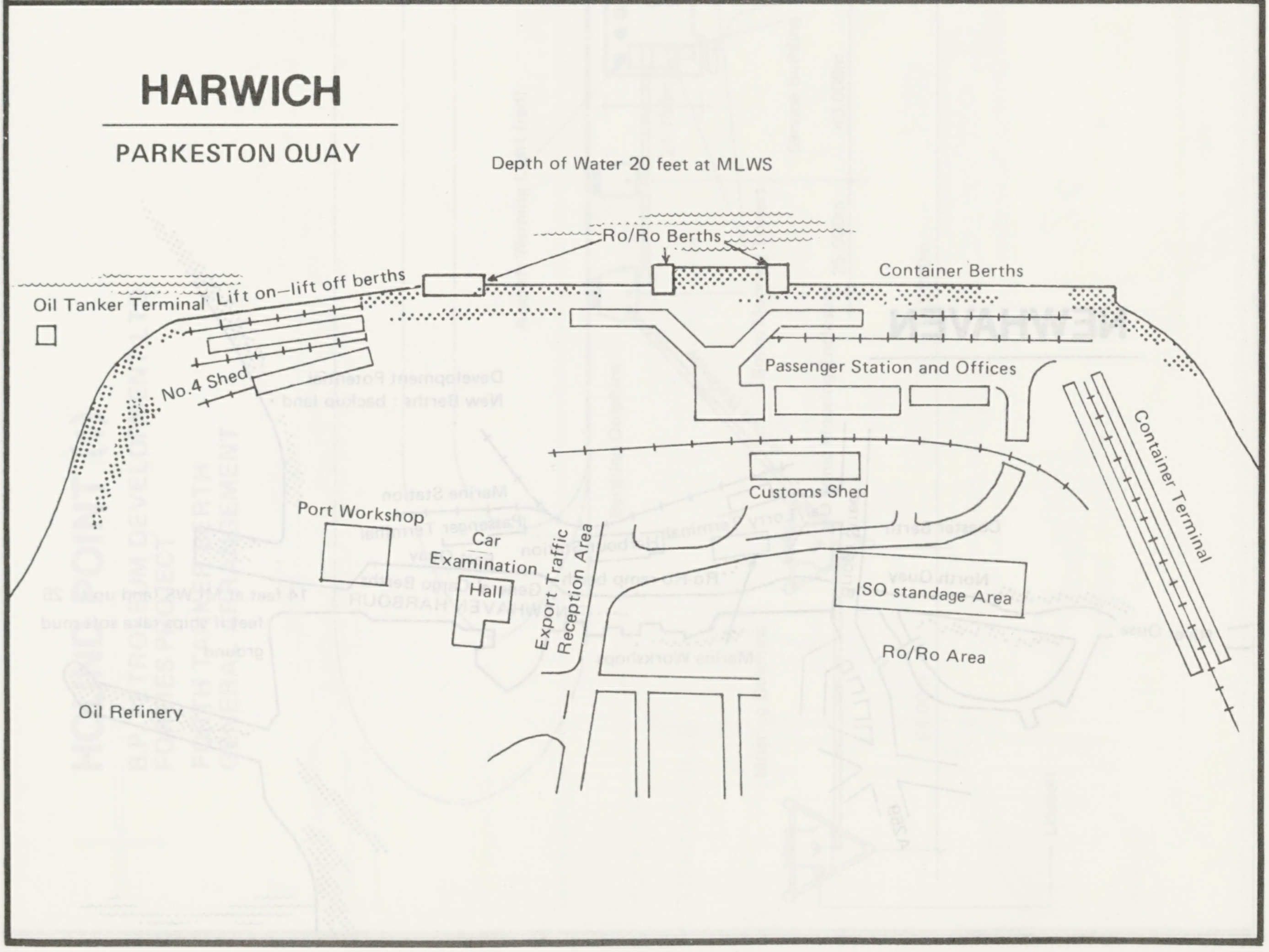


HEYSHAM

Additional 1000 feet of quay
Lift on–lift off Berth
North Quay
Depth of Water 17 feet at MLWS
West Wall
South Jetty
South Quay
Ro/Ro Ramp
Customs



HARWICH

PARKESTON QUAY

Depth of Water 20 feet at MLWS
Ro/Ro Berths
Container Berths
Oil Tanker Terminal
Lift on–lift off berths
No.4 Shed
Passenger Station and Offices
Container Terminal
Customs Shed
Port Workshop
Car Examination Hall
Export Traffic Reception Area
ISO standage Area
Ro/Ro Area
Oil Refinery

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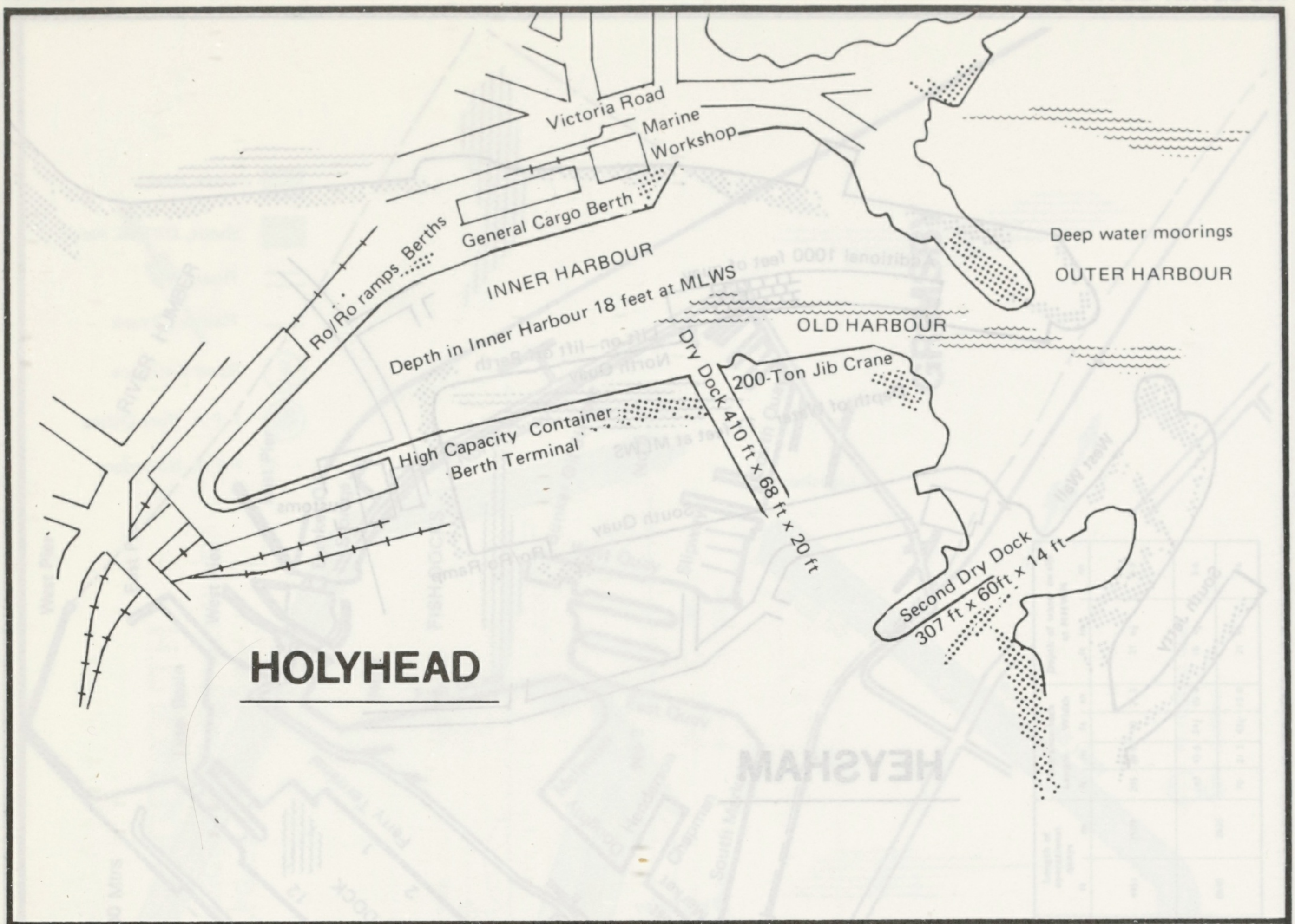
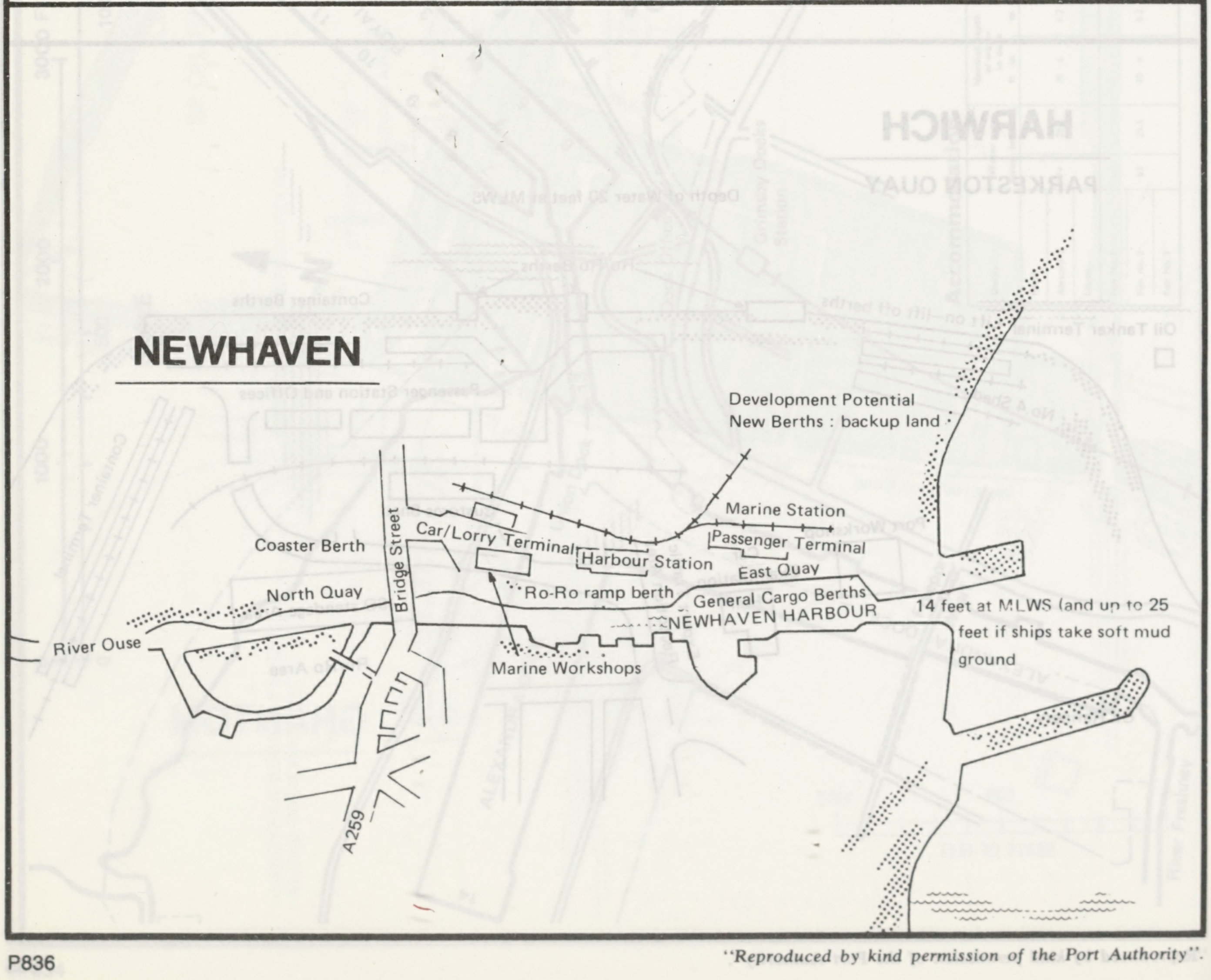
HOLYHEAD


Victoria Road
Marine Workshop
General Cargo Berth
Ro/Ro ramps Berths
INNER HARBOUR
Depth in Inner Harbour 18 feet at MLWS
Dry Dock 410 ft x 68 ft x 20 ft
200-Ton Jib Crane
OLD HARBOUR
Deep water moorings
OUTER HARBOUR
High Capacity Container Berth Terminal
Second Dry Dock 307 ft x 60ft x 14 ft

NEWHAVEN


Development Potential
New Berths : backup land
Marine Station
Passenger Terminal
Coaster Berth
Bridge Street
Car/Lorry Terminal
Harbour Station
East Quay
North Quay
Ro-Ro ramp berth
General Cargo Berths
NEWHAVEN HARBOUR
14 feet at MLWS (and up to 25 feet if ships take soft mud ground)
River Ouse
Marine Workshops
A259

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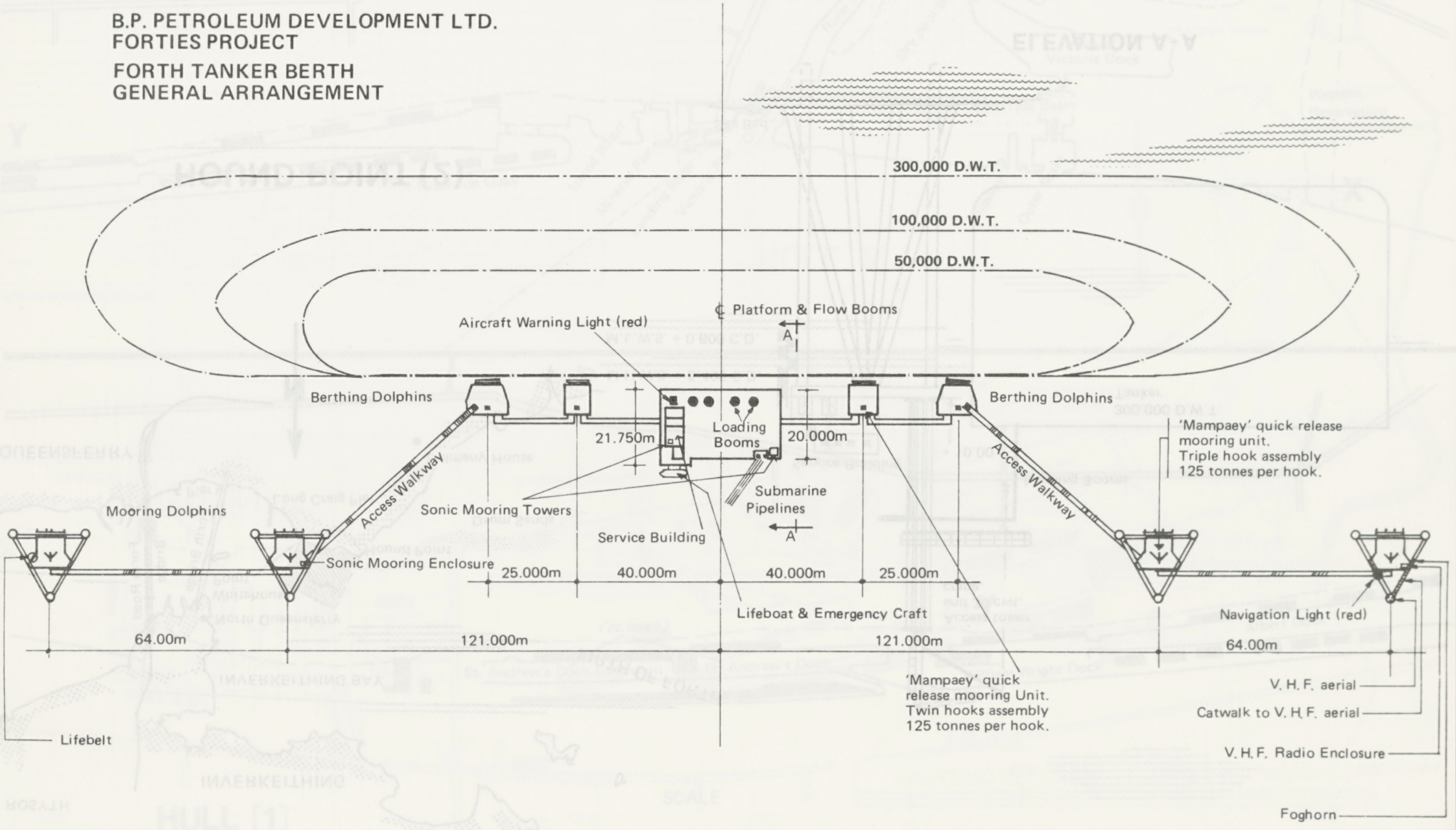
HOUND POINT (1)

B.P. PETROLEUM DEVELOPMENT LTD.
FORTIES PROJECT

FORTH TANKER BERTH
GENERAL ARRANGEMENT


300,000 D.W.T.
100,000 D.W.T.
50,000 D.W.T.
℄ Platform & Flow Booms
A
Aircraft Warning Light (red)
Berthing Dolphins
Berthing Dolphins
Loading Booms
21.750m
20.000m
'Mampaey' quick release mooring unit. Triple hook assembly 125 tonnes per hook.
Access Walkway
Access Walkway
Submarine Pipelines
Sonic Mooring Towers
Mooring Dolphins
Service Building
A
Sonic Mooring Enclosure
25.000m
40.000m
40.000m
25.000m
Lifeboat & Emergency Craft
Navigation Light (red)
64.00m
121.000m
121.000m
64.00m
'Mampaey' quick release mooring Unit. Twin hooks assembly 125 tonnes per hook.
V. H. F. aerial
Catwalk to V. H. F. aerial
V. H. F. Radio Enclosure
Lifebelt
Foghorn

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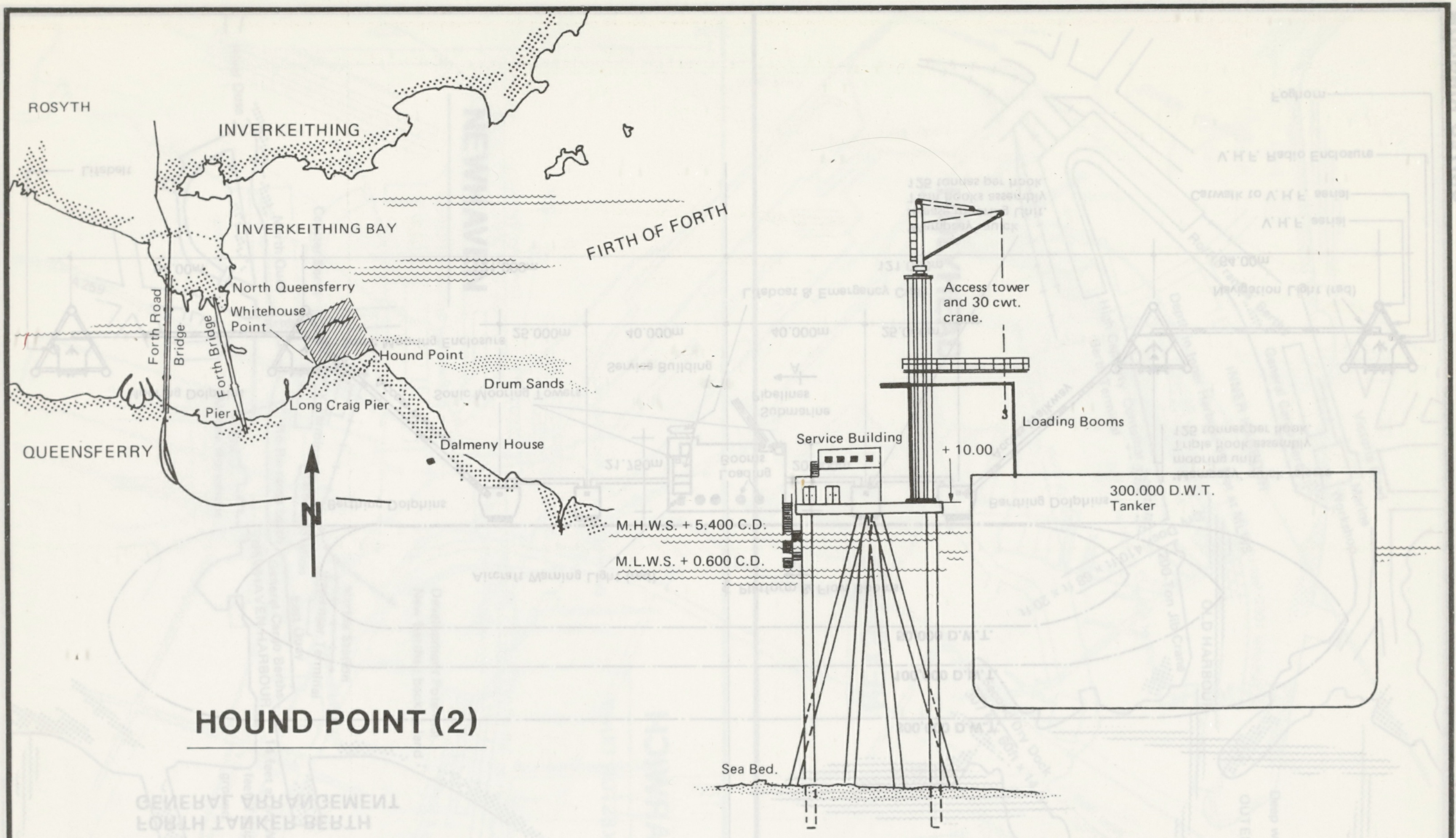
HOUND POINT (2)


ROSYTH
INVERKEITHING
INVERKEITHING BAY
FIRTH OF FORTH
North Queensferry
Whitehouse Point
Hound Point
Forth Road Bridge
Forth Bridge
Drum Sands
Pier
Long Craig Pier
QUEENSFERRY
Dalmeny House
N
Access tower and 30 cwt. crane.
Loading Booms
Service Building
+ 10.00
300.000 D.W.T. Tanker
M.H.W.S. + 5.400 C.D.
M.L.W.S. + 0.600 C.D.
Sea Bed.

ELEVATION A-A

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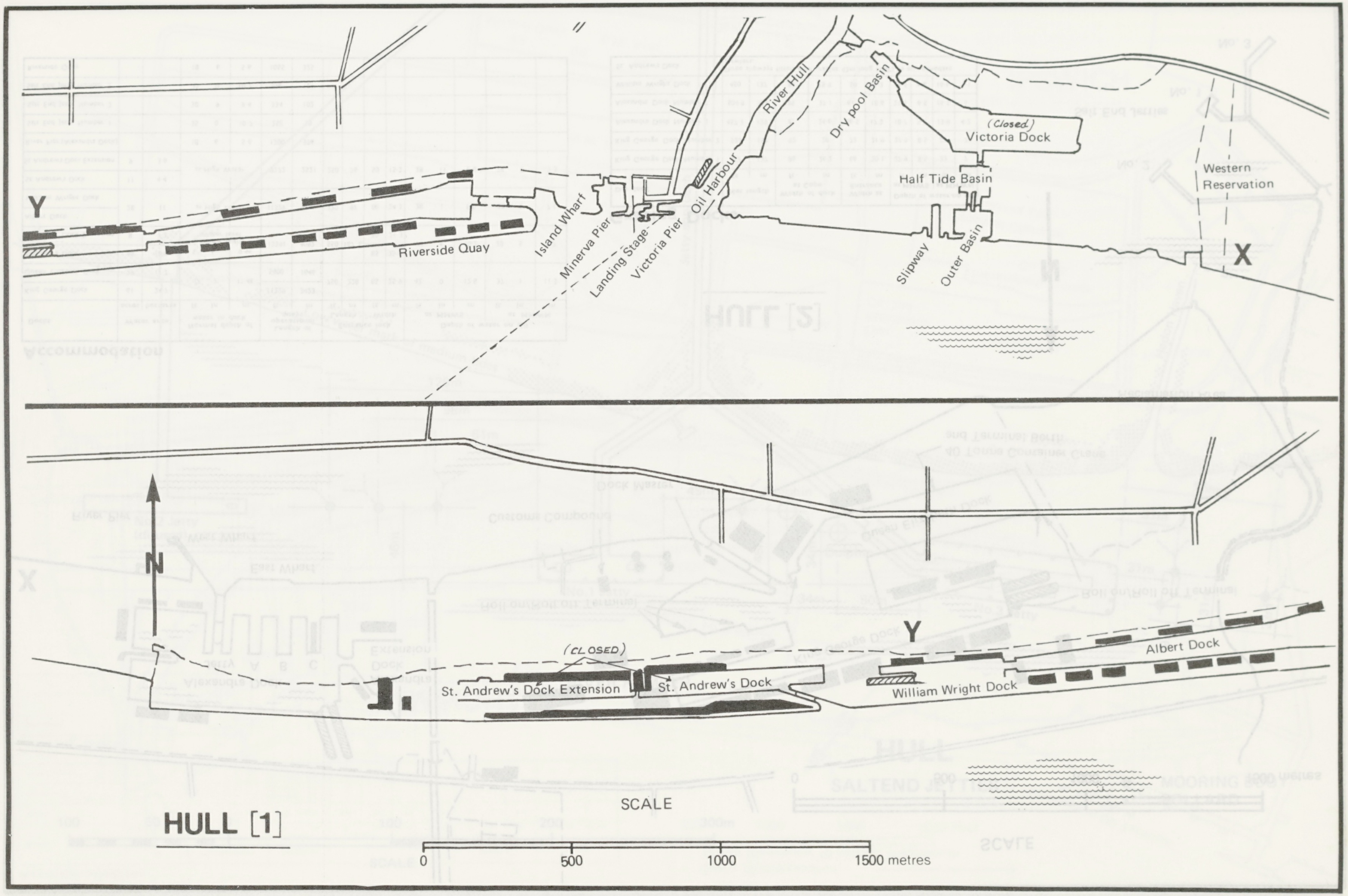
Y
Riverside Quay
Island Wharf
Minerva Pier
Landing Stage
Victoria Pier
Oil Harbour
River Hull
Dry pool Basin
(Closed)
Victoria Dock
Half Tide Basin
Slipway
Outer Basin
Western
Reservation
X
N
(CLOSED)
St. Andrew's Dock Extension
St. Andrew's Dock
Y
William Wright Dock
Albert Dock
SCALE
0
500
1000
1500 metres

HULL [1]

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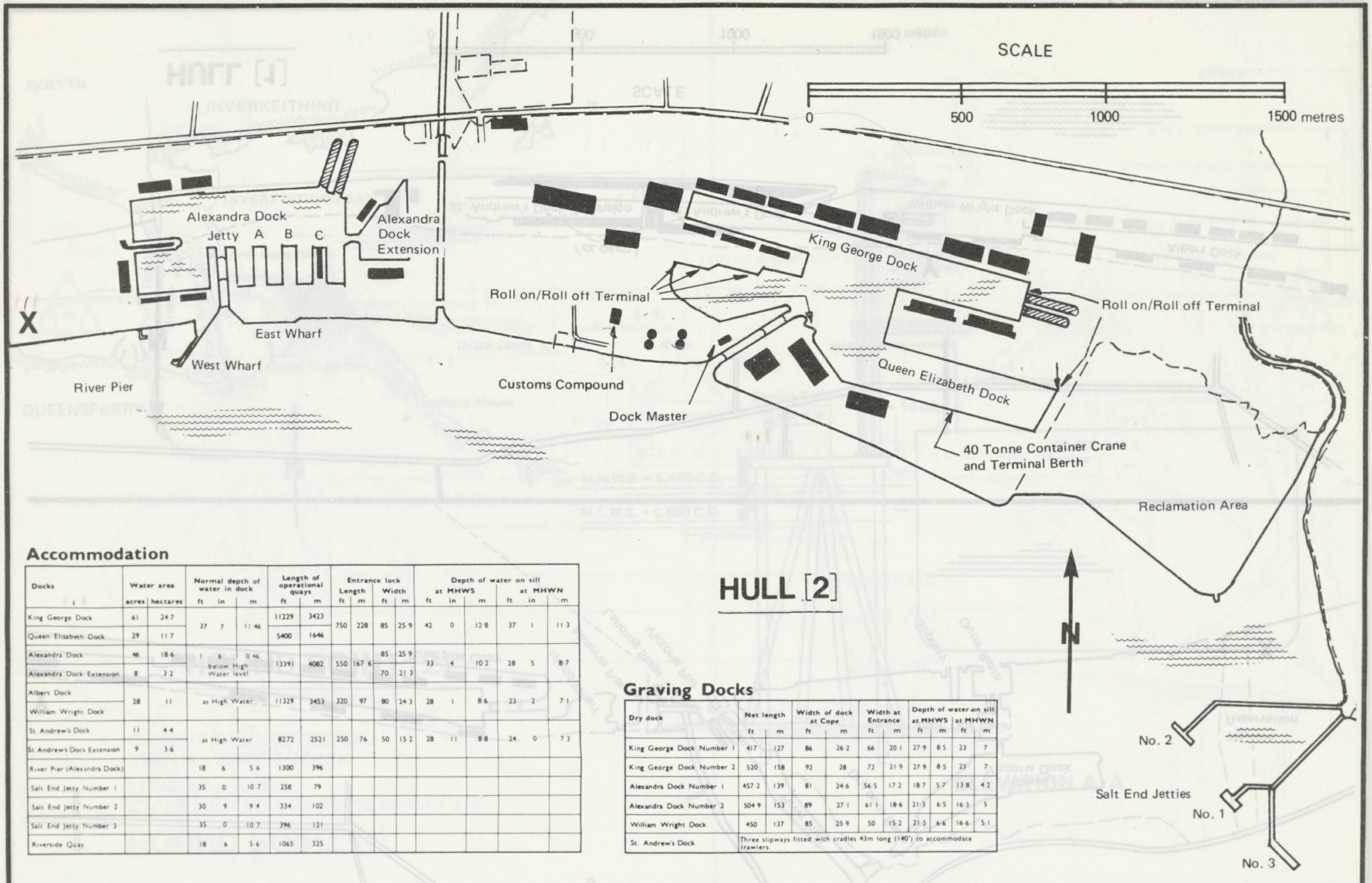
HULL [2]


SCALE
0
500
1000
1500 metres
Alexandra Dock
Jetty
A
B
C
Alexandra
Dock
Extension
X
East Wharf
West Wharf
River Pier
Roll on/Roll off Terminal
Customs Compound
Dock Master
King George Dock
Queen Elizabeth Dock
Roll on/Roll off Terminal
40 Tonne Container Crane
and Terminal Berth
Reclamation Area
N
No. 2
Salt End Jetties
No. 1
No. 3

Accommodation

Docks	Water area		Normal depth of water in dock			Length of operational quays		Entrance lock				Depth of water on sill					
								Length		Width		at MHWS			at MHWN		
	acres	hectares	ft	in	m	ft	m	ft	m	ft	m	ft	in	m	ft	in	m
King George Dock	61	24·7	37	7	11·46	11229	3423	750	228	85	25·9	42	0	12·8	37	1	11·3
Queen Elizabeth Dock	29	11·7				5400	1646										
Alexandra Dock	46	18·6	1	6	0·46	13391	4082	550	167·6	85	25·9	33	4	10·2	28	5	8·7
Alexandra Dock Extension	8	3·2	below High Water level							70	21·3						
Albert Dock	28	11	as High Water			11329	3453	320	97	80	24·3	28	1	8·6	23	2	7·1
William Wright Dock																	
St. Andrew's Dock	11	4·4	as High Water			8272	2521	250	76	50	15·2	28	11	8·8	24	0	7·3
St. Andrew's Dock Extension	9	3·6															
River Pier (Alexandra Dock)			18	6	5·6	1300	396										
Salt End Jetty Number 1			35	0	10·7	258	79										
Salt End Jetty Number 2			30	9	9·4	334	102										
Salt End Jetty Number 3			35	0	10·7	396	121										
Riverside Quay			18	6	5·6	1065	325										

Graving Docks

Dry dock	Net length		Width of dock at Cope		Width at Entrance		Depth of water on sill			
							at MHWS		at MHWN	
	ft	m	ft	m	ft	m	ft	m	ft	m
King George Dock Number 1	417	127	86	26·2	66	20·1	27·9	8·5	23	7
King George Dock Number 2	520	158	92	28	72	21·9	27·9	8·5	23	7
Alexandra Dock Number 1	457·2	139	81	24·6	56·5	17·2	18·7	5·7	13·8	4·2
Alexandra Dock Number 2	504·9	153	89	27·1	61·1	18·6	21·3	6·5	16·3	5
William Wright Dock	450	137	85	25·9	50	15·2	21·5	6·6	16·6	5·1
St. Andrew's Dock	Three slipways fitted with cradles 43m long (140') to accommodate trawlers.									

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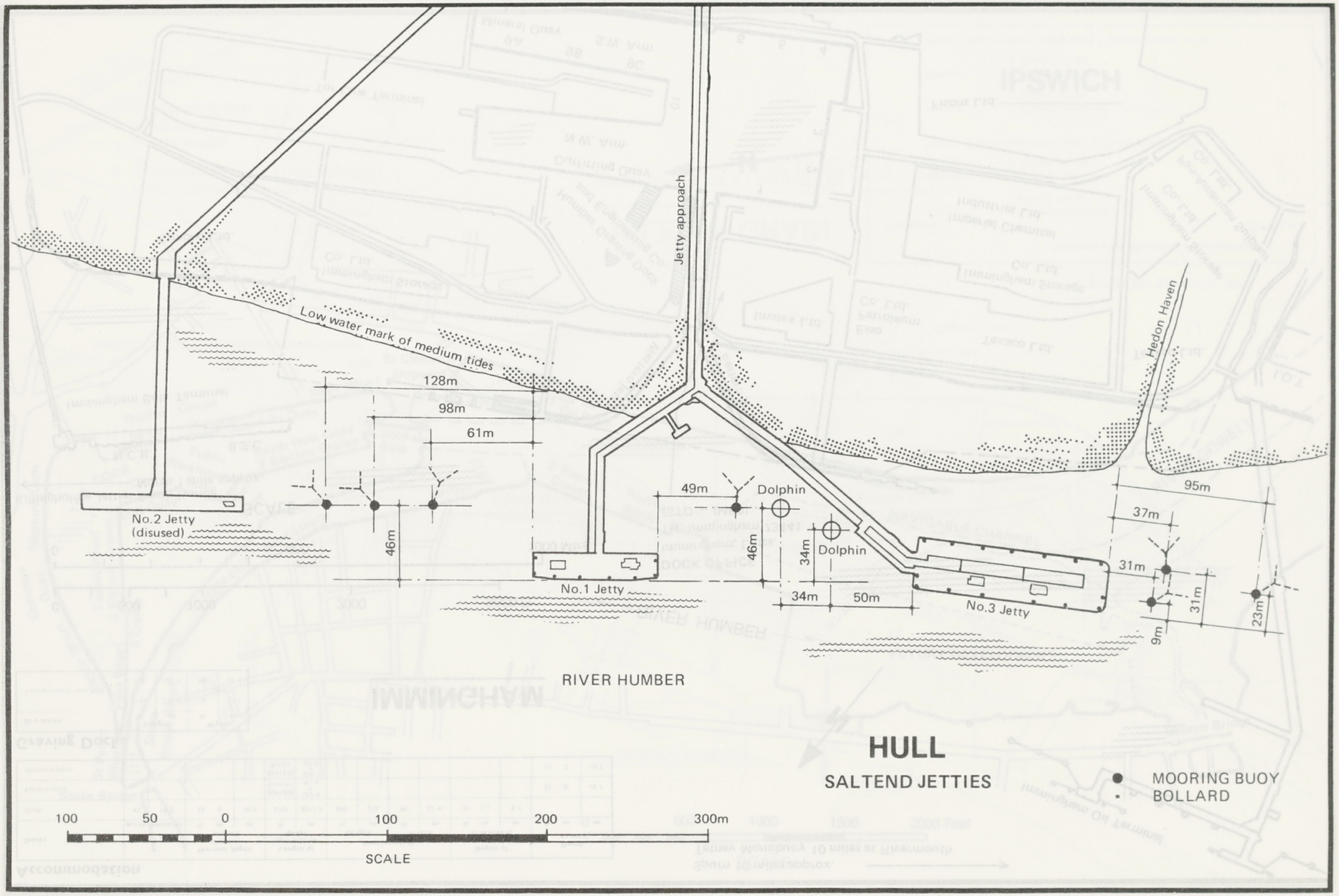

HULL

SALTEND JETTIES

Jetty approach
Low water mark of medium tides
Hedon Haven
128m
98m
61m
49m
46m
46m
34m
34m
50m
95m
37m
31m
31m
23m
9m
Dolphin
Dolphin
No.2 Jetty
(disused)
No.1 Jetty
No.3 Jetty
RIVER HUMBER
● MOORING BUOY
• BOLLARD
100
50
0
100
200
300m
SCALE

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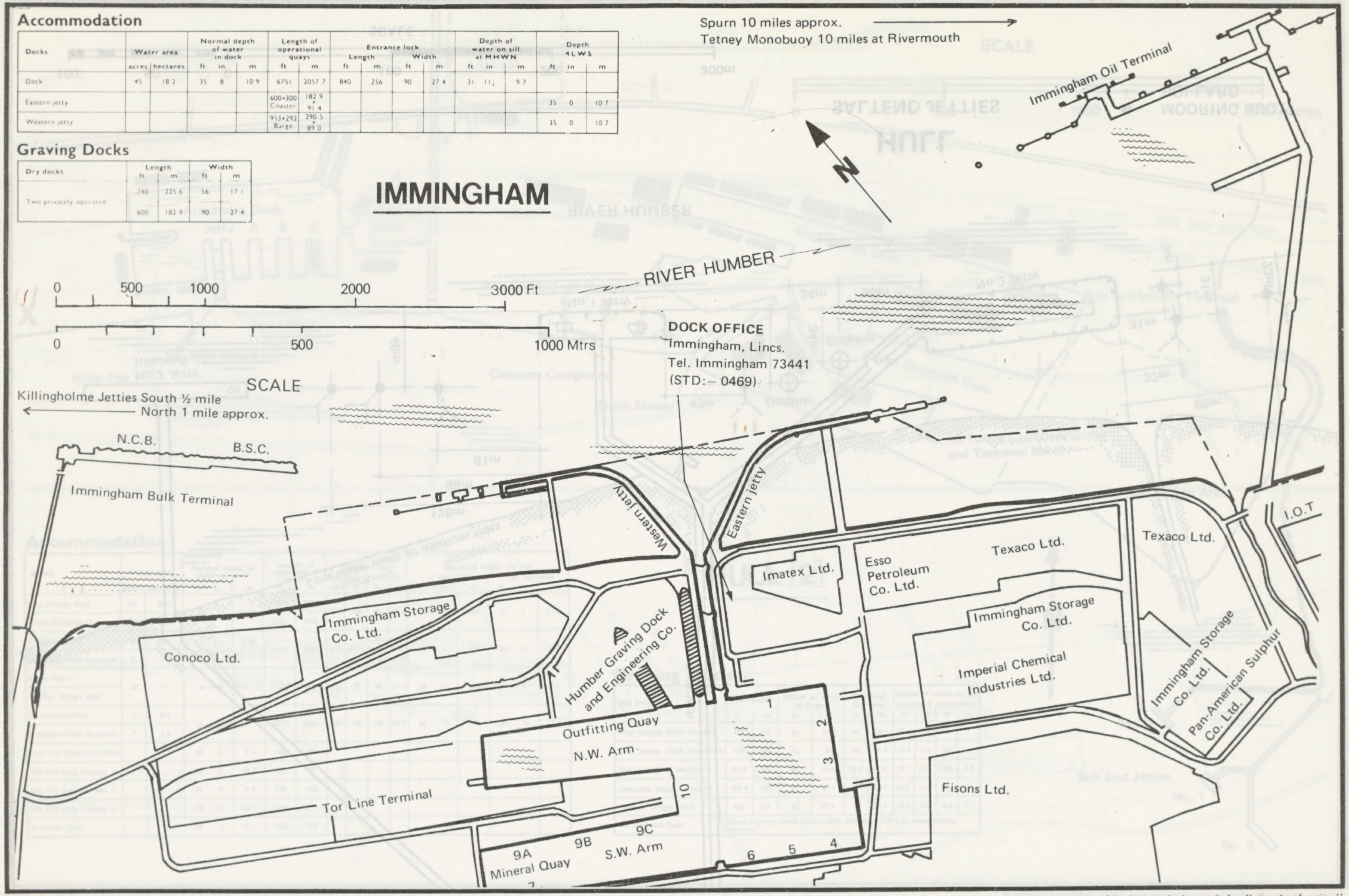
Accommodation

Docks	Water area		Normal depth of water in dock			Length of operational quays		Entrance lock Length		Entrance lock Width		Depth of water on sill at MHWN			Depth 4LWS		
	acres	hectares	ft	in	m	ft	m	ft	m	ft	m	ft	in	m	ft	in	m
Dock	45	18.2	35	8	10.9	6751	2057.7	840	256	90	27.4	31	11½	9.7			
Eastern jetty						600+300 Coaster	182.9 + 91.4								35	0	10.7
Western jetty						953+292 Barge	290.5 + 89.0								35	0	10.7

Graving Docks

Dry docks	Length		Width	
	ft	m	ft	m
Two privately operated	740	225.6	56	17.1
	600	182.9	90	27.4

IMMINGHAM


Spurn 10 miles approx.
Tetney Monobuoy 10 miles at Rivermouth
Immingham Oil Terminal
N
RIVER HUMBER
0
500
1000
2000
3000 Ft
0
500
1000 Mtrs
SCALE
DOCK OFFICE
Immingham, Lincs.
Tel. Immingham 73441
(STD:– 0469)
Killingholme Jetties South ½ mile
North 1 mile approx.
N.C.B.
B.S.C.
Immingham Bulk Terminal
Western jetty
Eastern jetty
I.O.T
Texaco Ltd.
Imatex Ltd.
Esso Petroleum Co. Ltd.
Texaco Ltd.
Immingham Storage Co. Ltd.
Immingham Storage Co. Ltd.
Conoco Ltd.
Humber Graving Dock and Engineering Co.
Imperial Chemical Industries Ltd.
Immingham Storage Co. Ltd.
Pan-American Sulphur Co. Ltd.
Outfitting Quay
N.W. Arm
1
2
3
10
Fisons Ltd.
Tor Line Terminal
9C
9A
9B
S.W. Arm
Mineral Quay
7
6
5
4

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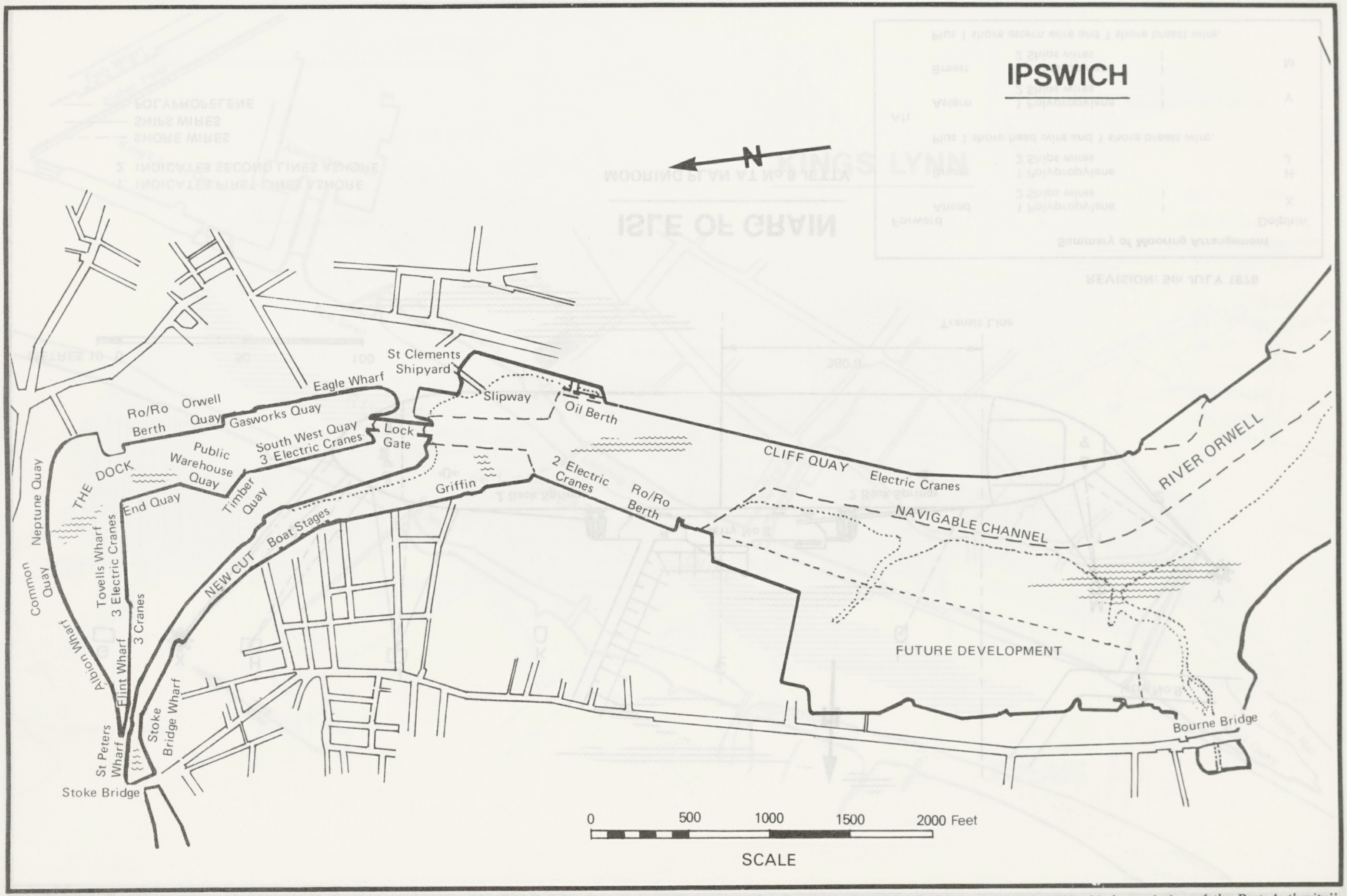
IPSWICH


N
St Clements
Shipyard
Eagle Wharf
Slipway
Oil Berth
Ro/Ro
Berth
Orwell
Quay
Gasworks Quay
Lock
Gate
South West Quay
3 Electric Cranes
Public
Warehouse
Quay
THE DOCK
Neptune Quay
End Quay
Timber
Quay
Griffin
2 Electric
Cranes
Ro/Ro
Berth
CLIFF QUAY
Electric Cranes
NAVIGABLE CHANNEL
RIVER ORWELL
Boat Stages
NEW CUT
Common
Quay
Tovells Wharf
3 Electric Cranes
3 Cranes
Albion Wharf
Flint Wharf
Stoke
Bridge Wharf
St Peters
Wharf
Stoke Bridge
FUTURE DEVELOPMENT
Bourne Bridge
0
500
1000
1500
2000 Feet
SCALE

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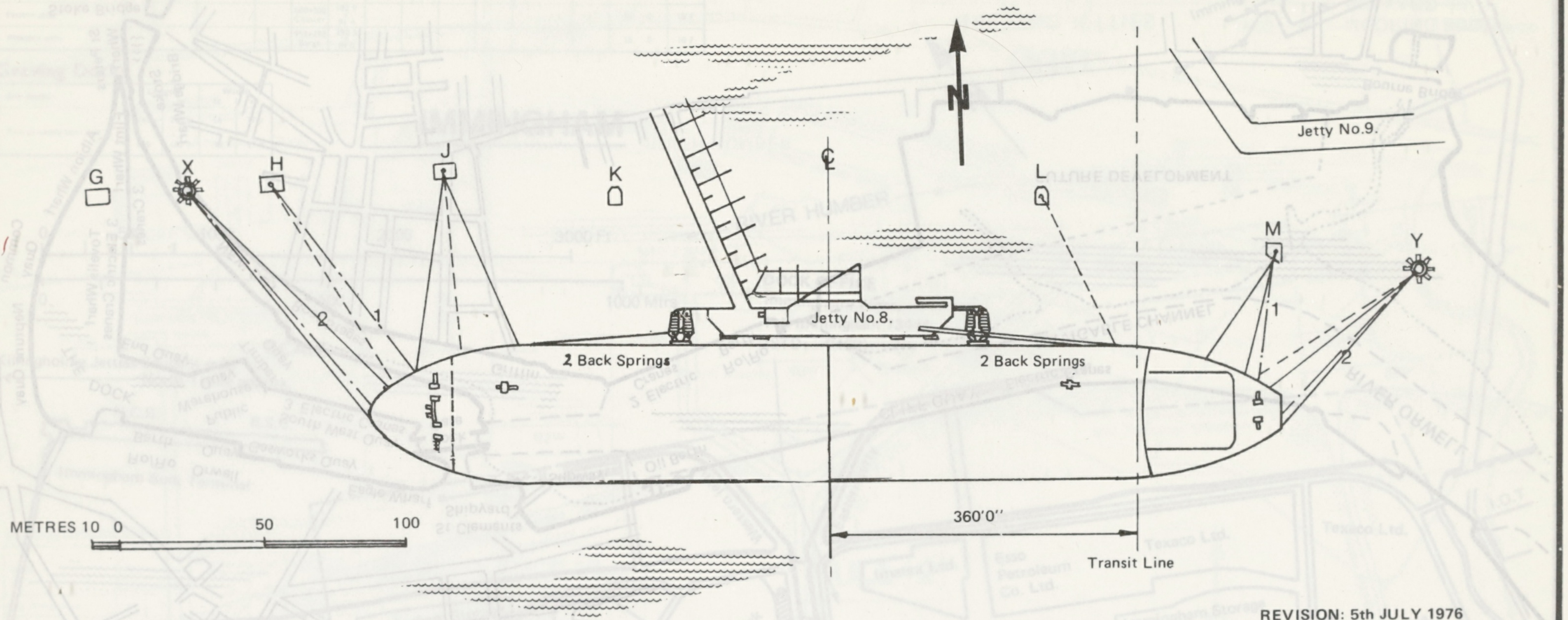
N
G
X
H
J
K
℄
L
M
Y
Jetty No.9.
Jetty No.8.
2
1
1
2
2 Back Springs
2 Back Springs
360'0"
Transit Line
METRES 10 0 50 100

REVISION: 5th JULY 1976

ISLE OF GRAIN

MOORING PLAN AT No.8 JETTY

1. INDICATES FIRST LINES ASHORE
2. INDICATES SECOND LINES ASHORE

— — — — SHORE WIRES
———— SHIPS WIRES
——·—— POLYPROPELENE

Summary of Mooring Arrangement

			Dolphin
Forward			
	Ahead	1 Polypropylene 2 Ships wires	X
	Breast	1 Polypropylene 2 Ships wires	H J
	Plus 1 shore head wire and 1 shore breast wire.		
Aft			
	Astern	1 Polypropylene 2 Ships wires	Y
	Breast	1 Polypropylene 2 Ships wires	M
	Plus 1 shore astern wire and 1 shore breast wire.		

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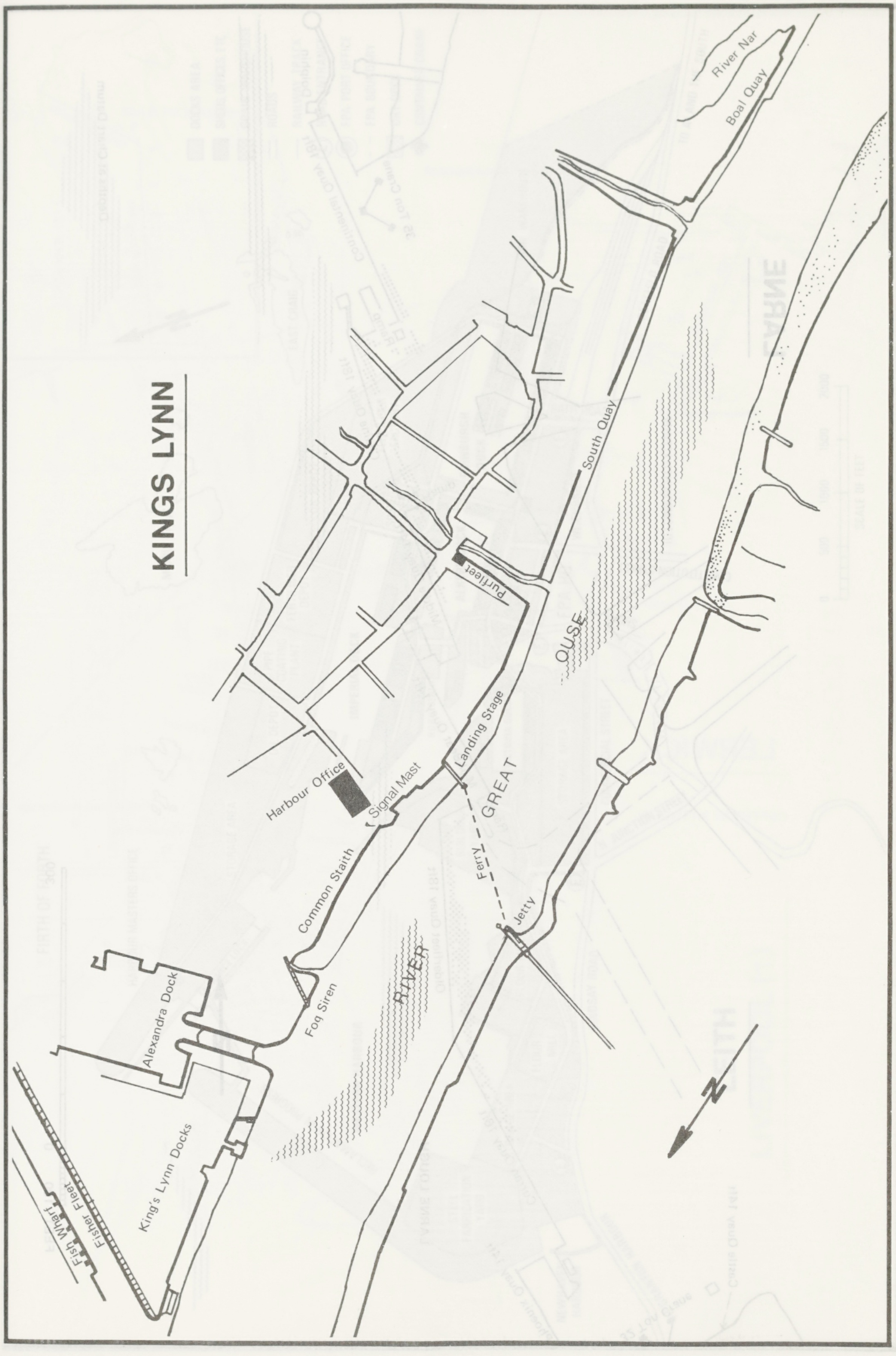

KINGS LYNN

River Nar
Boal Quay
South Quay
Purfleet
OUSE
GREAT
RIVER
Landing Stage
Harbour Office
Signal Mast
Ferry
Jetty
Common Staith
Fog Siren
Alexandra Dock
King's Lynn Docks
Fish Wharf
Fisher Fleet
N

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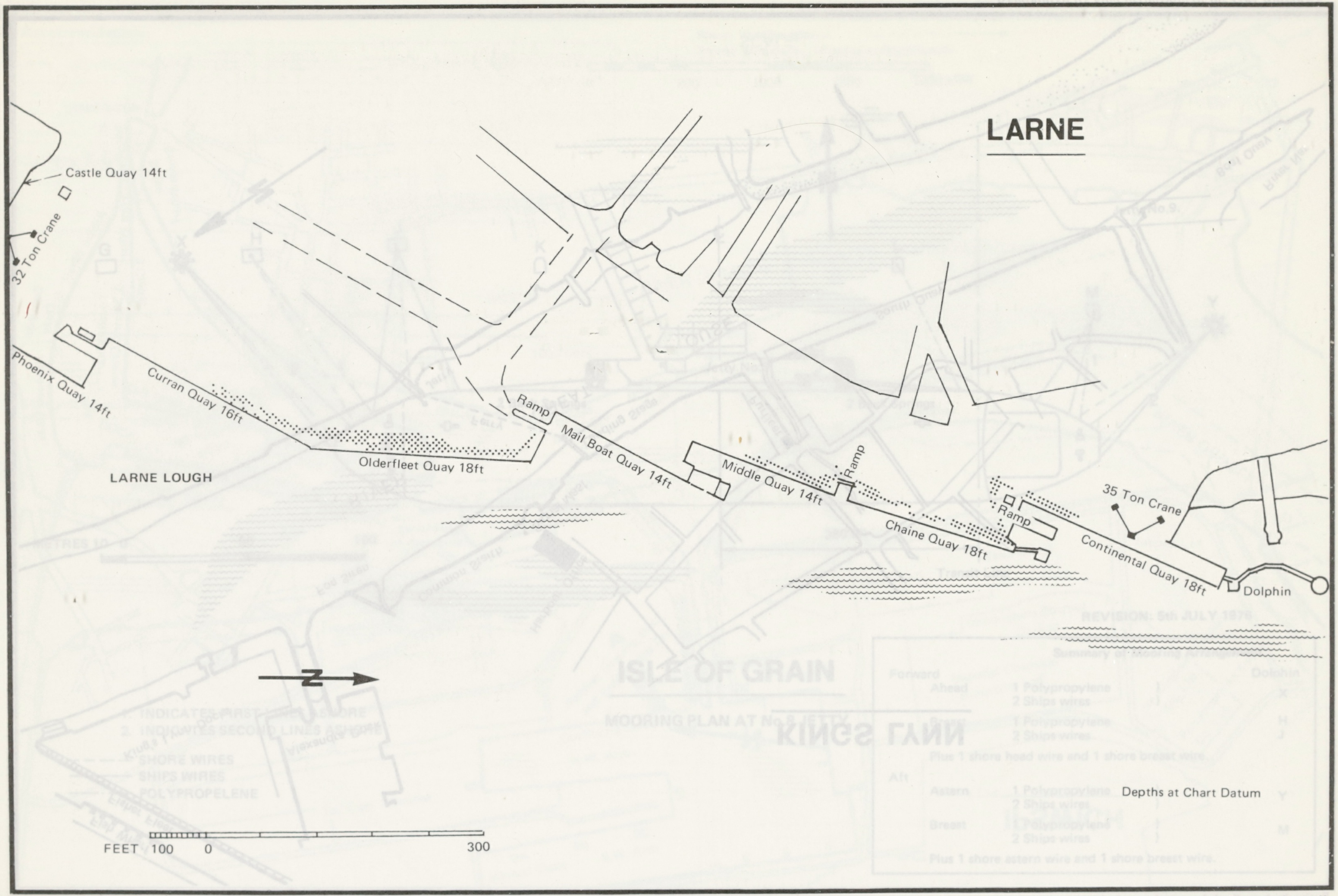
LARNE
Castle Quay 14ft
32 Ton Crane
Phoenix Quay 14ft
Curran Quay 16ft
Olderfleet Quay 18ft
LARNE LOUGH
Ramp
Mail Boat Quay 14ft
Middle Quay 14ft
Ramp
Chaine Quay 18ft
Ramp
35 Ton Crane
Continental Quay 18ft
Dolphin
N
FEET 100 0 300
Depths at Chart Datum

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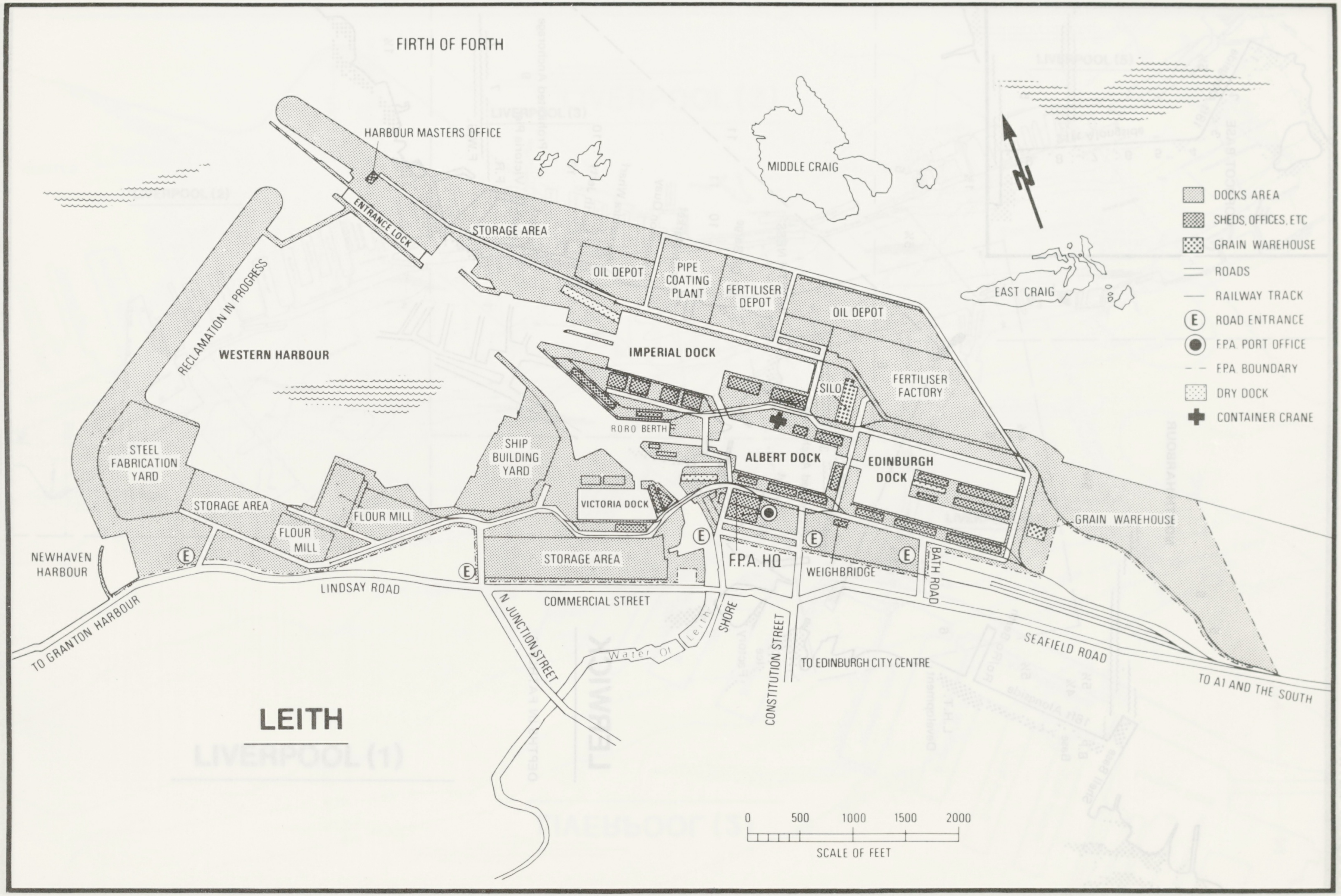
FIRTH OF FORTH
HARBOUR MASTERS OFFICE
ENTRANCE LOCK
STORAGE AREA
MIDDLE CRAIG
EAST CRAIG
N
OIL DEPOT
PIPE COATING PLANT
FERTILISER DEPOT
OIL DEPOT
RECLAMATION IN PROGRESS
WESTERN HARBOUR
IMPERIAL DOCK
SILO
FERTILISER FACTORY
RORO BERTH
STEEL FABRICATION YARD
SHIP BUILDING YARD
ALBERT DOCK
EDINBURGH DOCK
STORAGE AREA
FLOUR MILL
FLOUR MILL
VICTORIA DOCK
GRAIN WAREHOUSE
NEWHAVEN HARBOUR
E
E
E
E
E
STORAGE AREA
F.P.A. HQ
WEIGHBRIDGE
BATH ROAD
LINDSAY ROAD
COMMERCIAL STREET
N JUNCTION STREET
SHORE
CONSTITUTION STREET
Water Of Leith
TO GRANTON HARBOUR
SEAFIELD ROAD
TO EDINBURGH CITY CENTRE
TO A1 AND THE SOUTH
LEITH
0
500
1000
1500
2000
SCALE OF FEET
DOCKS AREA
SHEDS, OFFICES, ETC
GRAIN WAREHOUSE
ROADS
RAILWAY TRACK
E ROAD ENTRANCE
FPA PORT OFFICE
FPA BOUNDARY
DRY DOCK
CONTAINER CRANE

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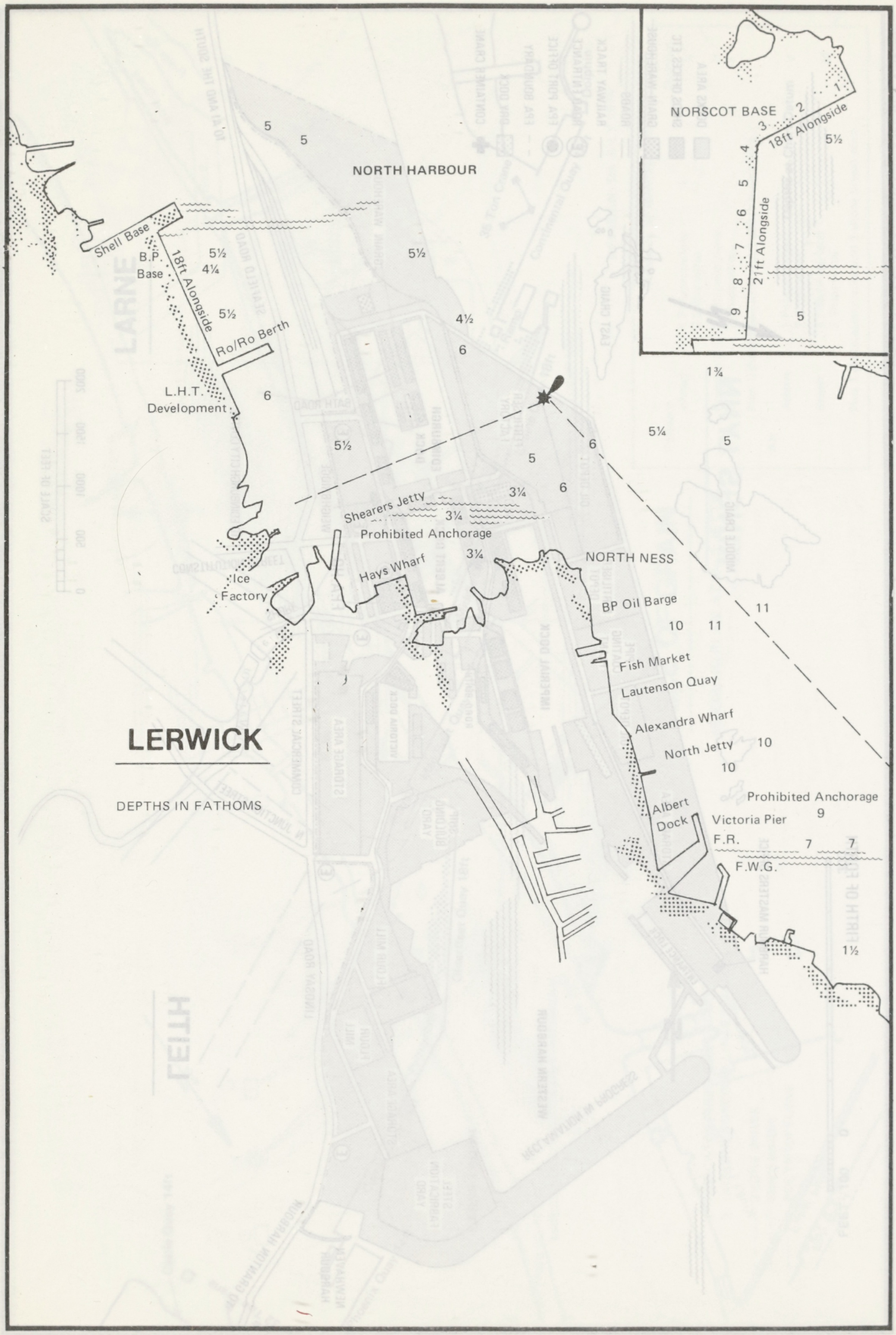
LERWICK
DEPTHS IN FATHOMS
NORSCOT BASE
18ft Alongside
21ft Alongside
NORTH HARBOUR
Shell Base
B.P. Base
18ft Alongside
Ro/Ro Berth
L.H.T. Development
Ice Factory
Shearers Jetty
Prohibited Anchorage
Hays Wharf
NORTH NESS
BP Oil Barge
Fish Market
Lautenson Quay
Alexandra Wharf
North Jetty
Albert Dock
Victoria Pier
Prohibited Anchorage
F.R.
F.W.G.
5
5
5½
4¼
5½
5½
4½
6
6
5½
5
6
6
3¼
3¼
3¼
1¾
5¼
5
11
10
11
10
10
9
7
7
1½
1
2
3
4
5
6
7
8
9
5½
5

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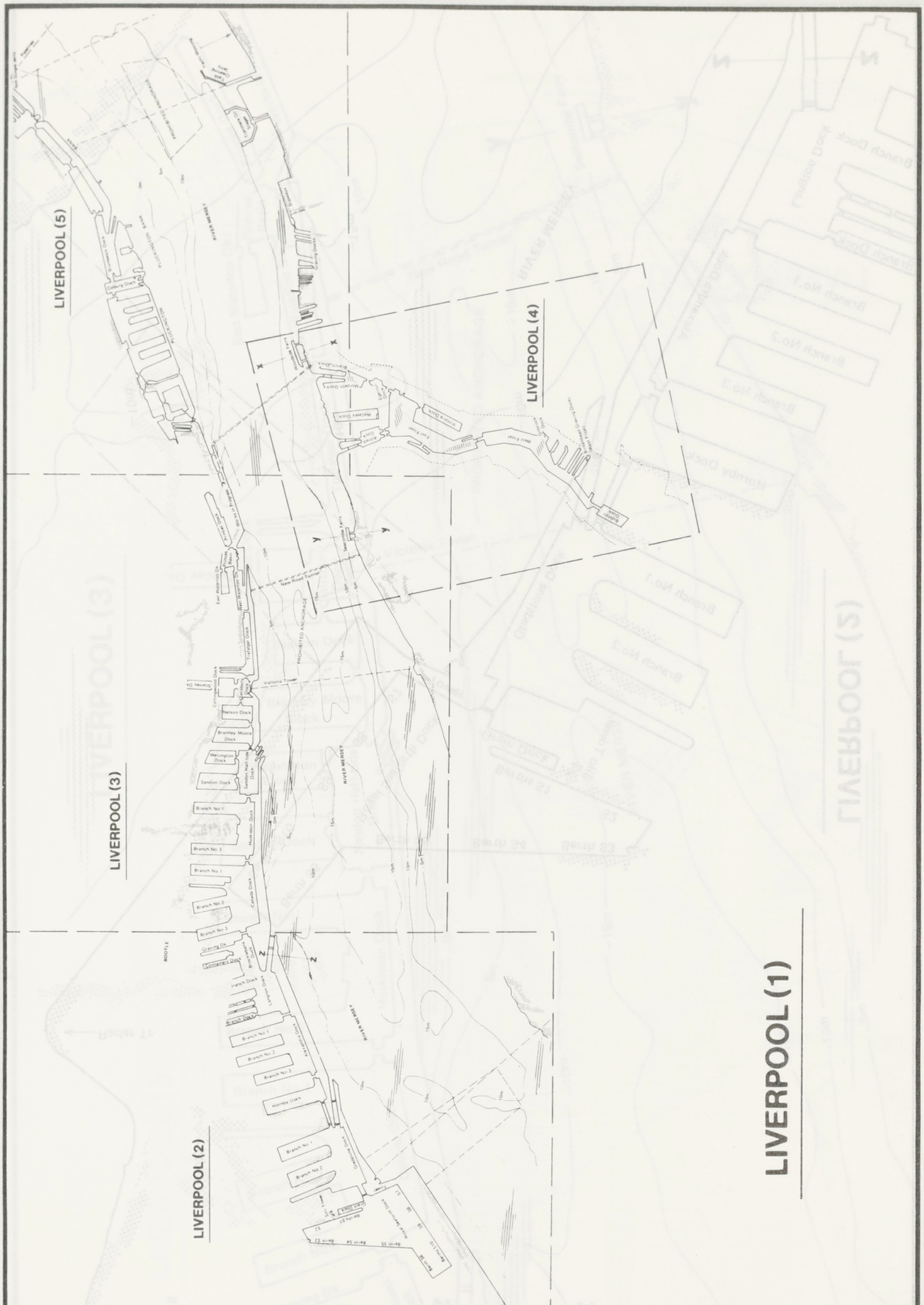
LIVERPOOL (1)
LIVERPOOL (2)
LIVERPOOL (3)
LIVERPOOL (4)
LIVERPOOL (5)
RIVER MERSEY
PROHIBITED ANCHORAGE
New Road Tunnel
Victoria Tower
BOOTLE
Gladstone Dock
Hornby Dock
Alexandra Dock
Langton Dock
Brocklebank Dock
Canada Dock
Huskisson Dock
Sandon Half-tide Dock
Sandon Dock
Wellington Dock
Bramley Moore Dock
Nelson Dock
Salisbury Dock
Collingwood Dock
Stanley Dk
Trafalgar Dock
West Waterloo Dock
East Waterloo Dk
Princes Basin
Princes Dock
Coburg Dock
Brunswick Dock
Branch No. 1
Branch No. 2
Branch No. 3
Graving Dk
Container Dock
Branch Dock
Seaforth Dock
Bidston Dock
Vittoria Dock
Wallasey Dock
Alfred Dock
Morpeth Dock
Egerton Dock
East Float
West Float
Woodside Ferry
Seacombe Ferry
Graving Docks
X
Y
Z
10m
15m
5m

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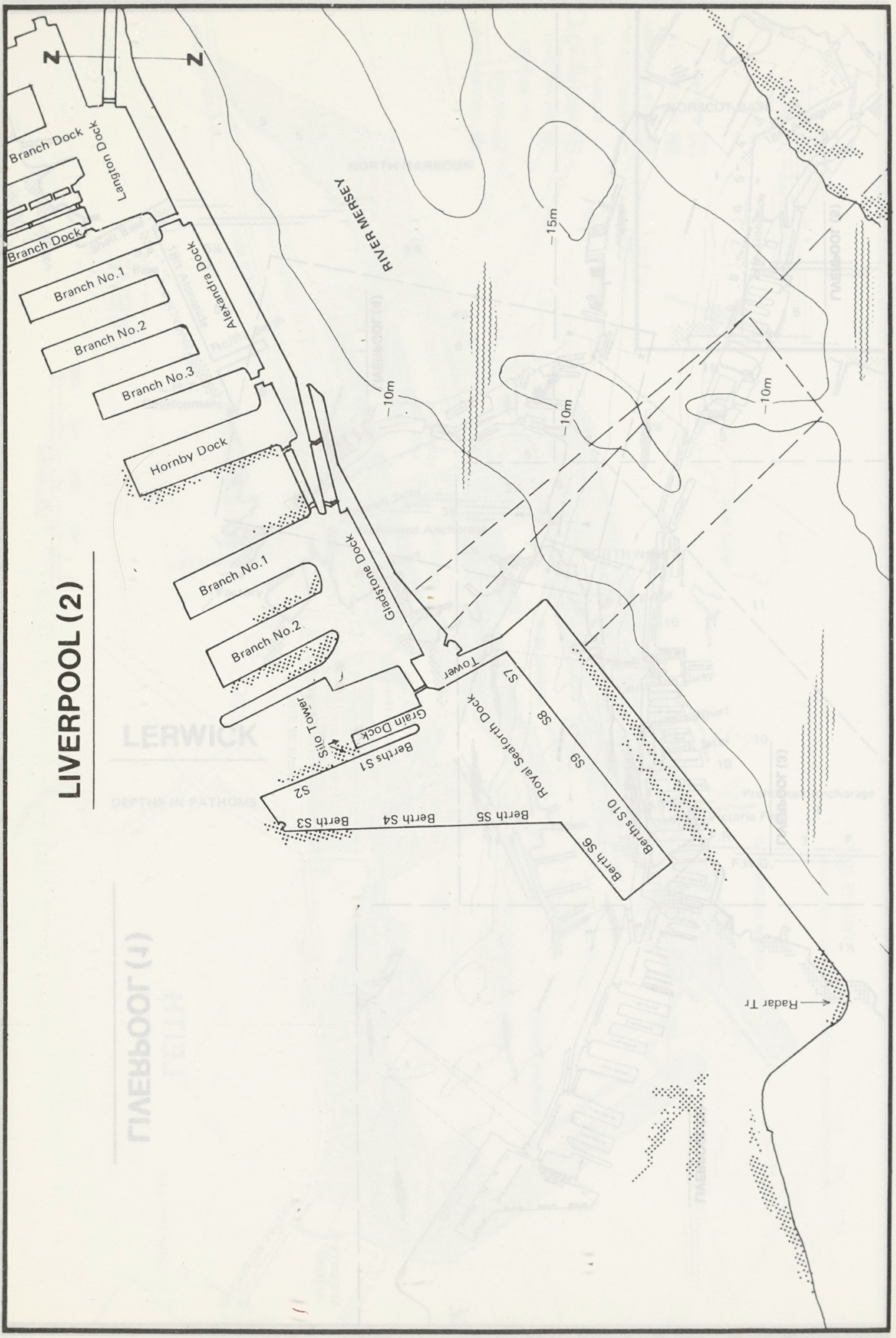
LIVERPOOL (2)


N
Branch Dock
Langton Dock
Branch Dock
Branch No.1
Branch No.2
Branch No.3
Alexandra Dock
Hornby Dock
RIVER MERSEY
−15m
−10m
−10m
−10m
Branch No.1
Branch No.2
Gladstone Dock
Tower
Silo Tower
Grain Dock
Berths S1
S2
Berth S3
Berth S4
Berth S5
Royal Seaforth Dock
S7
S8
S9
Berths S10
Berth S6
Radar Tr

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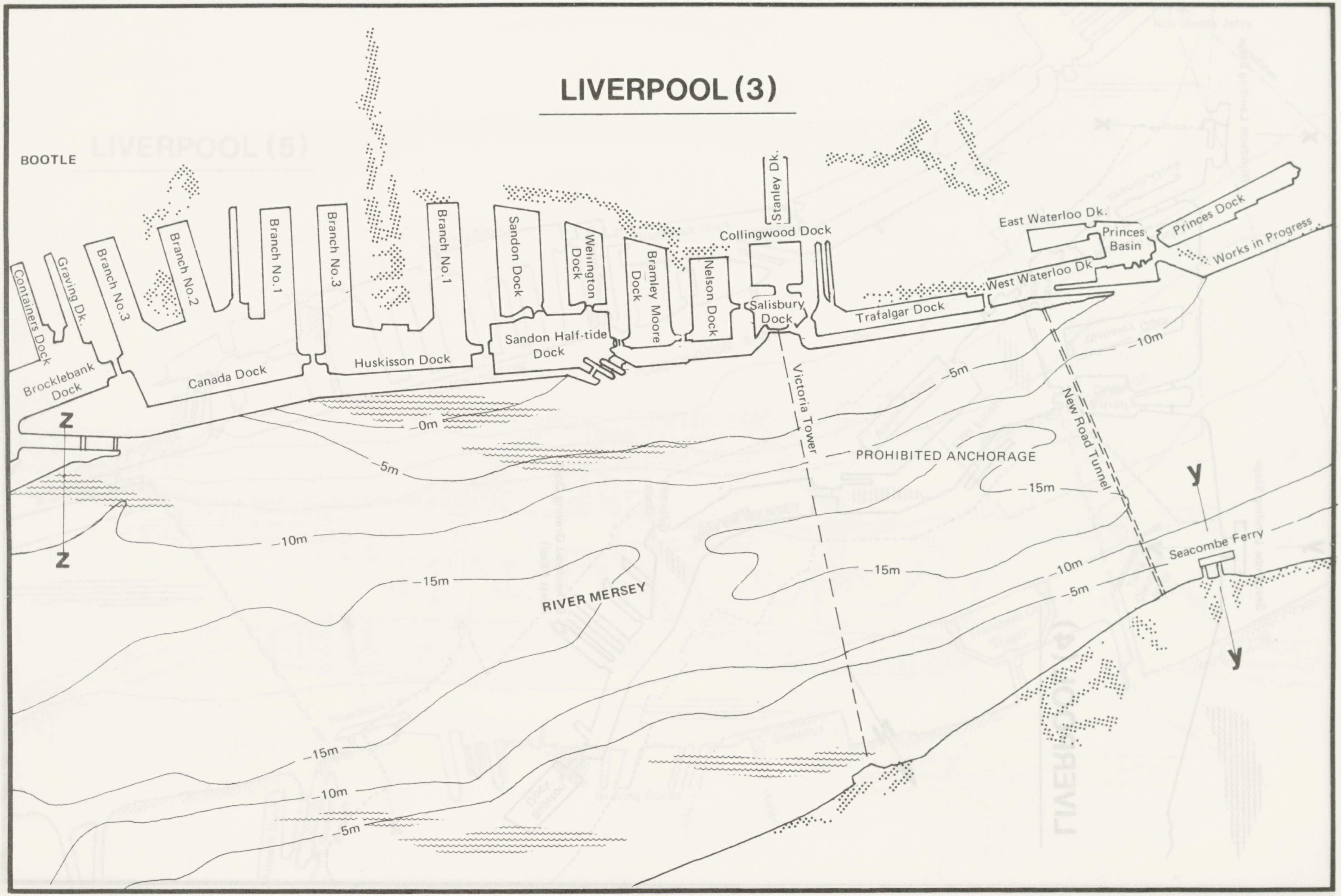
LIVERPOOL (3)


BOOTLE
Containers Dock
Graving Dk.
Branch No.3
Branch No.2
Branch No.1
Branch No.3
Branch No.1
Sandon Dock
Wellington Dock
Bramley Moore Dock
Nelson Dock
Stanley Dk.
Collingwood Dock
Salisbury Dock
Trafalgar Dock
West Waterloo Dk.
East Waterloo Dk.
Princes Basin
Princes Dock
Works in Progress
Brocklebank Dock
Canada Dock
Huskisson Dock
Sandon Half-tide Dock
Victoria Tower
New Road Tunnel
PROHIBITED ANCHORAGE
Z
Z
y
y
Seacombe Ferry
RIVER MERSEY
-0m
-5m
-10m
-15m
-15m
-15m
-15m
-10m
-5m
-5m
-10m
-5m
-10m
-15m

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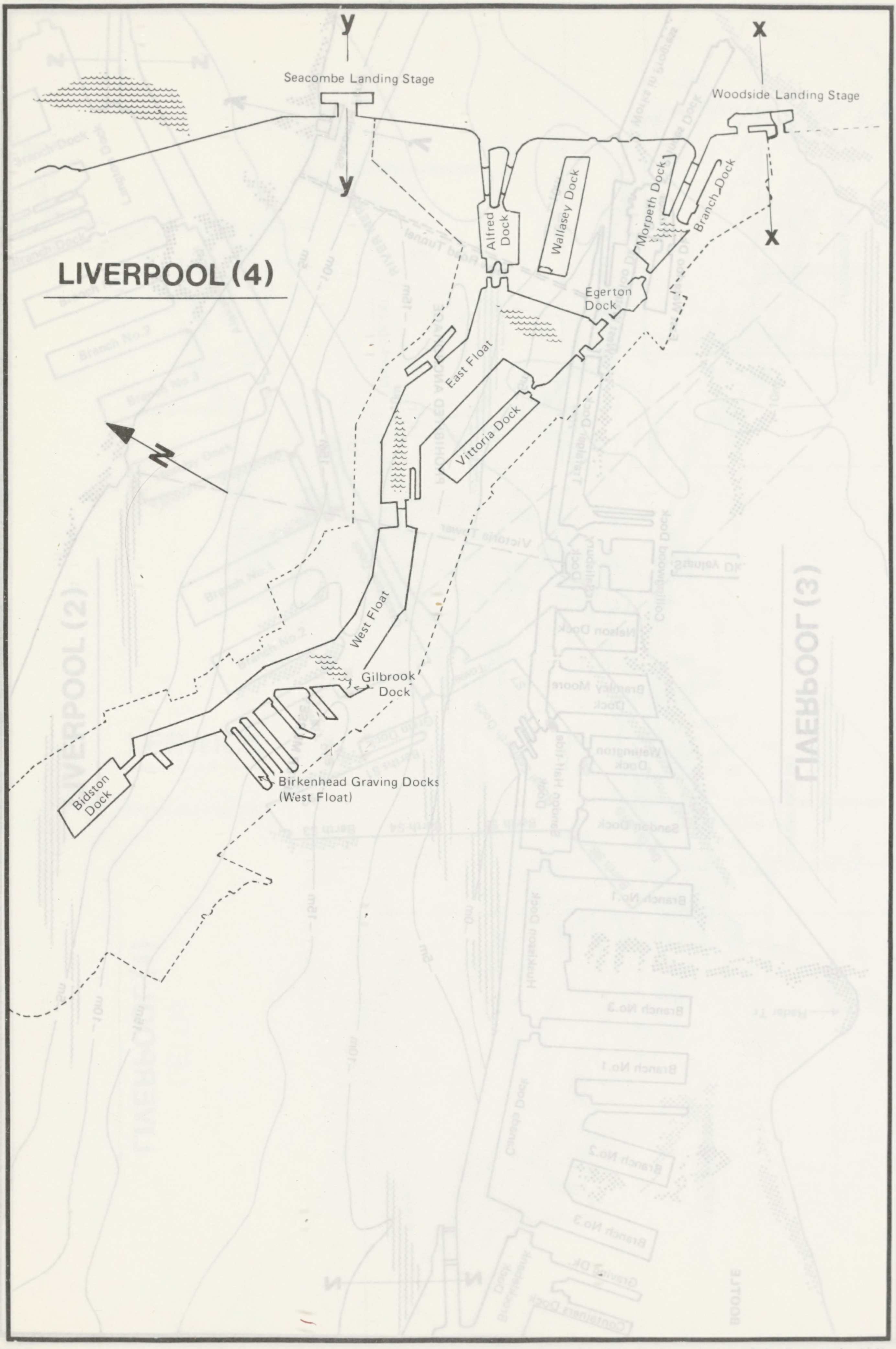
LIVERPOOL (4)


y
y
Seacombe Landing Stage
X
Woodside Landing Stage
X
Alfred Dock
Wallasey Dock
Morpeth Dock
Branch Dock
Egerton Dock
East Float
Vittoria Dock
N
West Float
Gilbrook Dock
Birkenhead Graving Docks (West Float)
Bidston Dock

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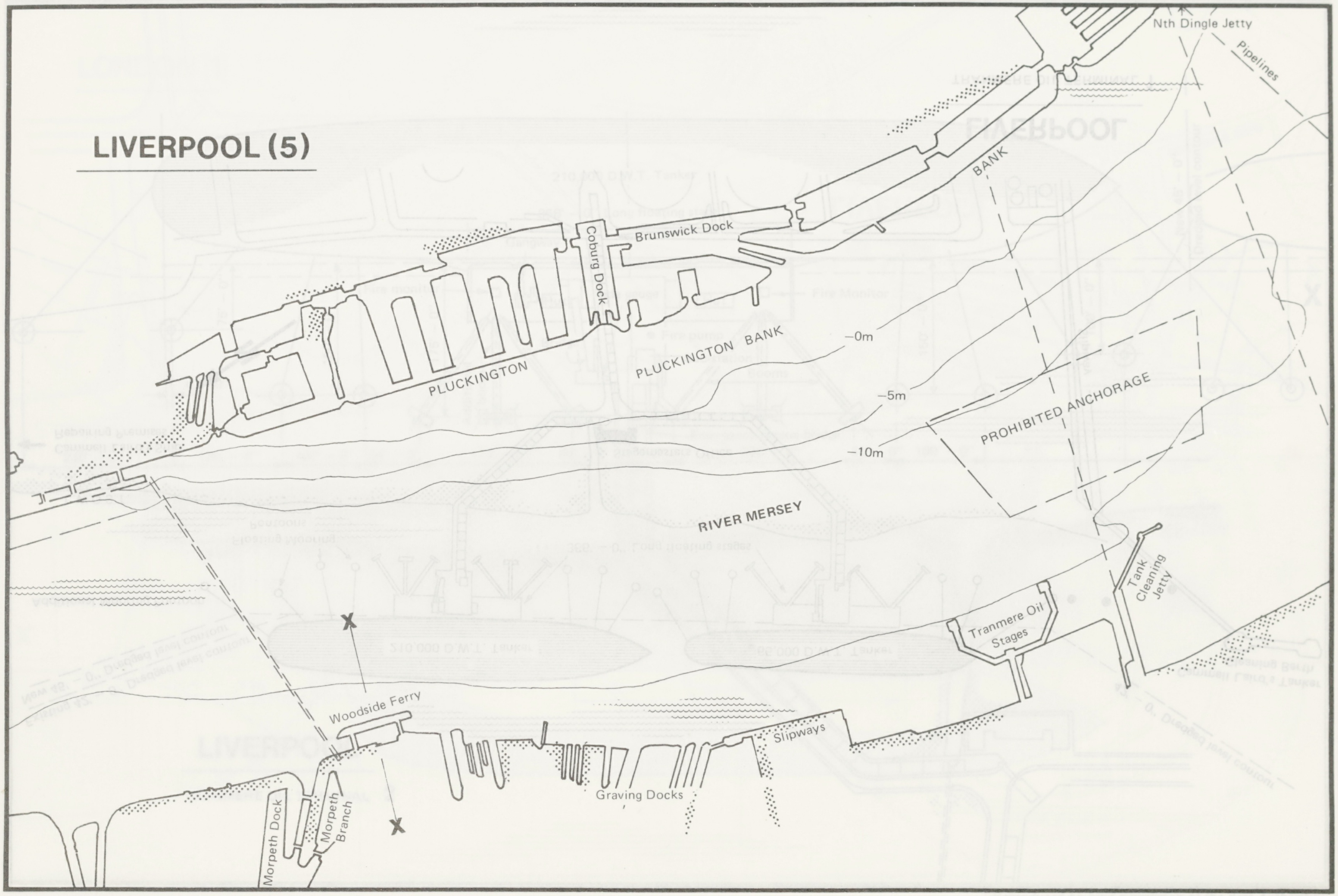
LIVERPOOL (5)


Nth Dingle Jetty
Pipelines
BANK
Brunswick Dock
Coburg Dock
PLUCKINGTON BANK
PLUCKINGTON
–0m
–5m
–10m
PROHIBITED ANCHORAGE
RIVER MERSEY
Tank Cleaning Jetty
Tranmere Oil Stages
Woodside Ferry
Slipways
Graving Docks
Morpeth Dock
Morpeth Branch

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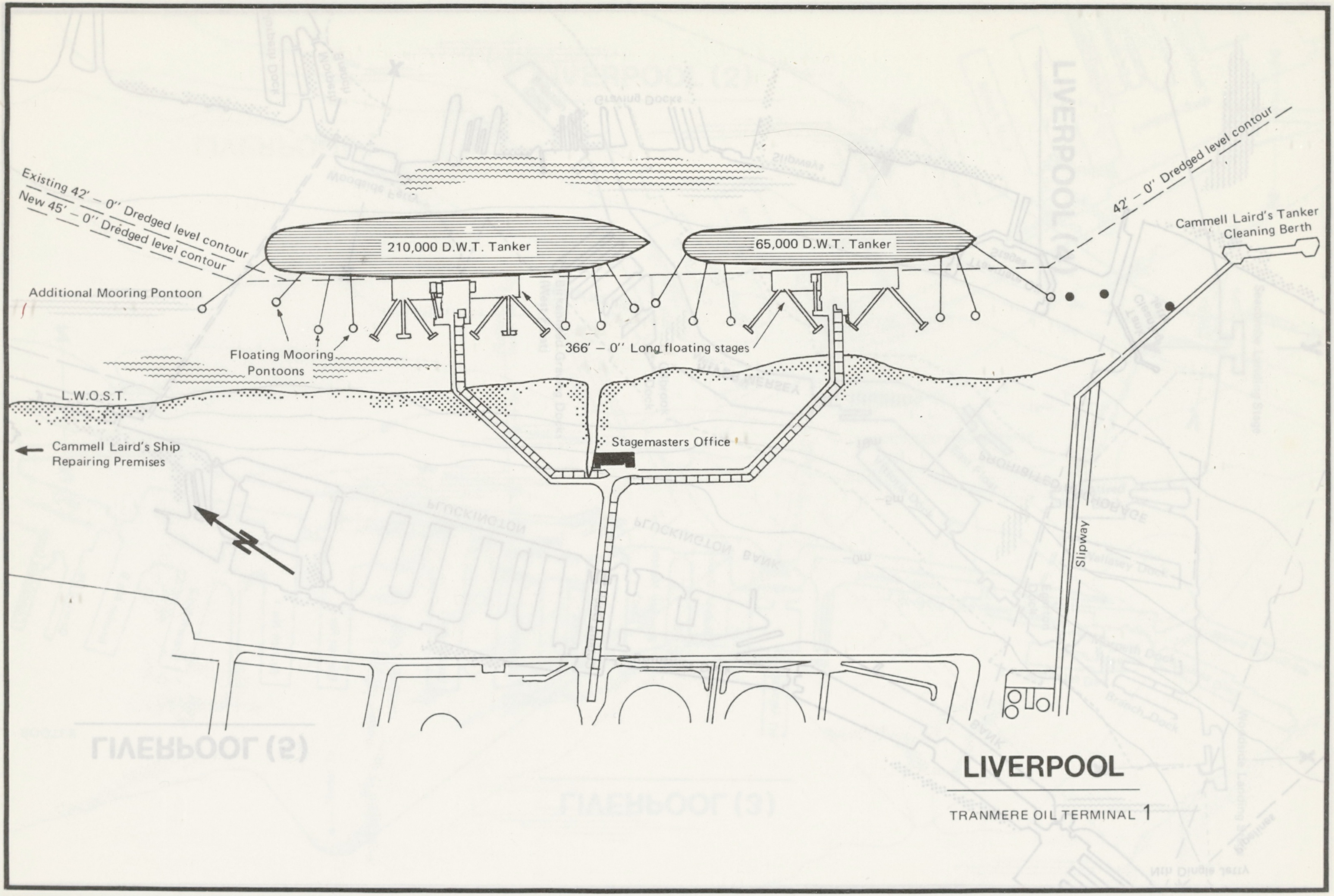
Existing 42′ – 0″ Dredged level contour
New 45′ – 0″ Dredged level contour
210,000 D.W.T. Tanker
65,000 D.W.T. Tanker
42′ – 0″ Dredged level contour
Cammell Laird's Tanker Cleaning Berth
Additional Mooring Pontoon
Floating Mooring Pontoons
366′ – 0″ Long floating stages
L.W.O.S.T.
Stagemasters Office
Cammell Laird's Ship Repairing Premises
Slipway

LIVERPOOL

TRANMERE OIL TERMINAL 1

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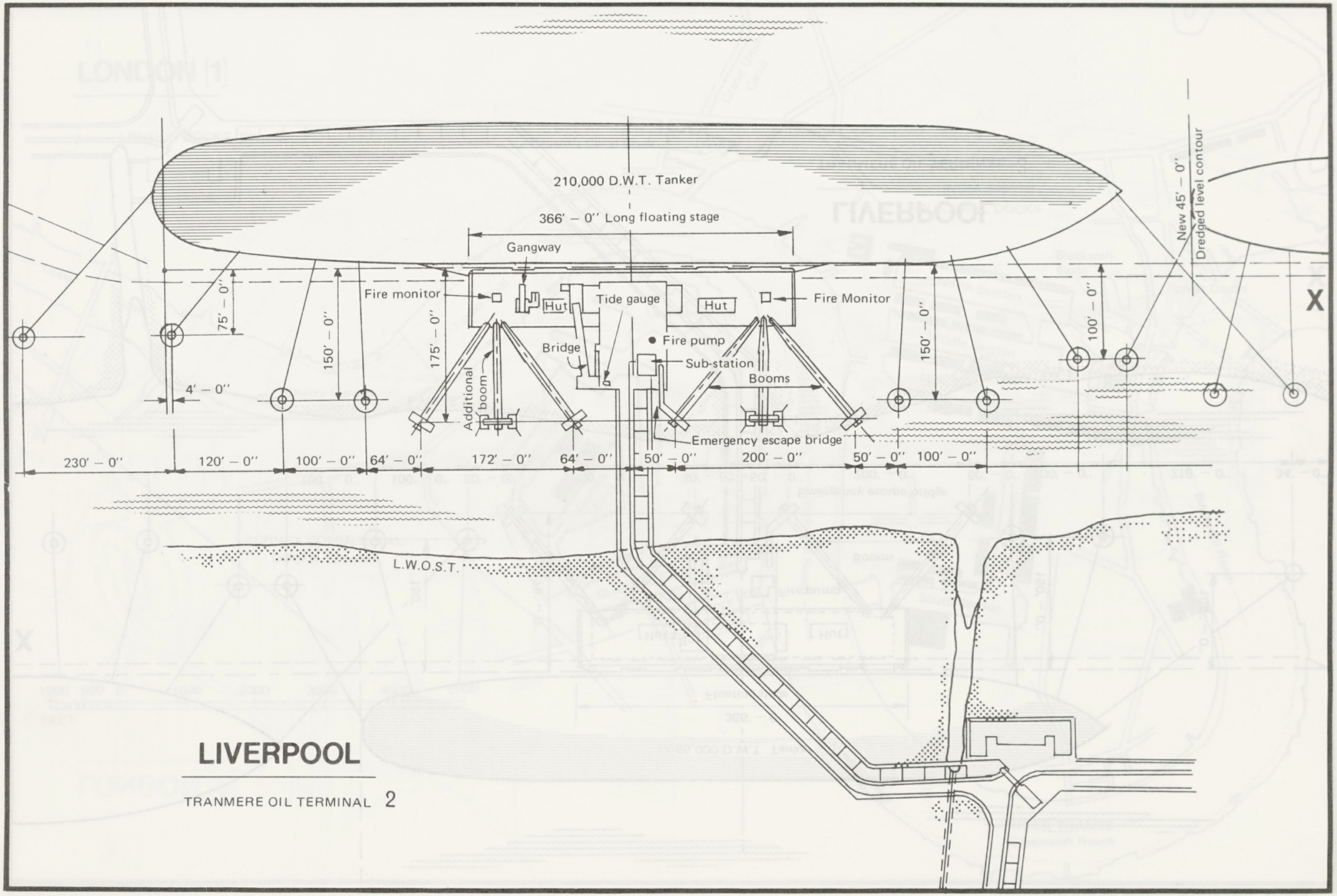
210,000 D.W.T. Tanker
366' – 0'' Long floating stage
Gangway
Fire monitor
Hut
Tide gauge
Hut
Fire Monitor
Fire pump
Bridge
Sub-station
Booms
Additional boom
Emergency escape bridge
75' – 0''
150' – 0''
175' – 0''
150' – 0''
100' – 0''
4' – 0''
230' – 0''
120' – 0''
100' – 0''
64' – 0''
172' – 0''
64' – 0''
50' – 0''
200' – 0''
50' – 0''
100' – 0''
New 45' – 0''
Dredged level contour
X
L.W.O.S.T.

LIVERPOOL

TRANMERE OIL TERMINAL 2

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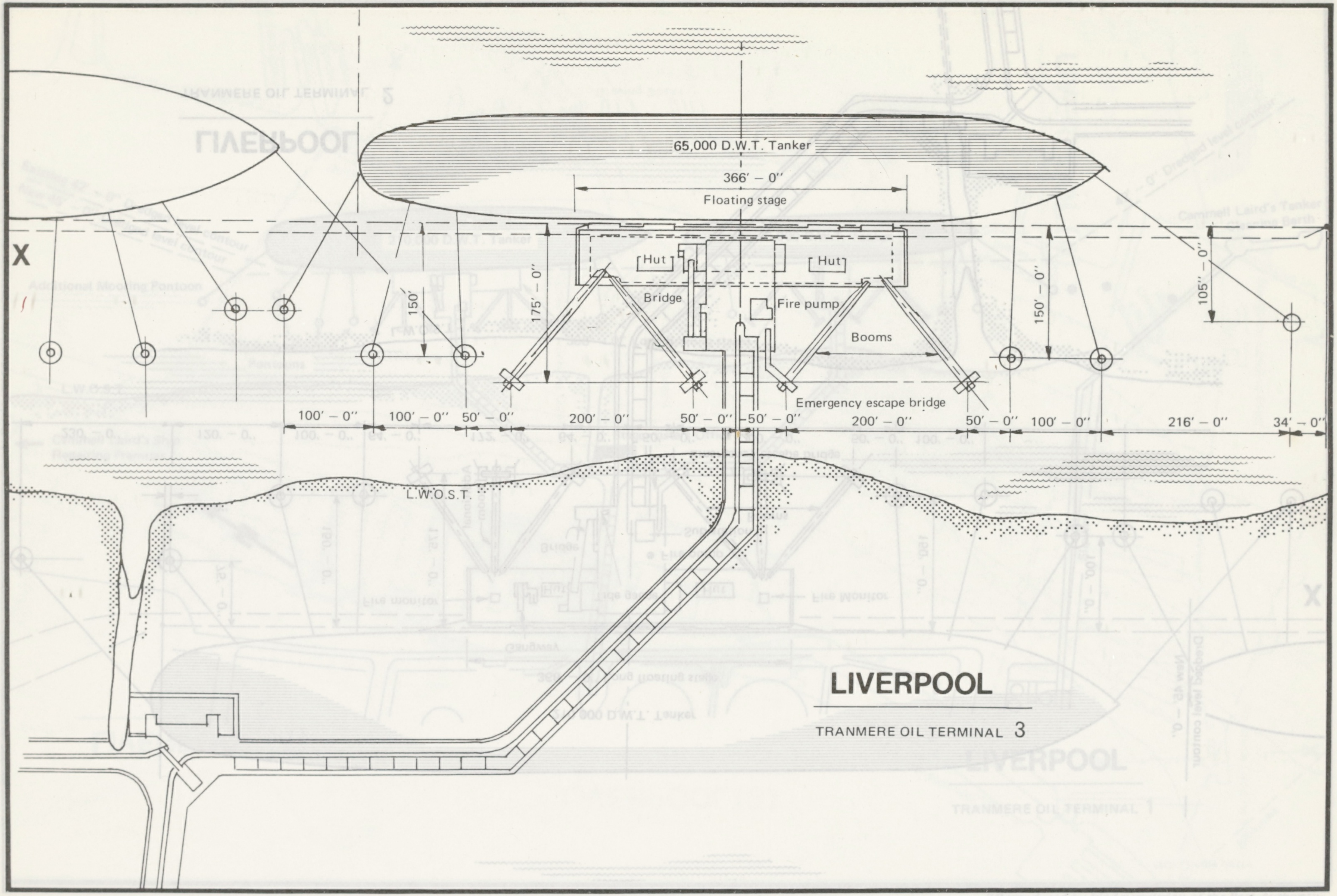
65,000 D.W.T. Tanker
366' – 0"
Floating stage
X
Hut
Hut
Bridge
Fire pump
Booms
Emergency escape bridge
150
175' – 0"
150' – 0"
105' – 0"
100' – 0"
100' – 0"
50' – 0"
200' – 0"
50' – 0"
50' – 0"
200' – 0"
50' – 0"
100' – 0"
216' – 0"
34' – 0"
L.W.O.S.T.

LIVERPOOL

TRANMERE OIL TERMINAL 3

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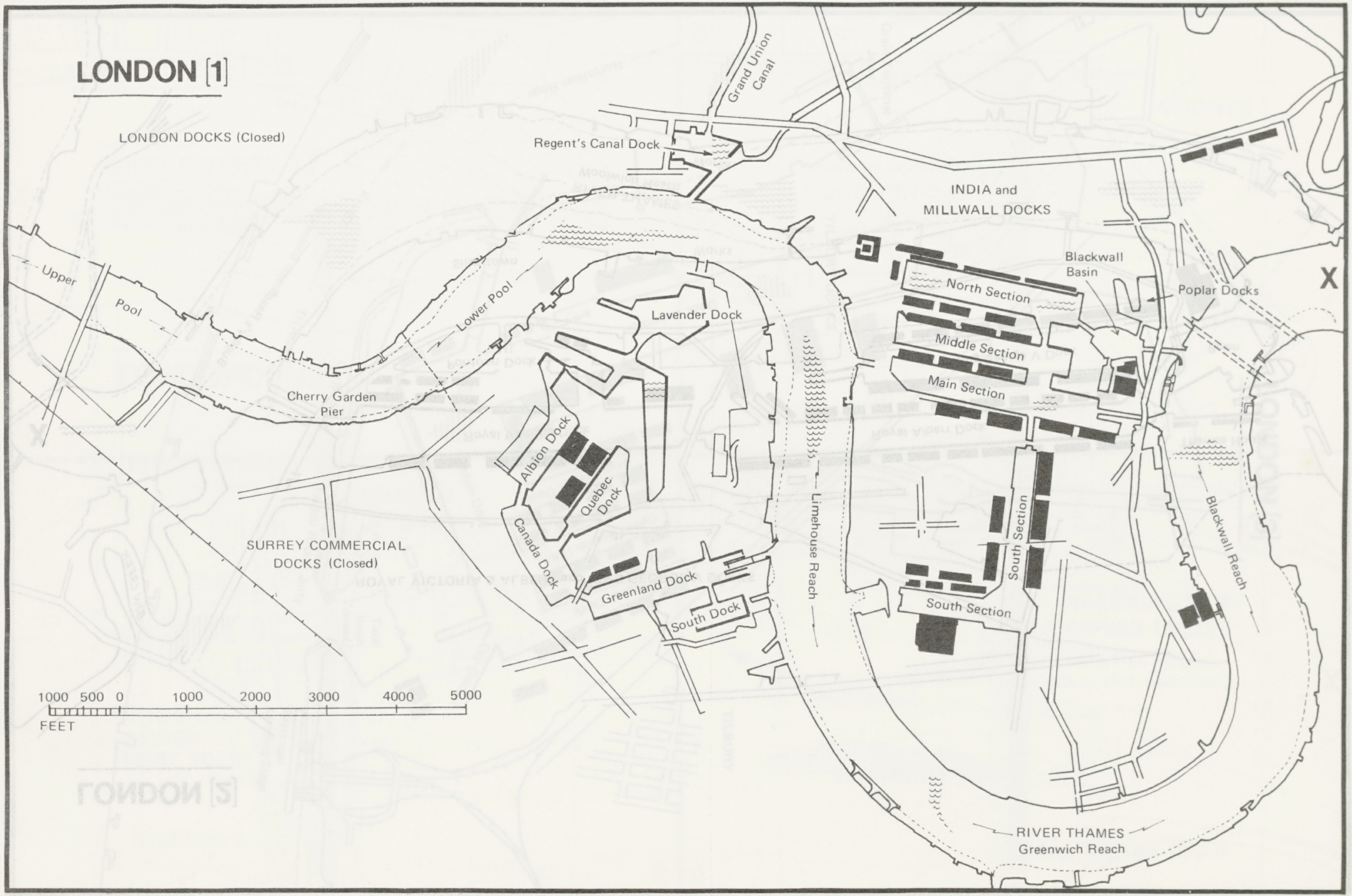
LONDON [1]


LONDON DOCKS (Closed)
Regent's Canal Dock
Grand Union Canal
INDIA and MILLWALL DOCKS
Upper Pool
Lower Pool
Cherry Garden Pier
Lavender Dock
Albion Dock
Quebec Dock
Canada Dock
Greenland Dock
South Dock
SURREY COMMERCIAL DOCKS (Closed)
Limehouse Reach
North Section
Middle Section
Main Section
South Section
South Section
Blackwall Basin
Poplar Docks
X
X
Blackwall Reach
RIVER THAMES
Greenwich Reach
1000 500 0 1000 2000 3000 4000 5000
FEET

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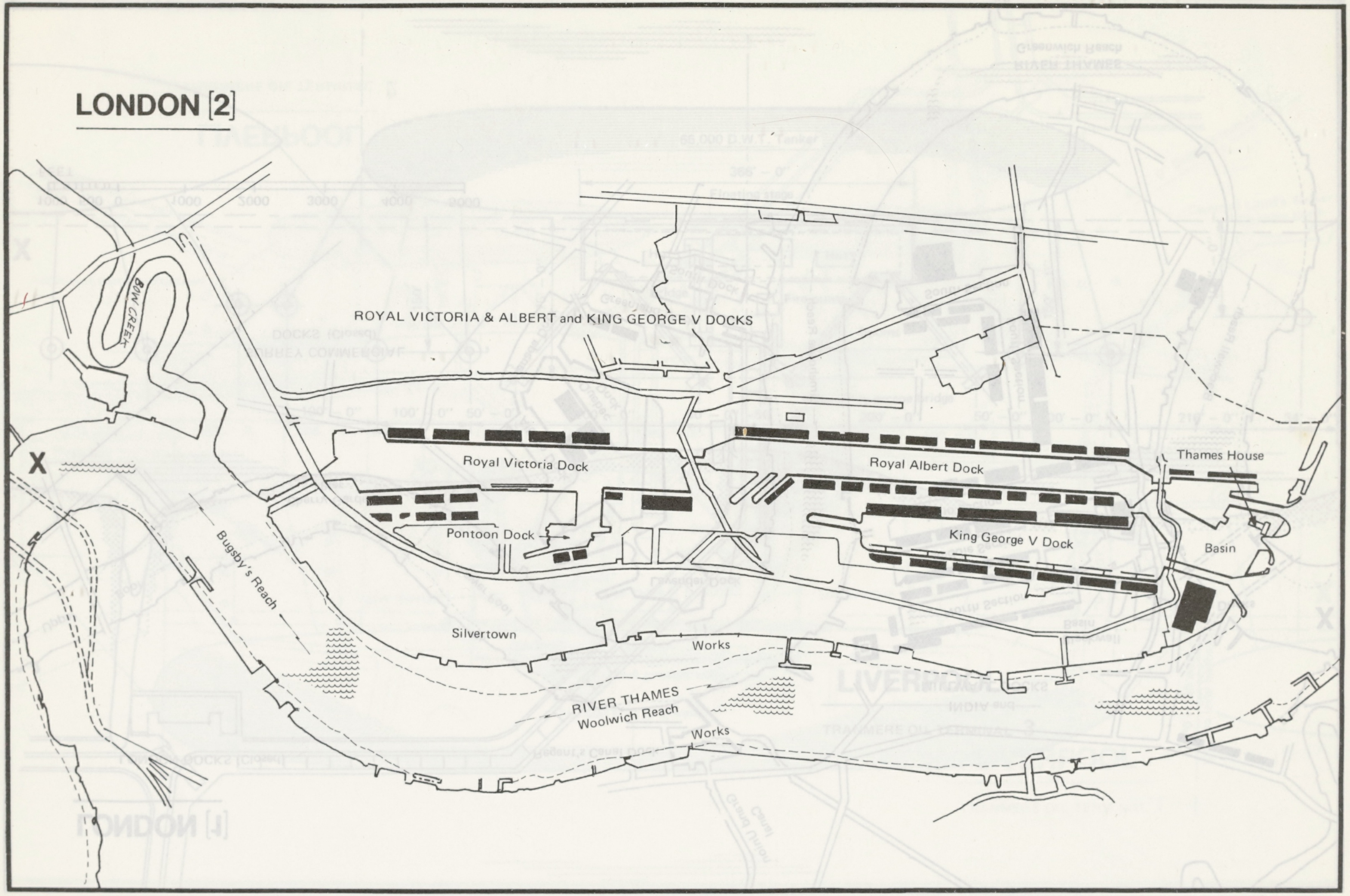
LONDON [2]


ROYAL VICTORIA & ALBERT and KING GEORGE V DOCKS
BOW CREEK
X
Royal Victoria Dock
Pontoon Dock
Royal Albert Dock
Thames House
King George V Dock
Basin
X
Bugsby's Reach
Silvertown
Works
RIVER THAMES
Woolwich Reach
Works

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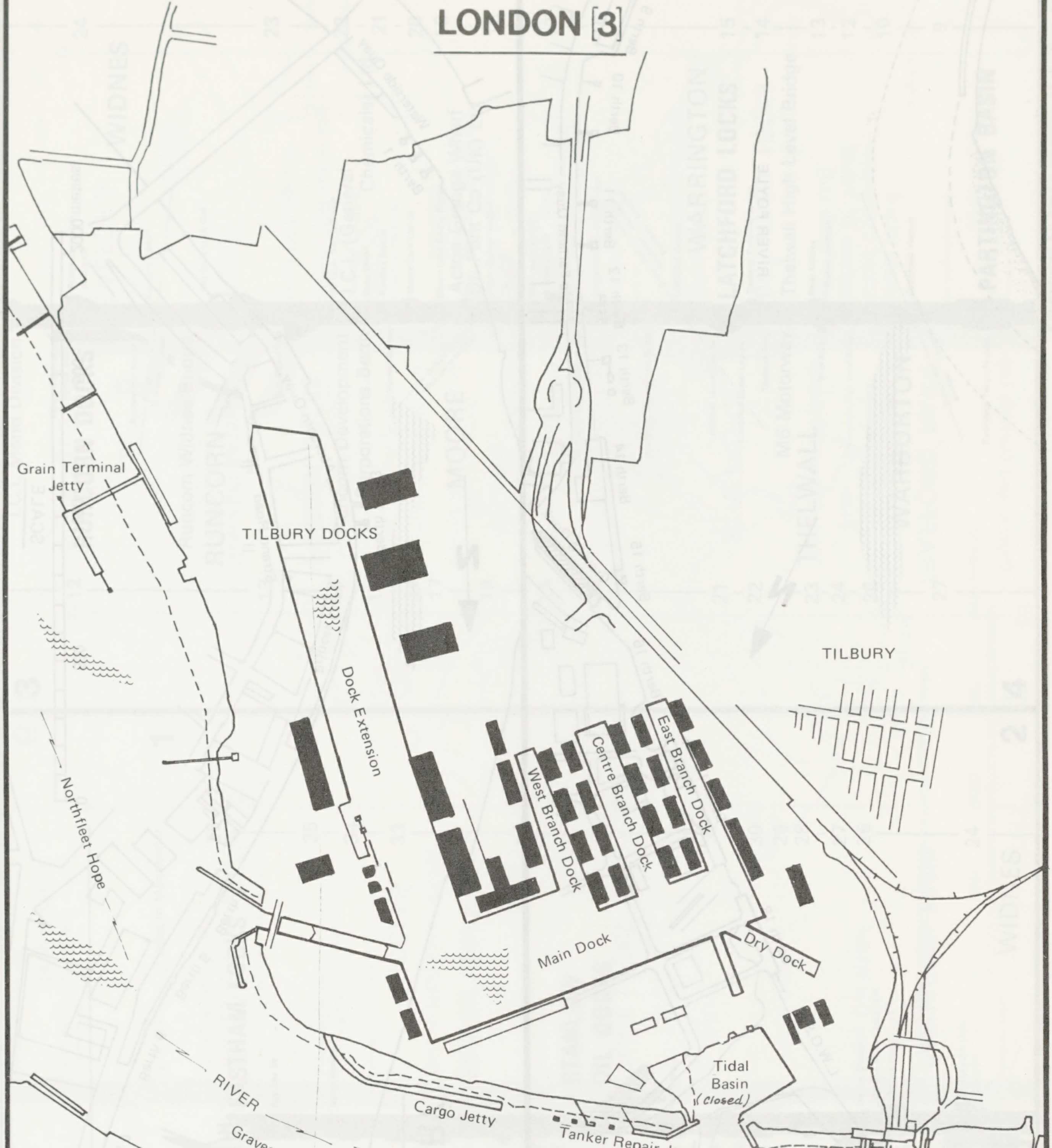
LONDON [3]


Grain Terminal Jetty
TILBURY DOCKS
Dock Extension
West Branch Dock
Centre Branch Dock
East Branch Dock
TILBURY
Main Dock
Dry Dock
Tidal Basin
(closed)
Cargo Jetty
Tanker Repair Jetty
Passenger Landing Stage
Northfleet Hope
RIVER
THAMES
Gravesend Reach

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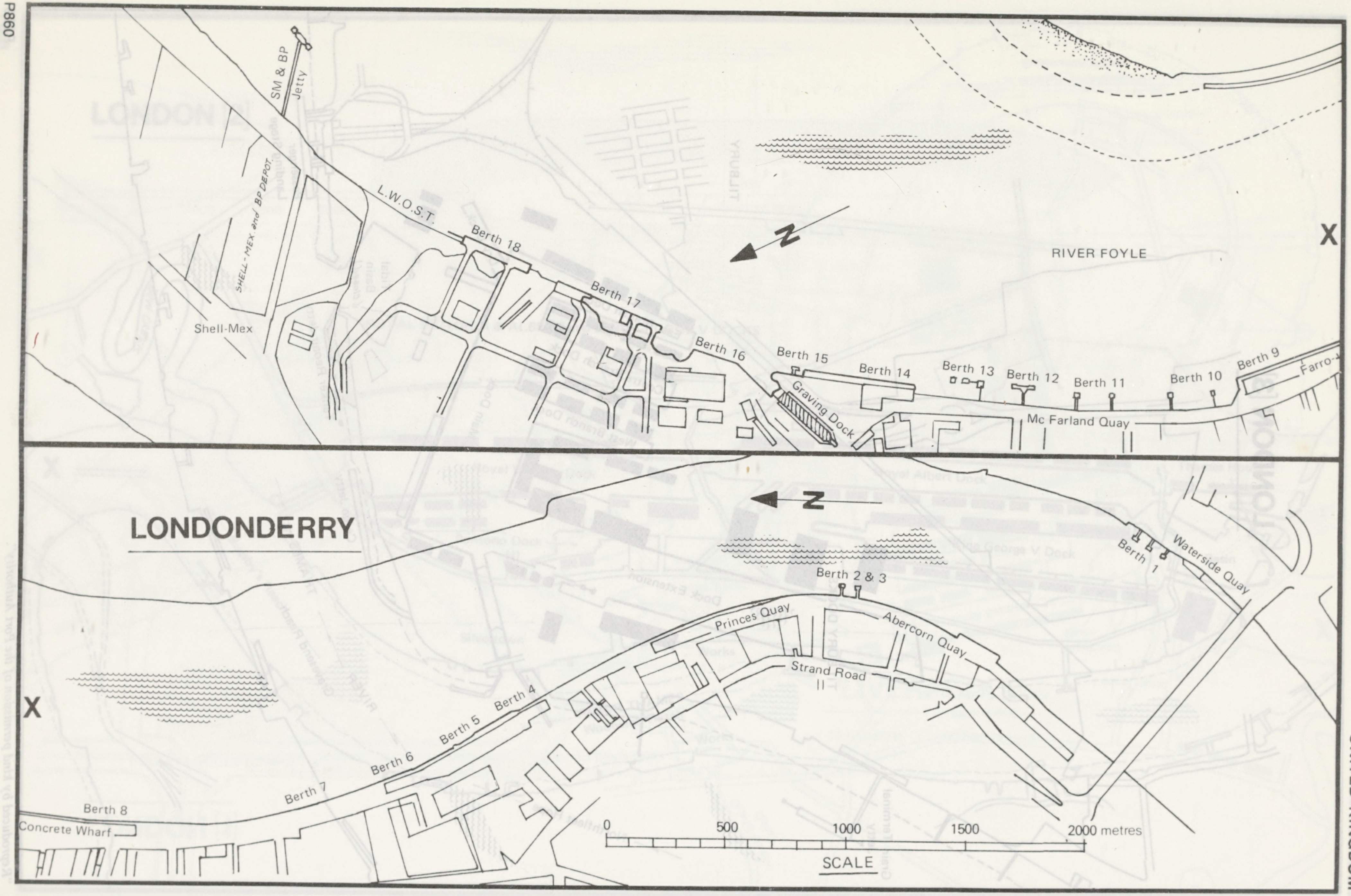
LONDONDERRY
SM & BP Jetty
SHELL-MEX and BP DEPOT.
Shell-Mex
L.W.O.S.T.
Berth 18
Berth 17
Berth 16
Berth 15
Graving Dock
Berth 14
Berth 13
Berth 12
Berth 11
Berth 10
Berth 9
Farro-
Mc Farland Quay
N
RIVER FOYLE
X
N
Berth 1
Waterside Quay
Berth 2 & 3
Princes Quay
Abercorn Quay
Strand Road
Berth 4
Berth 5
Berth 6
Berth 7
Berth 8
Concrete Wharf
X
0
500
1000
1500
2000 metres
SCALE

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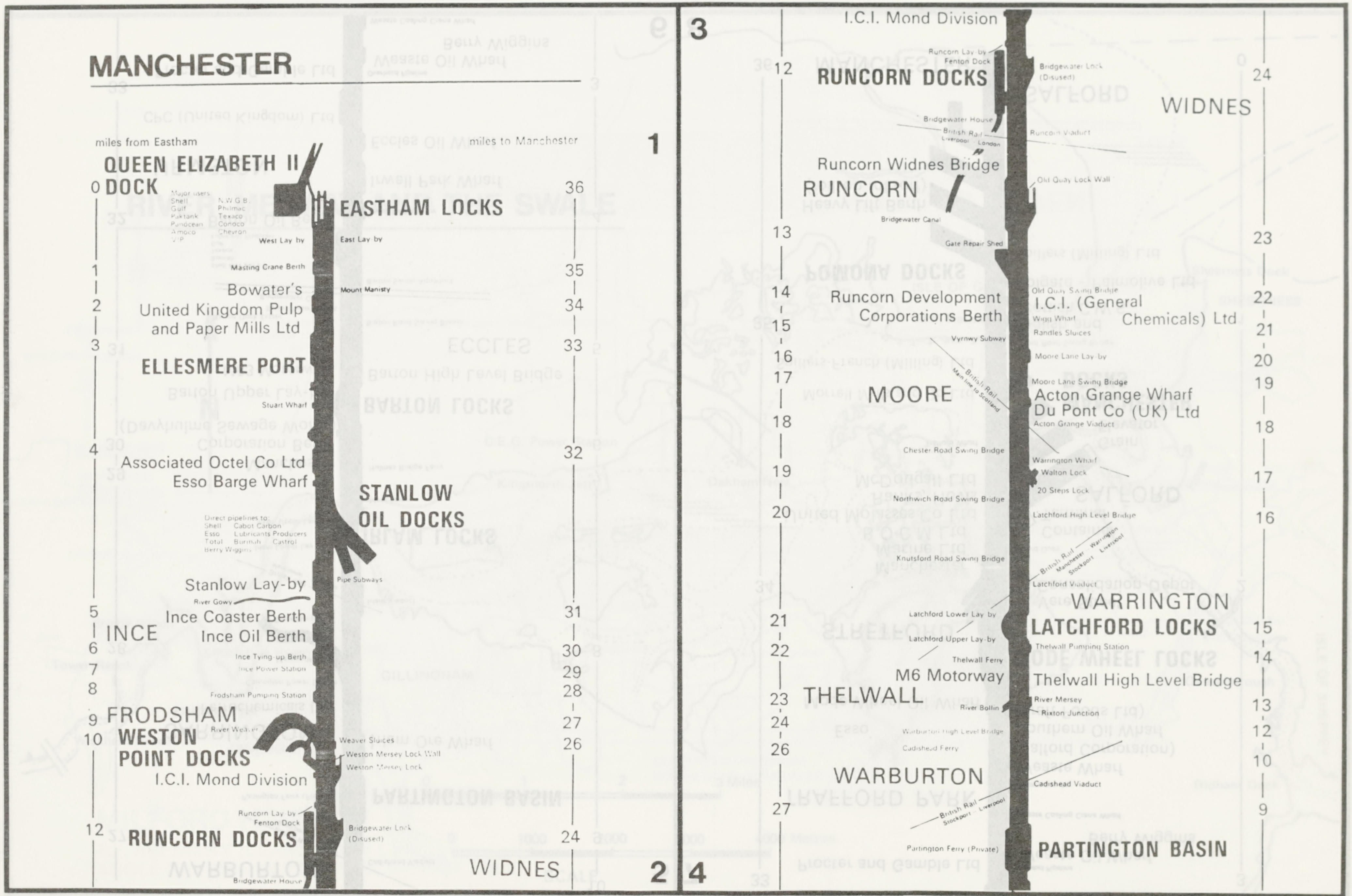
MANCHESTER
miles from Eastham
miles to Manchester
1
QUEEN ELIZABETH II DOCK
0
36
Major users:
Shell
Gulf
Paktank
Panocean
Amoco
VIP
N.W.G.B.
Philmac
Texaco
Conoco
Chevron
EASTHAM LOCKS
West Lay by
East Lay by
1
35
Masting Crane Berth
Bowater's
United Kingdom Pulp and Paper Mills Ltd
Mount Manisty
2
34
3
33
ELLESMERE PORT
Stuart Wharf
4
32
Associated Octel Co Ltd
Esso Barge Wharf
STANLOW OIL DOCKS
Direct pipelines to:
Shell
Cabot Carbon
Esso
Lubricants Producers
Total
Burmah
Castrol
Berry Wiggins
Pipe Subways
Stanlow Lay-by
River Gowy
5
31
INCE
Ince Coaster Berth
Ince Oil Berth
6
30
Ince Tying-up Berth
Ince Power Station
7
29
8
28
Frodsham Pumping Station
9
27
FRODSHAM
River Weaver
10
26
WESTON POINT DOCKS
Weaver Sluices
Weston Mersey Lock Wall
Weston Mersey Lock
I.C.I. Mond Division
Runcorn Lay by
Fenton Dock
12
24
RUNCORN DOCKS
Bridgewater Lock (Disused)
Bridgewater House
WIDNES
2
3
I.C.I. Mond Division
Runcorn Lay by
Fenton Dock
12
24
RUNCORN DOCKS
Bridgewater Lock (Disused)
WIDNES
Bridgewater House
British Rail
Liverpool
London
Runcorn Viaduct
Runcorn Widnes Bridge
RUNCORN
Old Quay Lock Wall
Bridgewater Canal
13
23
Gate Repair Shed
Old Quay Swing Bridge
14
22
Runcorn Development Corporations Berth
I.C.I. (General Chemicals) Ltd
Wigg Wharf
Randles Sluices
15
21
Vyrnwy Subway
16
20
Moore Lane Lay by
17
19
Moore Lane Swing Bridge
British Rail
Main line to Scotland
MOORE
Acton Grange Wharf
Du Pont Co (UK) Ltd
Acton Grange Viaduct
18
18
Chester Road Swing Bridge
Warrington Wharf
Walton Lock
19
17
20 Steps Lock
Northwich Road Swing Bridge
20
16
Latchford High Level Bridge
British Rail
Manchester
Warrington
Stockport
Liverpool
Knutsford Road Swing Bridge
Latchford Viaduct
WARRINGTON
21
15
Latchford Lower Lay by
LATCHFORD LOCKS
Latchford Upper Lay-by
22
14
Thelwall Pumping Station
Thelwall Ferry
M6 Motorway
Thelwall High Level Bridge
THELWALL
23
13
River Mersey
River Bollin
Rixton Junction
24
12
Warburton High Level Bridge
26
10
Cadishead Ferry
WARBURTON
Cadishead Viaduct
27
9
British Rail
Stockport
Liverpool
Partington Ferry (Private)
PARTINGTON BASIN
4

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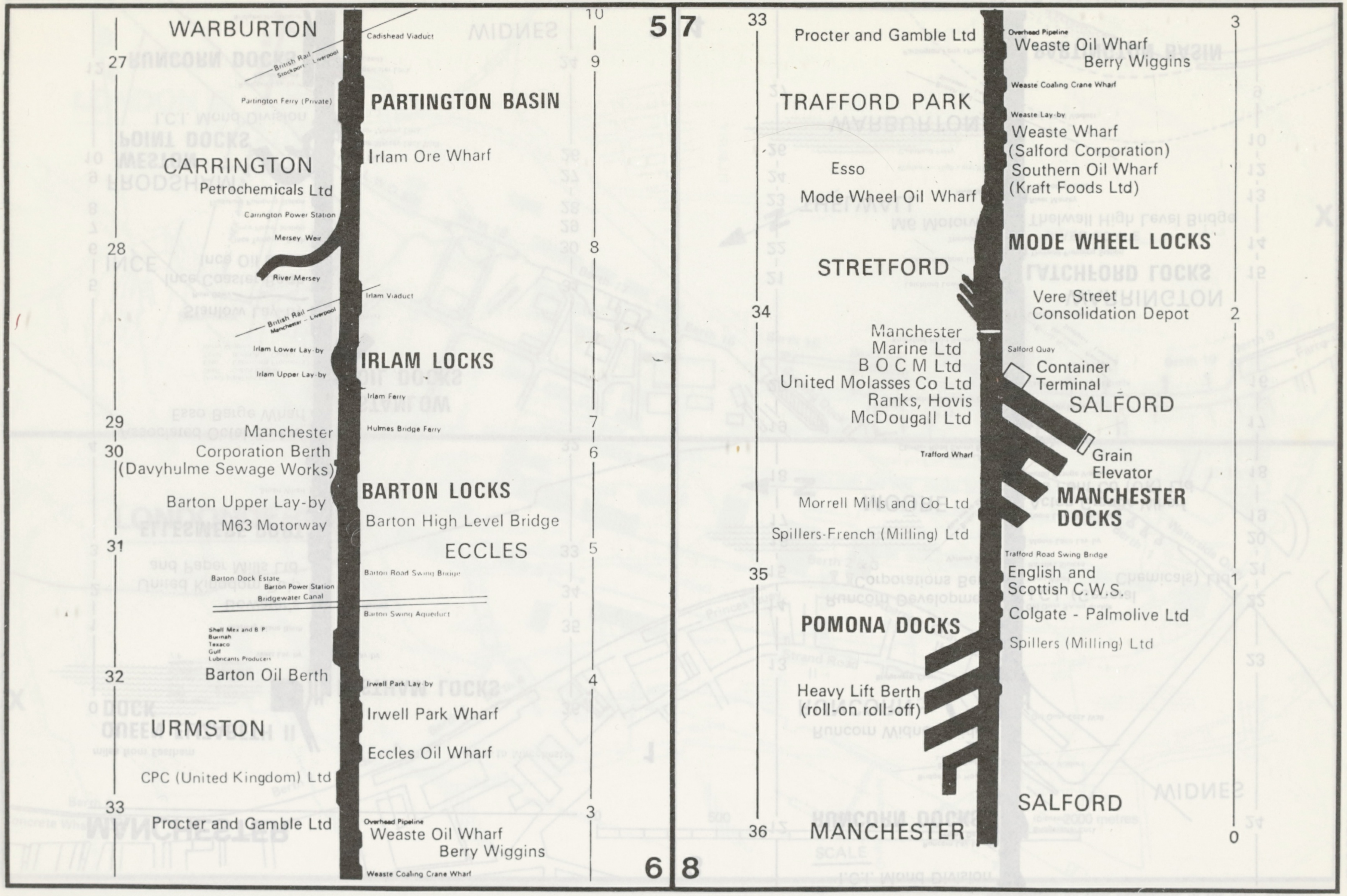
WARBURTON
27
British Rail Stockport – Liverpool
Cadishead Viaduct
Partington Ferry (Private)
PARTINGTON BASIN
CARRINGTON
Petrochemicals Ltd
Irlam Ore Wharf
Carrington Power Station
Mersey Weir
28
River Mersey
Irlam Viaduct
British Rail Manchester – Liverpool
Irlam Lower Lay-by
Irlam Upper Lay-by
IRLAM LOCKS
Irlam Ferry
Hulmes Bridge Ferry
29
30
Manchester
Corporation Berth
(Davyhulme Sewage Works)
BARTON LOCKS
Barton Upper Lay-by
M63 Motorway
Barton High Level Bridge
ECCLES
31
Barton Dock Estate
Barton Power Station
Bridgewater Canal
Barton Road Swing Bridge
Barton Swing Aqueduct
Shell Mex and B.P.
Burmah
Texaco
Gulf
Lubricants Producers
32
Barton Oil Berth
Irwell Park Lay-by
Irwell Park Wharf
URMSTON
Eccles Oil Wharf
CPC (United Kingdom) Ltd
33
Procter and Gamble Ltd
Overhead Pipeline
Weaste Oil Wharf
Berry Wiggins
Weaste Coaling Crane Wharf
10
9
8
7
6
5
4
3
5
6
7
8
33
Procter and Gamble Ltd
Overhead Pipeline
Weaste Oil Wharf
Berry Wiggins
Weaste Coaling Crane Wharf
TRAFFORD PARK
Weaste Lay-by
Weaste Wharf
(Salford Corporation)
Southern Oil Wharf
(Kraft Foods Ltd)
Esso
Mode Wheel Oil Wharf
MODE WHEEL LOCKS
STRETFORD
Vere Street
Consolidation Depot
34
Manchester
Marine Ltd
B O C M Ltd
United Molasses Co Ltd
Ranks, Hovis
McDougall Ltd
Salford Quay
Container
Terminal
SALFORD
Trafford Wharf
Grain
Elevator
MANCHESTER
DOCKS
Morrell Mills and Co Ltd
Spillers-French (Milling) Ltd
Trafford Road Swing Bridge
35
English and
Scottish C.W.S.
Colgate - Palmolive Ltd
POMONA DOCKS
Spillers (Milling) Ltd
Heavy Lift Berth
(roll-on roll-off)
SALFORD
36
MANCHESTER
3
2
1
0

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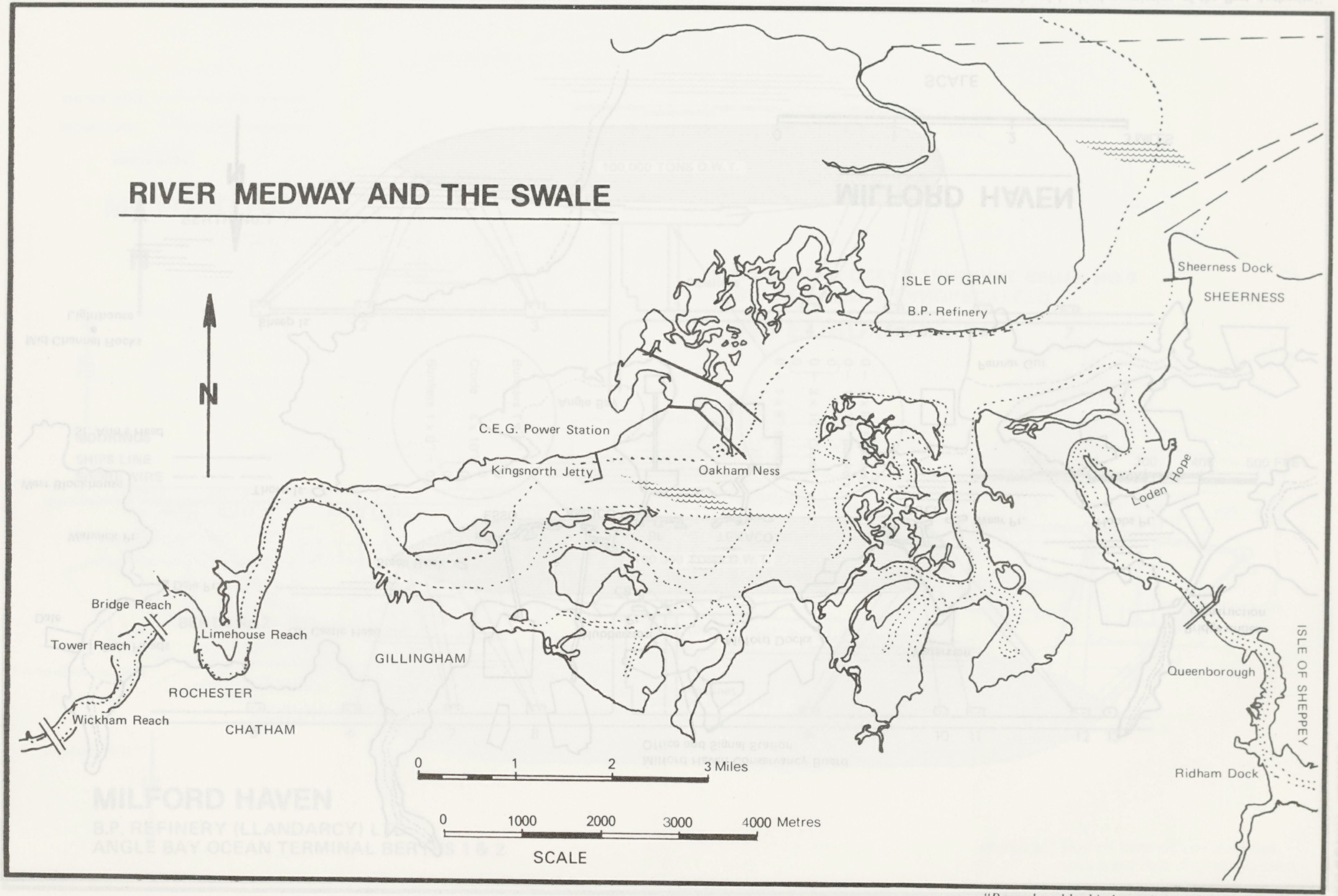
RIVER MEDWAY AND THE SWALE


N
ISLE OF GRAIN
B.P. Refinery
Sheerness Dock
SHEERNESS
C.E.G. Power Station
Kingsnorth Jetty
Oakham Ness
Loden Hope
ISLE OF SHEPPEY
Queenborough
Ridham Dock
Bridge Reach
Limehouse Reach
Tower Reach
GILLINGHAM
ROCHESTER
Wickham Reach
CHATHAM
0
1
2
3 Miles
0
1000
2000
3000
4000 Metres
SCALE

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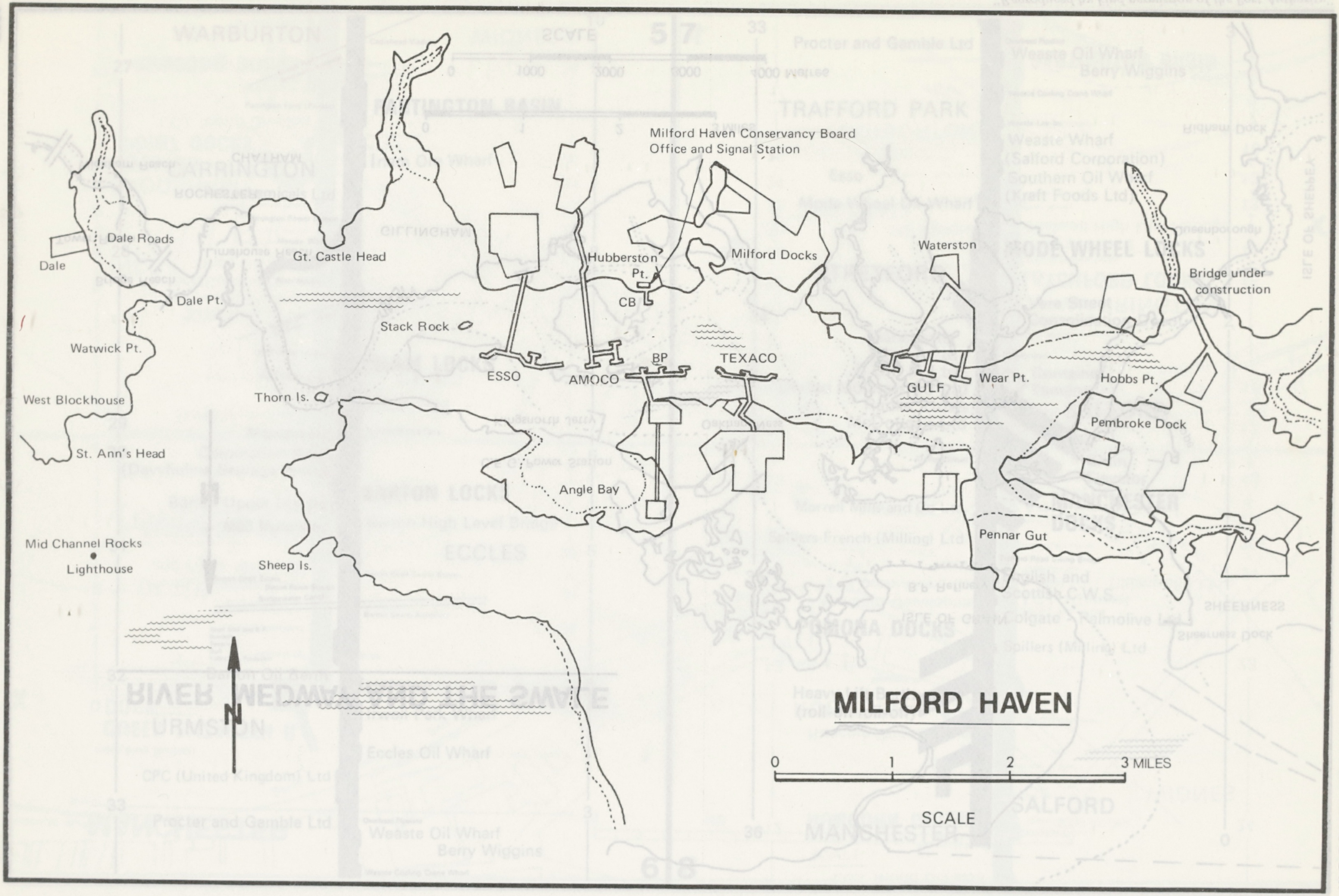
Milford Haven Conservancy Board
Office and Signal Station
Dale Roads
Dale
Gt. Castle Head
Hubberston Pt.
Milford Docks
Waterston
Bridge under construction
Dale Pt.
CB
Stack Rock
Watwick Pt.
BP
TEXACO
ESSO
AMOCO
GULF
Wear Pt.
Hobbs Pt.
West Blockhouse
Thorn Is.
Pembroke Dock
St. Ann's Head
Angle Bay
Pennar Gut
Mid Channel Rocks
Lighthouse
Sheep Is.
N
MILFORD HAVEN
0
1
2
3 MILES
SCALE

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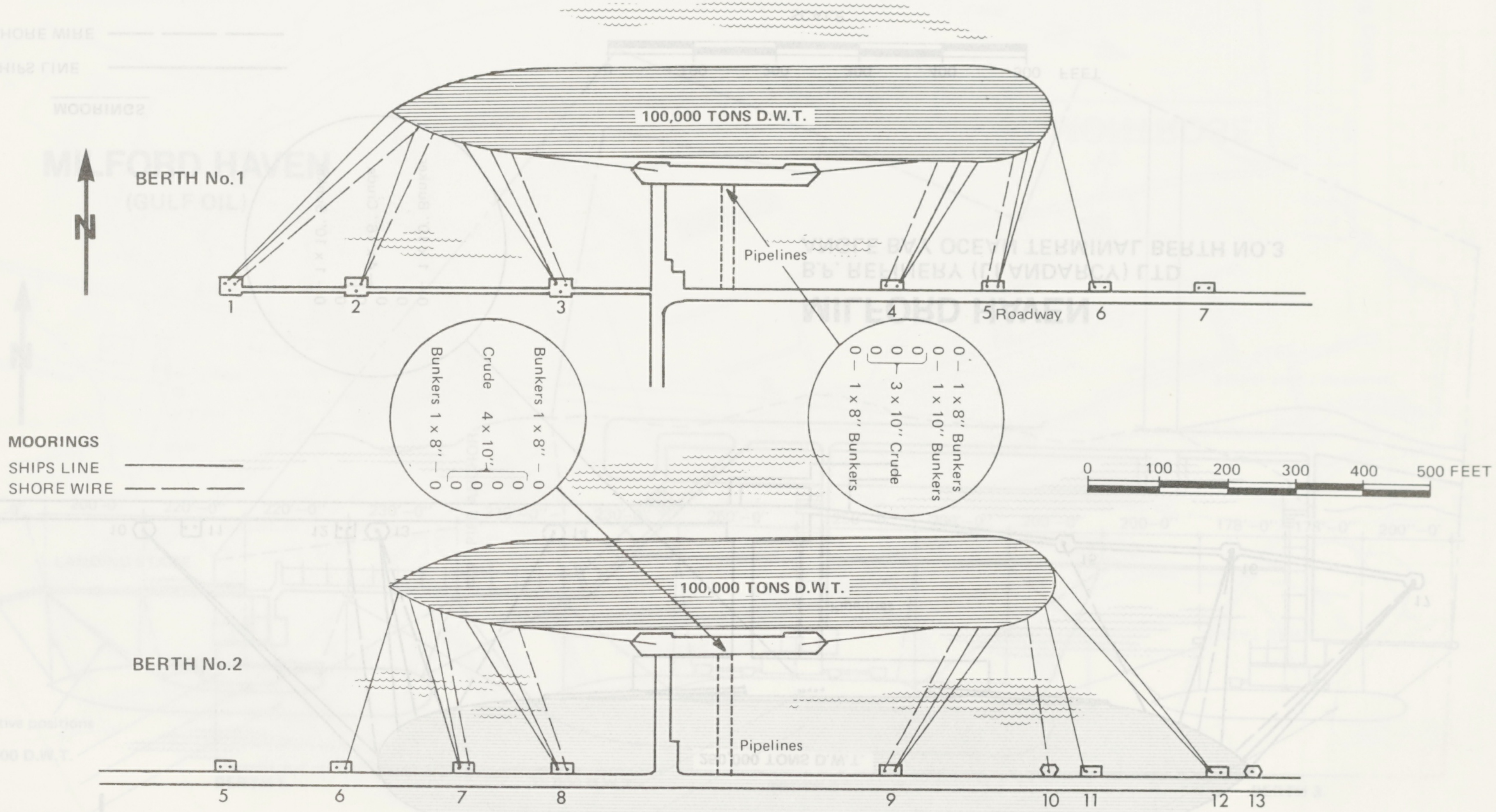
BERTH No.1
N
100,000 TONS D.W.T.
Pipelines
1
2
3
4
5
Roadway
6
7
Bunkers 1 x 8" — 0
Crude 4 x 10" 0 0 0 0
Bunkers 1 x 8" — 0
0 — 1 x 8" Bunkers
0 — 1 x 10" Bunkers
0 0 0 — 3 x 10" Crude
0 — 1 x 8" Bunkers
MOORINGS
SHIPS LINE
SHORE WIRE
0
100
200
300
400
500 FEET
BERTH No.2
100,000 TONS D.W.T.
Pipelines
5
6
7
8
9
10
11
12
13

MILFORD HAVEN

B.P. REFINERY (LLANDARCY) LTD
ANGLE BAY OCEAN TERMINAL BERTHS 1 & 2

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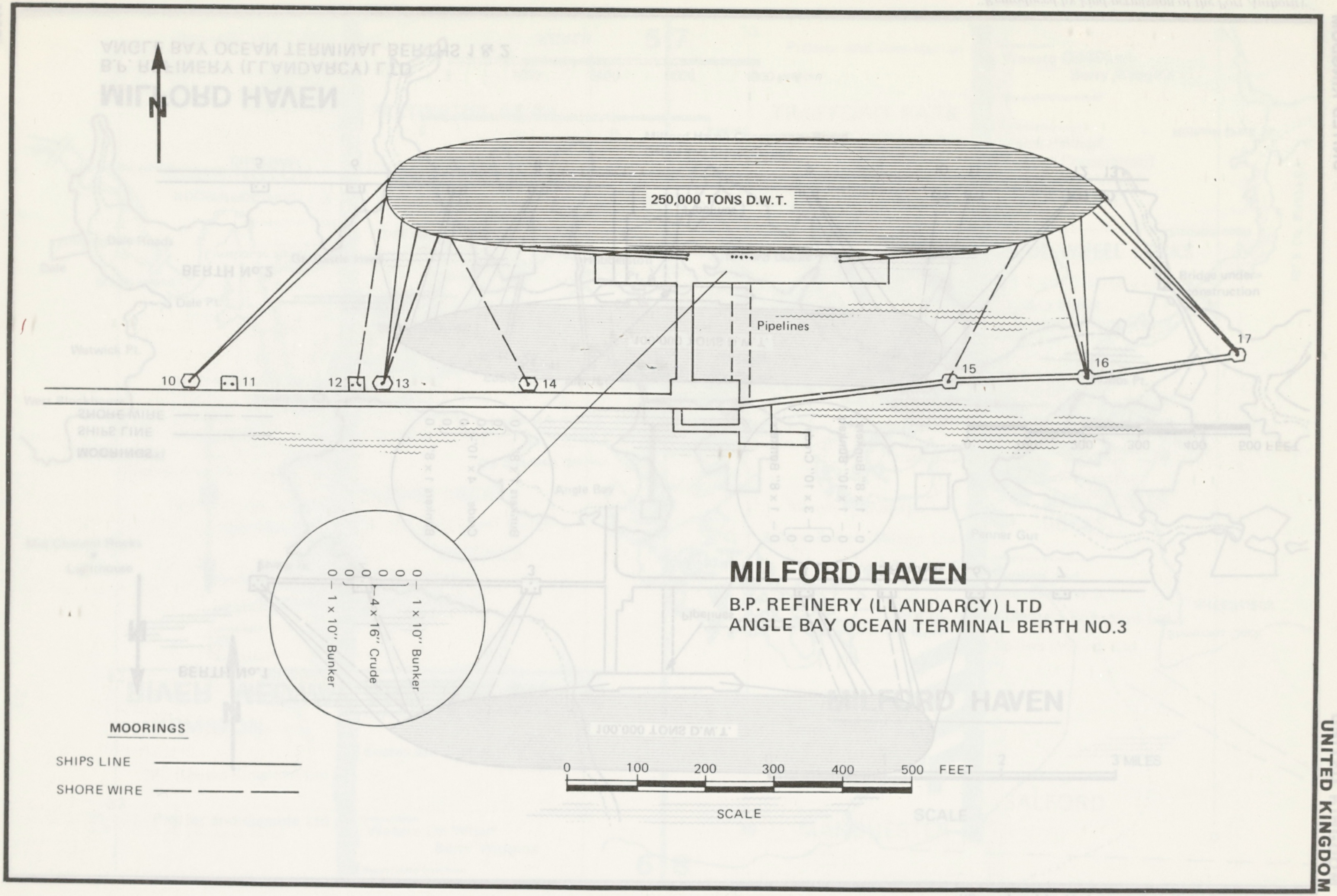
N
250,000 TONS D.W.T.
Pipelines
10
11
12
13
14
15
16
17
0 — 1 x 10" Bunker
4 x 16" Crude
0 — 1 x 10" Bunker
MOORINGS
SHIPS LINE
SHORE WIRE
0
100
200
300
400
500 FEET
SCALE

MILFORD HAVEN

B.P. REFINERY (LLANDARCY) LTD
ANGLE BAY OCEAN TERMINAL BERTH NO.3

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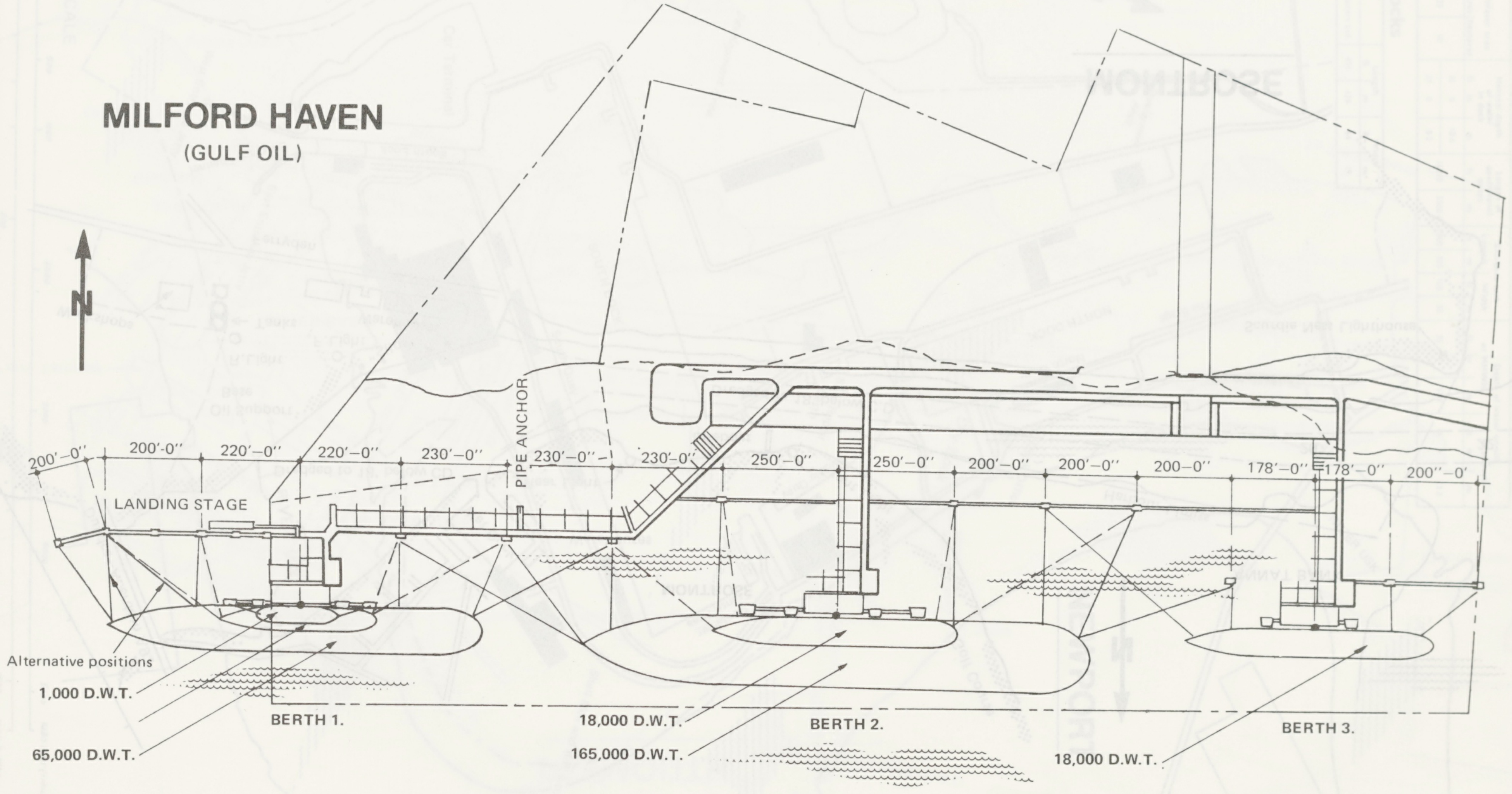
MILFORD HAVEN

(GULF OIL)


N
200'–0"
200'-0"
220'–0"
220'–0"
230'–0"
PIPE ANCHOR
230'–0"
230'–0"
250'–0"
250'–0"
200'–0"
200'–0"
200–0"
178'–0"
178'–0"
200"–0'
LANDING STAGE
Alternative positions
1,000 D.W.T.
65,000 D.W.T.
BERTH 1.
18,000 D.W.T.
165,000 D.W.T.
BERTH 2.
18,000 D.W.T.
BERTH 3.

BERTH 3: DUE TO TYPE OF LOADING RIG MAX D.W.T. RESTRICTED TO 6,500.

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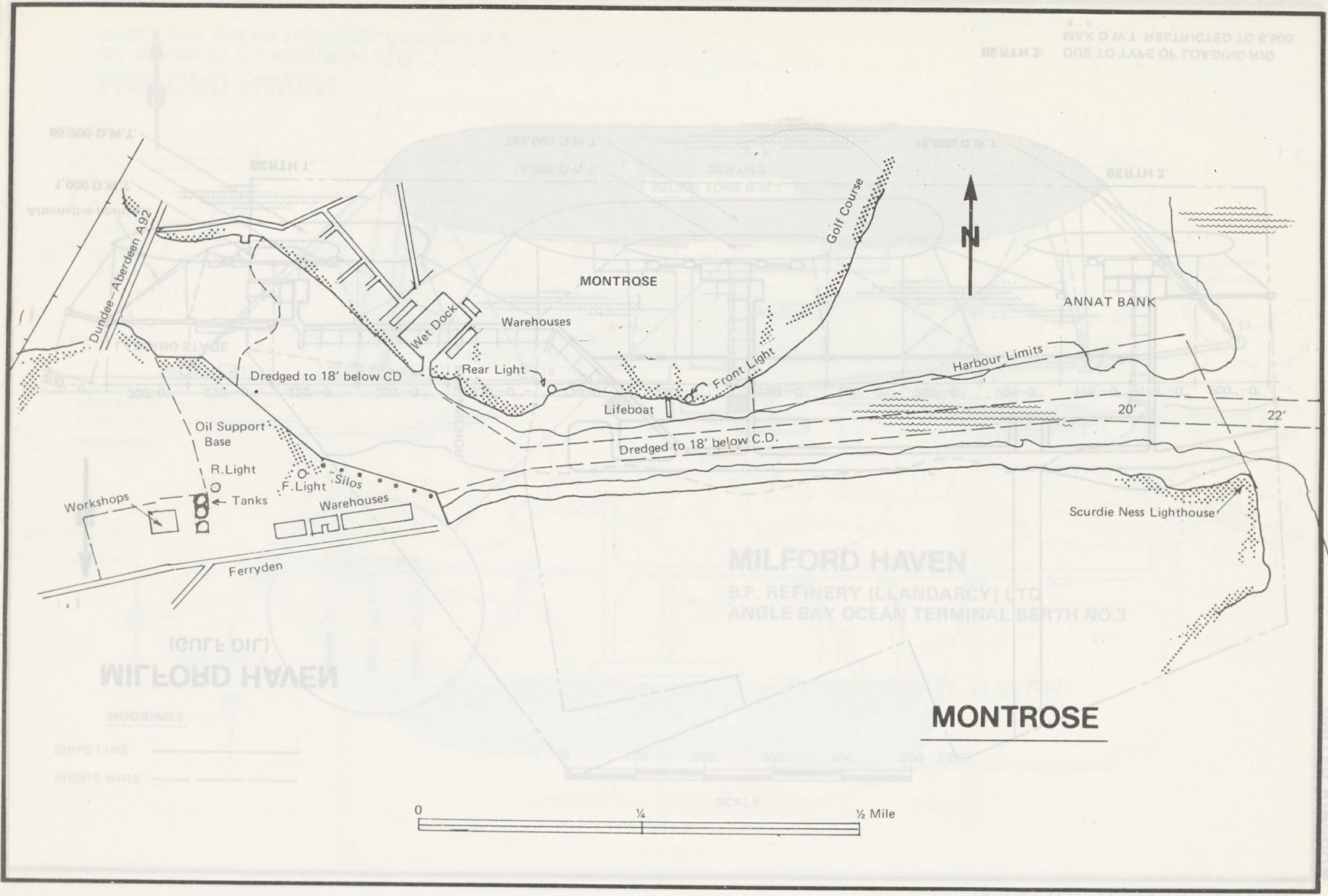
MONTROSE
Dundee–Aberdeen A92
Wet Dock
Warehouses
Golf Course
N
ANNAT BANK
Rear Light
Front Light
Harbour Limits
Dredged to 18' below CD
Lifeboat
20'
22'
Oil Support Base
Dredged to 18' below C.D.
R.Light
F.Light
Silos
Tanks
Workshops
Warehouses
Scurdie Ness Lighthouse
Ferryden
0
¼
½ Mile

MONTROSE

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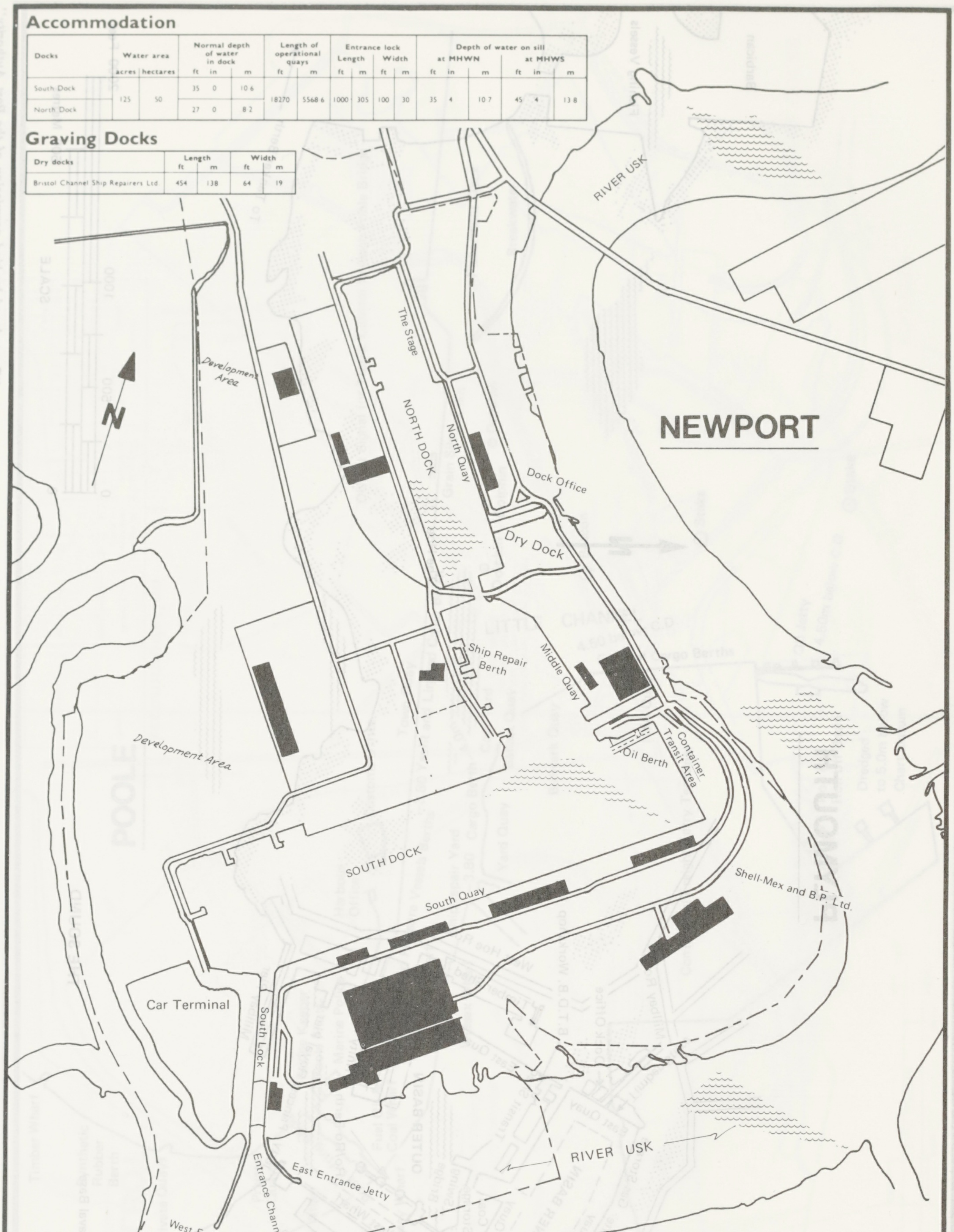
Accommodation

Docks	Water area		Normal depth of water in dock			Length of operational quays		Entrance lock Length		Entrance lock Width		Depth of water on sill at MHWN			Depth of water on sill at MHWS		
	acres	hectares	ft	in	m	ft	m	ft	m	ft	m	ft	in	m	ft	in	m
South Dock	125	50	35	0	10.6	18270	5568.6	1000	305	100	30	35	4	10.7	45	4	13.8
North Dock			27	0	8.2												

Graving Docks

Dry docks	Length ft	Length m	Width ft	Width m
Bristol Channel Ship Repairers Ltd	454	138	64	19


NEWPORT
RIVER USK
N
Development Area
The Stage
NORTH DOCK
North Quay
Dock Office
Dry Dock
Ship Repair Berth
Middle Quay
Container Transit Area
Oil Berth
Development Area
SOUTH DOCK
South Quay
Shell-Mex and B.P. Ltd.
Car Terminal
South Lock
Entrance Channel
East Entrance Jetty
West Entrance Jetty
RIVER USK
SCALE
0
500
1000
2000
3000
4000
5000
5280 FEET (1 MILE)
0
500
1000
1500
1609.3 Mts.

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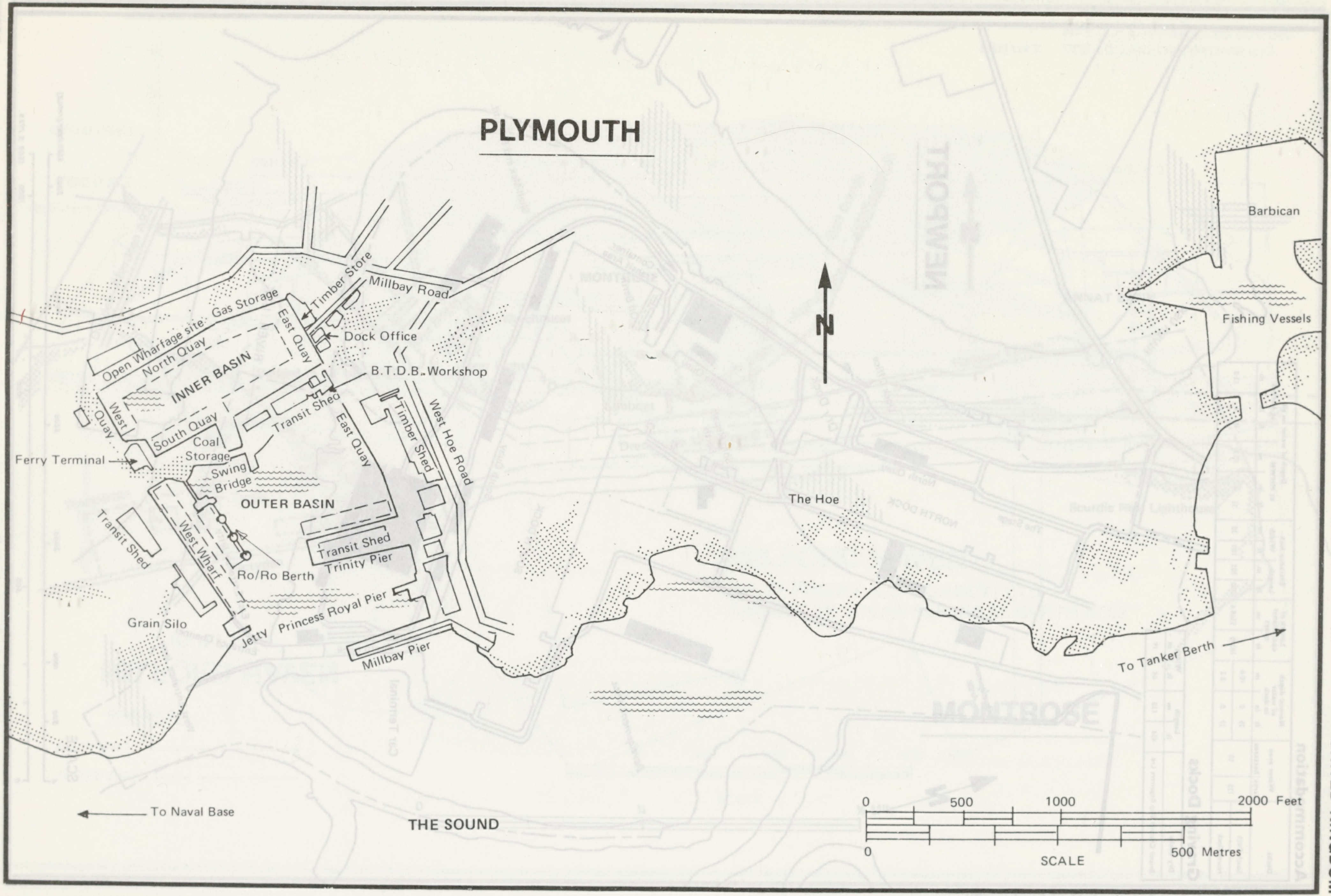
PLYMOUTH
N
Timber Store
Millbay Road
Open Wharfage site
Gas Storage
North Quay
East Quay
Dock Office
INNER BASIN
B.T.D.B. Workshop
West Quay
South Quay
Transit Shed
Coal Storage
Ferry Terminal
Swing Bridge
East Quay
Timber Shed
West Hoe Road
OUTER BASIN
Transit Shed
West Wharf
Transit Shed
Trinity Pier
Ro/Ro Berth
Princess Royal Pier
Grain Silo
Jetty
Millbay Pier
Barbican
Fishing Vessels
The Hoe
To Tanker Berth
To Naval Base
THE SOUND
0
500
1000
2000 Feet
0
500 Metres
SCALE

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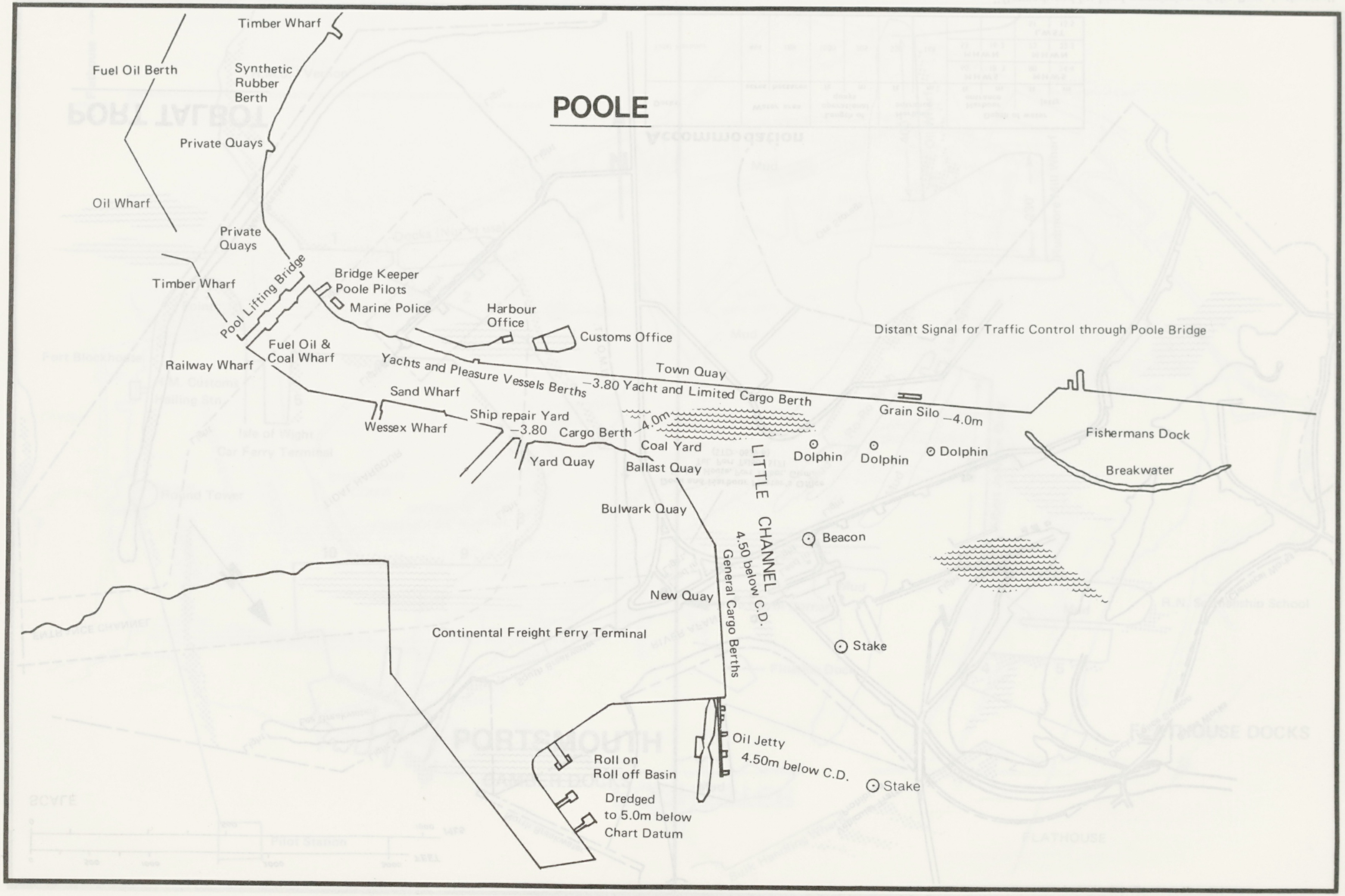
POOLE
Timber Wharf
Fuel Oil Berth
Synthetic Rubber Berth
Private Quays
Oil Wharf
Private Quays
Timber Wharf
Pool Lifting Bridge
Bridge Keeper
Poole Pilots
Marine Police
Harbour Office
Customs Office
Distant Signal for Traffic Control through Poole Bridge
Railway Wharf
Fuel Oil & Coal Wharf
Yachts and Pleasure Vessels Berths
Town Quay
−3.80 Yacht and Limited Cargo Berth
Sand Wharf
Grain Silo −4.0m
Fishermans Dock
Wessex Wharf
Ship repair Yard
−3.80
Cargo Berth
−4.0m
Coal Yard
Yard Quay
Ballast Quay
Dolphin
Dolphin
Dolphin
Breakwater
LITTLE CHANNEL
Bulwark Quay
4.50 below C.D.
General Cargo Berths
Beacon
New Quay
Continental Freight Ferry Terminal
Stake
Oil Jetty
4.50m below C.D.
Stake
Roll on Roll off Basin
Dredged to 5.0m below Chart Datum

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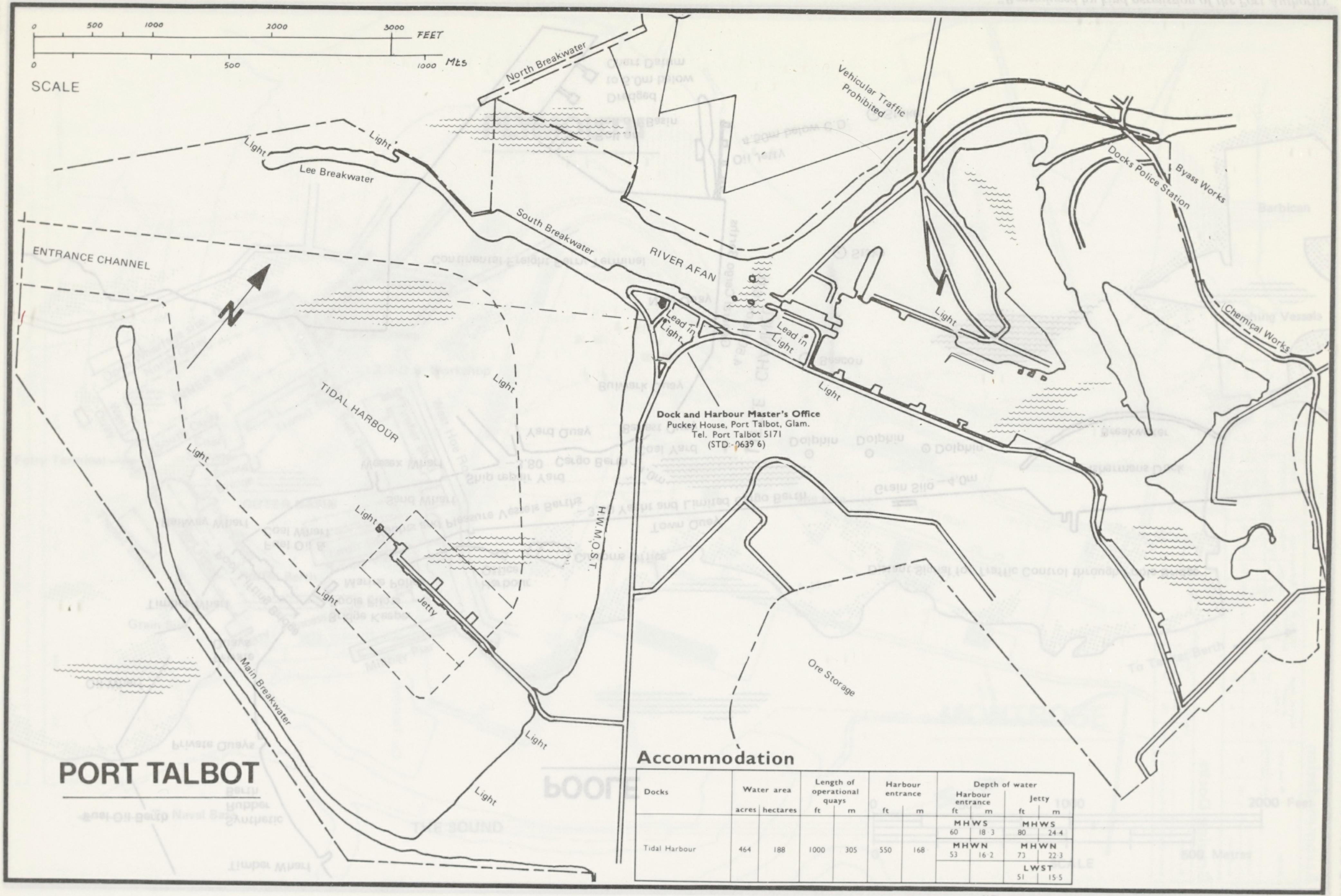
0
500
1000
2000
3000
FEET
0
500
1000
MEs
SCALE
North Breakwater
Vehicular Traffic Prohibited
Light
Light
Lee Breakwater
South Breakwater
RIVER AFAN
Docks Police Station
Byass Works
ENTRANCE CHANNEL
N
Lead in Light
Lead in Light
Light
Light
Chemical Works
TIDAL HARBOUR
Light
Light
Light
Jetty
Light
H.W.M.O.S.T.
Main Breakwater
Light
Light
Ore Storage

Dock and Harbour Master's Office
Puckey House, Port Talbot, Glam.
Tel. Port Talbot 5171
(STD 0639 6)

PORT TALBOT

Accommodation

Docks	Water area		Length of operational quays		Harbour entrance		Depth of water: Harbour entrance		Depth of water: Jetty	
	acres	hectares	ft	m	ft	m	ft	m	ft	m
Tidal Harbour	464	188	1000	305	550	168	MHWS 60	18·3	MHWS 80	24·4
							MHWN 53	16·2	MHWN 73	22·3
									LWST 51	15·5

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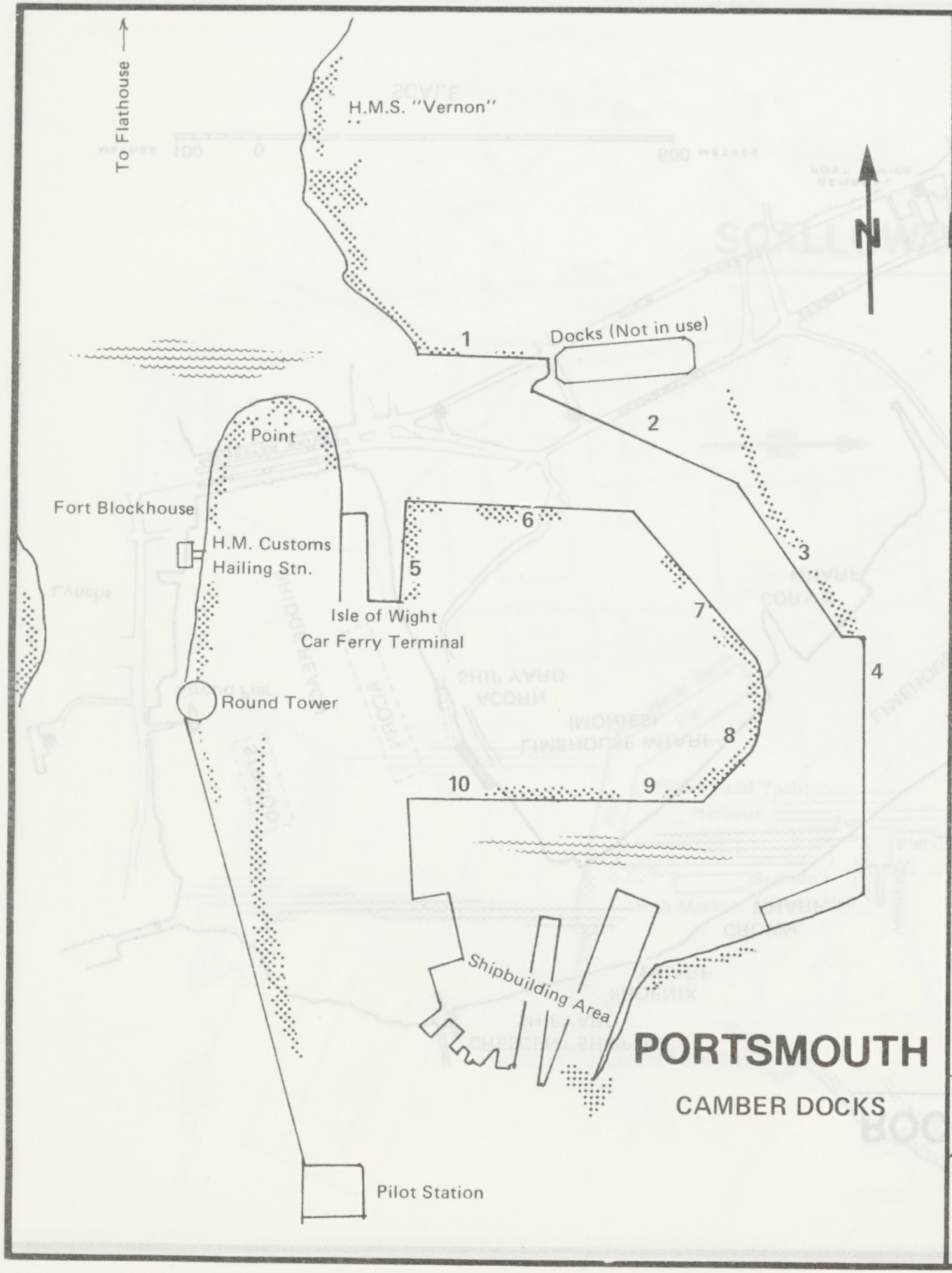
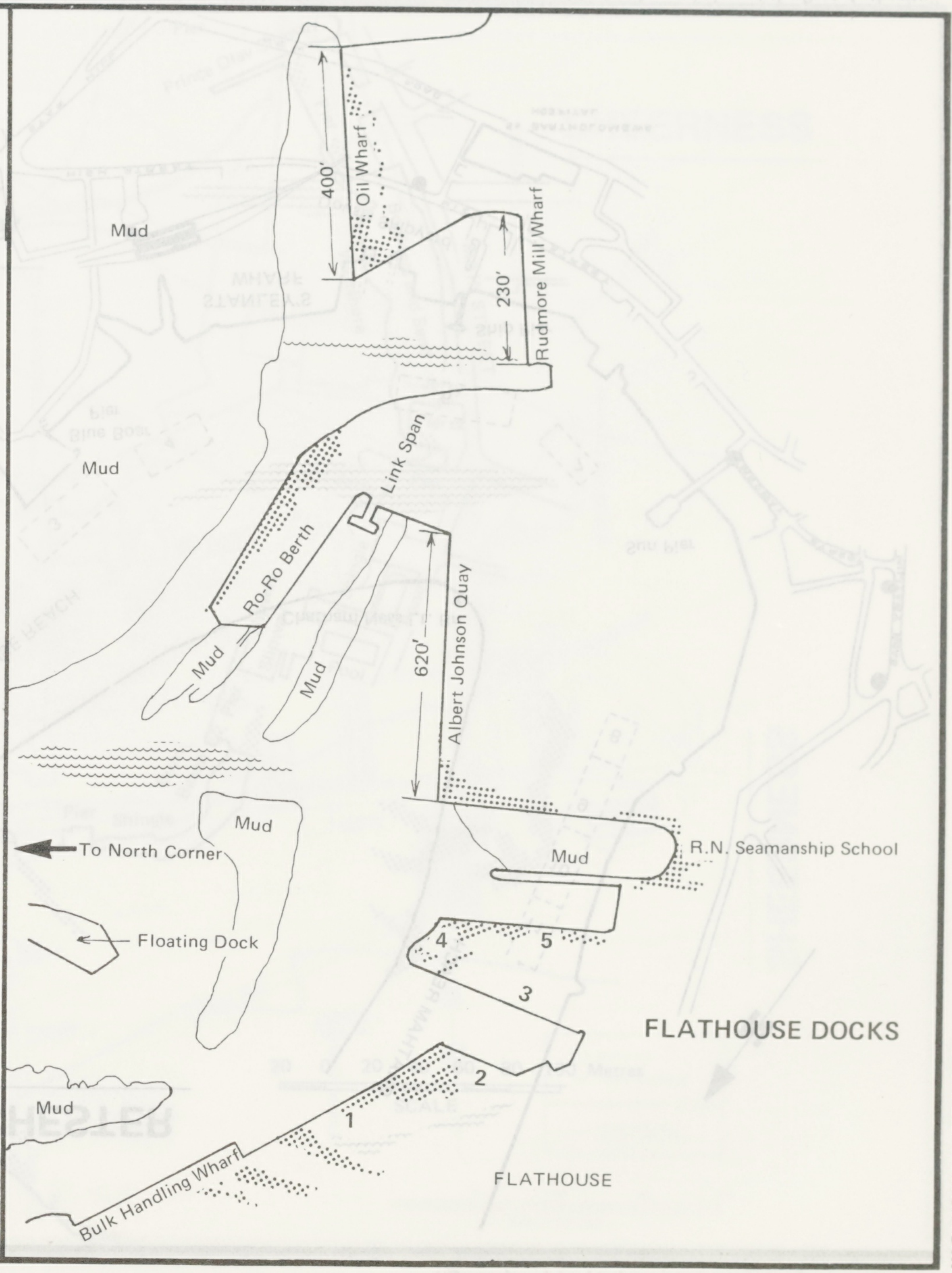

To Flathouse →
H.M.S. "Vernon"
N
1
Docks (Not in use)
2
Point
Fort Blockhouse
H.M. Customs
Hailing Stn.
5
6
3
Isle of Wight
Car Ferry Terminal
7
4
Round Tower
8
10
9
Shipbuilding Area
Pilot Station
PORTSMOUTH
CAMBER DOCKS


400'
Oil Wharf
Mud
230'
Rudmore Mill Wharf
Link Span
Mud
Ro-Ro Berth
620'
Albert Johnson Quay
Mud
Mud
Mud
To North Corner
Mud
R.N. Seamanship School
Floating Dock
4
5
3
FLATHOUSE DOCKS
2
Mud
1
Bulk Handling Wharf
FLATHOUSE

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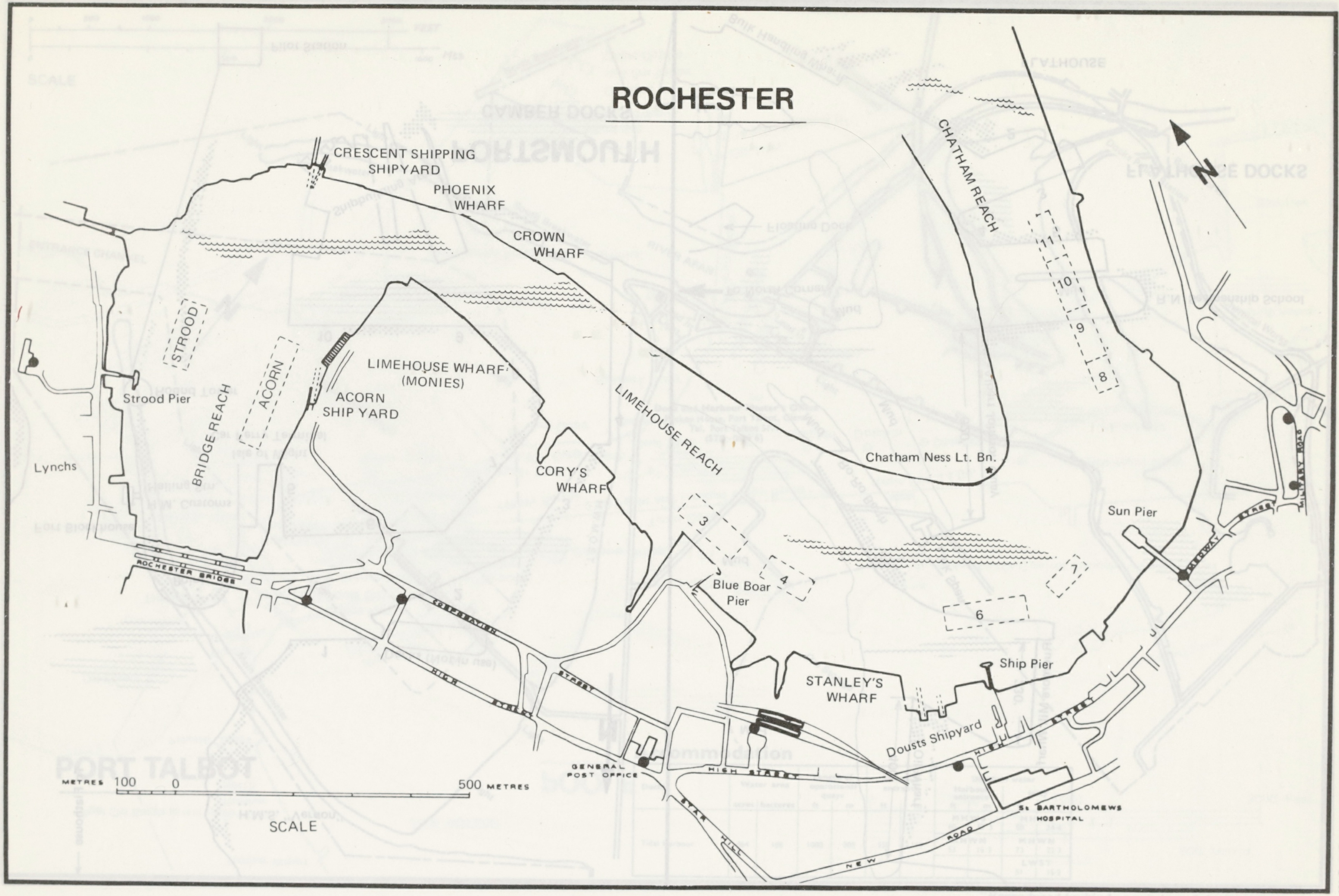
ROCHESTER
CRESCENT SHIPPING SHIPYARD
PHOENIX WHARF
CROWN WHARF
CHATHAM REACH
STROOD
ACORN
LIMEHOUSE WHARF (MONIES)
ACORN SHIP YARD
Strood Pier
BRIDGE REACH
LIMEHOUSE REACH
Lynchs
CORY'S WHARF
Chatham Ness Lt. Bn.
11
10
9
8
3
4
7
6
Blue Boar Pier
Sun Pier
ROCHESTER BRIDGE
CORPORATION STREET
HIGH STREET
MEDWAY STREET
MILITARY ROAD
STANLEY'S WHARF
Ship Pier
Dousts Shipyard
GENERAL POST OFFICE
HIGH STREET
STAR HILL
NEW ROAD
St BARTHOLOMEWS HOSPITAL
METRES 100 0 500 METRES
SCALE
N

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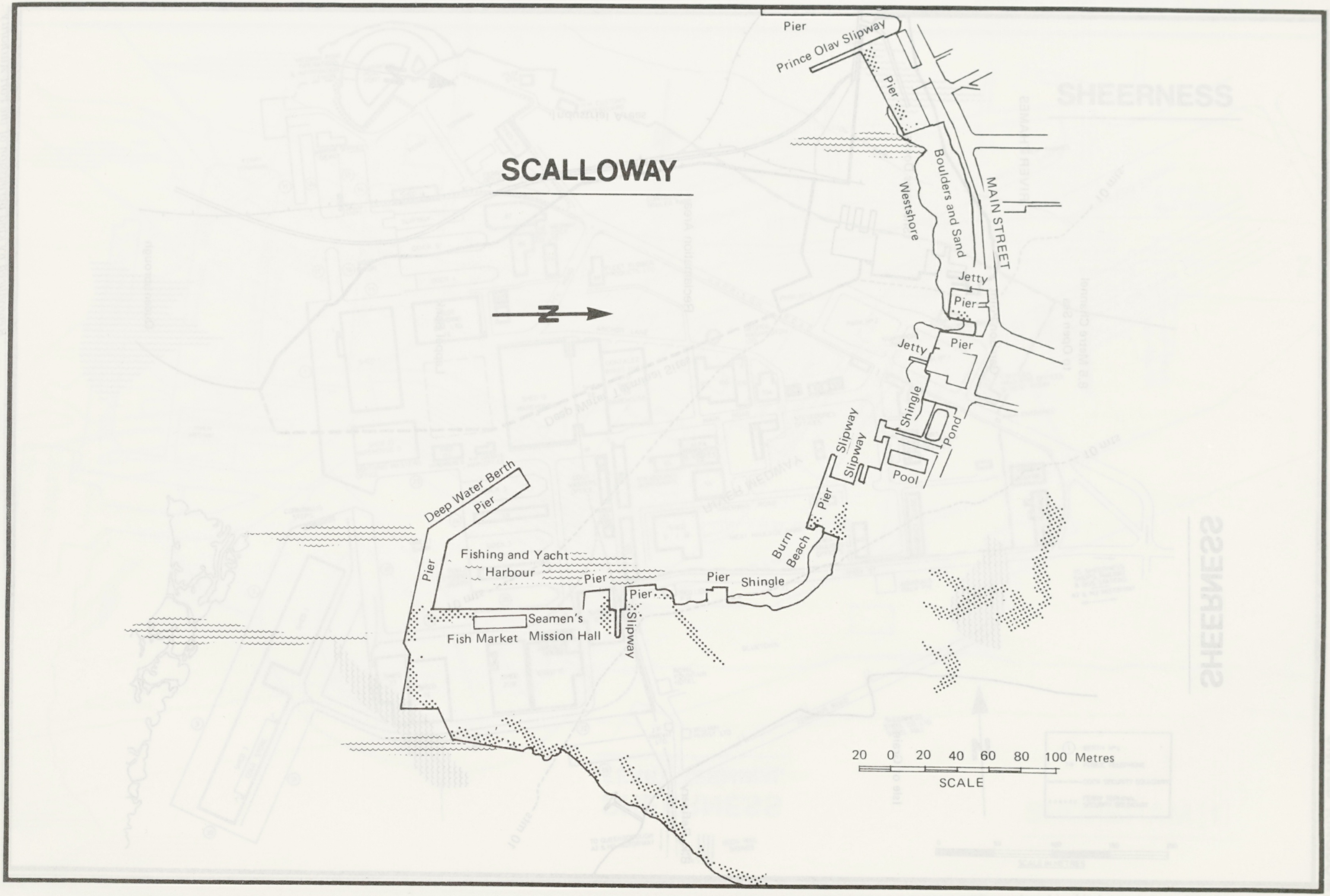
SCALLOWAY


Pier
Prince Olav Slipway
Pier
Boulders and Sand
Westshore
MAIN STREET
Jetty
Pier
Pier
Jetty
Shingle
Slipway
Slipway
Pond
Pool
Pier
Burn Beach
Shingle
Pier
Pier
Pier
Slipway
Deep Water Berth
Pier
Pier
Fishing and Yacht Harbour
Seamen's Mission Hall
Fish Market
N
20 0 20 40 60 80 100 Metres
SCALE

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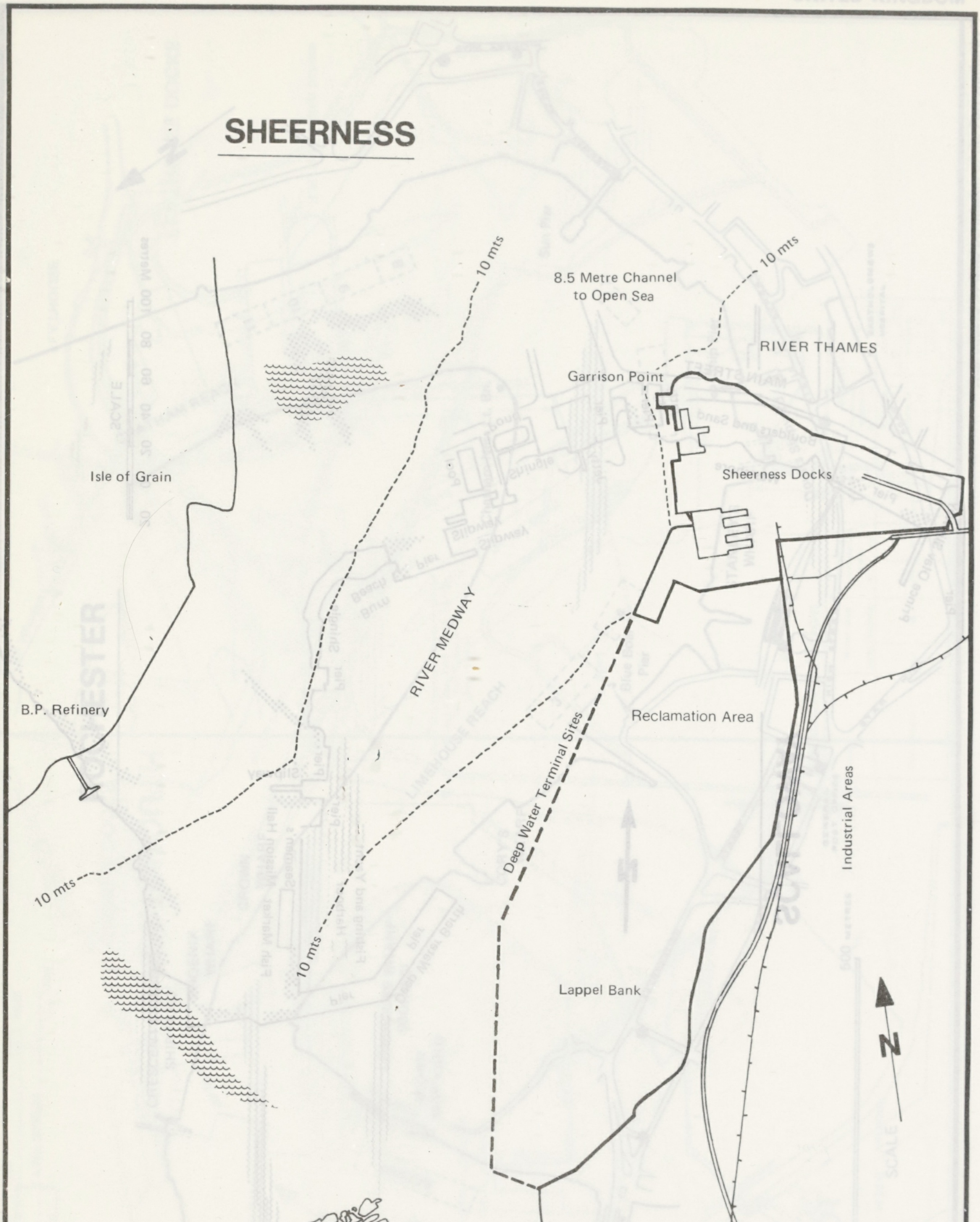
SHEERNESS
8.5 Metre Channel to Open Sea
10 mts
10 mts
RIVER THAMES
Garrison Point
Sheerness Docks
Isle of Grain
RIVER MEDWAY
B.P. Refinery
Reclamation Area
Deep Water Terminal Sites
10 mts
10 mts
Industrial Areas
Lappel Bank
N
Queenborough

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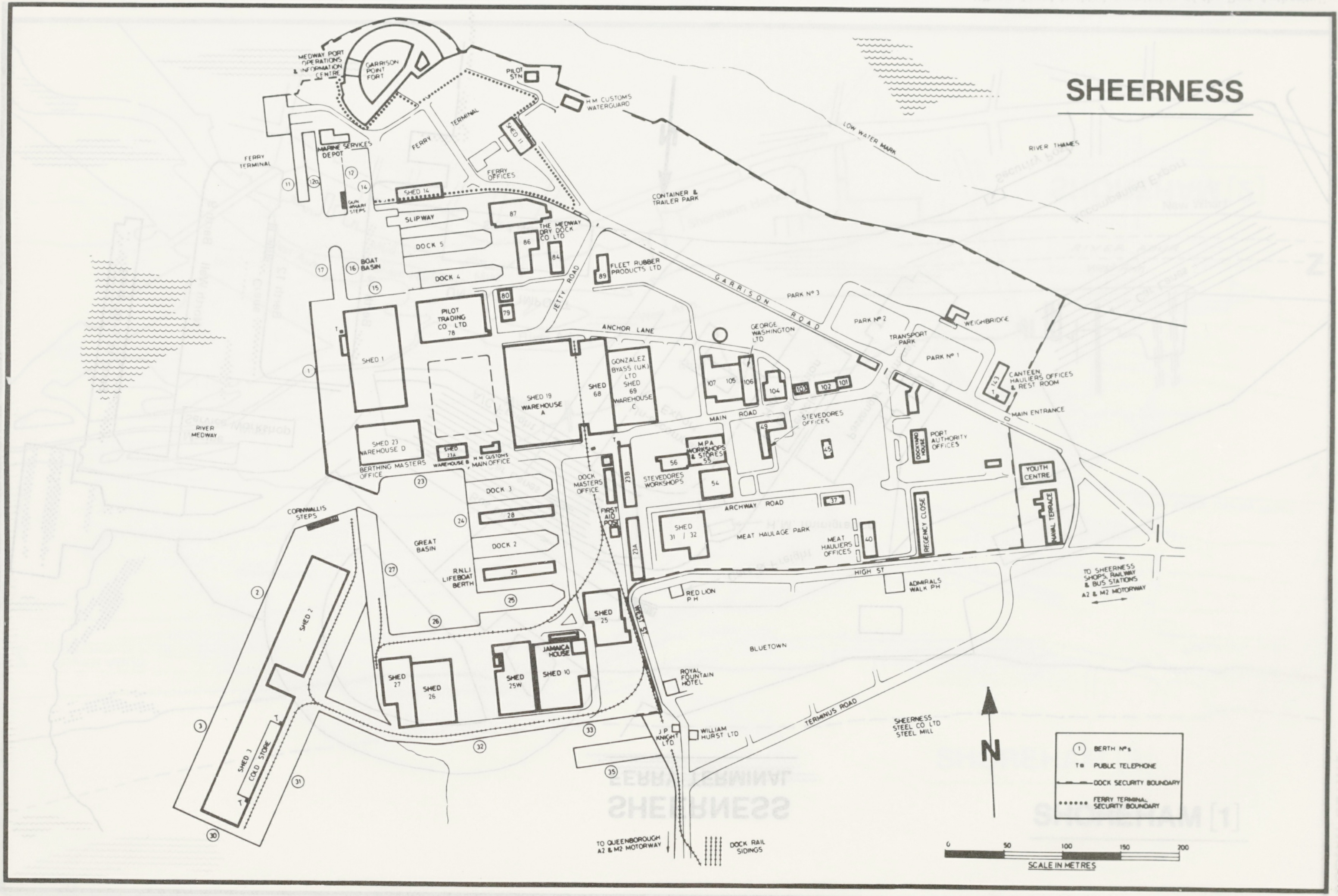
SHEERNESS


MEDWAY PORT OPERATIONS & INFORMATION CENTRE
GARRISON POINT FORT
PILOT STN
H.M. CUSTOMS WATERGUARD
LOW WATER MARK
RIVER THAMES
FERRY TERMINAL
FERRY
TERMINAL
SHED 11
FERRY OFFICES
MARINE SERVICES DEPOT
GUN WHARF STEPS
SHED 14
CONTAINER & TRAILER PARK
SLIPWAY
87
THE MEDWAY DRY DOCK CO. LTD
86
84
DOCK 5
DOCK 4
BOAT BASIN
89 FLEET RUBBER PRODUCTS LTD
JETTY ROAD
GARRISON ROAD
PARK No 3
PARK No 2
PARK No 1
TRANSPORT PARK
WEIGHBRIDGE
80
79
PILOT TRADING CO. LTD 78
ANCHOR LANE
GEORGE WASHINGTON LTD
SHED 1
SHED 19 WAREHOUSE A
SHED 68
GONZALEZ BYASS (UK) LTD SHED 69 WAREHOUSE C
107
105
106
104
103
102
101
147 CANTEEN HAULIERS OFFICES & REST ROOM
MAIN ENTRANCE
MAIN ROAD
STEVEDORES OFFICES
49
45
RIVER MEDWAY
SHED 23 WAREHOUSE D
SHED 23A WAREHOUSE B
H.M. CUSTOMS MAIN OFFICE
BERTHING MASTERS OFFICE
M.P.A. WORKSHOPS & STORES 55
56
STEVEDORES WORKSHOPS
54
DOCKYARD HOUSE
PORT AUTHORITY OFFICES
YOUTH CENTRE
DOCK MASTERS OFFICE
23B
DOCK 3
28
DOCK 2
29
FIRST AID POST
ARCHWAY ROAD
37
SHED 31 / 32
MEAT HAULAGE PARK
MEAT HAULIERS OFFICES
40
REGENCY CLOSE
NAVAL TERRACE
23A
CORNWALLIS STEPS
GREAT BASIN
R.N.L.I. LIFEBOAT BERTH
HIGH ST
ADMIRALS WALK PH
RED LION P.H.
TO SHEERNESS SHOPS, RAILWAY & BUS STATIONS A2 & M2 MOTORWAY
SHED 2
SHED 25
WEST ST
JAMAICA HOUSE
SHED 10
SHED 25W
SHED 27
SHED 26
BLUETOWN
ROYAL FOUNTAIN HOTEL
TERMINUS ROAD
SHEERNESS STEEL CO LTD STEEL MILL
SHED 3
COLD STORE
J.P. KNIGHT LTD
WILLIAM HURST LTD
TO QUEENBOROUGH A2 & M2 MOTORWAY
DOCK RAIL SIDINGS
1
2
3
11
12
12a
14
15
16
17
23
24
25
26
27
30
31
32
33
35
T
N
① BERTH Nos
T▪ PUBLIC TELEPHONE
DOCK SECURITY BOUNDARY
FERRY TERMINAL SECURITY BOUNDARY
0
50
100
150
200
SCALE IN METRES

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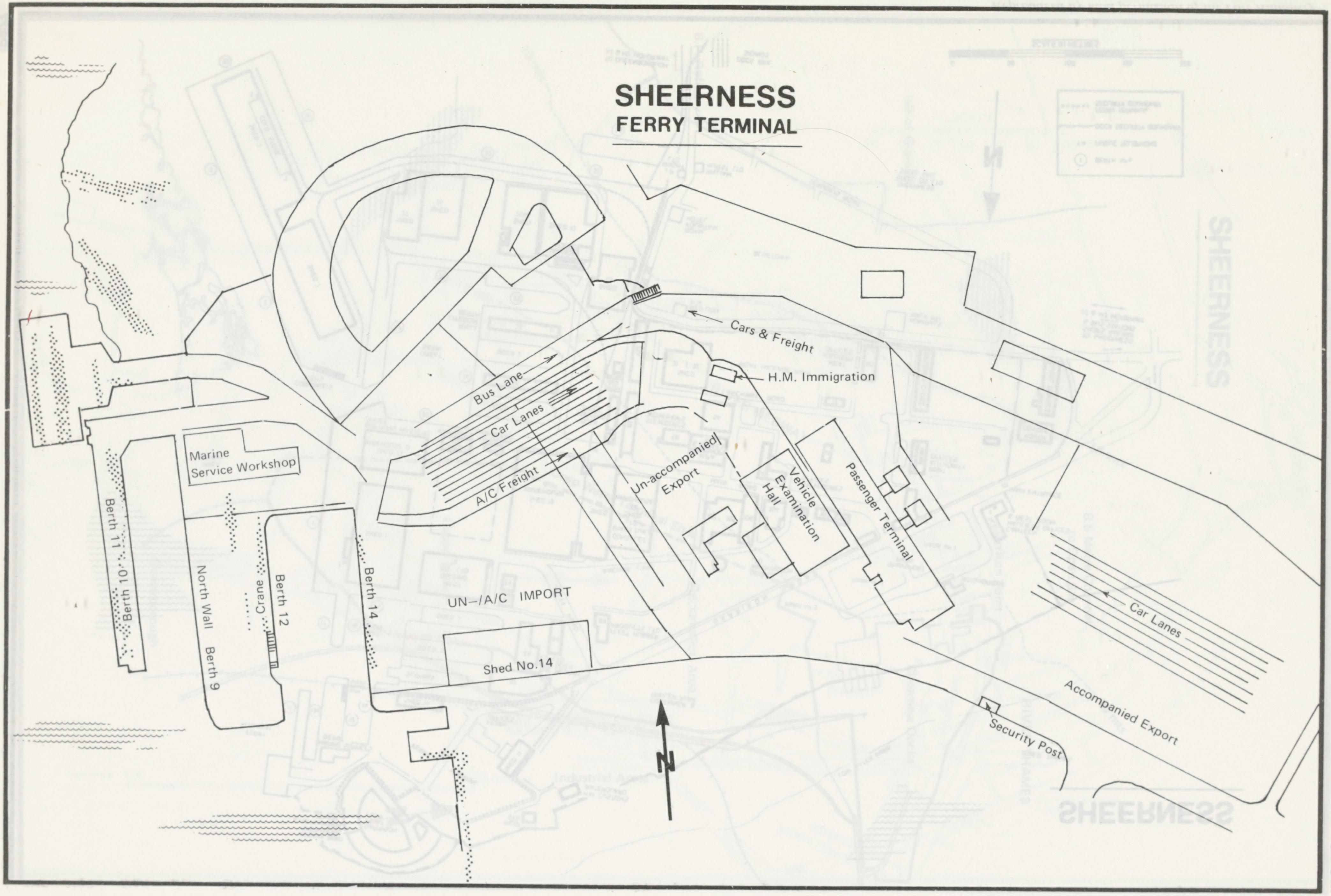
SHEERNESS
FERRY TERMINAL


Bus Lane
Car Lanes
A/C Freight
Cars & Freight
H.M. Immigration
Un-accompanied Export
Vehicle Examination Hall
Passenger Terminal
Car Lanes
Accompanied Export
Security Post
Marine Service Workshop
Berth 11
Berth 10
North Wall
Berth 9
Crane
Berth 12
Berth 14
UN–/A/C IMPORT
Shed No.14
N

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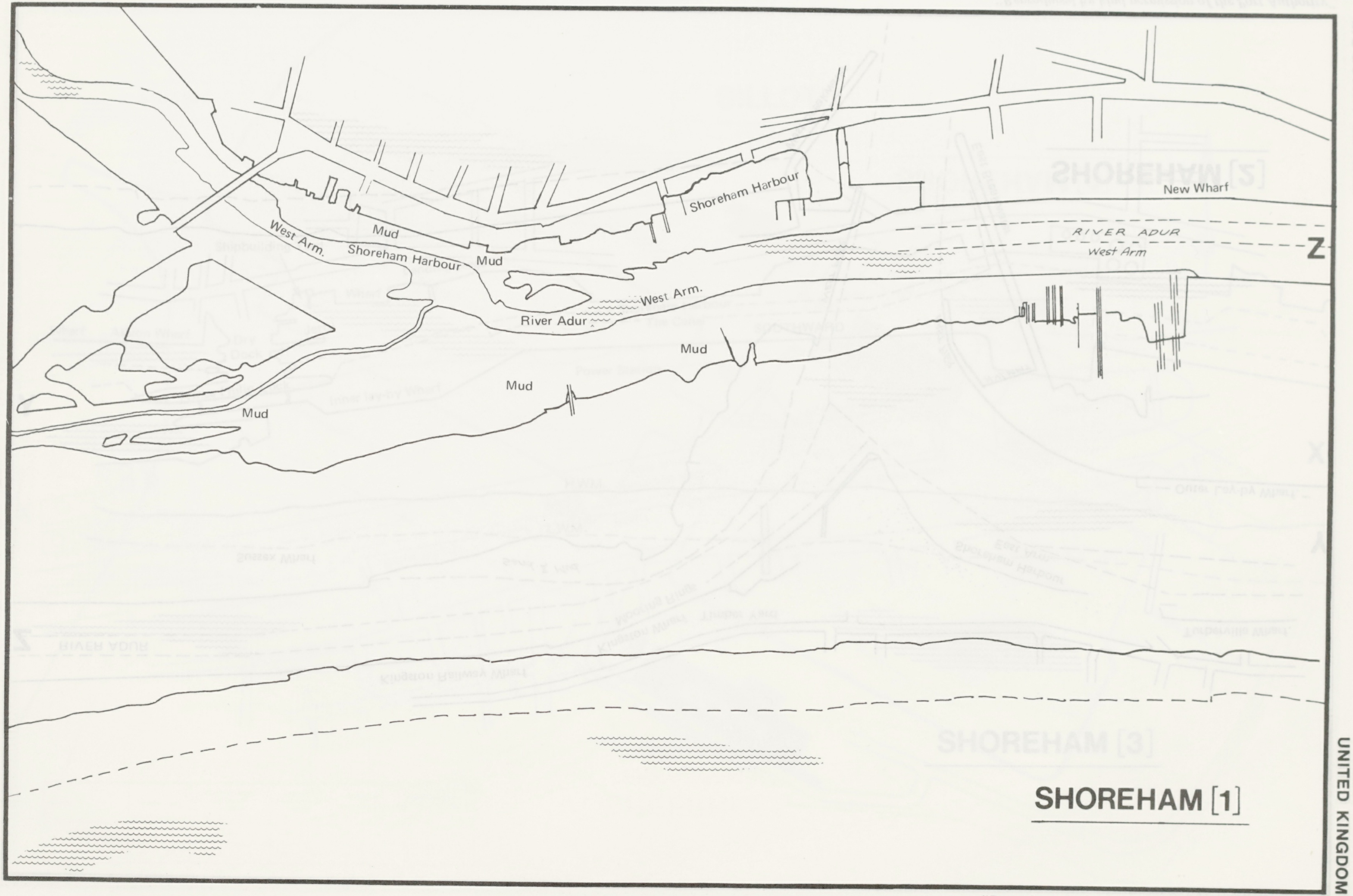
SHOREHAM [1]


New Wharf
RIVER ADUR
West Arm
Z
Shoreham Harbour
West Arm.
Mud
Shoreham Harbour
Mud
West Arm.
River Adur
Mud
Mud
Mud

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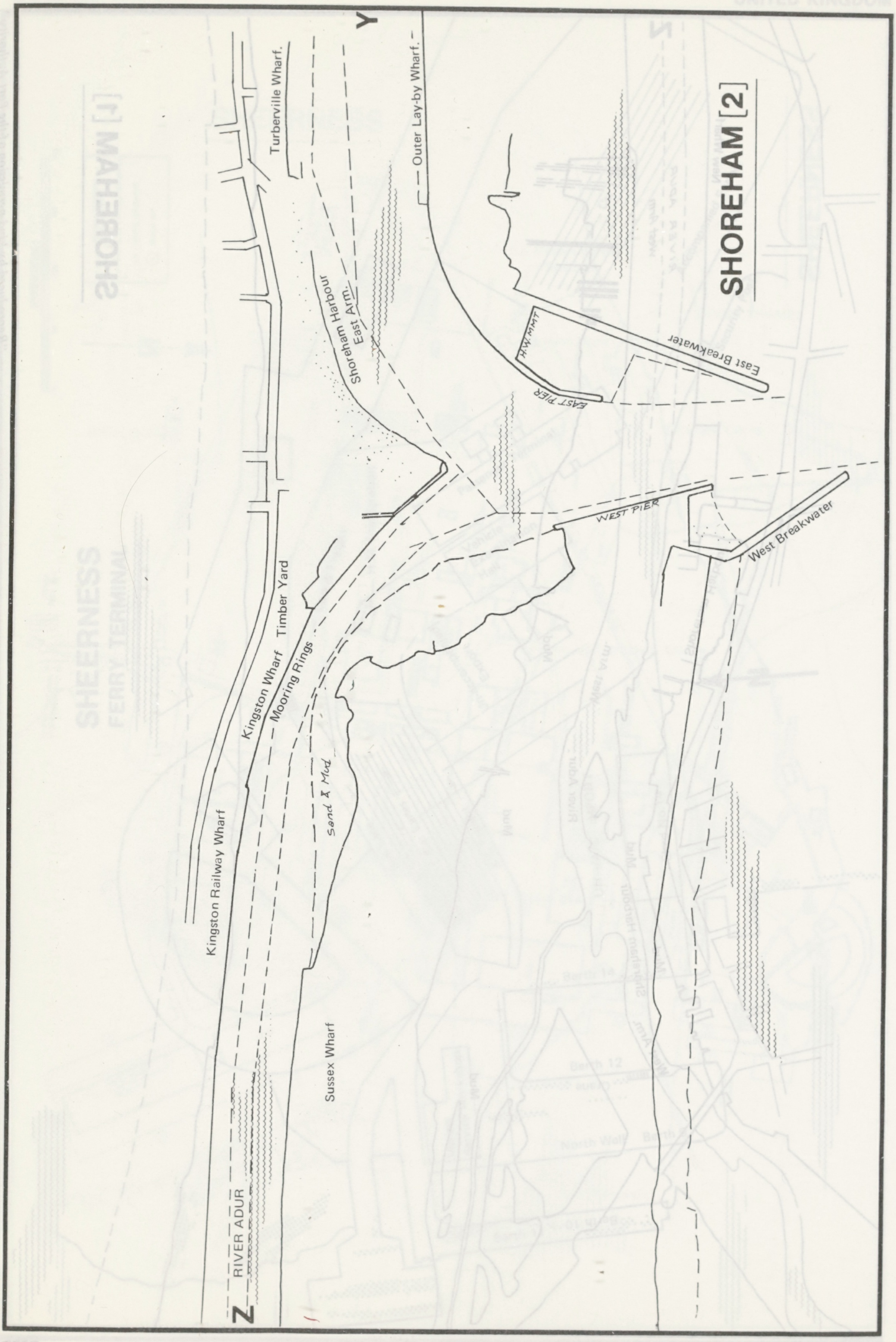

SHOREHAM [2]

Y
Z
Turberville Wharf.
Outer Lay-by Wharf.
Shoreham Harbour East Arm.
H.W. MMT
East Breakwater
EAST PIER
WEST PIER
West Breakwater
Timber Yard
Kingston Wharf
Mooring Rings
Kingston Railway Wharf
Sand & Mud
Sussex Wharf
RIVER ADUR

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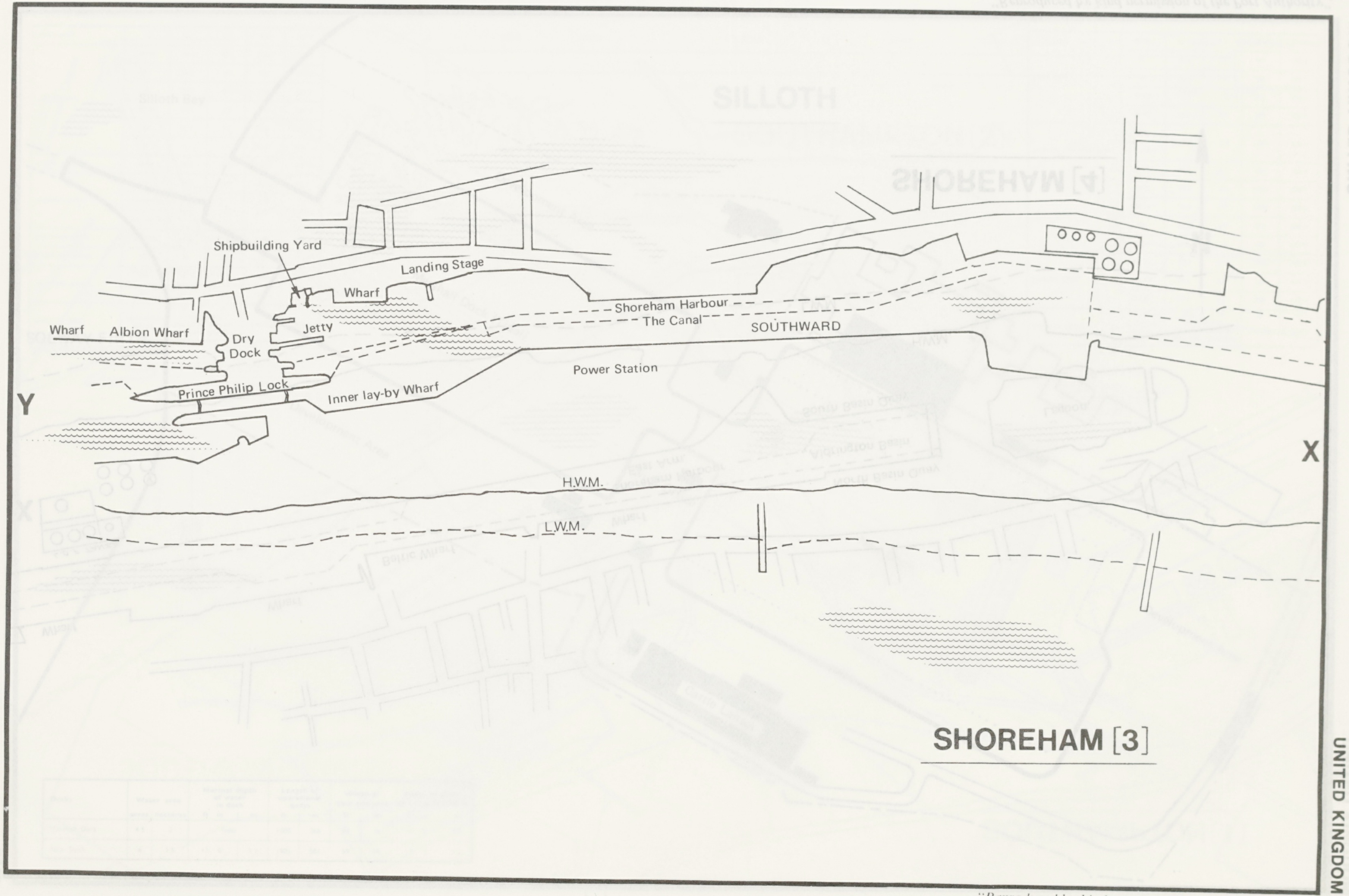
Shipbuilding Yard
Landing Stage
Wharf
Wharf
Albion Wharf
Dry Dock
Jetty
Shoreham Harbour
The Canal
SOUTHWARD
Power Station
Prince Philip Lock
Inner lay-by Wharf
Y
X
H.W.M.
L.W.M.

SHOREHAM [3]

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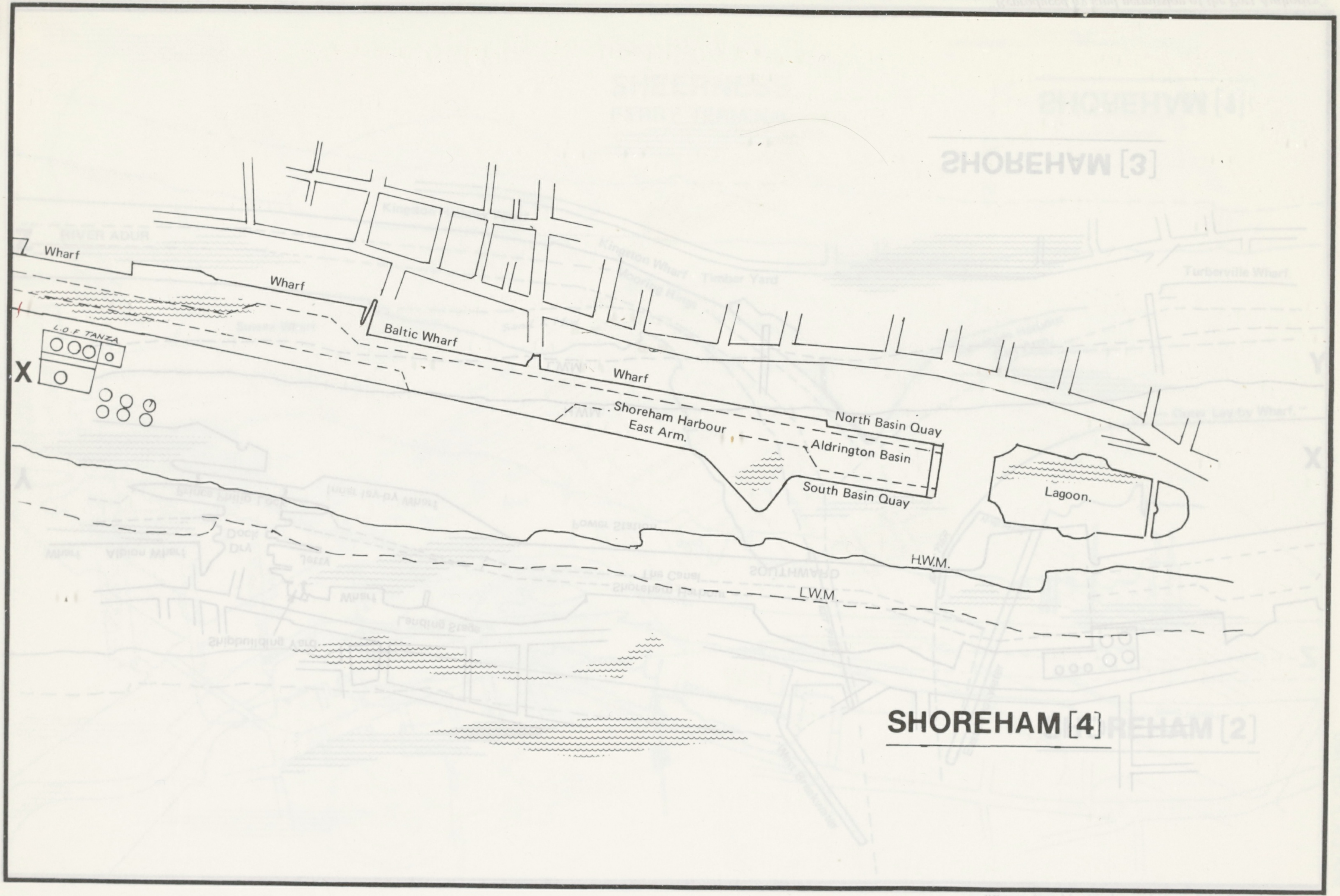
Wharf
Wharf
Baltic Wharf
Wharf
L.O.F TANZA
X
Shoreham Harbour
East Arm.
North Basin Quay
Aldrington Basin
South Basin Quay
Lagoon.
H.W.M.
L.W.M.

SHOREHAM [4]

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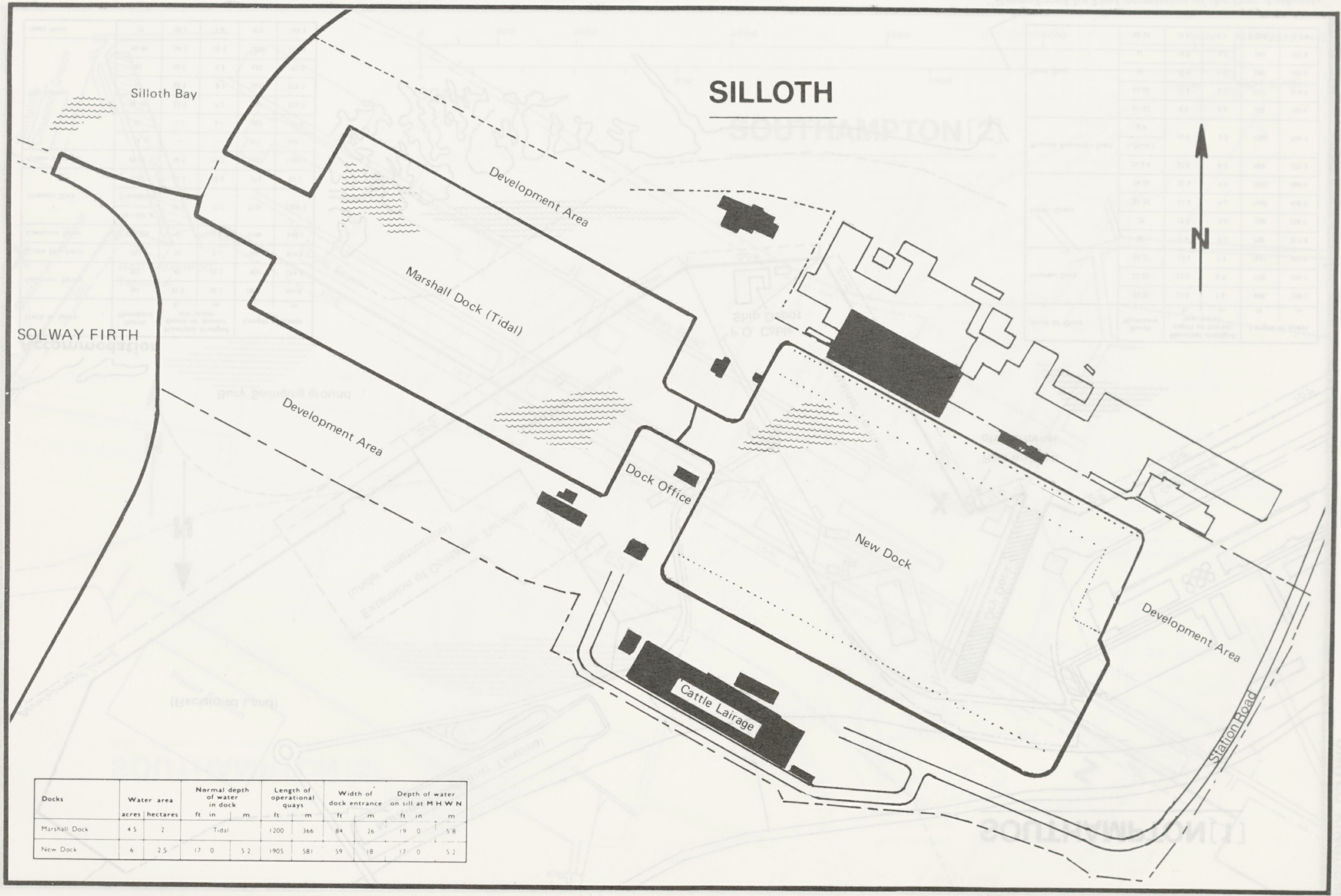
SILLOTH


Silloth Bay
SOLWAY FIRTH
N
Development Area
Marshall Dock (Tidal)
Development Area
Dock Office
New Dock
Development Area
Cattle Lairage
Station Road

Docks	Water area		Normal depth of water in dock			Length of operational quays		Width of dock entrance		Depth of water on sill at M H W N		
	acres	hectares	ft	in	m	ft	m	ft	m	ft	in	m
Marshall Dock	4.5	2	Tidal			1200	366	84	26	19	0	5.8
New Dock	6	2.5	17	0	5.2	1905	581	59	18	17	0	5.2

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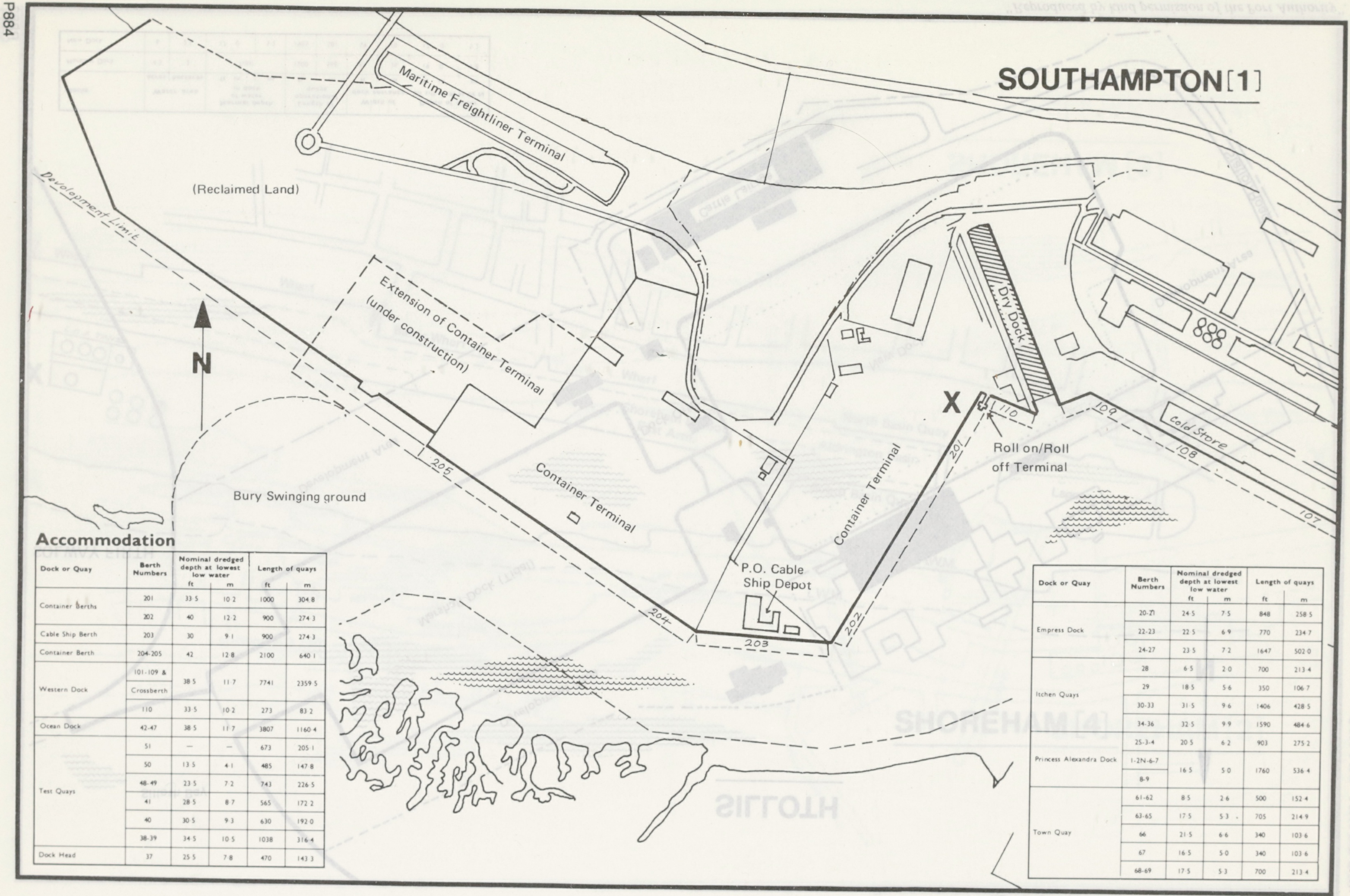
SOUTHAMPTON [1]


Maritime Freightliner Terminal
(Reclaimed Land)
Development Limit
Extension of Container Terminal
(under construction)
N
Bury Swinging ground
205
Container Terminal
204
203
P.O. Cable
Ship Depot
Container Terminal
202
201
X
110
Roll on/Roll
off Terminal
Dry Dock
109
108
Cold Store
107

Accommodation

Dock or Quay	Berth Numbers	Nominal dredged depth at lowest low water		Length of quays	
		ft	m	ft	m
Container Berths	201	33·5	10·2	1000	304·8
	202	40	12·2	900	274·3
Cable Ship Berth	203	30	9·1	900	274·3
Container Berth	204-205	42	12·8	2100	640·1
Western Dock	101-109 &	38·5	11·7	7741	2359·5
	Crossberth				
	110	33·5	10·2	273	83·2
Ocean Dock	42-47	38·5	11·7	3807	1160·4
Test Quays	51	—	—	673	205·1
	50	13·5	4·1	485	147·8
	48-49	23·5	7·2	743	226·5
	41	28·5	8·7	565	172·2
	40	30·5	9·3	630	192·0
	38-39	34·5	10·5	1038	316·4
Dock Head	37	25·5	7·8	470	143·3

Dock or Quay	Berth Numbers	Nominal dredged depth at lowest low water		Length of quays	
		ft	m	ft	m
Empress Dock	20-21	24·5	7·5	848	258·5
	22-23	22·5	6·9	770	234·7
	24-27	23·5	7·2	1647	502·0
Itchen Quays	28	6·5	2·0	700	213·4
	29	18·5	5·6	350	106·7
	30-33	31·5	9·6	1406	428·5
	34-36	32·5	9·9	1590	484·6
Princess Alexandra Dock	25-3-4	20·5	6·2	903	275·2
	1-2N-6-7	16·5	5·0	1760	536·4
	8-9				
Town Quay	61-62	8·5	2·6	500	152·4
	63-65	17·5	5·3	705	214·9
	66	21·5	6·6	340	103·6
	67	16·5	5·0	340	103·6
	68-69	17·5	5·3	700	213·4

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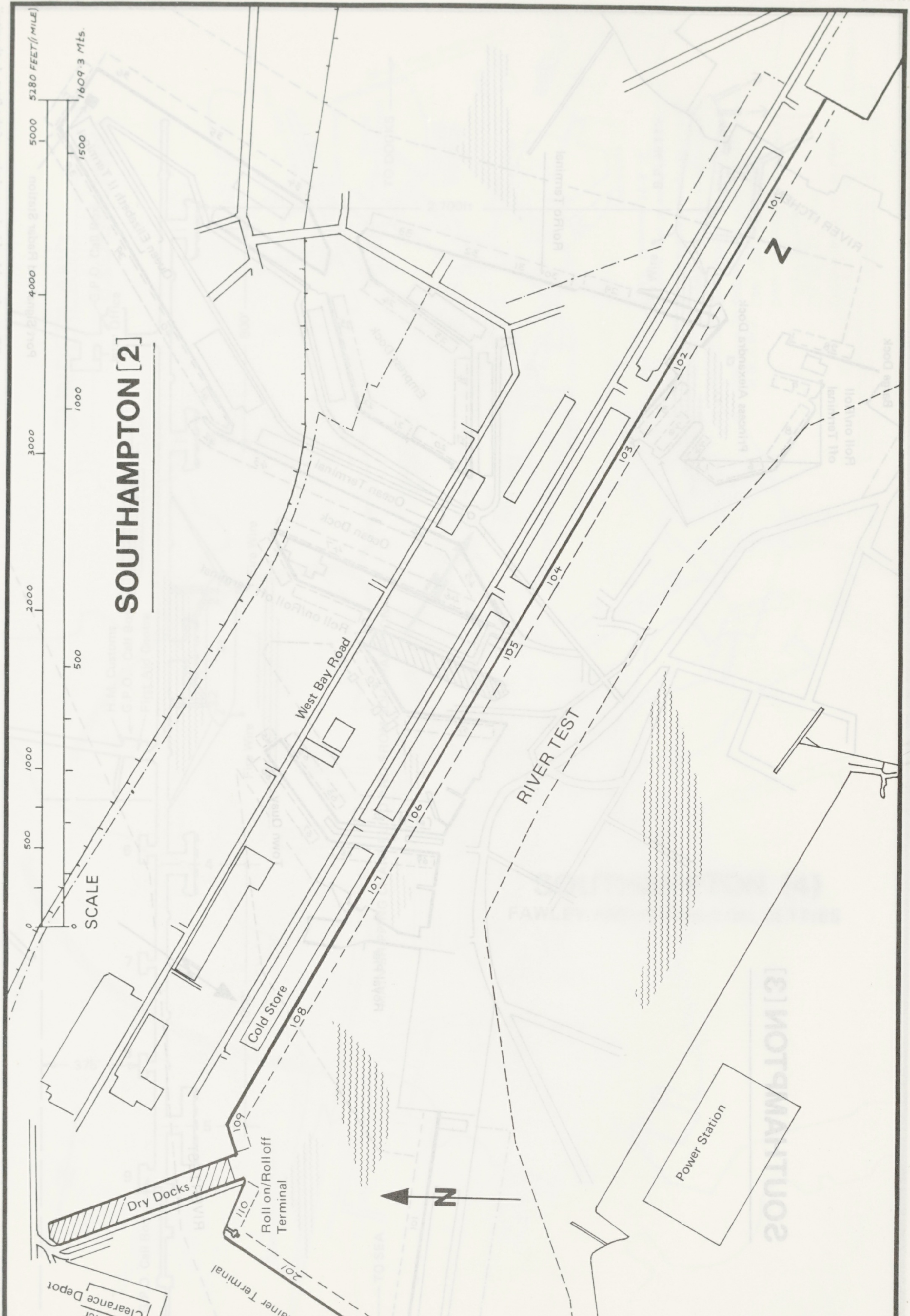
SOUTHAMPTON [2]
SCALE
0
500
1000
2000
3000
4000
5000
5280 FEET (1 MILE)
0
500
1000
1500
1609.3 Mts.
West Bay Road
Cold Store
RIVER TEST
Dry Docks
Roll on/Roll off Terminal
Container Terminal
Container Clearance Depot
Power Station
N
N
101
102
103
104
105
106
107
108
109
110
201
202
X

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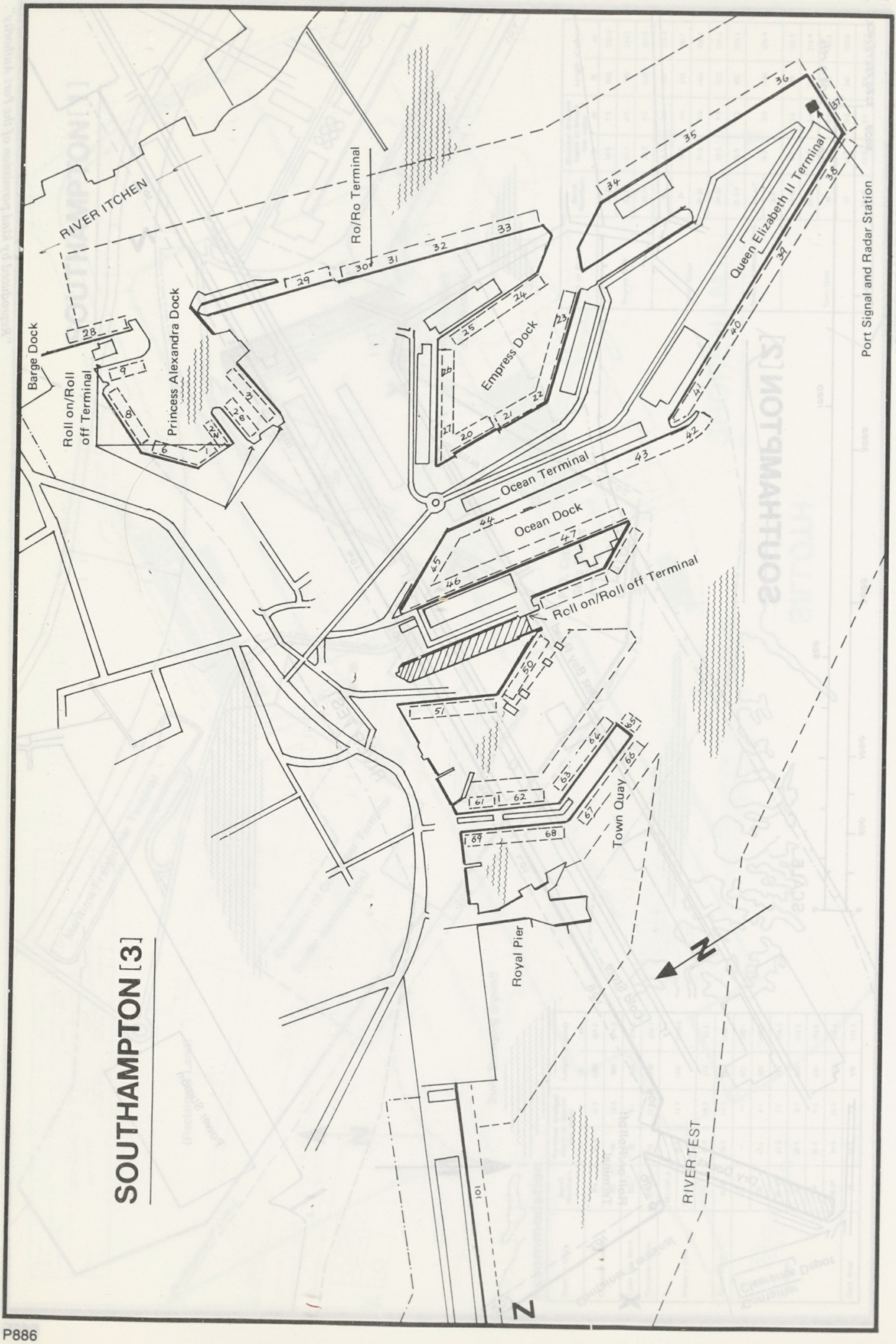
SOUTHAMPTON [3]

Barge Dock
28
Roll on/Roll off Terminal
Princess Alexandra Dock
1
2
3
6
8
9
RIVER ITCHEN
Ro/Ro Terminal
29
30
31
32
33
Empress Dock
20
21
22
23
24
25
26
27
34
35
36
37
38
39
40
41
42
43
Queen Elizabeth II Terminal
Port Signal and Radar Station
Ocean Terminal
Ocean Dock
44
45
46
47
Roll on/Roll off Terminal
50
51
61
62
63
64
65
66
67
68
69
Town Quay
Royal Pier
101
RIVER TEST
N

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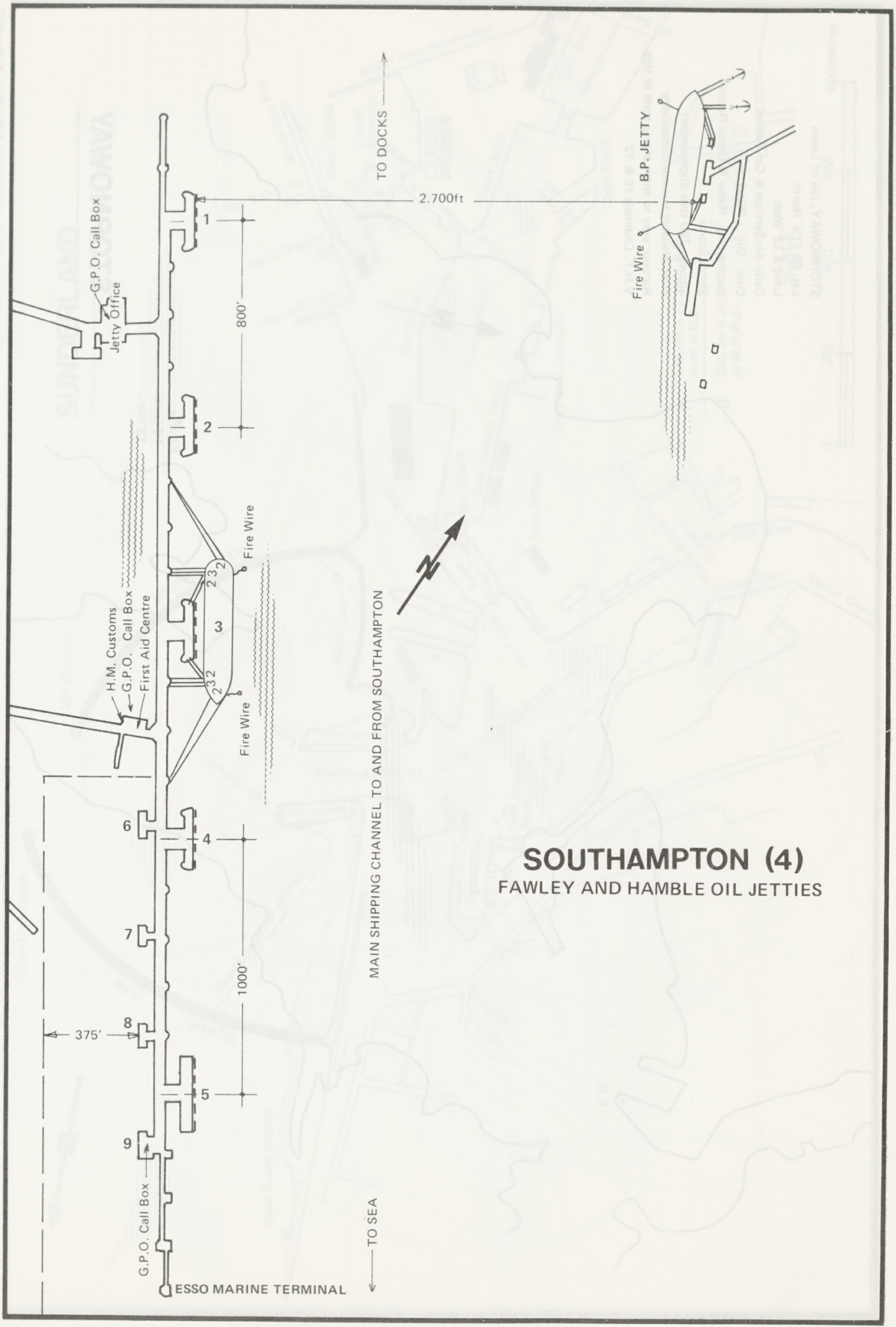
TO DOCKS
2.700ft
B.P. JETTY
Fire Wire
1
G.P.O. Call Box
Jetty Office
800'
2
Fire Wire
2 3 2
3
2 3 2
Fire Wire
H.M. Customs
G.P.O. Call Box
First Aid Centre
MAIN SHIPPING CHANNEL TO AND FROM SOUTHAMPTON
N
6
4
7
1000'
8
375'
5
9
G.P.O. Call Box
TO SEA
ESSO MARINE TERMINAL

SOUTHAMPTON (4)

FAWLEY AND HAMBLE OIL JETTIES

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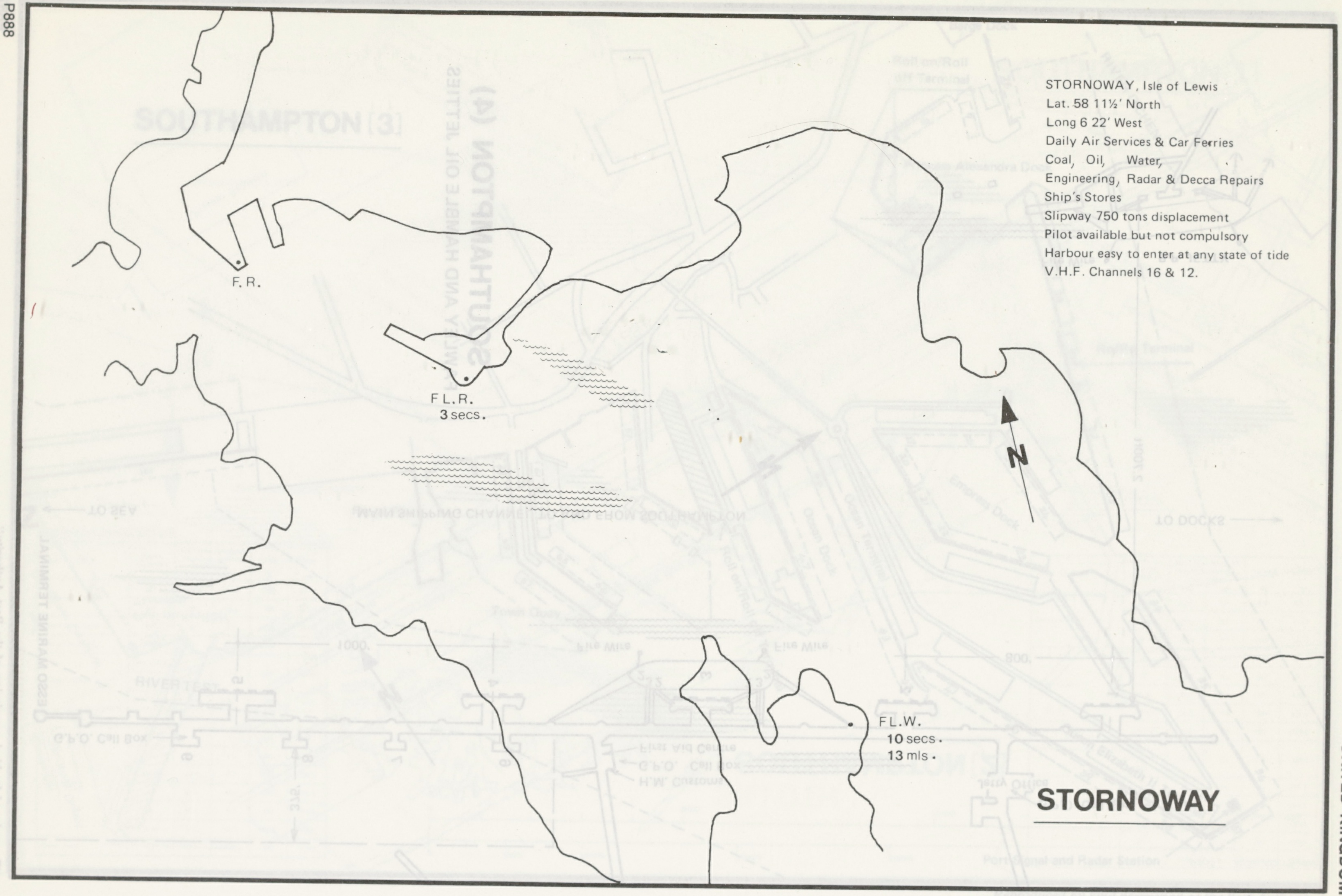
STORNOWAY



STORNOWAY, Isle of Lewis
Lat. 58 11½′ North
Long 6 22′ West
Daily Air Services & Car Ferries
Coal, Oil, Water,
Engineering, Radar & Decca Repairs
Ship's Stores
Slipway 750 tons displacement
Pilot available but not compulsory
Harbour easy to enter at any state of tide
V.H.F. Channels 16 & 12.

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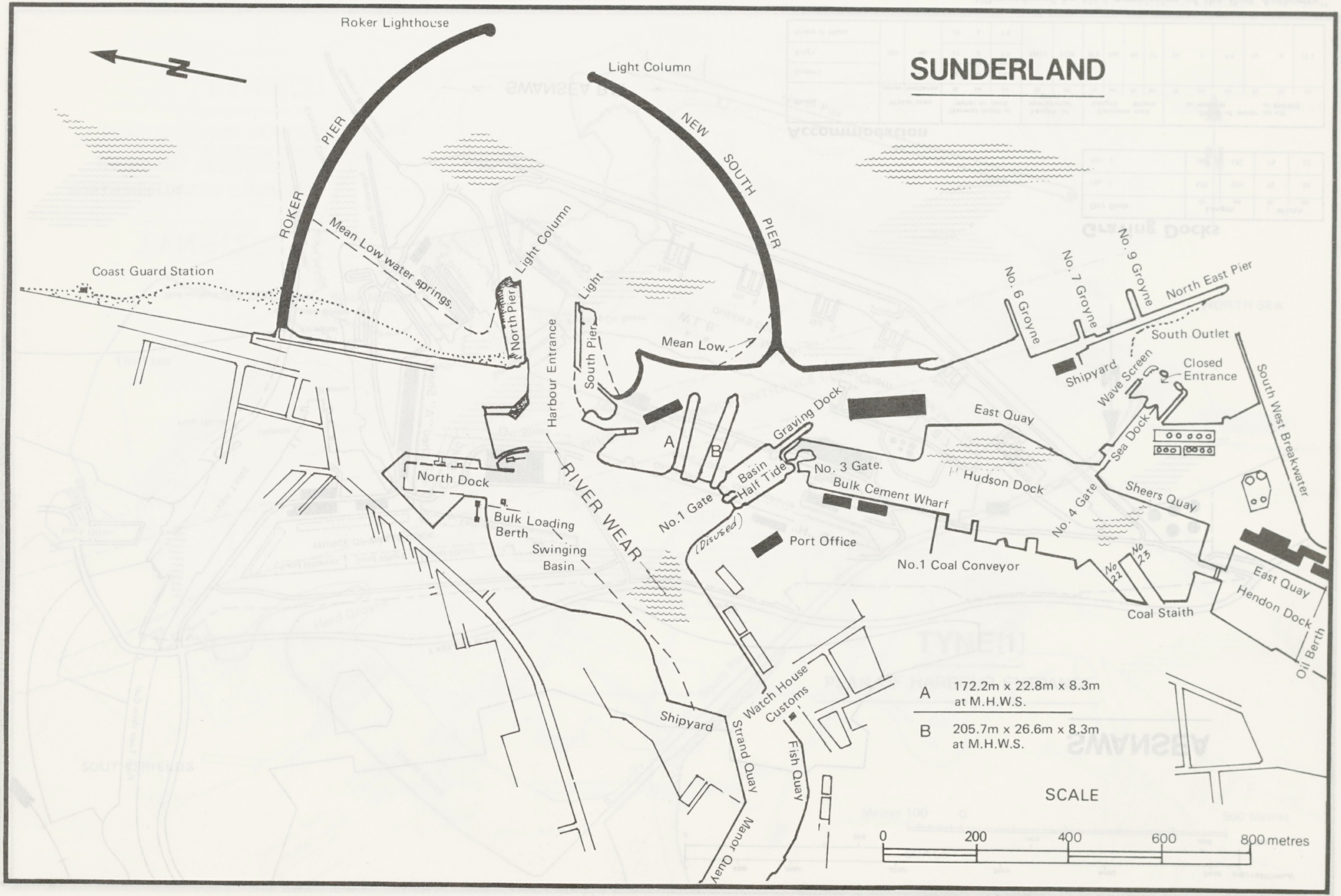
SUNDERLAND


Roker Lighthouse
N
Light Column
NEW SOUTH PIER
ROKER PIER
Mean Low water springs.
Light Column
Coast Guard Station
North Pier
Light
South Pier
Harbour Entrance
Mean Low.
No. 6 Groyne
No. 7 Groyne
No. 9 Groyne
North East Pier
South Outlet
Shipyard
Wave Screen
Closed Entrance
South West Breakwater
Graving Dock
East Quay
A
B
Basin
Half Tide
No. 3 Gate.
North Dock
RIVER WEAR
Hudson Dock
Sea Dock
Bulk Cement Wharf
No.1 Gate
(Disused)
Sheers Quay
No. 4 Gate
Bulk Loading Berth
Swinging Basin
Port Office
No.1 Coal Conveyor
No 22
No 23
East Quay
Hendon Dock
Coal Staith
Oil Berth
Watch House
Customs
Shipyard
Strand Quay
Fish Quay
Manor Quay
A 172.2m x 22.8m x 8.3m at M.H.W.S.
B 205.7m x 26.6m x 8.3m at M.H.W.S.
SCALE
0
200
400
600
800 metres

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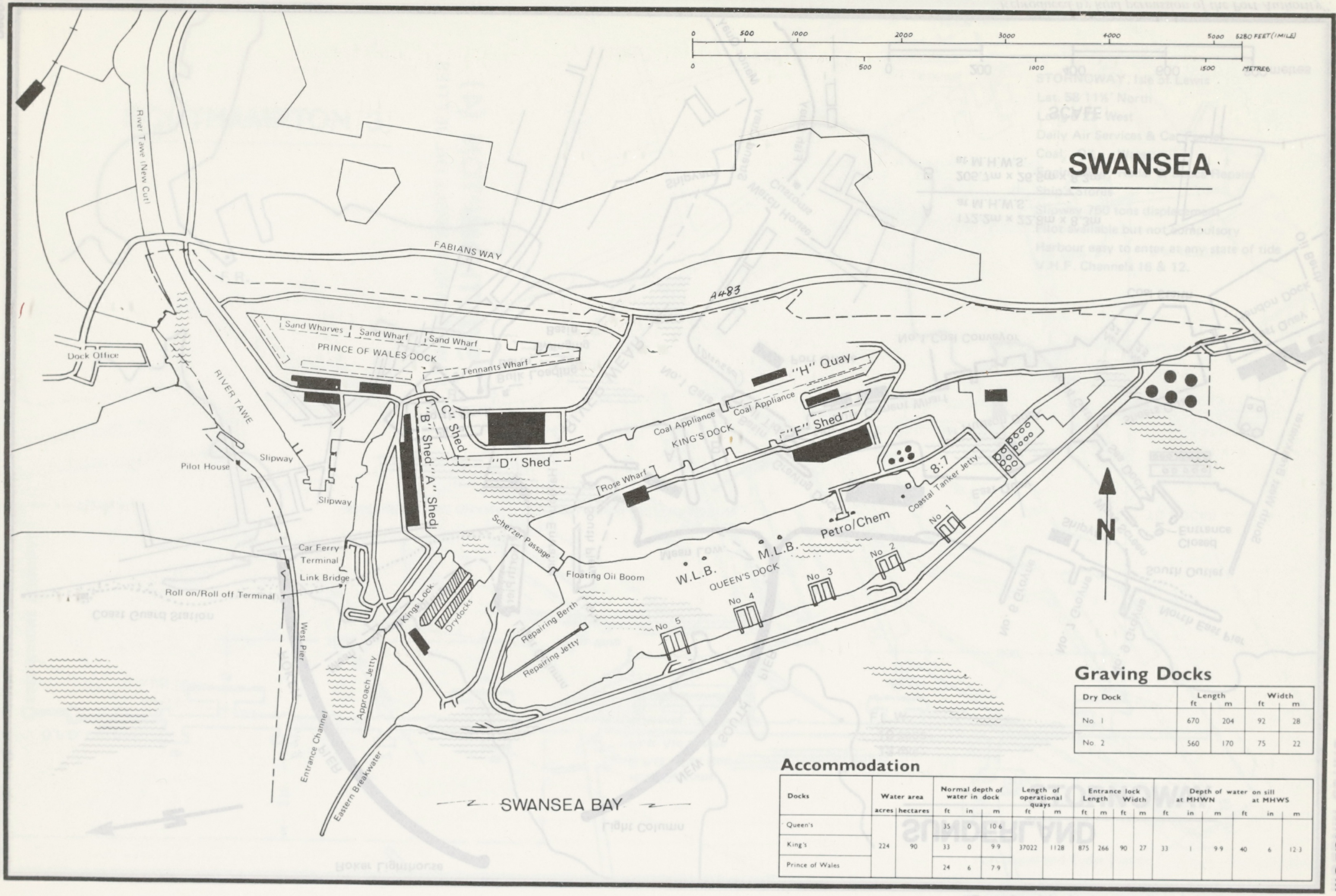
SWANSEA


0
500
1000
2000
3000
4000
5000
5280 FEET (1 MILE)
0
500
1000
1500
METRES
River Tawe (New Cut)
FABIANS WAY
A483
Sand Wharves
Sand Wharf
Sand Wharf
PRINCE OF WALES DOCK
Tennants Wharf
Dock Office
RIVER TAWE
Pilot House
Slipway
Slipway
"C" Shed
"B" Shed
"A" Shed
"D" Shed
Coal Appliance
Coal Appliance
KING'S DOCK
"H" Quay
"F" Shed
Rose Wharf
Coastal Tanker Jetty
8:7
Petro/Chem
No 1
No 2
No 3
No 4
No 5
M.L.B.
W.L.B.
QUEEN'S DOCK
Scherzer Passage
Floating Oil Boom
Car Ferry Terminal
Link Bridge
Roll on/Roll off Terminal
Kings Lock
Drydocks
Repairing Berth
Repairing Jetty
West Pier
Approach Jetty
Entrance Channel
Eastern Breakwater
SWANSEA BAY
N

Graving Docks

Dry Dock	Length ft	Length m	Width ft	Width m
No. 1	670	204	92	28
No. 2	560	170	75	22

Accommodation

Docks	Water area acres	Water area hectares	Normal depth of water in dock ft	Normal depth of water in dock in	Normal depth of water in dock m	Length of operational quays ft	Length of operational quays m	Entrance lock Length ft	Entrance lock Length m	Entrance lock Width ft	Entrance lock Width m	Depth of water on sill at MHWN ft	Depth of water on sill at MHWN in	Depth of water on sill at MHWN m	Depth of water on sill at MHWS ft	Depth of water on sill at MHWS in	Depth of water on sill at MHWS m
Queen's	224	90	35	0	10·6	37022	1128	875	266	90	27	33	1	9·9	40	6	12·3
King's			33	0	9·9												
Prince of Wales			24	6	7·9												

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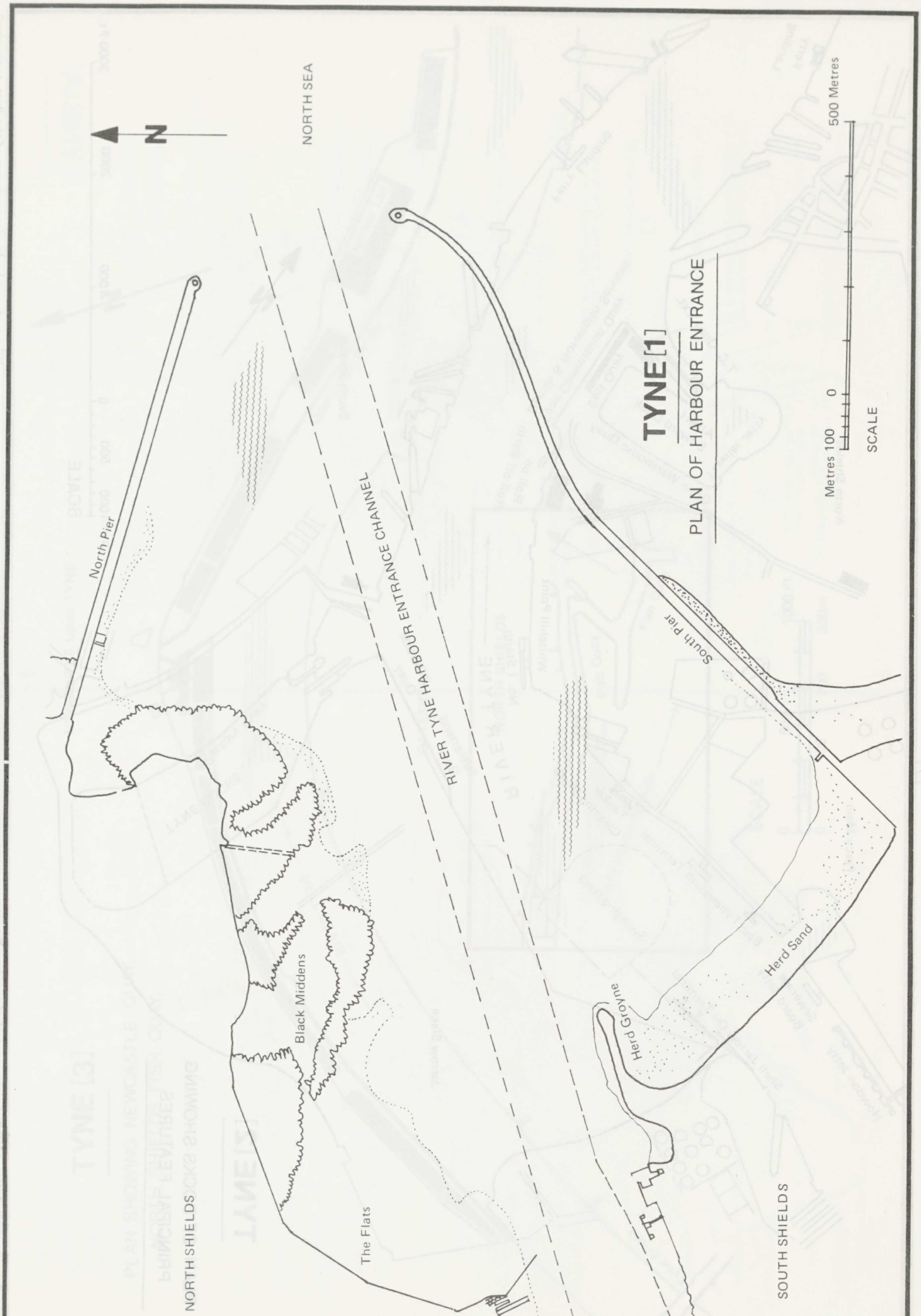

TYNE[1]

PLAN OF HARBOUR ENTRANCE

NORTH SEA
N
North Pier
RIVER TYNE HARBOUR ENTRANCE CHANNEL
South Pier
Black Middens
The Flats
NORTH SHIELDS
Herd Groyne
Herd Sand
SOUTH SHIELDS
Metres 100
0
500 Metres
SCALE

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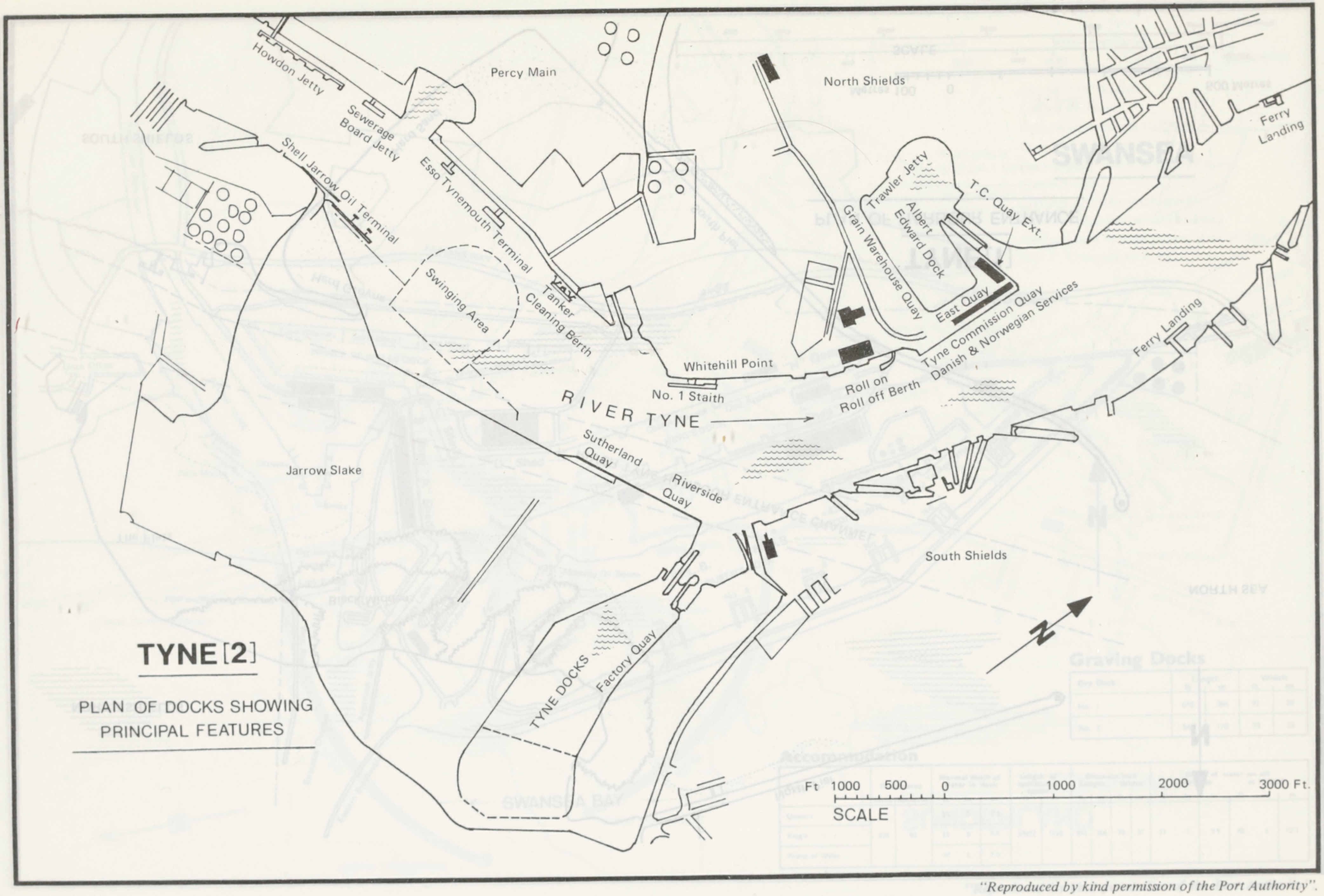
Howdon Jetty
Percy Main
North Shields
Sewerage Board Jetty
Shell Jarrow Oil Terminal
Esso Tynemouth Terminal
Swinging Area
Tanker Cleaning Berth
Trawler Jetty
Albert Edward Dock
Grain Warehouse Quay
T.C. Quay Ext.
East Quay
Tyne Commission Quay
Danish & Norwegian Services
Ferry Landing
Ferry Landing
Whitehill Point
No. 1 Staith
Roll on Roll off Berth
RIVER TYNE
Sutherland Quay
Riverside Quay
Jarrow Slake
South Shields
TYNE DOCKS
Factory Quay
N
Ft 1000 500 0 1000 2000 3000 Ft.
SCALE

TYNE [2]

PLAN OF DOCKS SHOWING PRINCIPAL FEATURES

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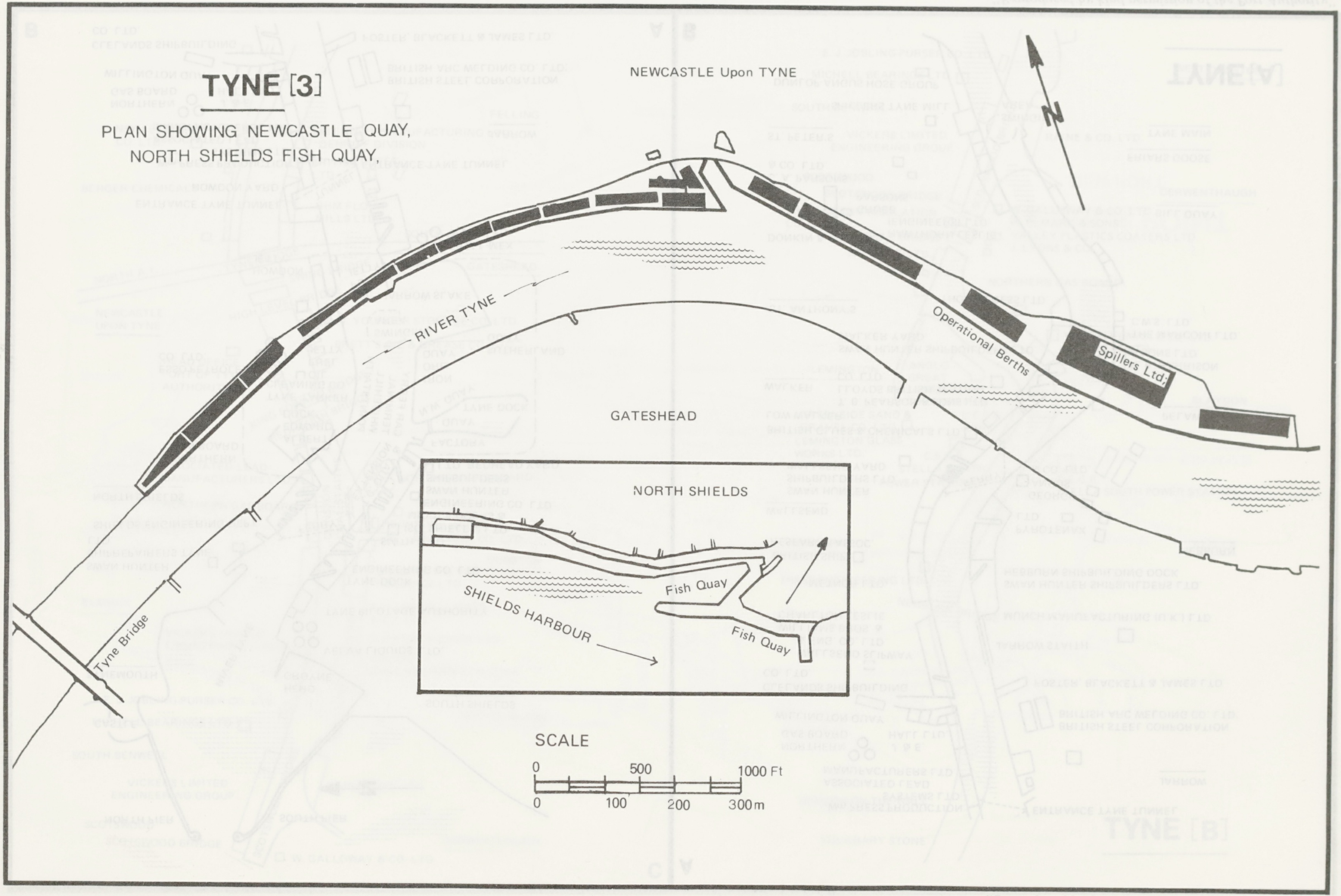
TYNE [3]

PLAN SHOWING NEWCASTLE QUAY,
NORTH SHIELDS FISH QUAY.


NEWCASTLE Upon TYNE
N
RIVER TYNE
Operational Berths
Spillers Ltd.
GATESHEAD
NORTH SHIELDS
Fish Quay
Fish Quay
SHIELDS HARBOUR
Tyne Bridge
SCALE
0
500
1000 Ft
0
100
200
300m

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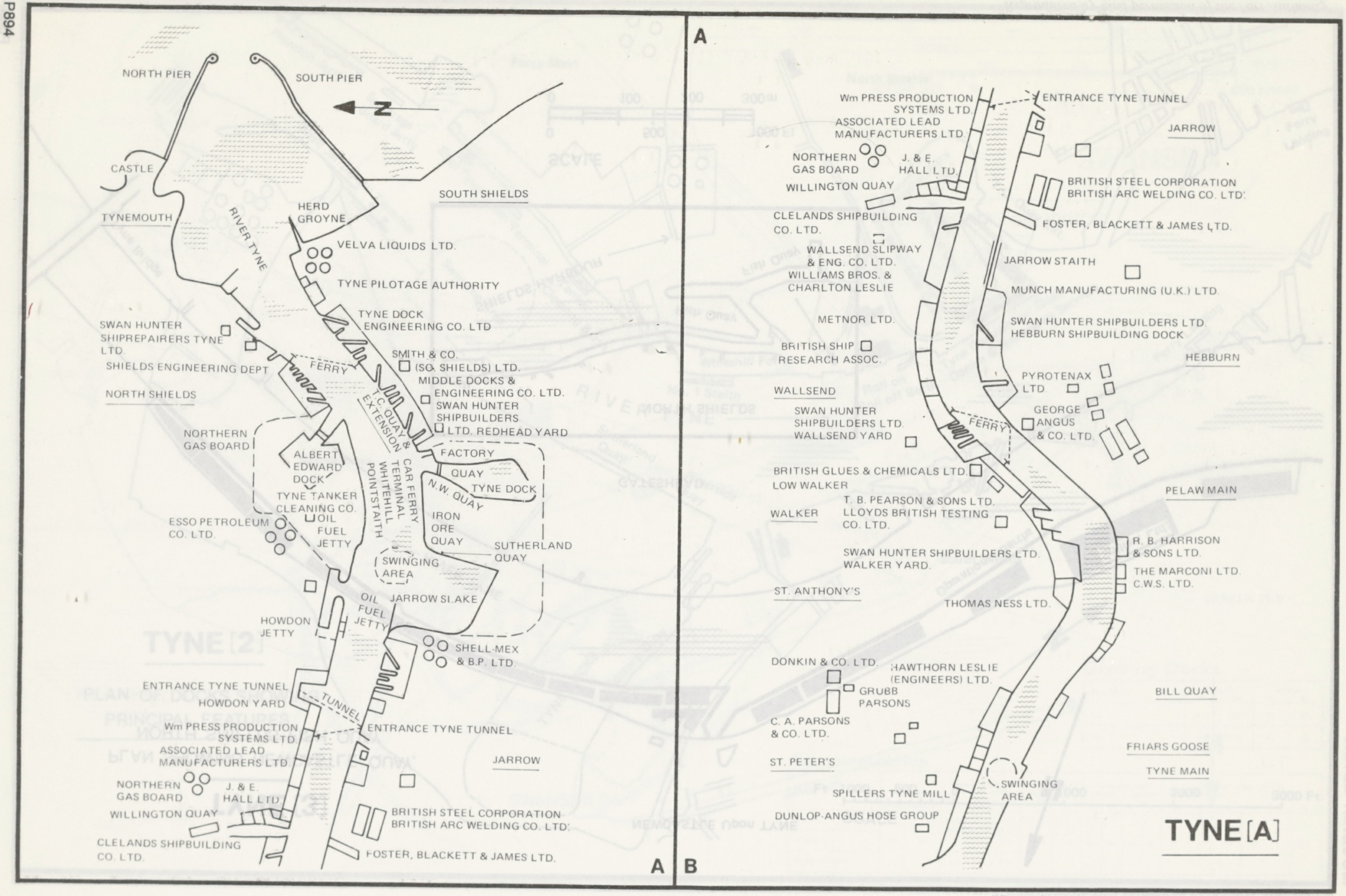
A
NORTH PIER
SOUTH PIER
N
CASTLE
TYNEMOUTH
RIVER TYNE
HERD GROYNE
SOUTH SHIELDS
VELVA LIQUIDS LTD.
TYNE PILOTAGE AUTHORITY
TYNE DOCK ENGINEERING CO. LTD
SWAN HUNTER SHIPREPAIRERS TYNE LTD.
SHIELDS ENGINEERING DEPT
FERRY
SMITH & CO. (SO. SHIELDS) LTD.
MIDDLE DOCKS & ENGINEERING CO. LTD.
SWAN HUNTER SHIPBUILDERS LTD. REDHEAD YARD
NORTH SHIELDS
T.C. QUAY & EXTENSION
NORTHERN GAS BOARD
ALBERT EDWARD DOCK
CAR FERRY TERMINAL
WHITEHILL POINT STAITH
FACTORY
QUAY
TYNE DOCK
N.W. QUAY
TYNE TANKER CLEANING CO.
OIL FUEL JETTY
ESSO PETROLEUM CO. LTD.
IRON ORE QUAY
SUTHERLAND QUAY
SWINGING AREA
OIL FUEL JETTY
JARROW SLAKE
HOWDON JETTY
SHELL-MEX & B.P. LTD.
ENTRANCE TYNE TUNNEL
HOWDON YARD
TUNNEL
Wm PRESS PRODUCTION SYSTEMS LTD.
ENTRANCE TYNE TUNNEL
ASSOCIATED LEAD MANUFACTURERS LTD
JARROW
NORTHERN GAS BOARD
J. & E. HALL LTD.
WILLINGTON QUAY
BRITISH STEEL CORPORATION
BRITISH ARC WELDING CO. LTD.
CLELANDS SHIPBUILDING CO. LTD.
FOSTER, BLACKETT & JAMES LTD.
A
B
A
Wm PRESS PRODUCTION SYSTEMS LTD.
ENTRANCE TYNE TUNNEL
ASSOCIATED LEAD MANUFACTURERS LTD.
JARROW
NORTHERN GAS BOARD
J. & E. HALL LTD.
WILLINGTON QUAY
BRITISH STEEL CORPORATION
BRITISH ARC WELDING CO. LTD.
CLELANDS SHIPBUILDING CO. LTD.
FOSTER, BLACKETT & JAMES LTD.
WALLSEND SLIPWAY & ENG. CO. LTD.
WILLIAMS BROS. & CHARLTON LESLIE
JARROW STAITH
MUNCH MANUFACTURING (U.K.) LTD.
METNOR LTD.
SWAN HUNTER SHIPBUILDERS LTD.
HEBBURN SHIPBUILDING DOCK
BRITISH SHIP RESEARCH ASSOC.
HEBBURN
PYROTENAX LTD.
WALLSEND
SWAN HUNTER SHIPBUILDERS LTD. WALLSEND YARD
FERRY
GEORGE ANGUS & CO. LTD.
BRITISH GLUES & CHEMICALS LTD.
LOW WALKER
PELAW MAIN
T. B. PEARSON & SONS LTD.
WALKER
LLOYDS BRITISH TESTING CO. LTD.
R. B. HARRISON & SONS LTD.
SWAN HUNTER SHIPBUILDERS LTD. WALKER YARD
THE MARCONI LTD.
C.W.S. LTD.
ST. ANTHONY'S
THOMAS NESS LTD.
DONKIN & CO. LTD.
HAWTHORN LESLIE (ENGINEERS) LTD.
GRUBB PARSONS
BILL QUAY
C. A. PARSONS & CO. LTD.
ST. PETER'S
FRIARS GOOSE
TYNE MAIN
SWINGING AREA
SPILLERS TYNE MILL
DUNLOP-ANGUS HOSE GROUP
TYNE [A]

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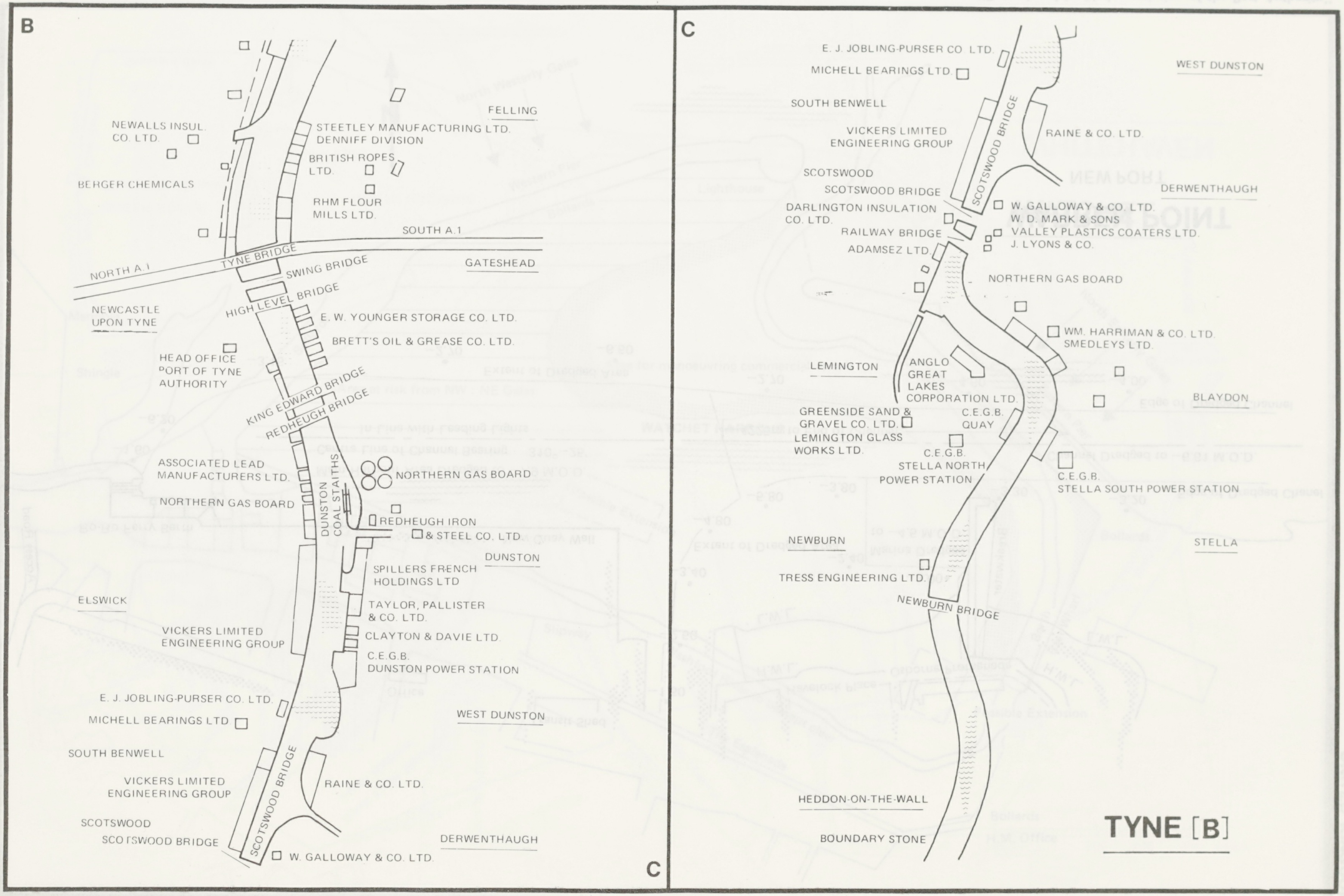
B
NEWALLS INSUL.
CO. LTD.
BERGER CHEMICALS
STEETLEY MANUFACTURING LTD.
DENNIFF DIVISION
BRITISH ROPES
LTD.
RHM FLOUR
MILLS LTD.
FELLING
SOUTH A.1
GATESHEAD
NORTH A.1
TYNE BRIDGE
SWING BRIDGE
HIGH LEVEL BRIDGE
NEWCASTLE
UPON TYNE
E. W. YOUNGER STORAGE CO. LTD.
BRETT'S OIL & GREASE CO. LTD.
HEAD OFFICE
PORT OF TYNE
AUTHORITY
KING EDWARD BRIDGE
REDHEUGH BRIDGE
ASSOCIATED LEAD
MANUFACTURERS LTD.
DUNSTON
COAL STAITHS
NORTHERN GAS BOARD
NORTHERN GAS BOARD
REDHEUGH IRON
& STEEL CO. LTD.
DUNSTON
SPILLERS FRENCH
HOLDINGS LTD
ELSWICK
TAYLOR, PALLISTER
& CO. LTD.
VICKERS LIMITED
ENGINEERING GROUP
CLAYTON & DAVIE LTD.
C.E.G.B.
DUNSTON POWER STATION
E. J. JOBLING-PURSER CO. LTD.
MICHELL BEARINGS LTD.
WEST DUNSTON
SOUTH BENWELL
VICKERS LIMITED
ENGINEERING GROUP
SCOTSWOOD BRIDGE
RAINE & CO. LTD.
SCOTSWOOD
SCOTSWOOD BRIDGE
DERWENTHAUGH
W. GALLOWAY & CO. LTD.
C
C
E. J. JOBLING-PURSER CO LTD.
MICHELL BEARINGS LTD.
WEST DUNSTON
SOUTH BENWELL
VICKERS LIMITED
ENGINEERING GROUP
SCOTSWOOD BRIDGE
RAINE & CO. LTD.
SCOTSWOOD
SCOTSWOOD BRIDGE
DERWENTHAUGH
DARLINGTON INSULATION
CO. LTD.
W. GALLOWAY & CO. LTD.
W. D. MARK & SONS
VALLEY PLASTICS COATERS LTD.
J. LYONS & CO.
RAILWAY BRIDGE
ADAMSEZ LTD.
NORTHERN GAS BOARD
WM. HARRIMAN & CO. LTD.
SMEDLEYS LTD.
LEMINGTON
ANGLO
GREAT
LAKES
CORPORATION LTD.
BLAYDON
GREENSIDE SAND &
GRAVEL CO. LTD.
C.E.G.B.
QUAY
LEMINGTON GLASS
WORKS LTD.
C.E.G.B.
STELLA NORTH
POWER STATION
C.E.G.B.
STELLA SOUTH POWER STATION
NEWBURN
STELLA
TRESS ENGINEERING LTD.
NEWBURN BRIDGE
HEDDON-ON-THE-WALL
BOUNDARY STONE

TYNE [B]

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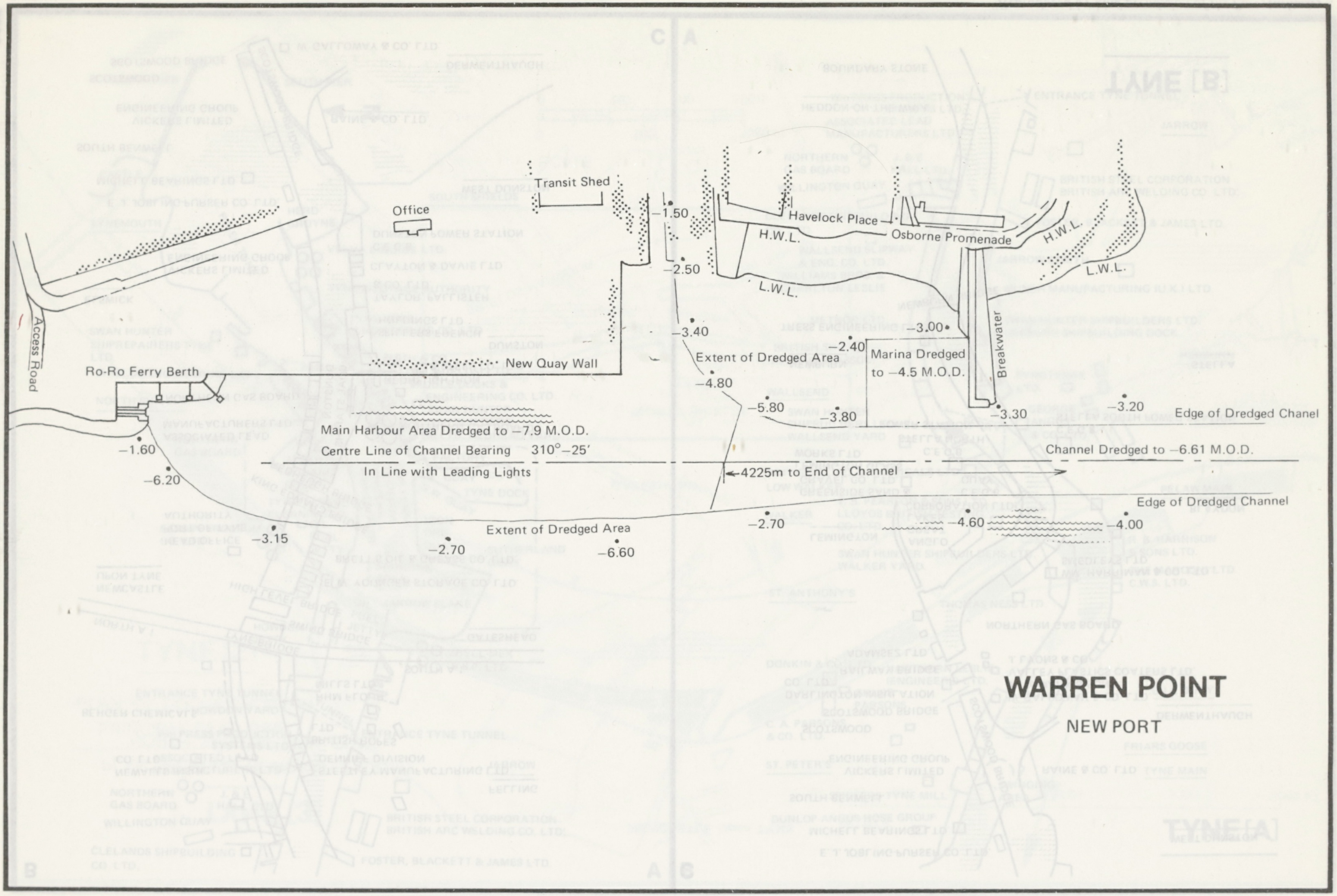
Transit Shed
Office
Havelock Place
Osborne Promenade
H.W.L.
L.W.L.
H.W.L.
L.W.L.
-1.50
-2.50
-3.40
-2.40
-3.00
Extent of Dredged Area
Marina Dredged
to -4.5 M.O.D.
Breakwater
-4.80
-5.80
-3.80
-3.30
-3.20
Edge of Dredged Chanel
Access Road
Ro-Ro Ferry Berth
New Quay Wall
Main Harbour Area Dredged to -7.9 M.O.D.
Centre Line of Channel Bearing 310°-25′
In Line with Leading Lights
4225m to End of Channel
Channel Dredged to -6.61 M.O.D.
Edge of Dredged Channel
-1.60
-6.20
-3.15
-2.70
Extent of Dredged Area
-6.60
-2.70
-4.60
-4.00

WARREN POINT

NEW PORT

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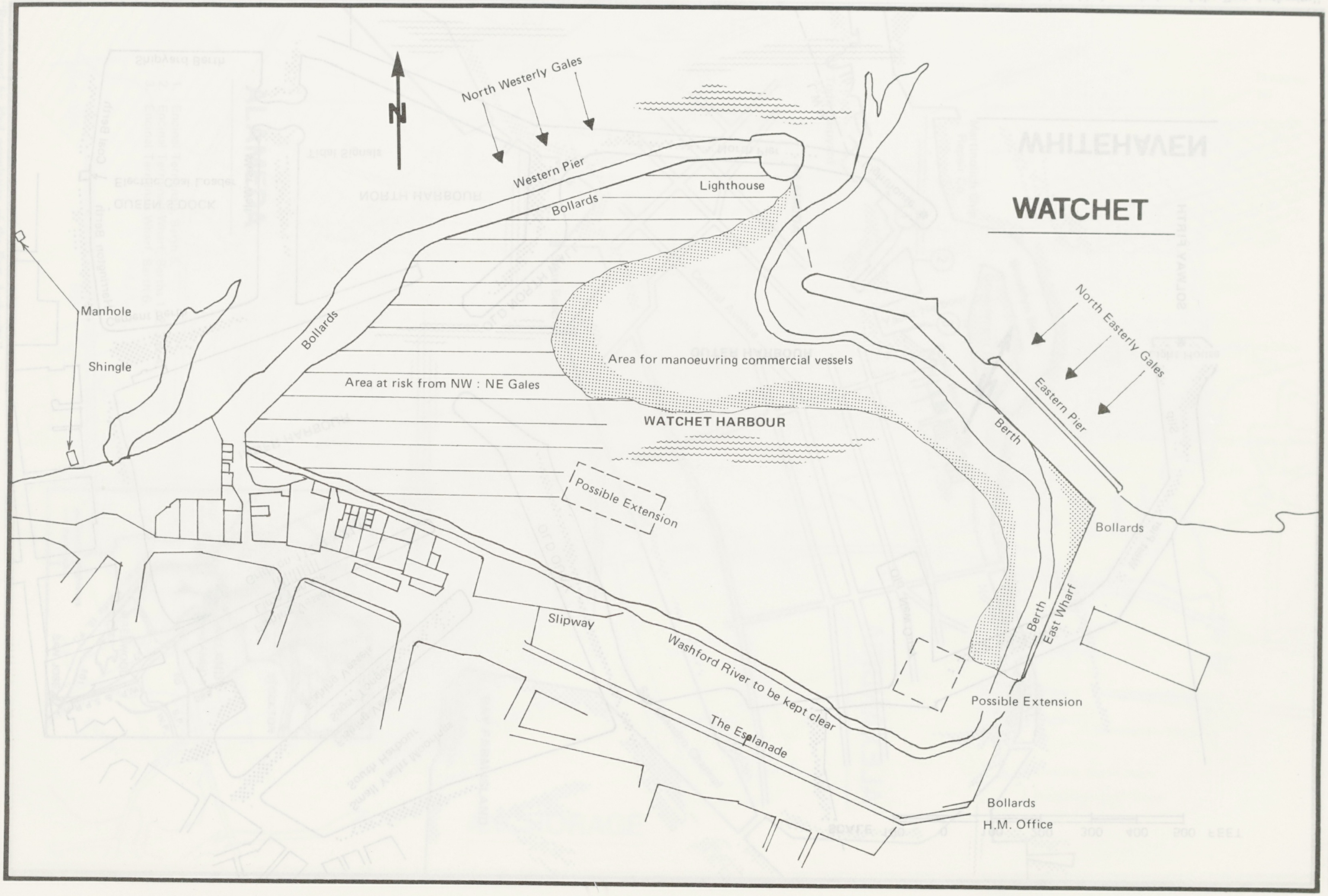
N
North Westerly Gales
Western Pier
Bollards
Lighthouse
WATCHET
Manhole
Shingle
Bollards
Area for manoeuvring commercial vessels
Area at risk from NW : NE Gales
WATCHET HARBOUR
North Easterly Gales
Eastern Pier
Berth
Possible Extension
Bollards
Berth
East Wharf
Slipway
Washford River to be kept clear
The Esplanade
Possible Extension
Bollards
H.M. Office

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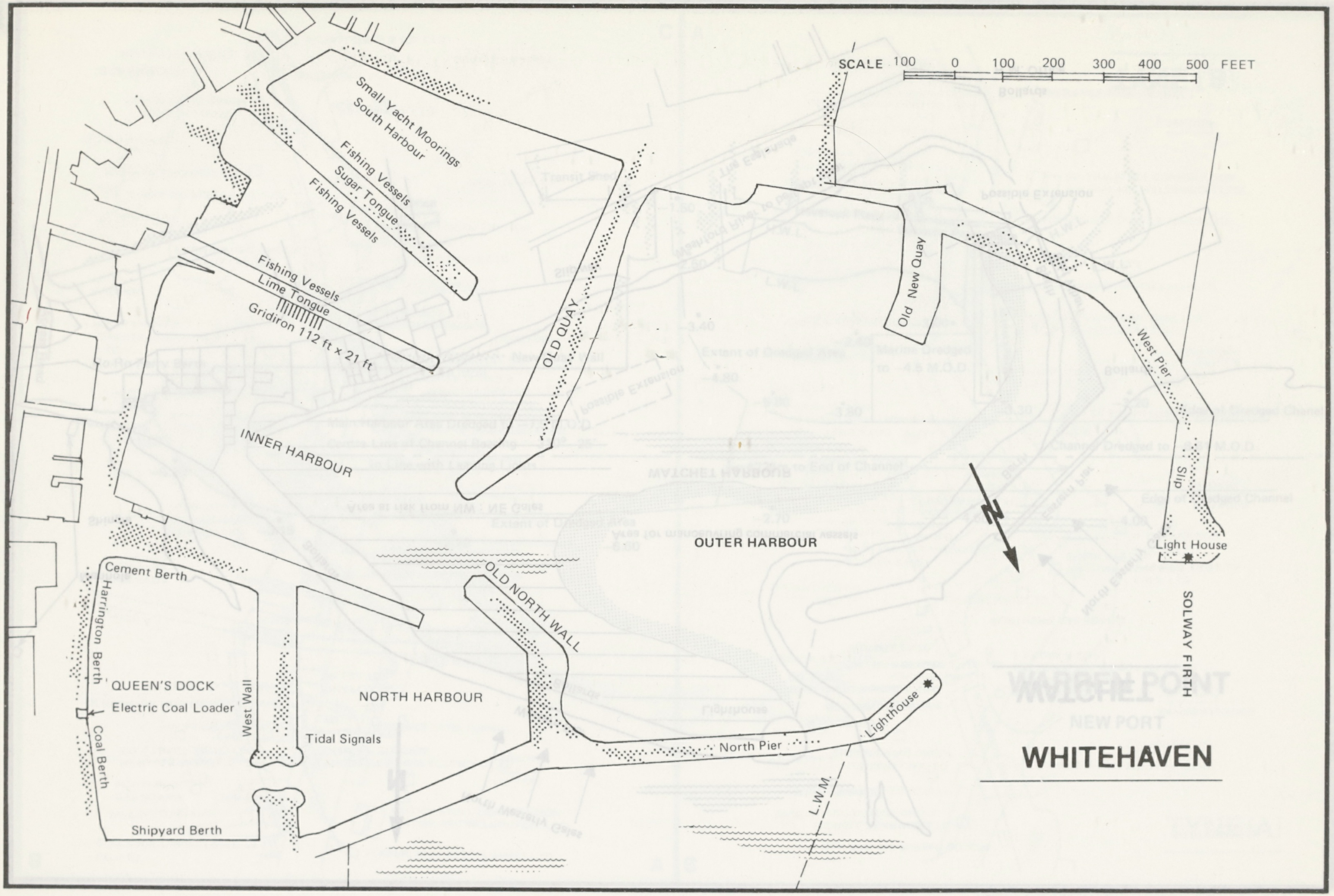
SCALE 100 0 100 200 300 400 500 FEET
Small Yacht Moorings
South Harbour
Fishing Vessels
Sugar Tongue
Fishing Vessels
Fishing Vessels
Lime Tongue
Gridiron 112 ft x 21 ft
OLD QUAY
Old New Quay
West Pier
Slip
Light House
INNER HARBOUR
OUTER HARBOUR
N
Cement Berth
OLD NORTH WALL
Harrington Berth
QUEEN'S DOCK
Electric Coal Loader
Coal Berth
West Wall
NORTH HARBOUR
Tidal Signals
Shipyard Berth
North Pier
Lighthouse
L.W.M.
SOLWAY FIRTH

WHITEHAVEN

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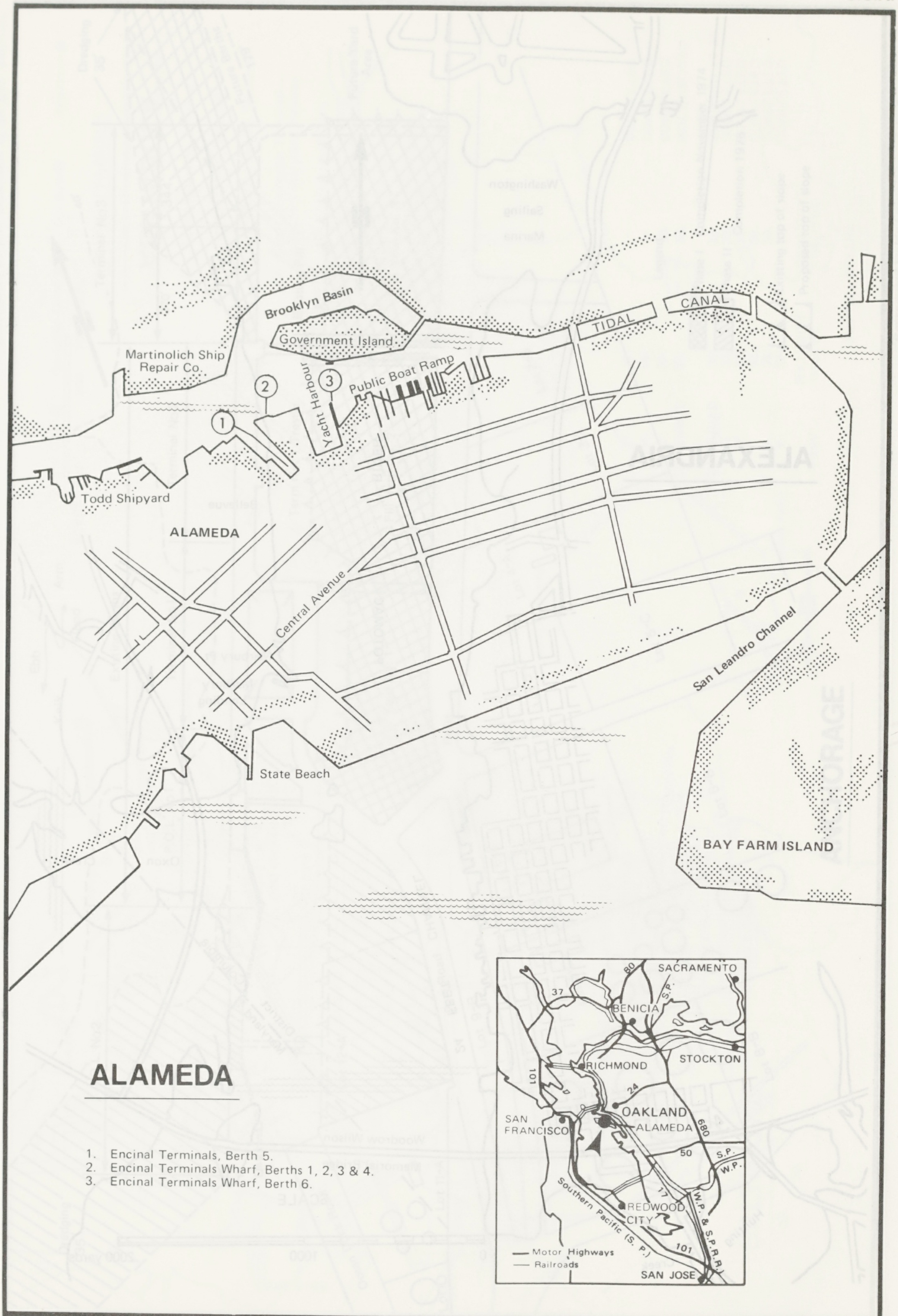
Brooklyn Basin
Government Island
TIDAL
CANAL
Martinolich Ship Repair Co.
②
①
③
Yacht Harbour
Public Boat Ramp
Todd Shipyard
ALAMEDA
Central Avenue
San Leandro Channel
State Beach
BAY FARM ISLAND
SACRAMENTO
80
37
S.P.
BENICIA
RICHMOND
STOCKTON
101
24
OAKLAND
ALAMEDA
SAN FRANCISCO
680
50
S.P.
W.P.
Southern Pacific (S. P.)
17
(W.P. & S.P.R.R.)
REDWOOD CITY
101
Motor Highways
Railroads
SAN JOSE

ALAMEDA

1. Encinal Terminals, Berth 5.
2. Encinal Terminals Wharf, Berths 1, 2, 3 & 4.
3. Encinal Terminals Wharf, Berth 6.

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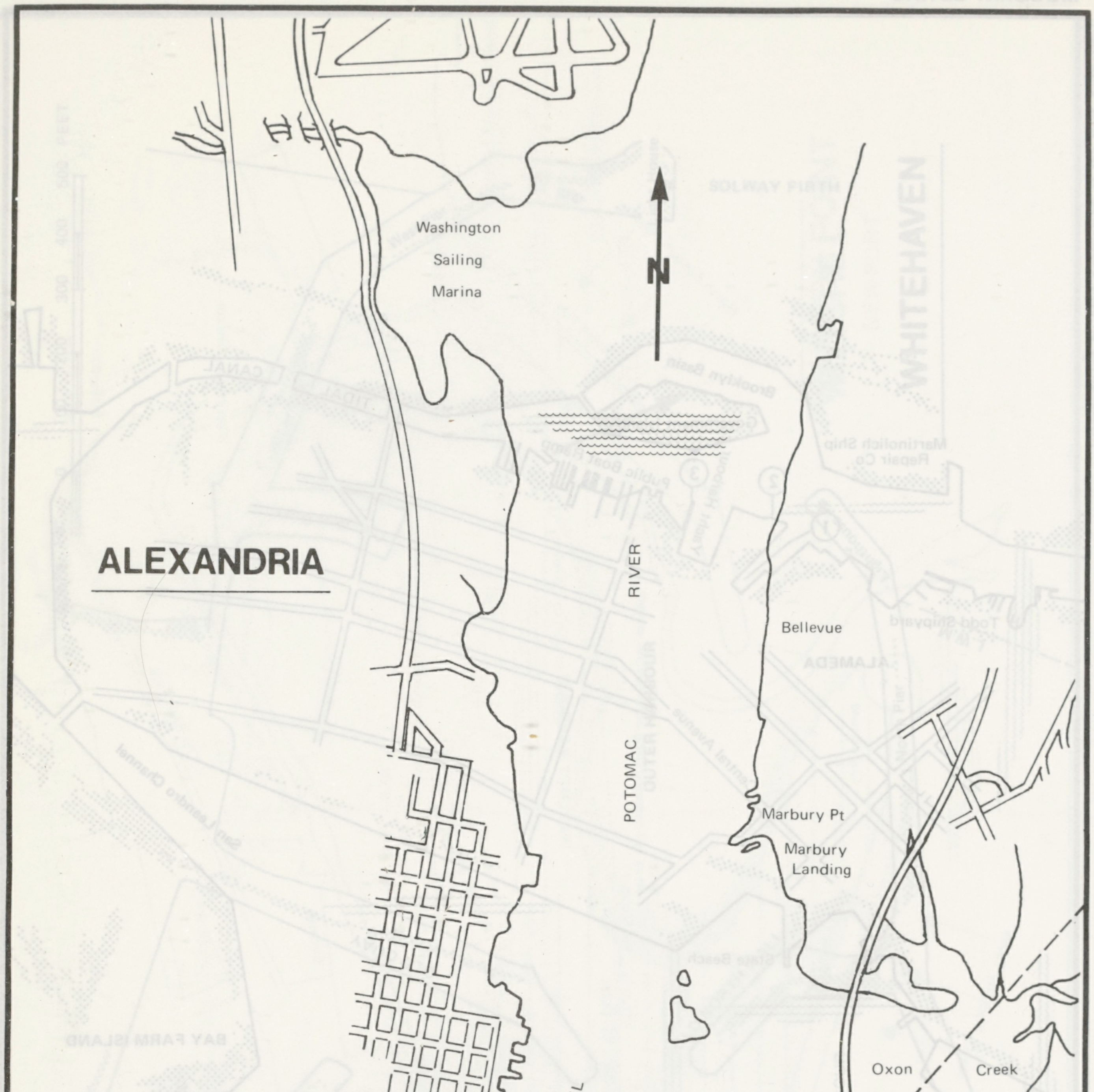
ALEXANDRIA
Washington Sailing Marina
N
POTOMAC RIVER
Bellevue
Marbury Pt
Marbury Landing
Oxon Creek
24 FEET CHANNEL
District Columbia
Maryland
Woodrow Wilson Memorial Bridge
Hunting Creek
SCALE
0
1000
2000 yards

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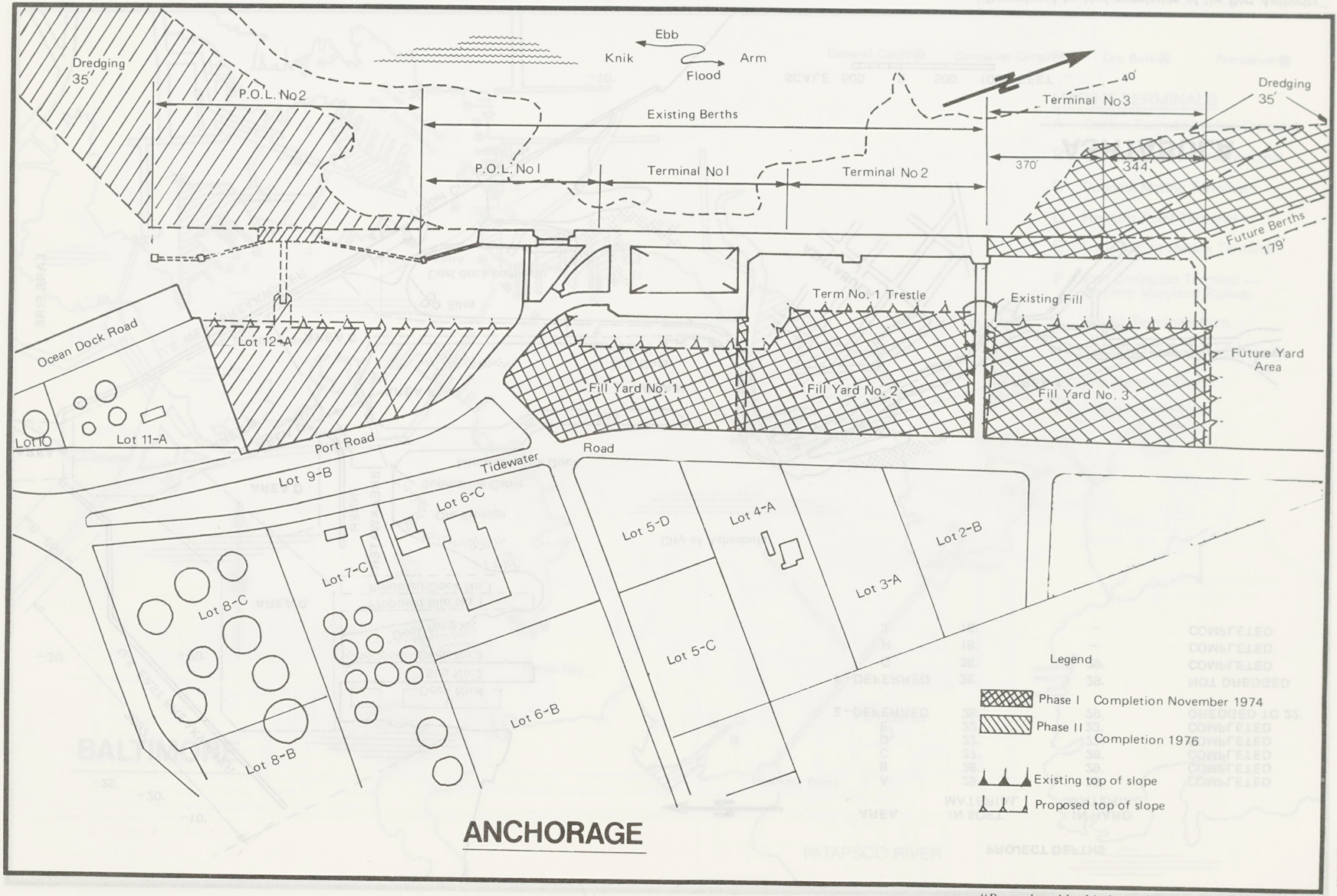
Dredging 35'
P.O.L. No2
Ebb
Knik
Flood
Arm
Existing Berths
Terminal No3
40'
Dredging 35'
P.O.L. No1
Terminal No1
Terminal No2
370'
344'
Future Berths
179'
Term No.1 Trestle
Existing Fill
Ocean Dock Road
Lot 12-A
Fill Yard No. 1
Fill Yard No. 2
Fill Yard No. 3
Future Yard Area
Lot 10
Lot 11-A
Port Road
Road
Tidewater
Lot 9-B
Lot 6-C
Lot 5-D
Lot 4-A
Lot 2-B
Lot 7-C
Lot 8-C
Lot 3-A
Lot 5-C
Lot 6-B
Lot 8-B
Legend
▩ Phase I Completion November 1974
▨ Phase II Completion 1976
Existing top of slope
Proposed top of slope

ANCHORAGE

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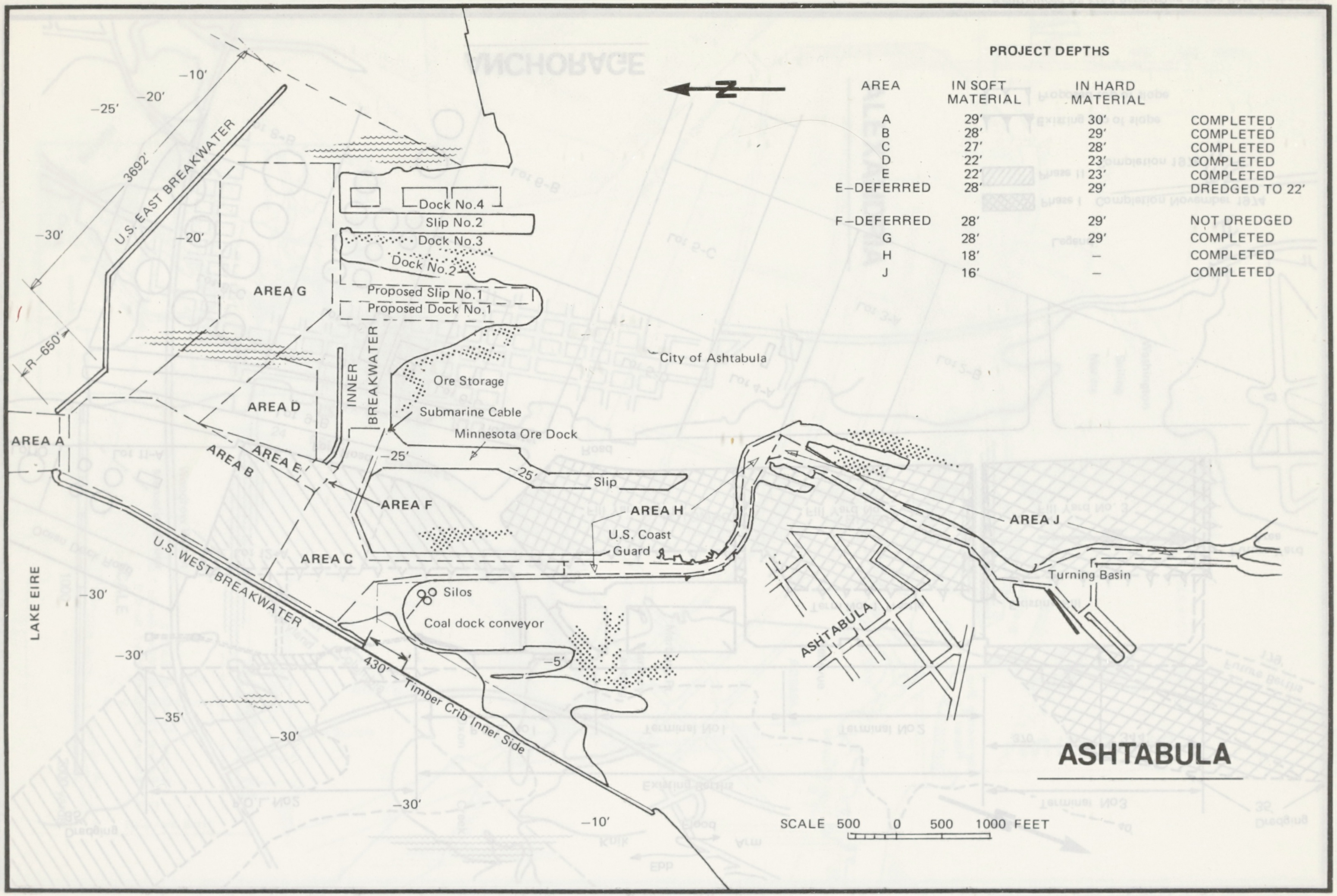
N
LAKE EIRE
U.S. EAST BREAKWATER
3692′
R–650′
U.S. WEST BREAKWATER
430′
Timber Crib Inner Side
INNER BREAKWATER
AREA A
AREA B
AREA C
AREA D
AREA E
AREA F
AREA G
AREA H
AREA J
Dock No.4
Slip No.2
Dock No.3
Dock No.2
Proposed Slip No.1
Proposed Dock No.1
Ore Storage
Submarine Cable
Minnesota Ore Dock
Slip
City of Ashtabula
U.S. Coast Guard
Silos
Coal dock conveyor
Turning Basin
ASHTABULA
–10′
–20′
–25′
–30′
–20′
–25′
–25′
–30′
–30′
–35′
–30′
–30′
–10′
–5′
SCALE 500 0 500 1000 FEET

PROJECT DEPTHS

AREA	IN SOFT MATERIAL	IN HARD MATERIAL	
A	29′	30′	COMPLETED
B	28′	29′	COMPLETED
C	27′	28′	COMPLETED
D	22′	23′	COMPLETED
E	22′	23′	COMPLETED
E—DEFERRED	28′	29′	DREDGED TO 22′
F—DEFERRED	28′	29′	NOT DREDGED
G	28′	29′	COMPLETED
H	18′	—	COMPLETED
J	16′	—	COMPLETED

ASHTABULA

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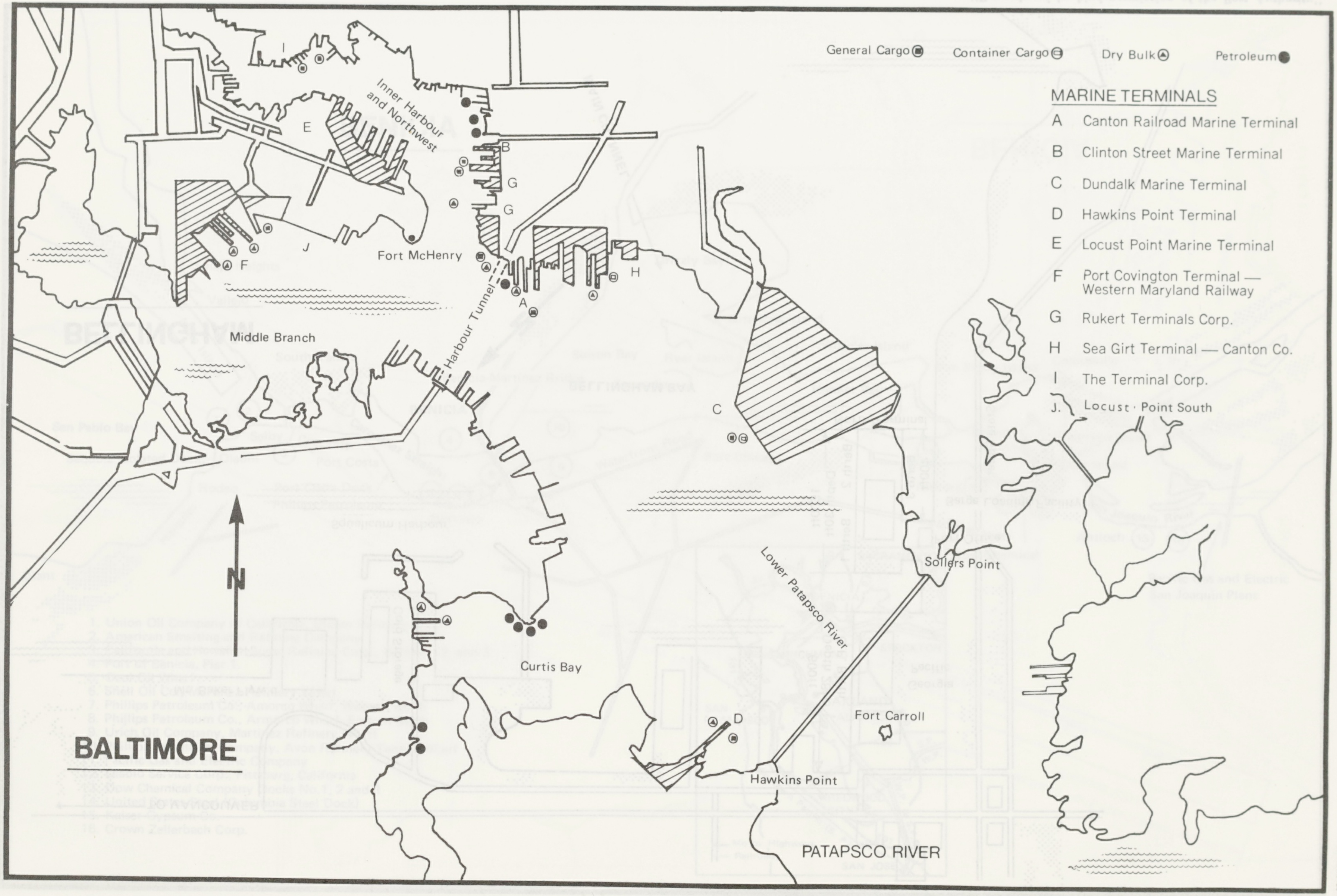
General Cargo ▣
Container Cargo ⊖
Dry Bulk Ⓐ
Petroleum ●
MARINE TERMINALS
A Canton Railroad Marine Terminal
B Clinton Street Marine Terminal
C Dundalk Marine Terminal
D Hawkins Point Terminal
E Locust Point Marine Terminal
F Port Covington Terminal — Western Maryland Railway
G Rukert Terminals Corp.
H Sea Girt Terminal — Canton Co.
I The Terminal Corp.
J. Locust · Point South
Inner Harbour and Northwest
Fort McHenry
Harbour Tunnel
Middle Branch
Curtis Bay
Sollers Point
Lower Patapsco River
Fort Carroll
Hawkins Point
PATAPSCO RIVER
N
BALTIMORE
A
B
C
D
E
F
G
G
H
I
J

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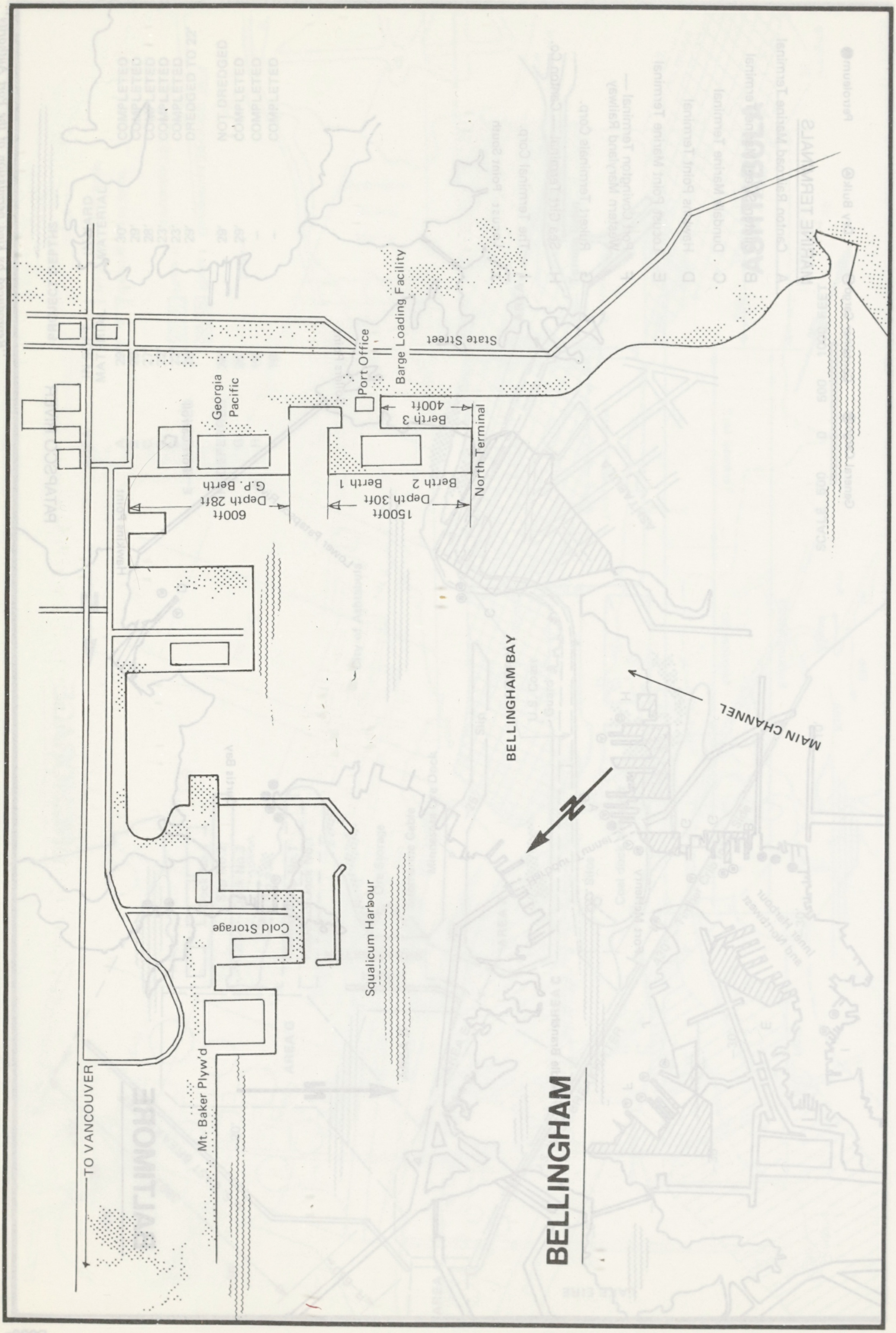
BELLINGHAM
TO VANCOUVER
Mt. Baker Plyw'd
Cold Storage
Squalicum Harbour
BELLINGHAM BAY
MAIN CHANNEL
600ft
Depth 28ft
G.P. Berth
Georgia
Pacific
1500ft
Depth 30ft
Berth 1
Berth 2
North Terminal
Port Office
Barge Loading Facility
Berth 3
400ft
State Street

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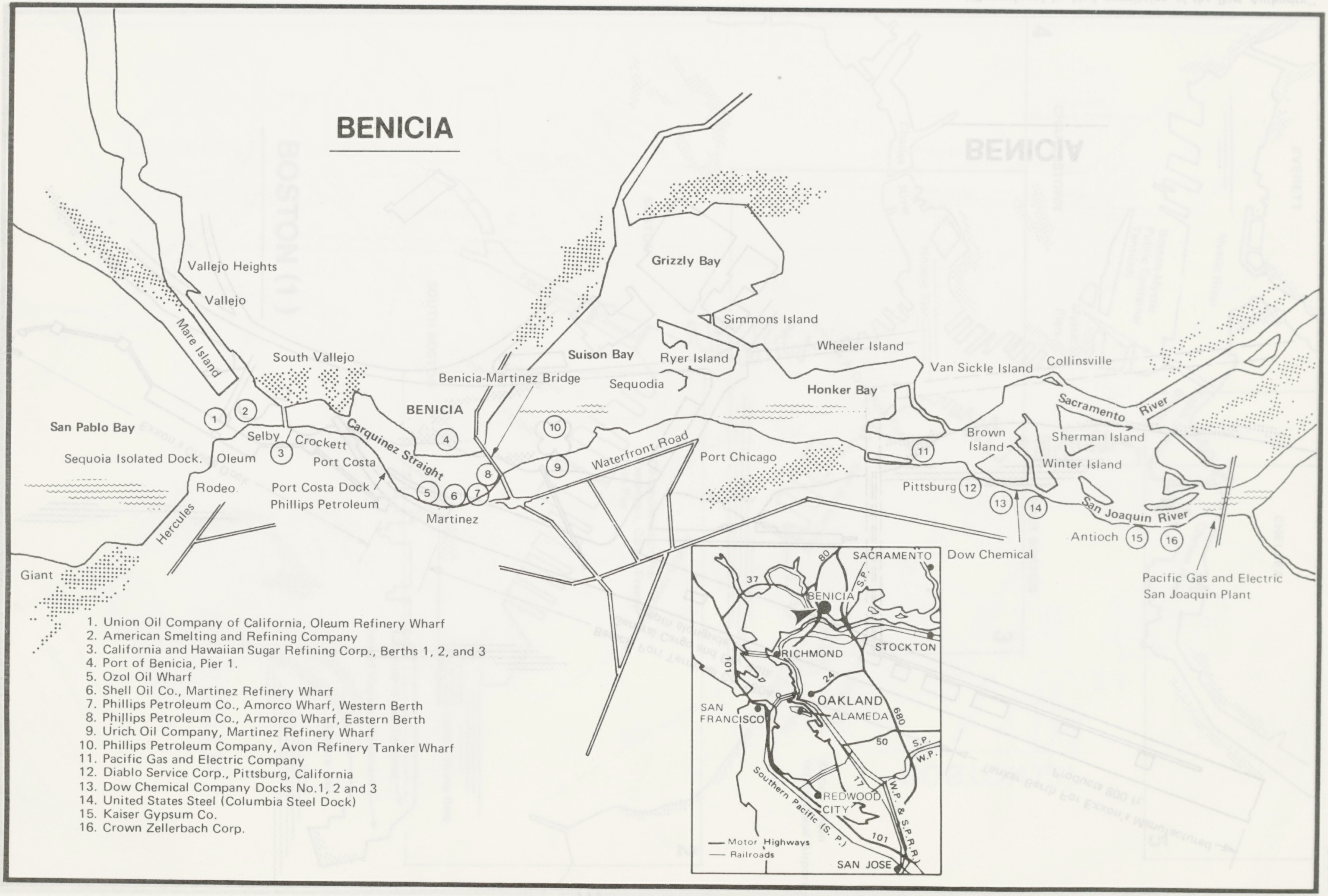
BENICIA
Vallejo Heights
Vallejo
Mare Island
South Vallejo
San Pablo Bay
Selby
Crockett
Sequoia Isolated Dock.
Oleum
Port Costa
Rodeo
Port Costa Dock
Phillips Petroleum
Hercules
Giant
Carquinez Straight
BENICIA
Benicia-Martinez Bridge
Martinez
Waterfront Road
Suison Bay
Sequodia
Grizzly Bay
Simmons Island
Ryer Island
Wheeler Island
Honker Bay
Port Chicago
Van Sickle Island
Collinsville
Sacramento River
Brown Island
Sherman Island
Winter Island
Pittsburg
San Joaquin River
Antioch
Dow Chemical
Pacific Gas and Electric San Joaquin Plant
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
SACRAMENTO
80
37
S.P.
BENICIA
STOCKTON
RICHMOND
101
24
OAKLAND
SAN FRANCISCO
ALAMEDA
680
50
S.P.
W.P.
17
Southern Pacific (S.P.)
REDWOOD CITY
W.P. & S.P.R.R.
101
Motor Highways
Railroads
SAN JOSE

1. Union Oil Company of California, Oleum Refinery Wharf
2. American Smelting and Refining Company
3. California and Hawaiian Sugar Refining Corp., Berths 1, 2, and 3
4. Port of Benicia, Pier 1.
5. Ozol Oil Wharf
6. Shell Oil Co., Martinez Refinery Wharf
7. Phillips Petroleum Co., Amorco Wharf, Western Berth
8. Phillips Petroleum Co., Armorco Wharf, Eastern Berth
9. Urich Oil Company, Martinez Refinery Wharf
10. Phillips Petroleum Company, Avon Refinery Tanker Wharf
11. Pacific Gas and Electric Company
12. Diablo Service Corp., Pittsburg, California
13. Dow Chemical Company Docks No.1, 2 and 3
14. United States Steel (Columbia Steel Dock)
15. Kaiser Gypsum Co.
16. Crown Zellerbach Corp.

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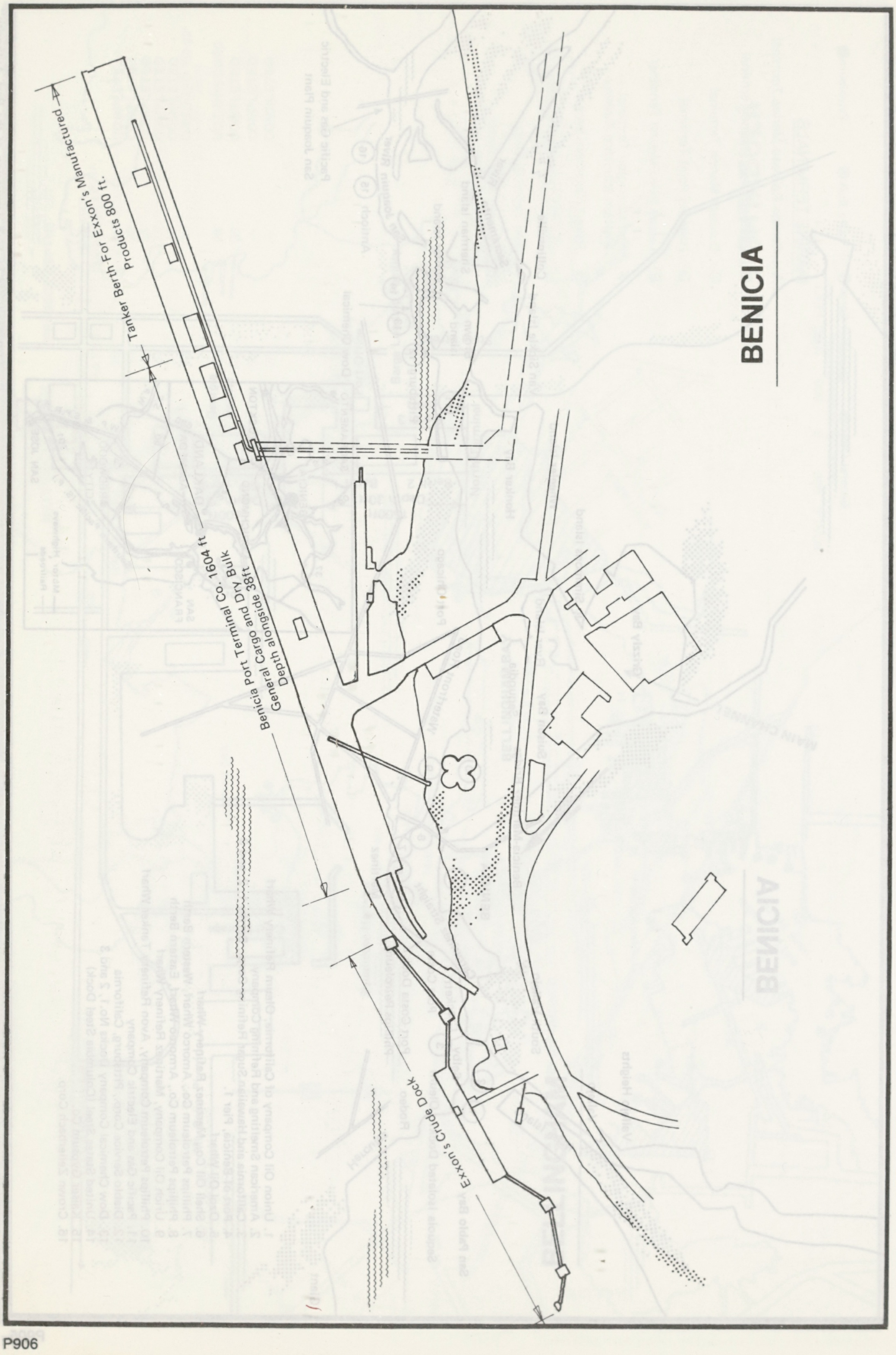
BENICIA


Tanker Berth-For Exxon's Manufactured Products 800 ft.
Benicia Port Terminal Co. 1604 ft
General Cargo and Dry Bulk
Depth alongside 38ft
Exxon's Crude Dock

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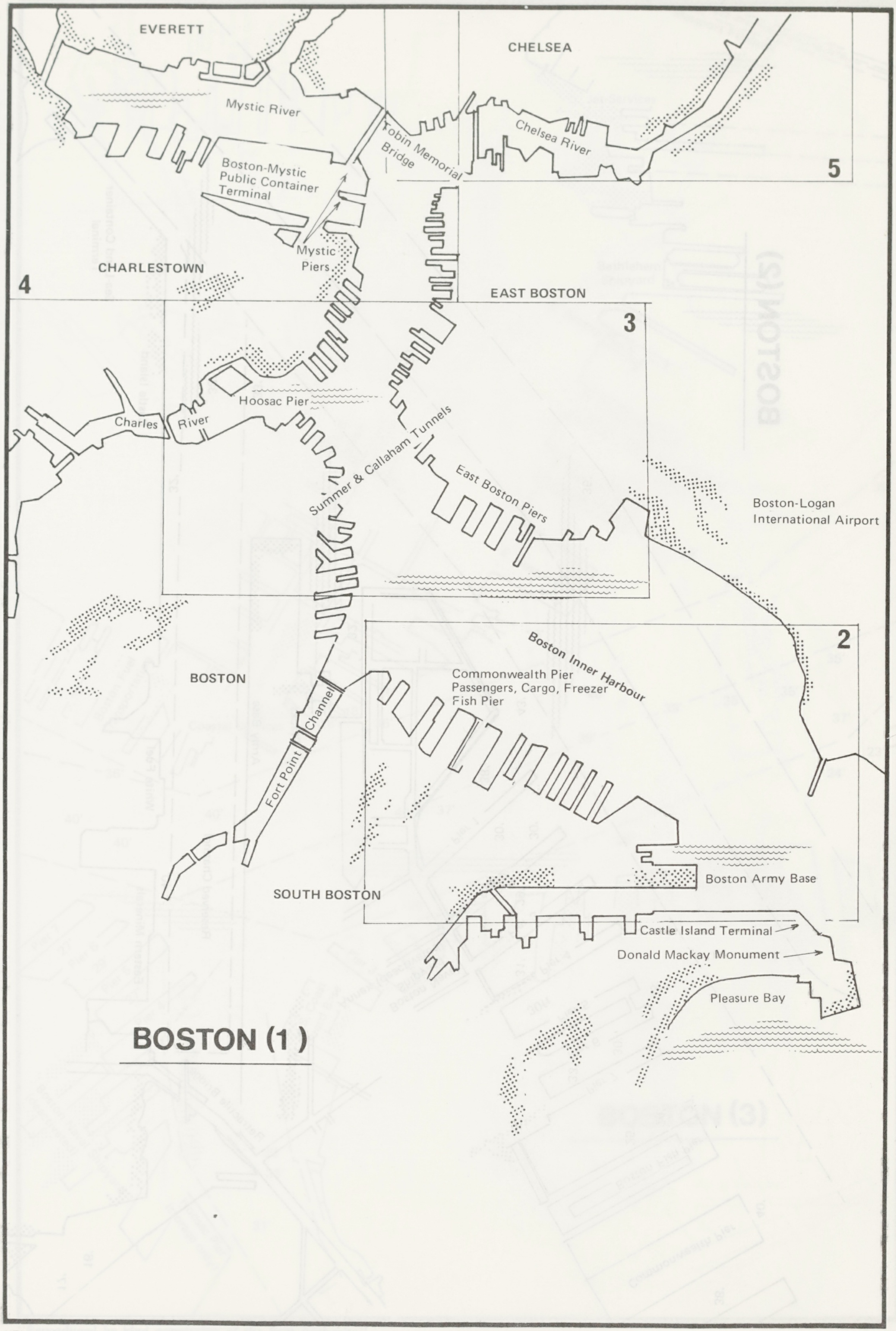
EVERETT
CHELSEA
Mystic River
Chelsea River
Tobin Memorial Bridge
5
Boston-Mystic Public Container Terminal
Mystic Piers
CHARLESTOWN
4
EAST BOSTON
3
Hoosac Pier
Charles
River
Summer & Callaham Tunnels
East Boston Piers
Boston-Logan International Airport
2
Boston Inner Harbour
BOSTON
Commonwealth Pier Passengers, Cargo, Freezer Fish Pier
Channel
Fort Point
Boston Army Base
SOUTH BOSTON
Castle Island Terminal
Donald Mackay Monument
Pleasure Bay

BOSTON (1)

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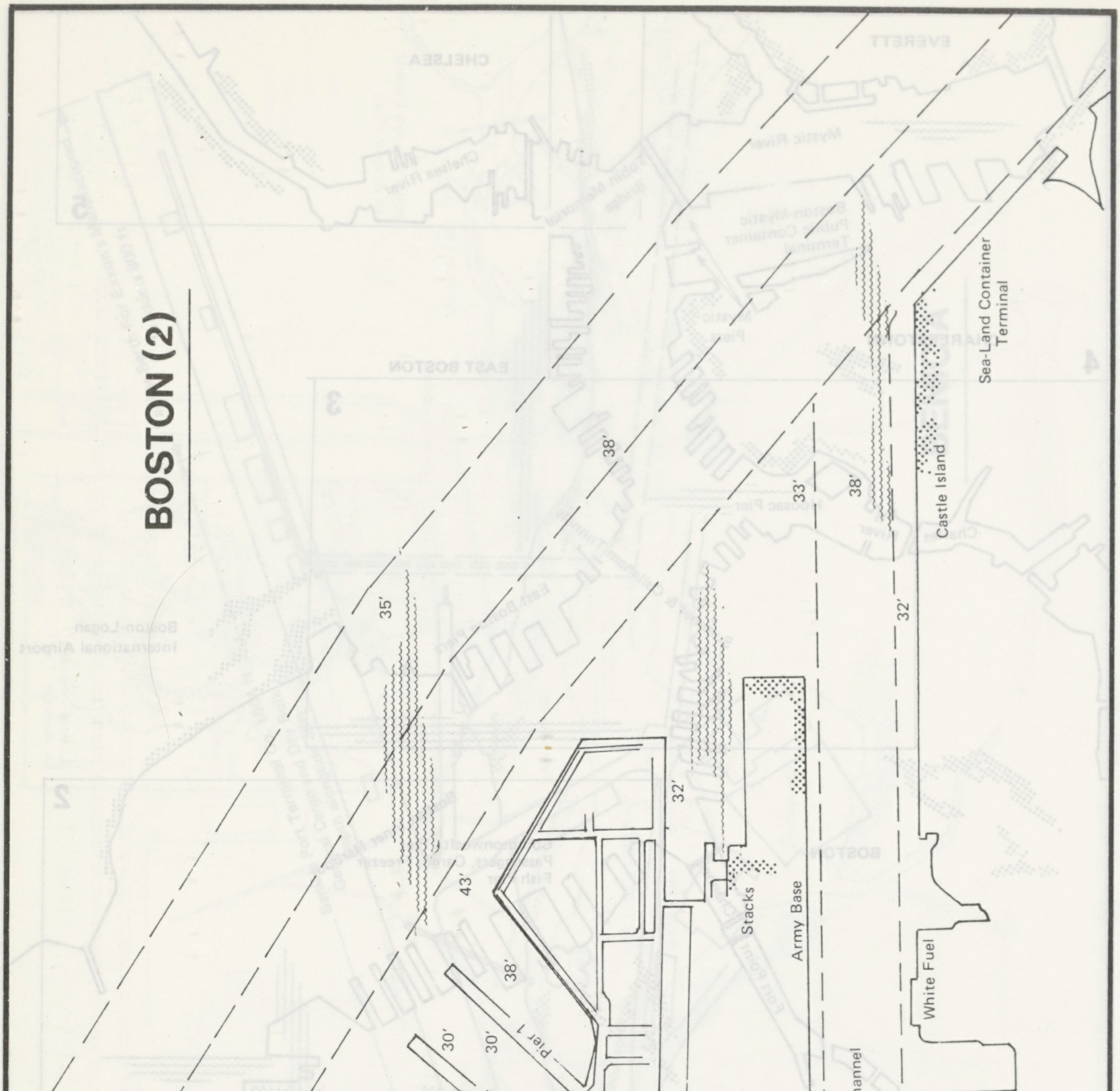
BOSTON (2)


Commonwealth Pier
38'
40'
Boston Fish Pier
27'
24'
25'
Pier 7
33'
30'
Pier 6
Pier 5
28'
30ft
Pier 4
31'
Pier 3
29'
Pier 2
30'
30'
Pier 1
38'
43'
35'
38'
32'
33'
38'
32'
40'
16'
17'
Boston Naval Shipyard Annex (deactivated)
Stacks
Army Base
Reserved Channel
Retractile Bridge
Eastern Minerals
White Fuel
Castle Island
Sea-Land Container Terminal

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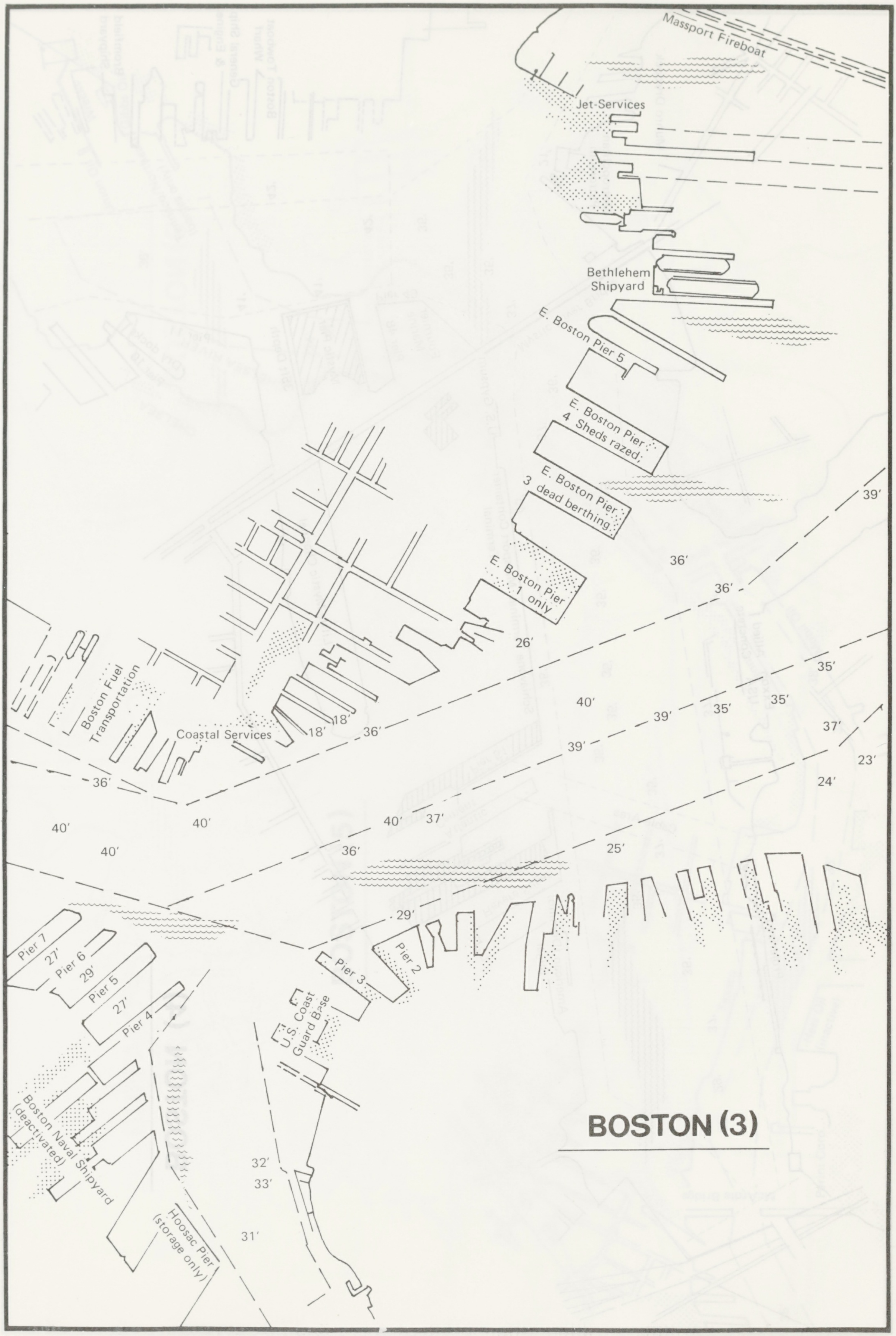
Massport Fireboat
Jet-Services
Bethlehem Shipyard
E. Boston Pier 5
E. Boston Pier 4 Sheds razed;
E. Boston Pier 3 dead berthing.
E. Boston Pier 1 only
Boston Fuel Transportation
Coastal Services
18'
18'
36'
26'
36'
36'
39'
40'
39'
39'
35'
35'
35'
35'
37'
23'
24'
36'
40'
40'
40'
40'
37'
36'
25'
29'
Pier 7
27'
Pier 6
29'
Pier 5
27'
Pier 4
Pier 3
Pier 2
U.S. Coast Guard Base
Boston Naval Shipyard (deactivated)
Hoosac Pier (storage only)
32'
33'
31'

BOSTON (3)

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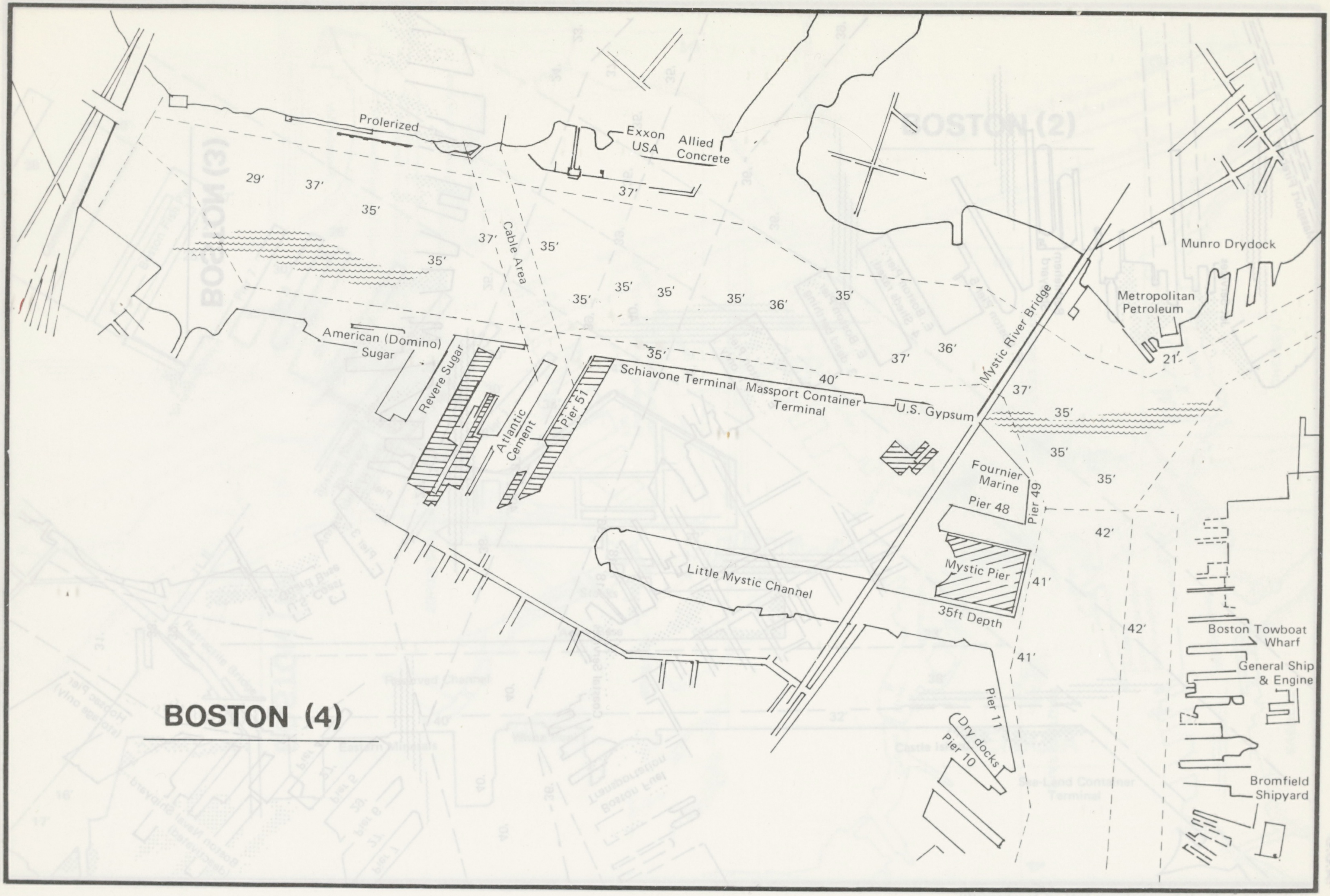
BOSTON (4)


Prolerized
Exxon USA
Allied Concrete
29′
37′
35′
37′
37′
Cable Area
35′
35′
35′
35′
35′
35′
36′
35′
American (Domino) Sugar
Revere Sugar
Atlantic Cement
Pier 51
35′
Schiavone Terminal
Massport Container Terminal
40′
37′
36′
U.S. Gypsum
Mystic River Bridge
37′
35′
Munro Drydock
Metropolitan Petroleum
21′
35′
Fournier Marine
35′
Pier 48
Pier 49
42′
Mystic Pier
41′
Little Mystic Channel
35ft Depth
42′
41′
Boston Towboat Wharf
General Ship & Engine
Pier 11
Dry docks
Pier 10
Bromfield Shipyard

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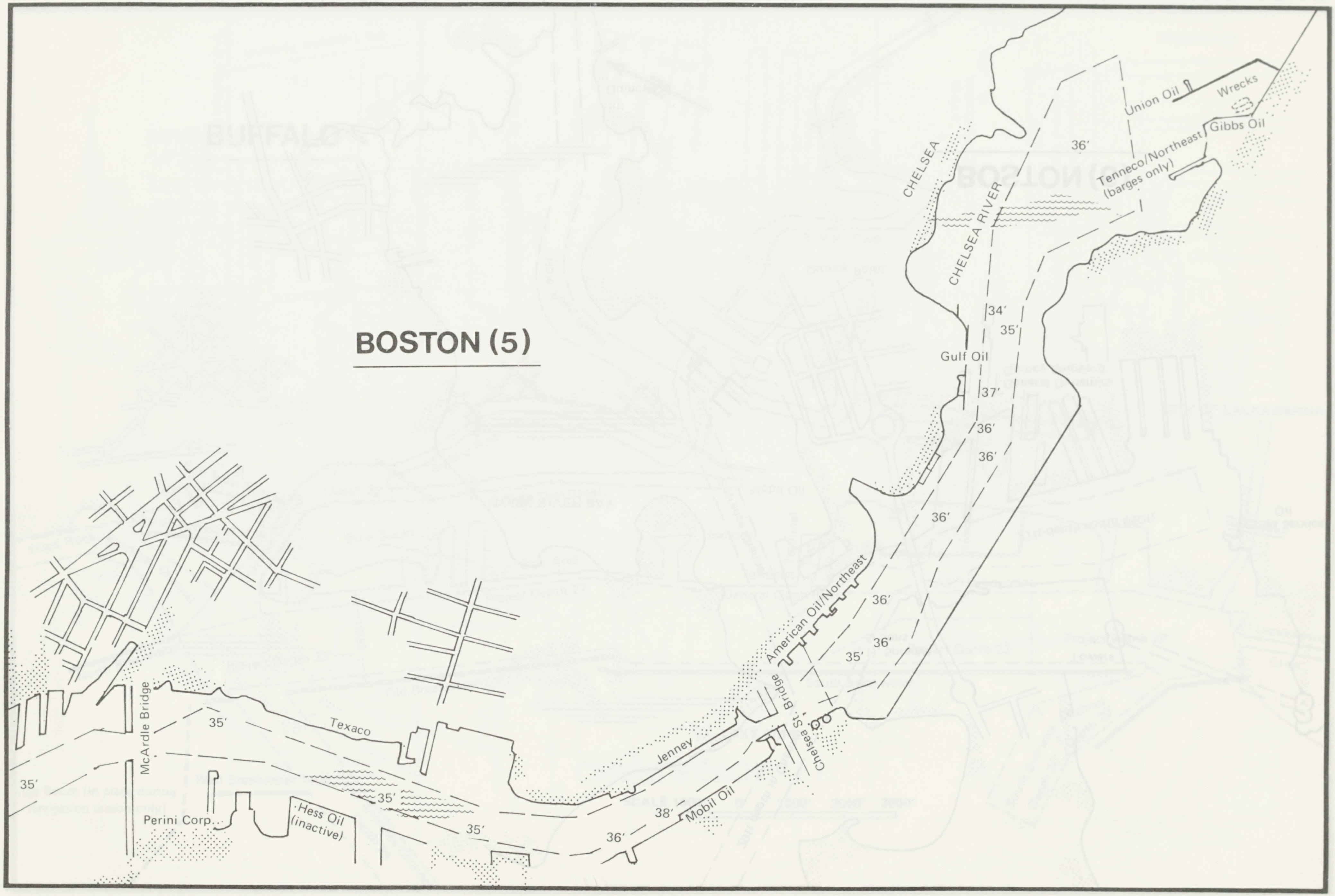
BOSTON (5)


CHELSEA
CHELSEA RIVER
Union Oil
Wrecks
Gibbs Oil
Tenneco/Northeast (barges only)
36′
34′
35′
Gulf Oil
37′
36′
36′
36′
American Oil/Northeast
36′
36′
35′
Bridge
Chelsea St. Bridge
Jenney
Mobil Oil
38′
36′
35′
35′
Hess Oil (inactive)
Perini Corp.
McArdle Bridge
Texaco
35′
35′

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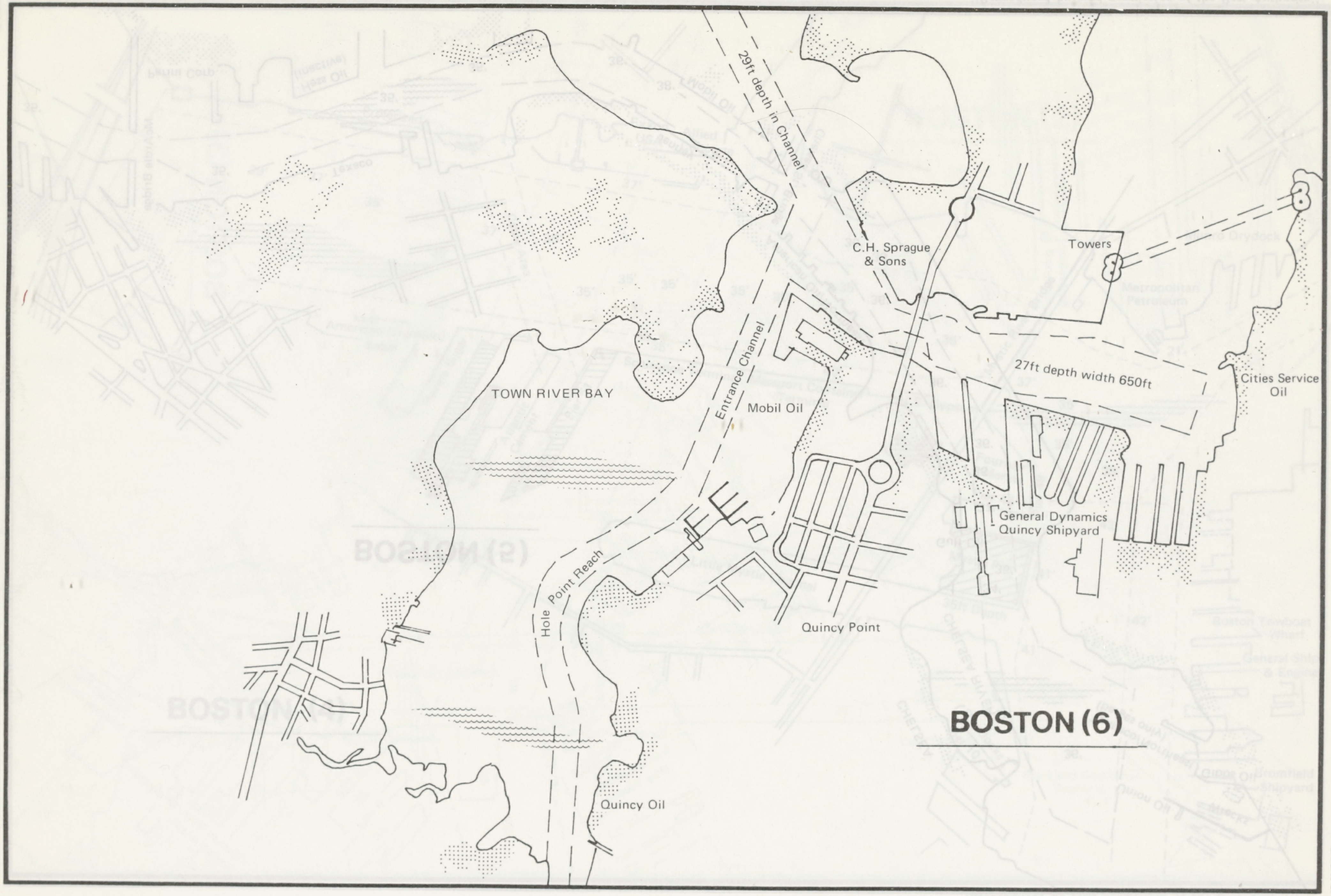
29ft depth in Channel
C.H. Sprague & Sons
Towers
TOWN RIVER BAY
Entrance Channel
Mobil Oil
27ft depth width 650ft
Cities Service Oil
General Dynamics Quincy Shipyard
Hole Point Reach
Quincy Point
Quincy Oil
BOSTON (6)

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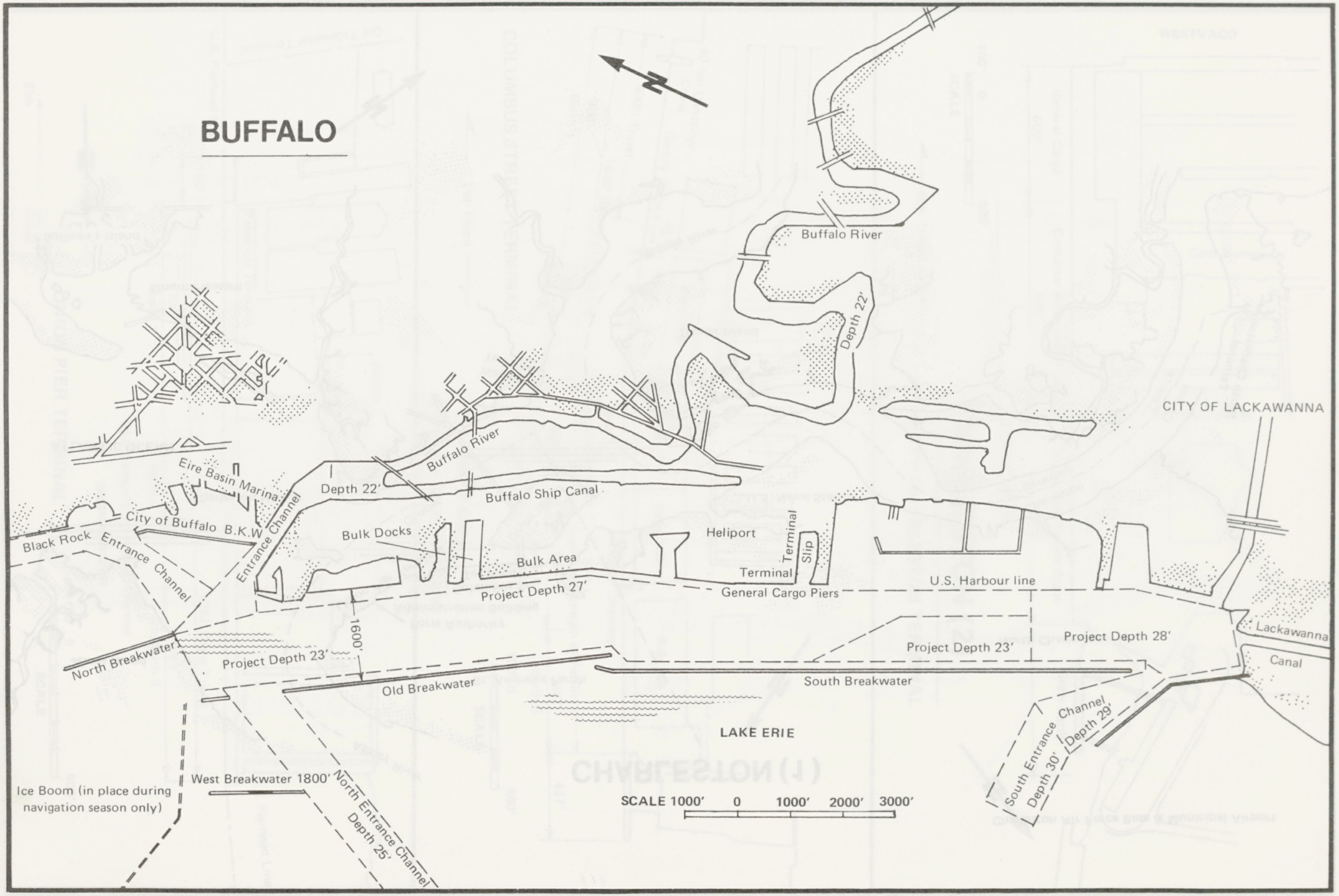
BUFFALO


Buffalo River
Depth 22'
CITY OF LACKAWANNA
Buffalo River
Eire Basin Marina
Depth 22'
Buffalo Ship Canal
City of Buffalo B.K.W.
Entrance Channel
Black Rock
Entrance Channel
Bulk Docks
Bulk Area
Heliport
Terminal
Slip
Terminal
U.S. Harbour line
General Cargo Piers
Project Depth 27'
1600'
North Breakwater
Project Depth 23'
Old Breakwater
Project Depth 23'
Project Depth 28'
Lackawanna
Canal
South Breakwater
LAKE ERIE
South Entrance Channel
Depth 29'
Depth 30'
West Breakwater 1800'
Ice Boom (in place during navigation season only)
North Entrance Channel
Depth 25'
SCALE 1000' 0 1000' 2000' 3000'

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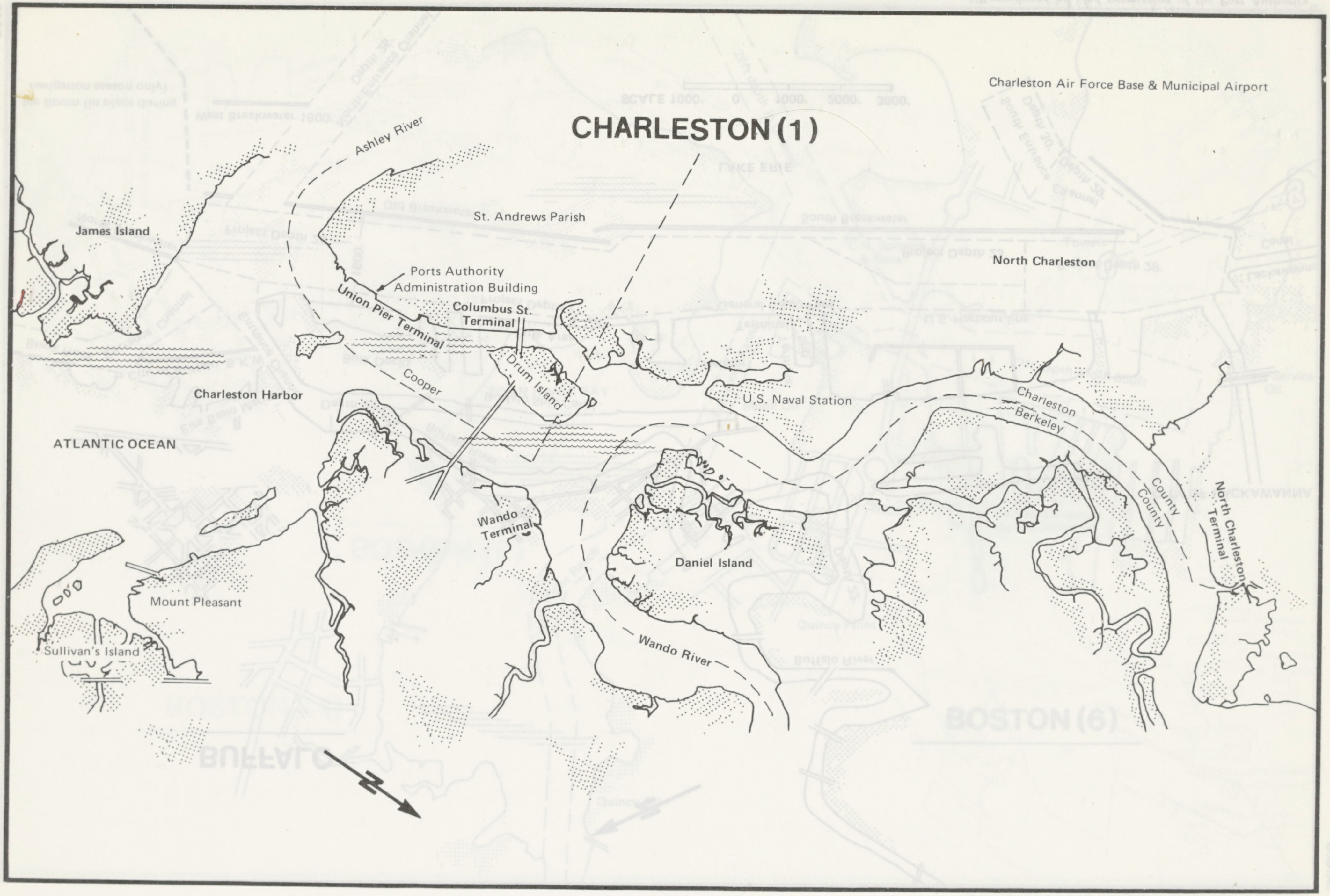
CHARLESTON (1)


Charleston Air Force Base & Municipal Airport
Ashley River
St. Andrews Parish
James Island
North Charleston
Ports Authority
Administration Building
Union Pier Terminal
Columbus St.
Terminal
Drum Island
Cooper
U.S. Naval Station
Charleston
Berkeley
Charleston Harbor
ATLANTIC OCEAN
County
County
North Charleston
Terminal
Wando
Terminal
Daniel Island
Mount Pleasant
Sullivan's Island
Wando River
N

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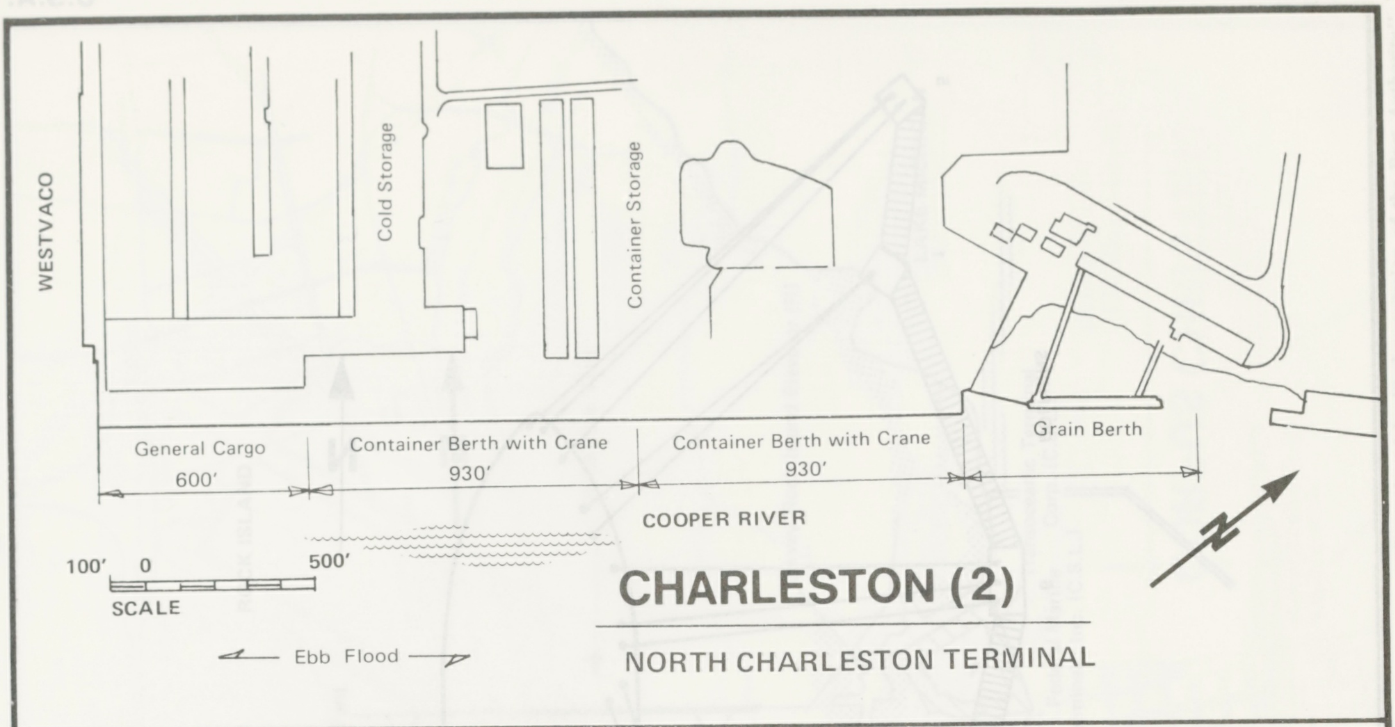
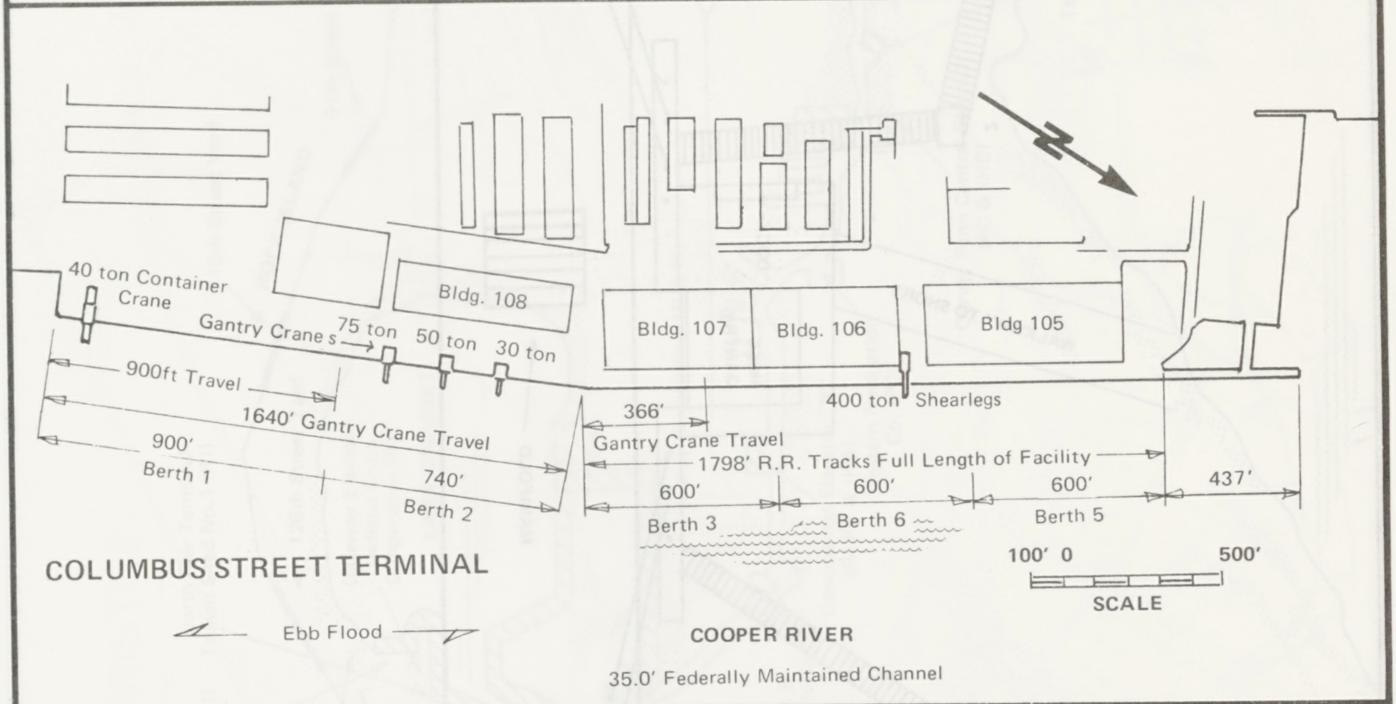
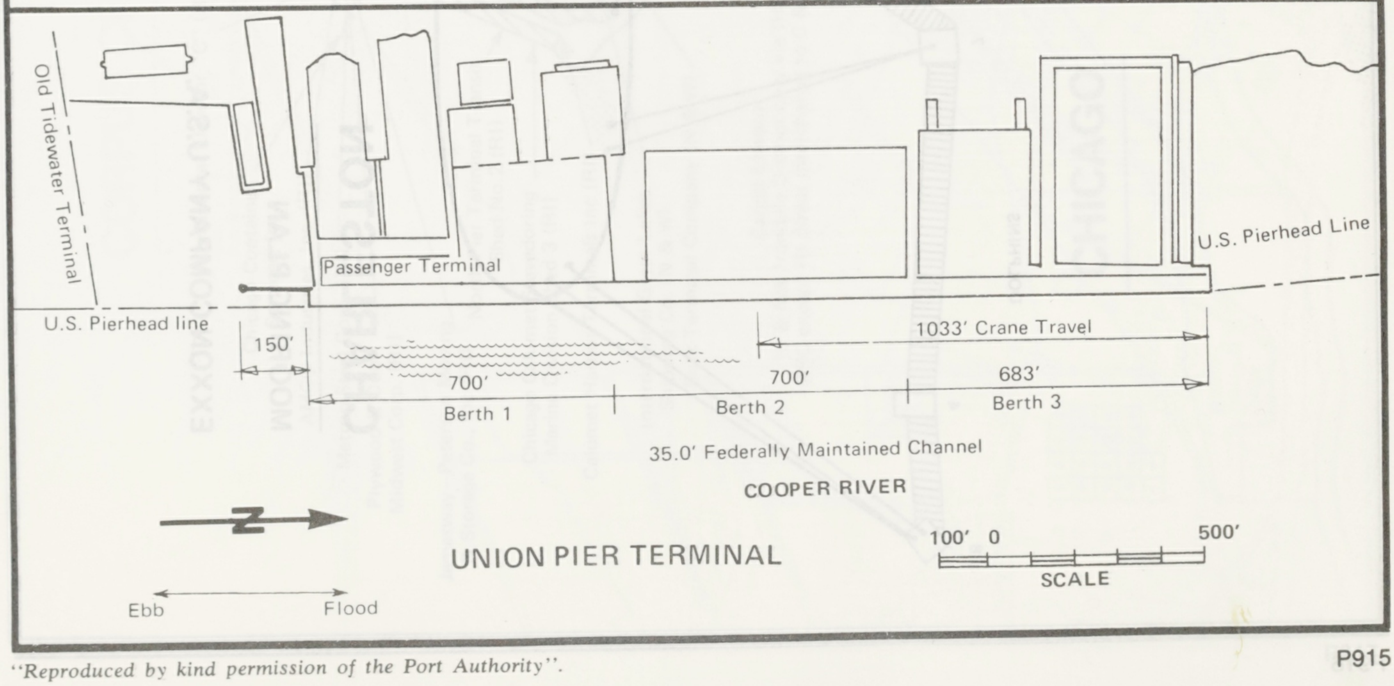

WESTVACO
Cold Storage
Container Storage
General Cargo
600'
Container Berth with Crane
930'
Container Berth with Crane
930'
Grain Berth
COOPER RIVER
100' 0 500'
SCALE
Ebb Flood
N

CHARLESTON (2)

NORTH CHARLESTON TERMINAL


N
40 ton Container Crane
Bldg. 108
Bldg. 107
Bldg. 106
Bldg 105
Gantry Crane s
75 ton
50 ton
30 ton
900ft Travel
1640' Gantry Crane Travel
900'
Berth 1
740'
Berth 2
400 ton Shearlegs
366'
Gantry Crane Travel
1798' R.R. Tracks Full Length of Facility
600'
Berth 3
600'
Berth 6
600'
Berth 5
437'
100' 0 500'
SCALE
Ebb Flood
COOPER RIVER
35.0' Federally Maintained Channel

COLUMBUS STREET TERMINAL


Old Tidewater Terminal
Passenger Terminal
U.S. Pierhead Line
U.S. Pierhead line
150'
1033' Crane Travel
700'
Berth 1
700'
Berth 2
683'
Berth 3
35.0' Federally Maintained Channel
COOPER RIVER
N
100' 0 500'
SCALE
Ebb Flood

UNION PIER TERMINAL

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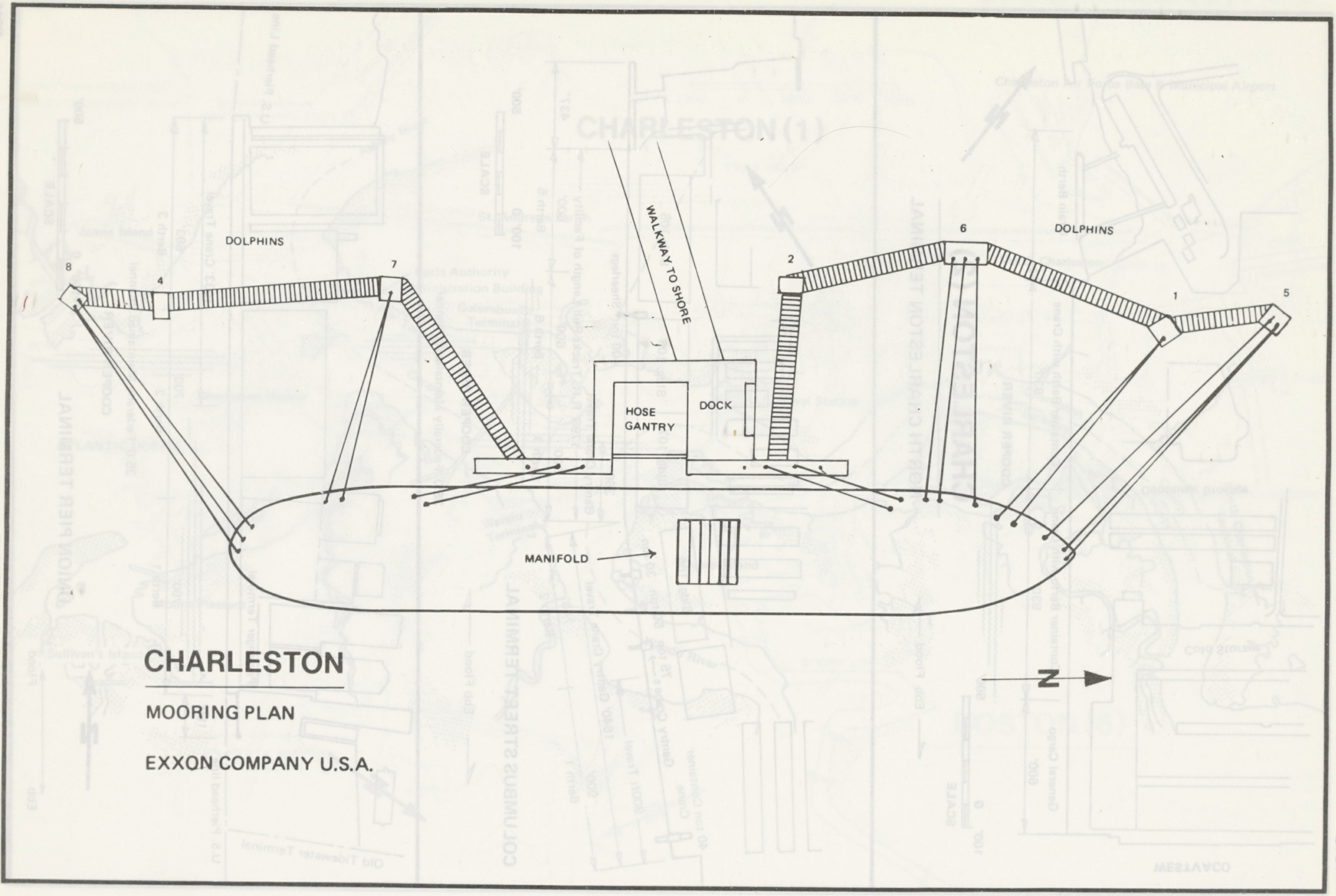
DOLPHINS
8
4
7
WALKWAY TO SHORE
2
6
DOLPHINS
1
5
HOSE GANTRY
DOCK
MANIFOLD
N

CHARLESTON

MOORING PLAN

EXXON COMPANY U.S.A.

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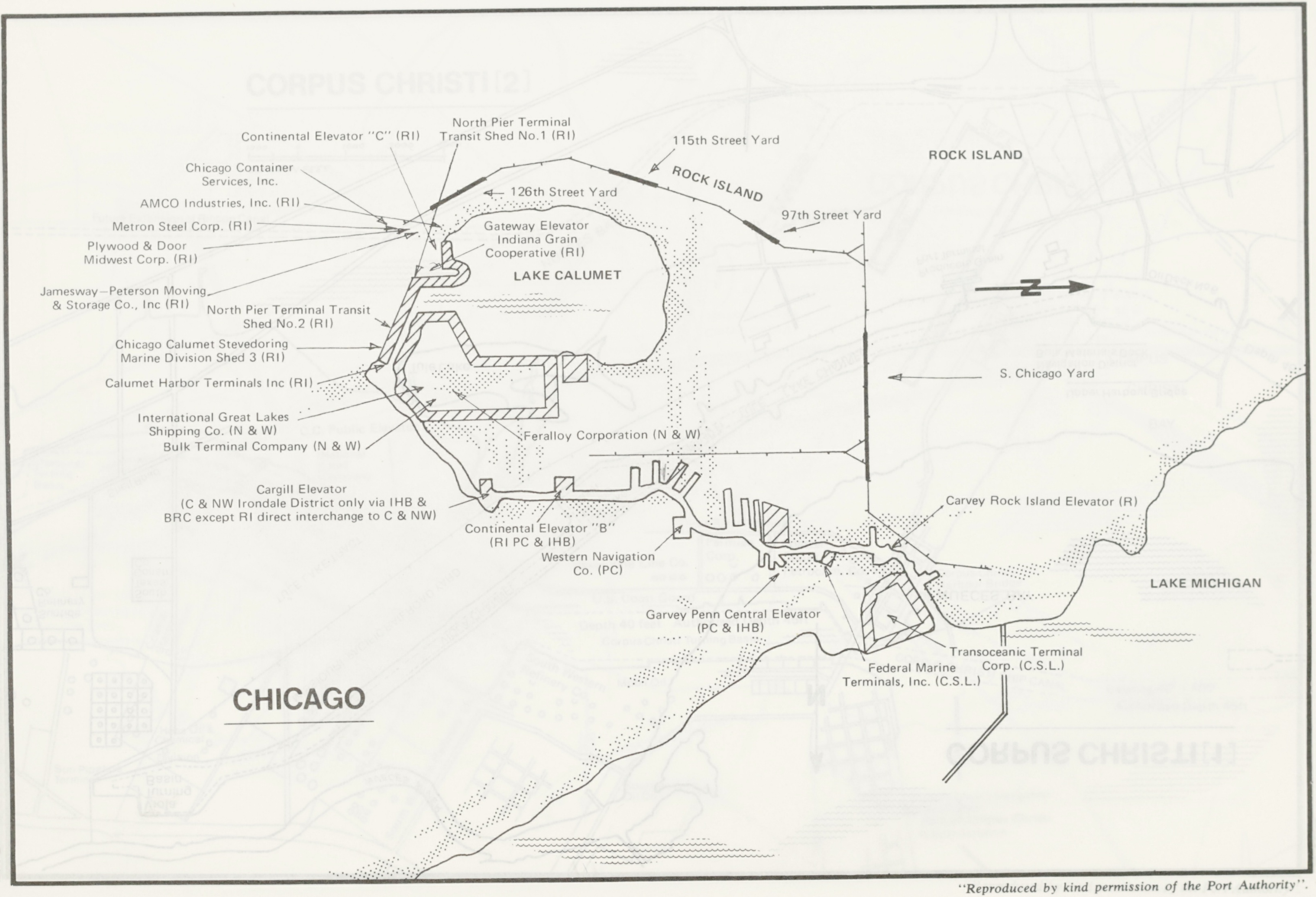
CHICAGO


Continental Elevator "C" (RI)
North Pier Terminal Transit Shed No.1 (RI)
115th Street Yard
ROCK ISLAND
ROCK ISLAND
Chicago Container Services, Inc.
126th Street Yard
AMCO Industries, Inc. (RI)
97th Street Yard
Metron Steel Corp. (RI)
Gateway Elevator Indiana Grain Cooperative (RI)
Plywood & Door Midwest Corp. (RI)
LAKE CALUMET
Jamesway–Peterson Moving & Storage Co., Inc (RI)
N
North Pier Terminal Transit Shed No.2 (RI)
Chicago Calumet Stevedoring Marine Division Shed 3 (RI)
S. Chicago Yard
Calumet Harbor Terminals Inc (RI)
International Great Lakes Shipping Co. (N & W)
Feralloy Corporation (N & W)
Bulk Terminal Company (N & W)
Cargill Elevator (C & NW Irondale District only via IHB & BRC except RI direct interchange to C & NW)
Carvey Rock Island Elevator (R)
Continental Elevator "B" (RI PC & IHB)
Western Navigation Co. (PC)
LAKE MICHIGAN
Garvey Penn Central Elevator (PC & IHB)
Transoceanic Terminal Corp. (C.S.L.)
Federal Marine Terminals, Inc. (C.S.L.)

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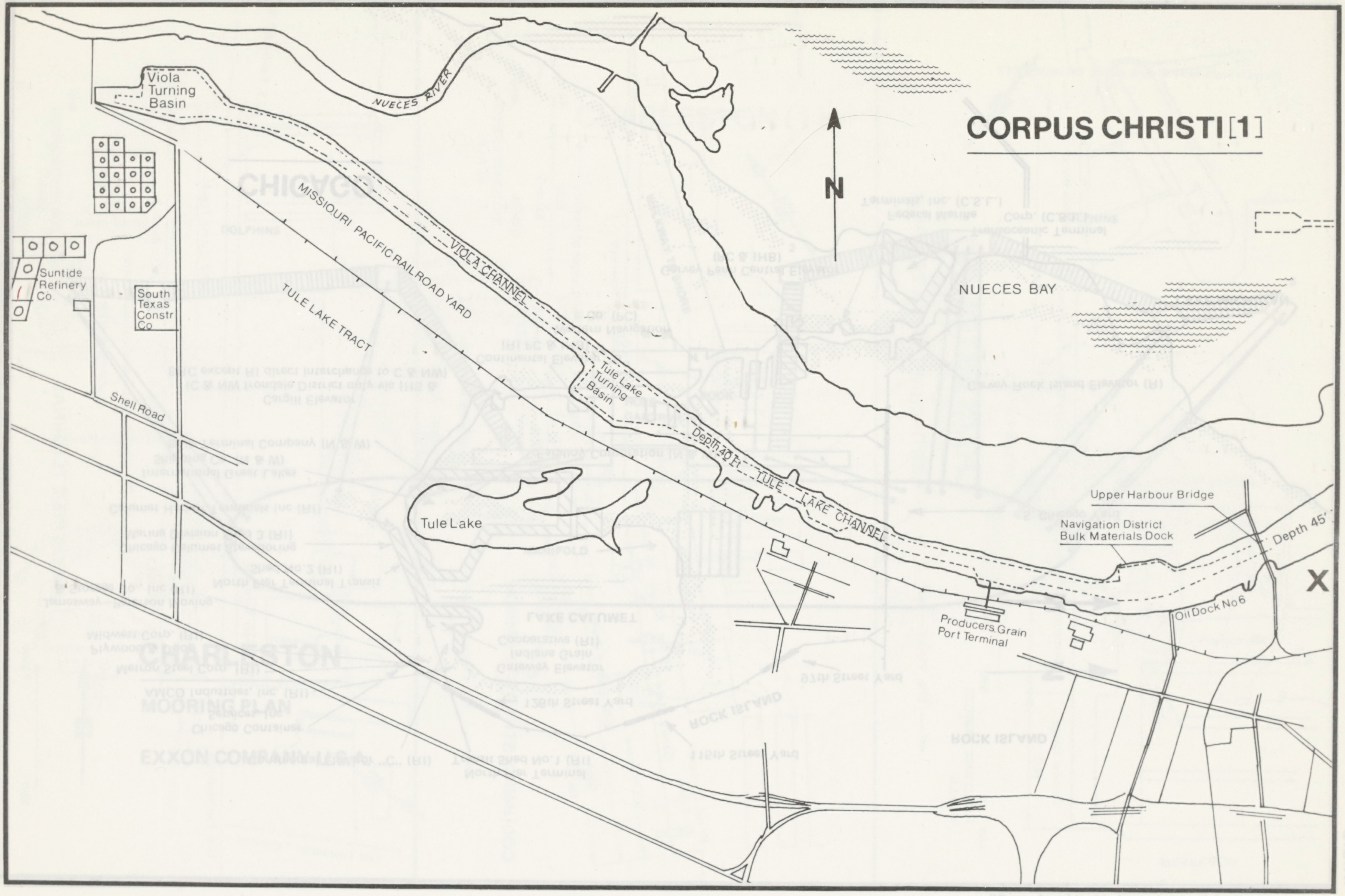
CORPUS CHRISTI [1]


Viola Turning Basin
NUECES RIVER
N
NUECES BAY
Suntide Refinery Co.
South Texas Constr Co
MISSOURI PACIFIC RAIL ROAD YARD
VIOLA CHANNEL
TULE LAKE TRACT
Shell Road
Tule Lake Turning Basin
Depth 40 Ft.
TULE LAKE CHANNEL
Tule Lake
Upper Harbour Bridge
Navigation District Bulk Materials Dock
Depth 45'
X
Oil Dock No 6
Producers Grain Port Terminal

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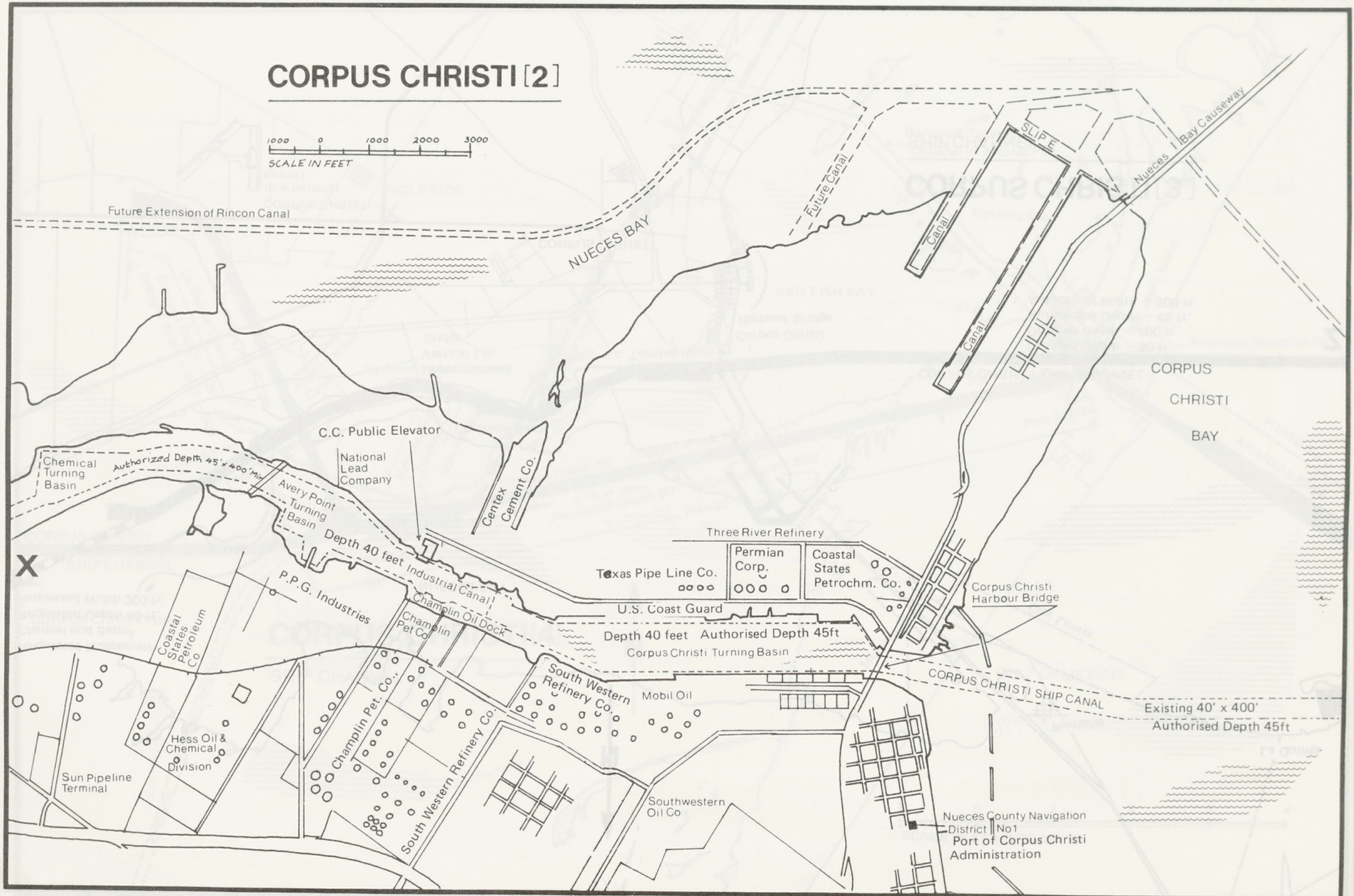
CORPUS CHRISTI [2]


1000
0
1000
2000
3000
SCALE IN FEET
Future Extension of Rincon Canal
NUECES BAY
Future Canal
SLIP E
Canal
Canal
Nueces Bay Causeway
CORPUS CHRISTI BAY
C.C. Public Elevator
National Lead Company
Chemical Turning Basin
Authorized Depth 45' x 400' Min
Avery Point Turning Basin
Depth 40 feet Industrial Canal
Centex Cement Co.
Three River Refinery
Permian Corp.
Coastal States Petrochm. Co.
Texas Pipe Line Co.
Corpus Christi Harbour Bridge
X
P.P.G. Industries
Champlin Oil Dock
U.S. Coast Guard
Depth 40 feet
Authorised Depth 45ft
Corpus Christi Turning Basin
Champlin Pet Co
Coastal States Petroleum Co
CORPUS CHRISTI SHIP CANAL
Existing 40' x 400'
Authorised Depth 45ft
South Western Refinery Co.
Mobil Oil
Champlin Pet. Co.
South Western Refinery Co.
Hess Oil & Chemical Division
Sun Pipeline Terminal
Southwestern Oil Co
Nueces County Navigation District No1
Port of Corpus Christi Administration

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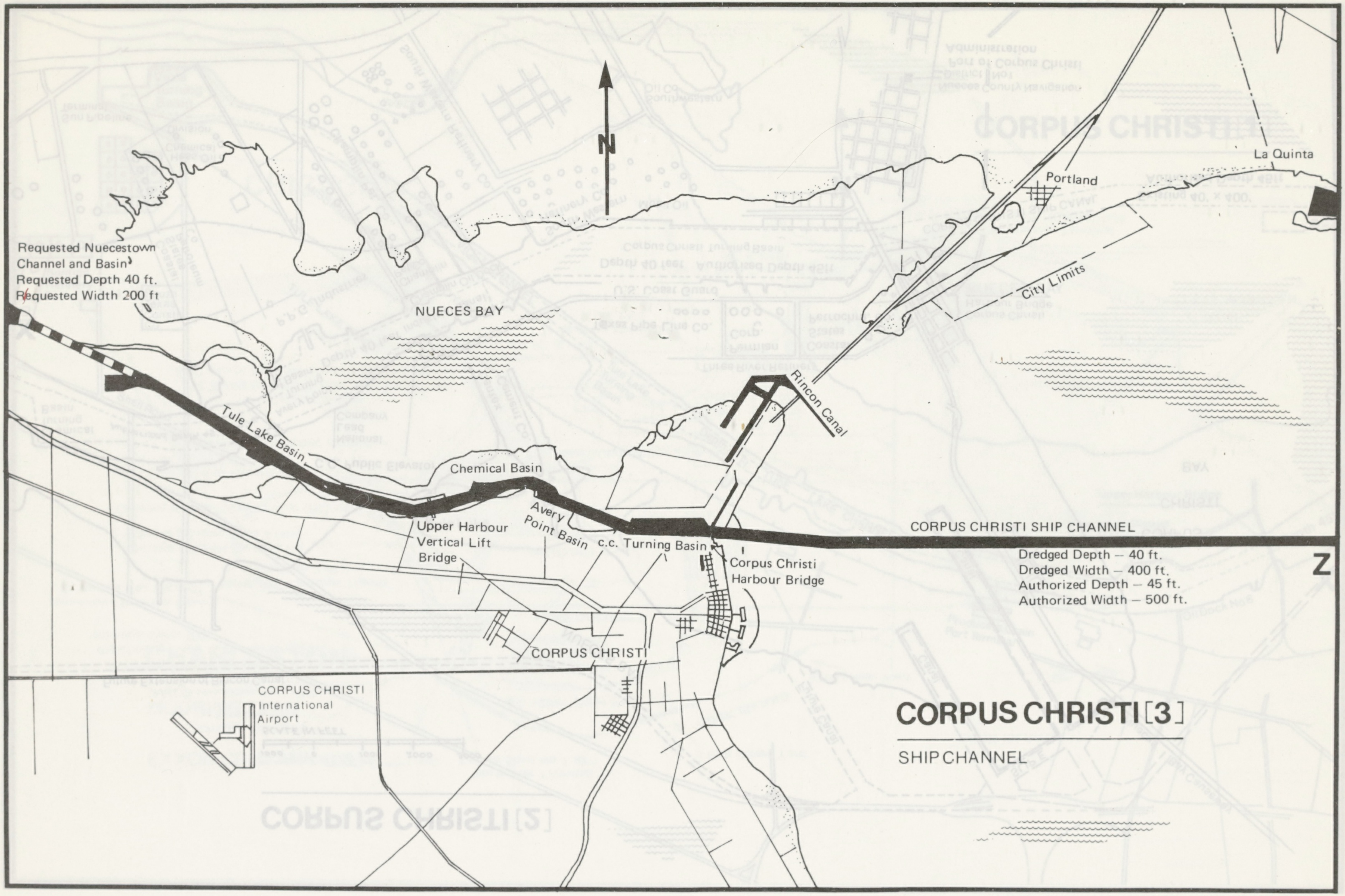
N
La Quinta
Portland
City Limits
Requested Nuecestown
Channel and Basin
Requested Depth 40 ft.
Requested Width 200 ft
NUECES BAY
Rincon Canal
Tule Lake Basin
Chemical Basin
Upper Harbour
Vertical Lift
Bridge
Avery
Point Basin
c.c. Turning Basin
Corpus Christi
Harbour Bridge
CORPUS CHRISTI SHIP CHANNEL
Z
CORPUS CHRISTI
CORPUS CHRISTI
International
Airport

Dredged Depth – 40 ft.
Dredged Width – 400 ft.
Authorized Depth – 45 ft.
Authorized Width – 500 ft.

CORPUS CHRISTI [3]

SHIP CHANNEL

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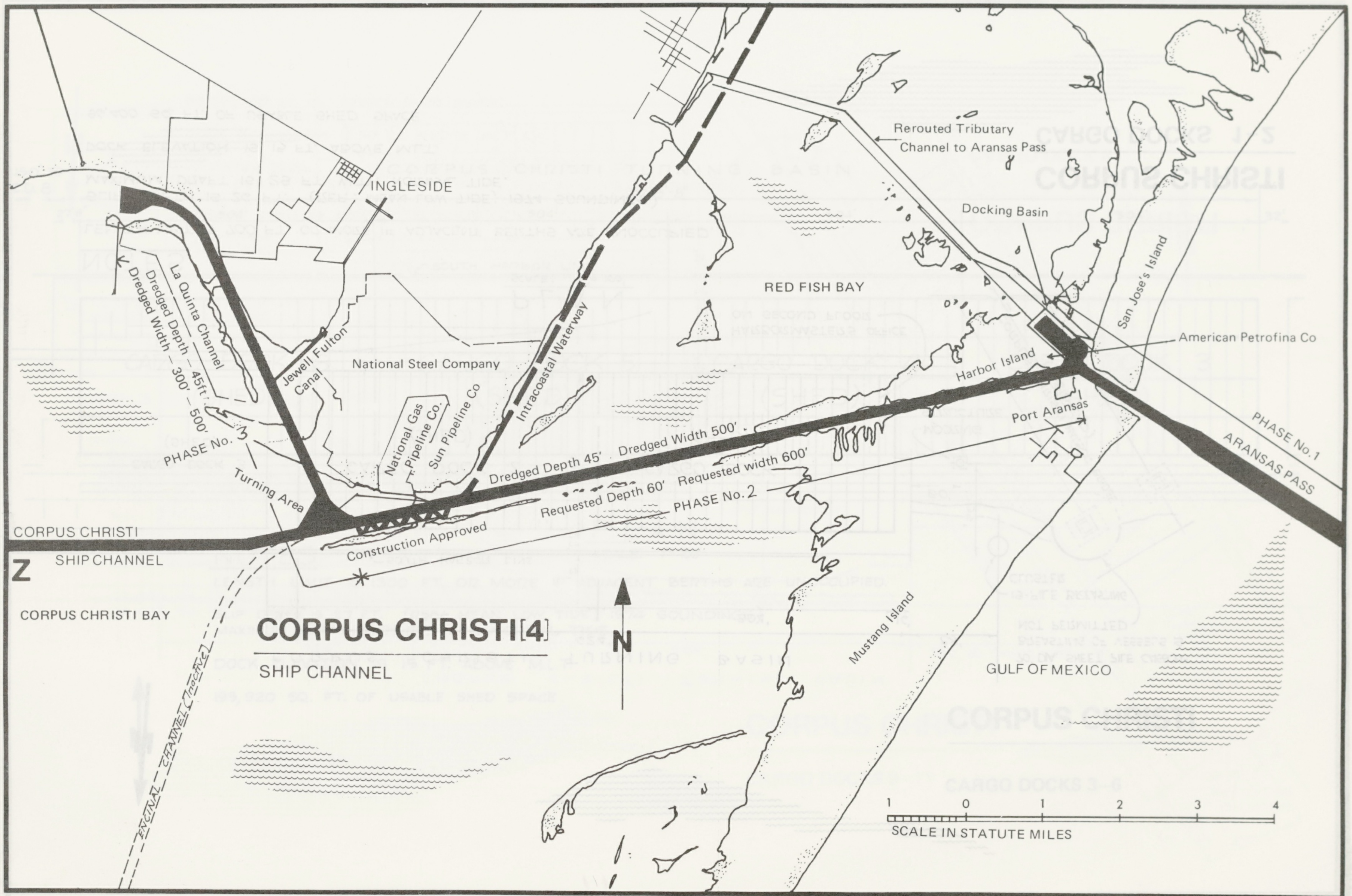
INGLESIDE
La Quinta Channel
Dredged Depth – 45ft
Dredged Width – 300' – 500'
PHASE No. 3
Jewell Fulton Canal
National Steel Company
National Gas Pipeline Co.
Sun Pipeline Co
Intracoastal Waterway
Turning Area
Dredged Depth 45' Dredged Width 500'
Requested Depth 60' Requested width 600'
PHASE No. 2
Construction Approved
CORPUS CHRISTI SHIP CHANNEL
Z
CORPUS CHRISTI BAY
ENCINAL CHANNEL (Inactive)
N
RED FISH BAY
Rerouted Tributary Channel to Aransas Pass
Docking Basin
San Jose's Island
American Petrofina Co
Harbor Island
Port Aransas
PHASE No. 1
ARANSAS PASS
Mustang Island
GULF OF MEXICO
1 0 1 2 3 4
SCALE IN STATUTE MILES

CORPUS CHRISTI[4]

SHIP CHANNEL

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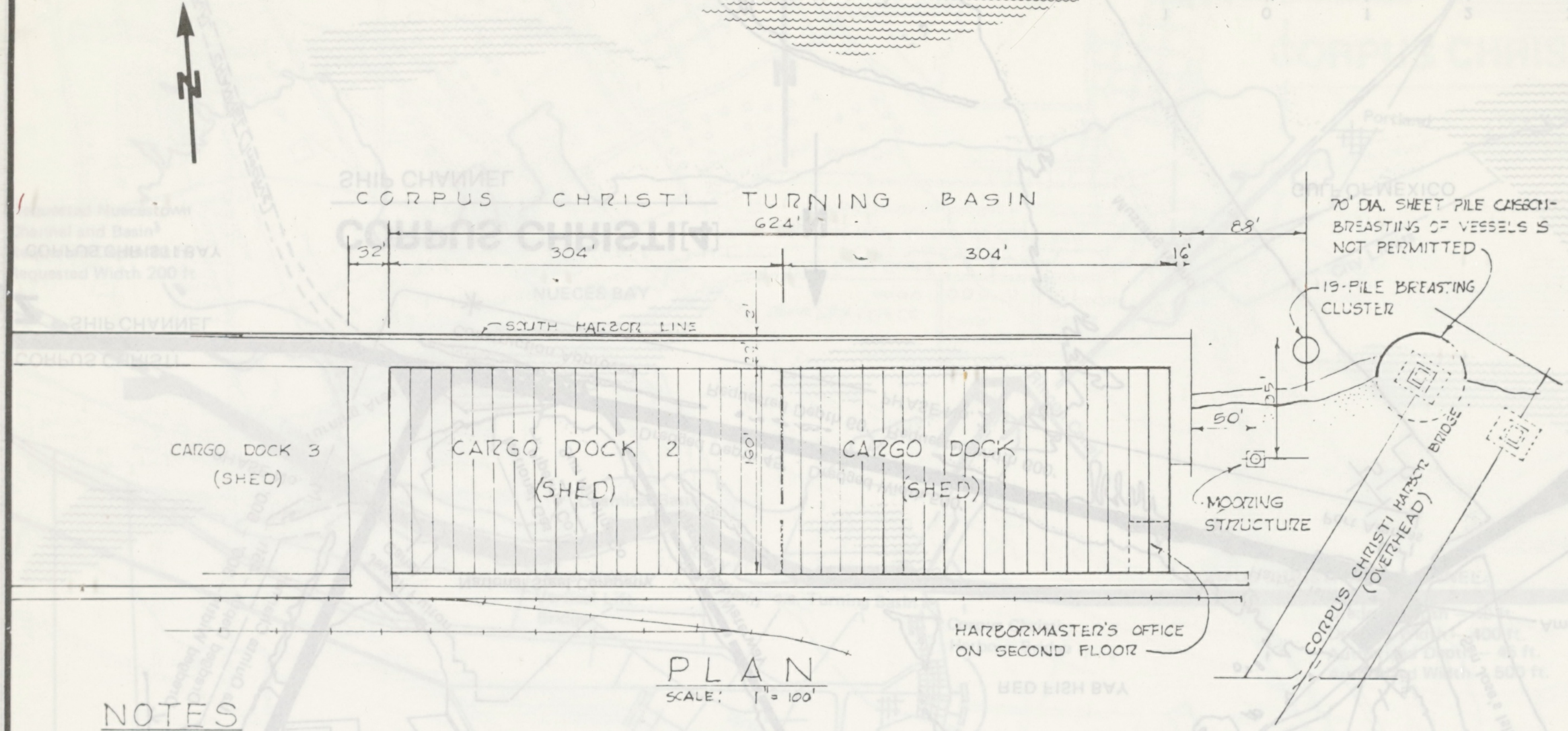
N
CORPUS CHRISTI TURNING BASIN
624'
32'
304'
304'
16'
88'
SOUTH HARBOR LINE
70' DIA. SHEET PILE CAISSON-
BREASTING OF VESSELS IS
NOT PERMITTED
19-PILE BREASTING
CLUSTER
25'
50'
160'
CARGO DOCK 3
(SHED)
CARGO DOCK 2
(SHED)
CARGO DOCK
(SHED)
MOORING
STRUCTURE
CORPUS CHRISTI HARBOR BRIDGE
(OVERHEAD)
HARBORMASTER'S OFFICE
ON SECOND FLOOR

PLAN
SCALE: 1" = 100'

NOTES

LENGTH LIMIT IS 700 FT. OR MORE IF ADJACENT BERTHS ARE UNOCCUPIED.

SLIP DEPTH IS 26 FT. (REF.: MEAN LOW TIDE; 1974 SOUNDINGS)
MAXIMUM DRAFT IS 28 FT. WITH NORMAL TIDE.

DOCK ELEVATION IS 15 FT. ABOVE M.L.T.

96,400 SQ. FT. OF USABLE SHED SPACE

CORPUS CHRISTI

CARGO DOCKS 1–2

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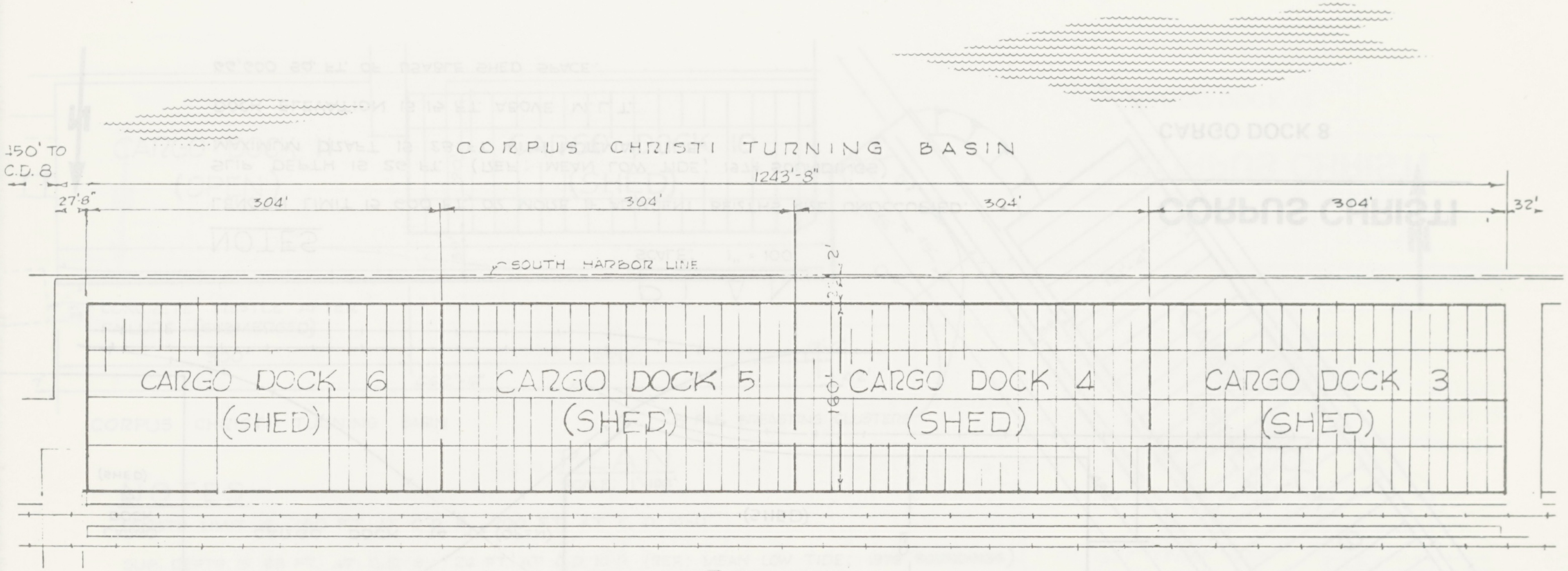
CORPUS CHRISTI TURNING BASIN
150' TO C.D. 8
1243'-8"
27'8"
304'
304'
304'
304'
32'
SOUTH HARBOR LINE
2'-2"
160'
CARGO DOCK 6 (SHED)
CARGO DOCK 5 (SHED)
CARGO DOCK 4 (SHED)
CARGO DOCK 3 (SHED)

PLAN

SCALE 1"=100'

NOTES

LENGTH LIMIT IS 1300 FT. OR MORE IF ADJACENT BERTHS ARE UNOCCUPIED.

SLIP DEPTH IS 27 FT. (REF.: MEAN LOW TIDE; 1974 SOUNDINGS)
MAXIMUM DRAFT IS 29 FT. WITH NORMAL TIDE.

DOCK ELEVATION IS 15 FT. ABOVE M.L.T.

193,920 SQ. FT. OF USABLE SHED SPACE.

N

CORPUS CHRISTI

CARGO DOCKS 3–6

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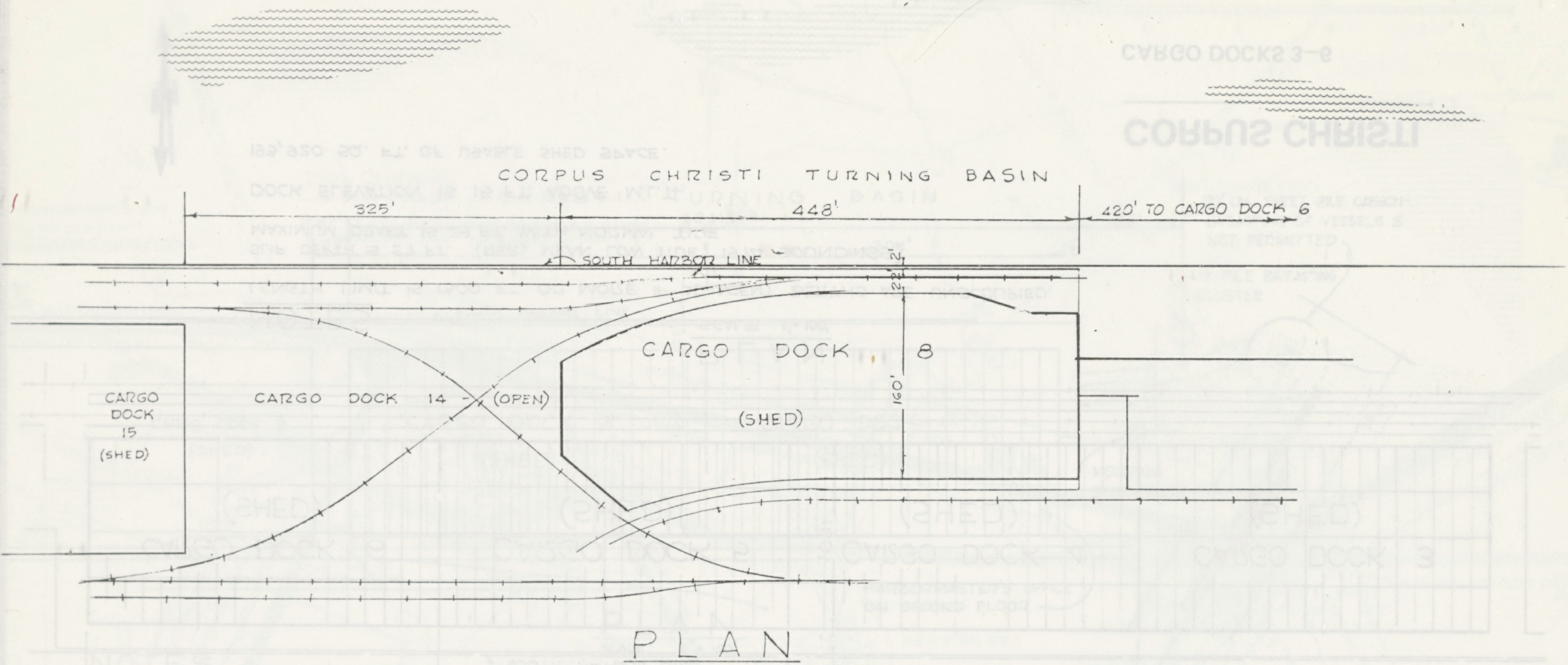
CORPUS CHRISTI TURNING BASIN
325'
448'
420' TO CARGO DOCK 6
SOUTH HARBOR LINE
22'
CARGO DOCK 8
160'
(SHED)
CARGO DOCK 14 - (OPEN)
CARGO DOCK 15 (SHED)

PLAN

SCALE: 1" = 100'

NOTES

LENGTH LIMIT IS 600 FT., OR MORE IF ADJACENT BERTHS ARE UNOCCUPIED.

SLIP DEPTH IS 26 FT. (REF.: MEAN LOW TIDE; 1974 SOUNDINGS)
MAXIMUM DRAFT IS 28 FT. WITH NORMAL TIDE.

DOCK ELEVATION IS 15 FT. ABOVE M.L.T.

66,600 SQ. FT. OF USABLE SHED SPACE.

CORPUS CHRISTI

CARGO DOCK 8

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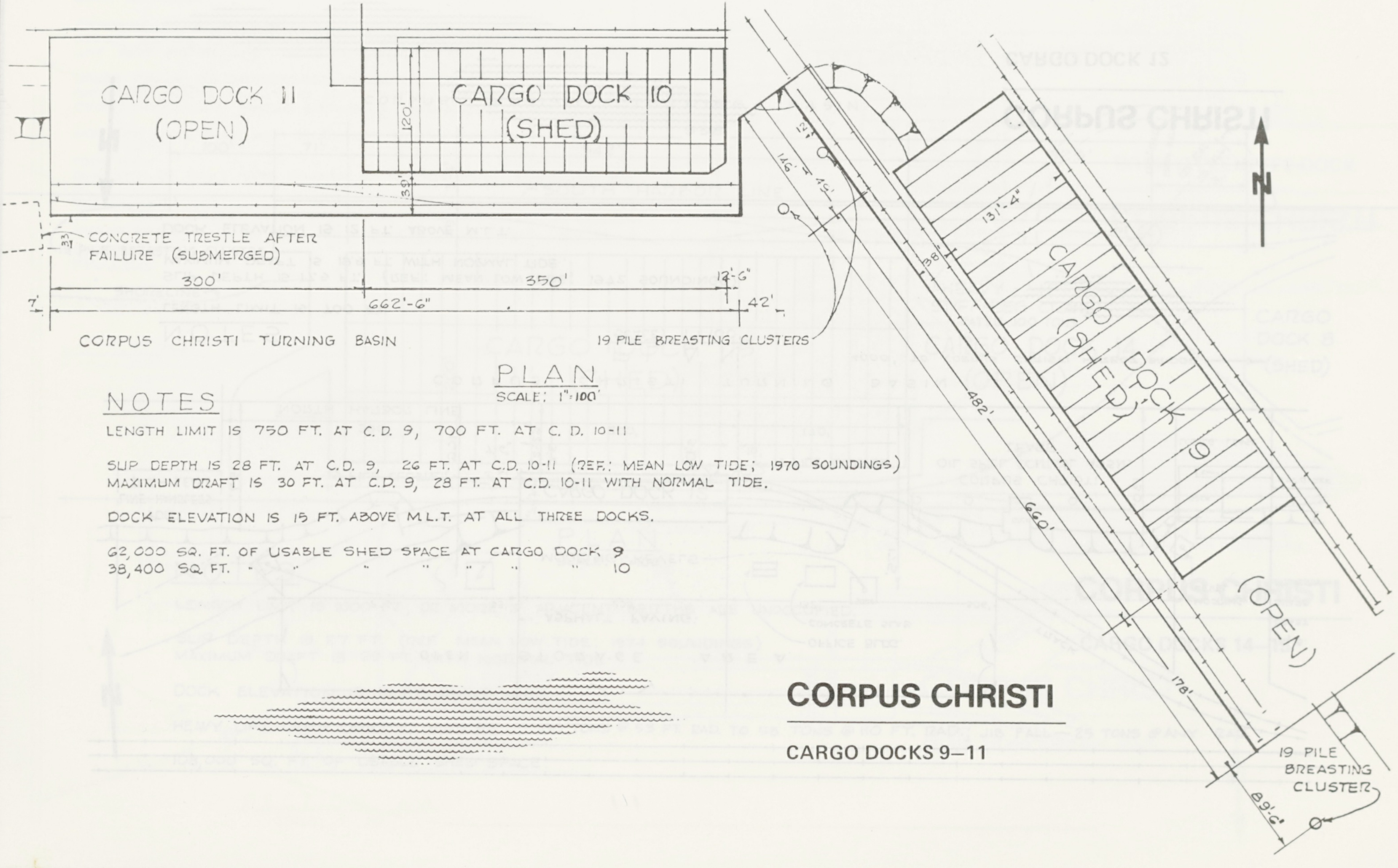
CARGO DOCK 11
(OPEN)
CARGO DOCK 10
(SHED)
120'
39'
33'
CONCRETE TRESTLE AFTER FAILURE (SUBMERGED)
300'
350'
12'-6"
7'
662'-6"
42'
CORPUS CHRISTI TURNING BASIN
19 PILE BREASTING CLUSTERS
121'
146'
49'
38'
131'-4"
CARGO DOCK 9 (SHED)
482'
660'
178'
(OPEN)
89'-6"
19 PILE BREASTING CLUSTER
N
PLAN
SCALE: 1"=100'

NOTES

LENGTH LIMIT IS 750 FT. AT C.D. 9, 700 FT. AT C. D. 10-11

SLIP DEPTH IS 28 FT. AT C.D. 9, 26 FT. AT C.D. 10-11 (REF.: MEAN LOW TIDE; 1970 SOUNDINGS)
MAXIMUM DRAFT IS 30 FT. AT C.D. 9, 28 FT. AT C.D. 10-11 WITH NORMAL TIDE.

DOCK ELEVATION IS 15 FT. ABOVE M.L.T. AT ALL THREE DOCKS.

62,000 SQ. FT. OF USABLE SHED SPACE AT CARGO DOCK 9
38,400 SQ. FT. " " " " " " " 10

CORPUS CHRISTI

CARGO DOCKS 9–11

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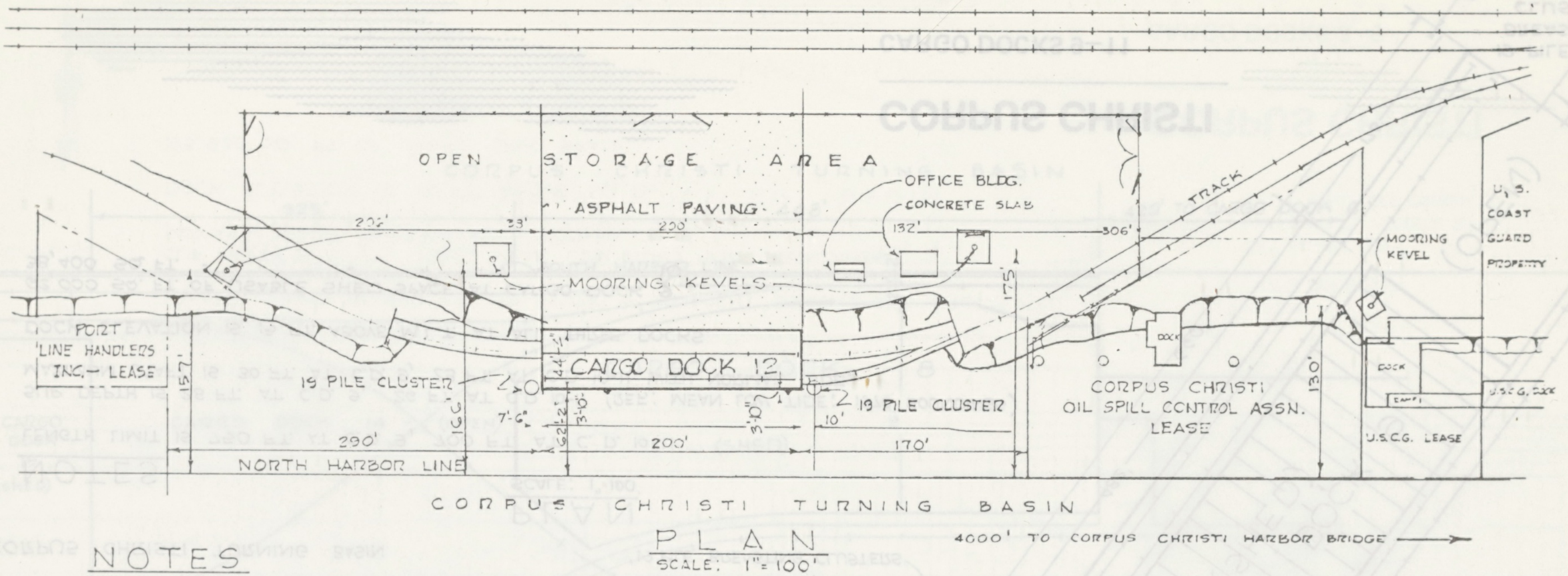
OPEN STORAGE AREA
ASPHALT PAVING
OFFICE BLDG.
CONCRETE SLAB
TRACK
MOORING KEVELS
MOORING KEVEL
U.S. COAST GUARD PROPERTY
PORT LINE HANDLERS INC.-LEASE
CARGO DOCK 12
19 PILE CLUSTER
19 PILE CLUSTER
CORPUS CHRISTI OIL SPILL CONTROL ASSN. LEASE
DOCK
DOCK
U.S.C.G. DOCK
U.S.C.G. LEASE
NORTH HARBOR LINE
CORPUS CHRISTI TURNING BASIN
4000' TO CORPUS CHRISTI HARBOR BRIDGE
290'
33'
200'
132'
306'
17.5'
157'
16' C.C.
7'-6"
44'-2"
62'-2"
30'-0"
30'-0"
10'
290'
200'
170'
130'

PLAN

SCALE: 1" = 100'

NOTES

LENGTH LIMIT IS 700 FT.

SLIP DEPTH IS 17.5 FT. (REF: MEAN LOW TIDE; 1972 SOUNDINGS)
MAXIMUM DRAFT IS 19.5 FT. WITH NORMAL TIDE.

DOCK ELEVATION IS 12 FT. ABOVE M.L.T.

CORPUS CHRISTI

CARGO DOCK 12

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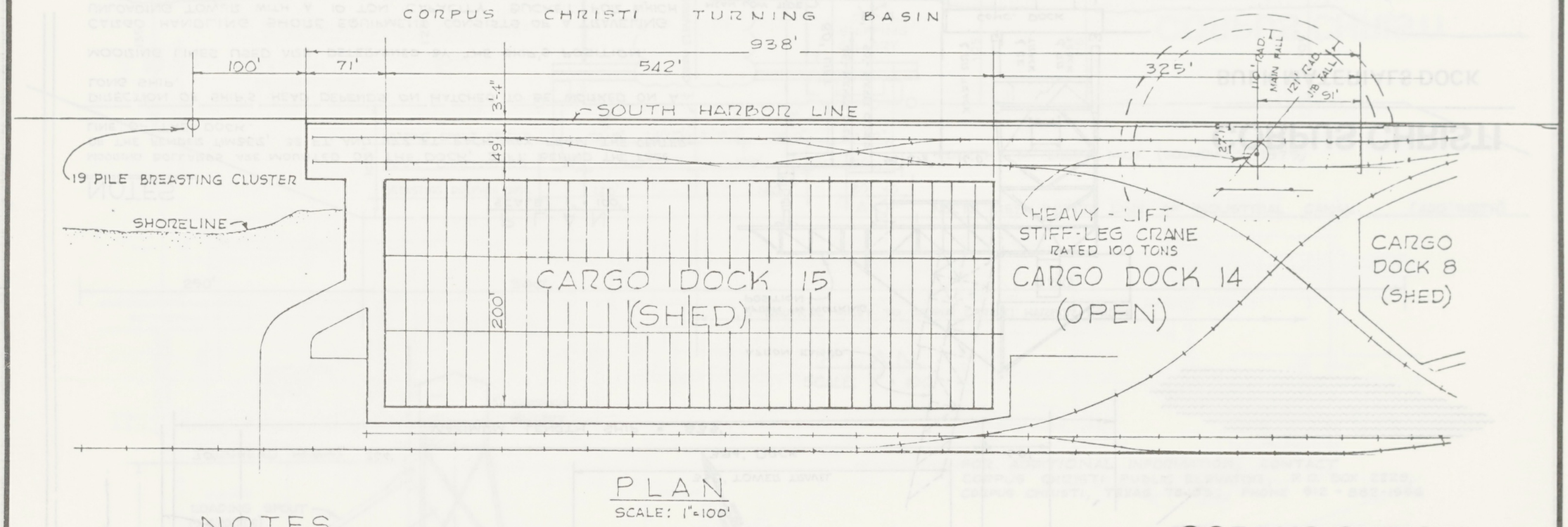
CORPUS CHRISTI TURNING BASIN
938'
100'
71'
542'
325'
3'-4"
49'
SOUTH HARBOR LINE
19 PILE BREASTING CLUSTER
SHORELINE
CARGO DOCK 15 (SHED)
200'
HEAVY-LIFT STIFF-LEG CRANE RATED 100 TONS
CARGO DOCK 14 (OPEN)
CARGO DOCK 8 (SHED)
110' RAD. MAIN FALL
121' RAD. JIB FALL
51'
27'

PLAN

SCALE: 1"=100'

NOTES

LENGTH LIMIT IS 1000 FT., OR MORE IF ADJACENT BERTHS ARE UNOCCUPIED.

SLIP DEPTH IS 27 FT. (REF: MEAN LOW TIDE; 1974 SOUNDINGS)
MAXIMUM DRAFT IS 29 FT. WITH NORMAL TIDE

DOCK ELEVATION IS 15 FT. ABOVE M.L.T.

HEAVY LIFT CRANE CAPACITY: MAIN FALL—100 TONS @ 53 FT. RAD. TO 53 TONS @ 110 FT. RAD.; JIB FALL—25 TONS @ ANY RAD.

108,000 SQ. FT. OF USABLE SHED SPACE.

CORPUS CHRISTI

CARGO DOCKS 14–15

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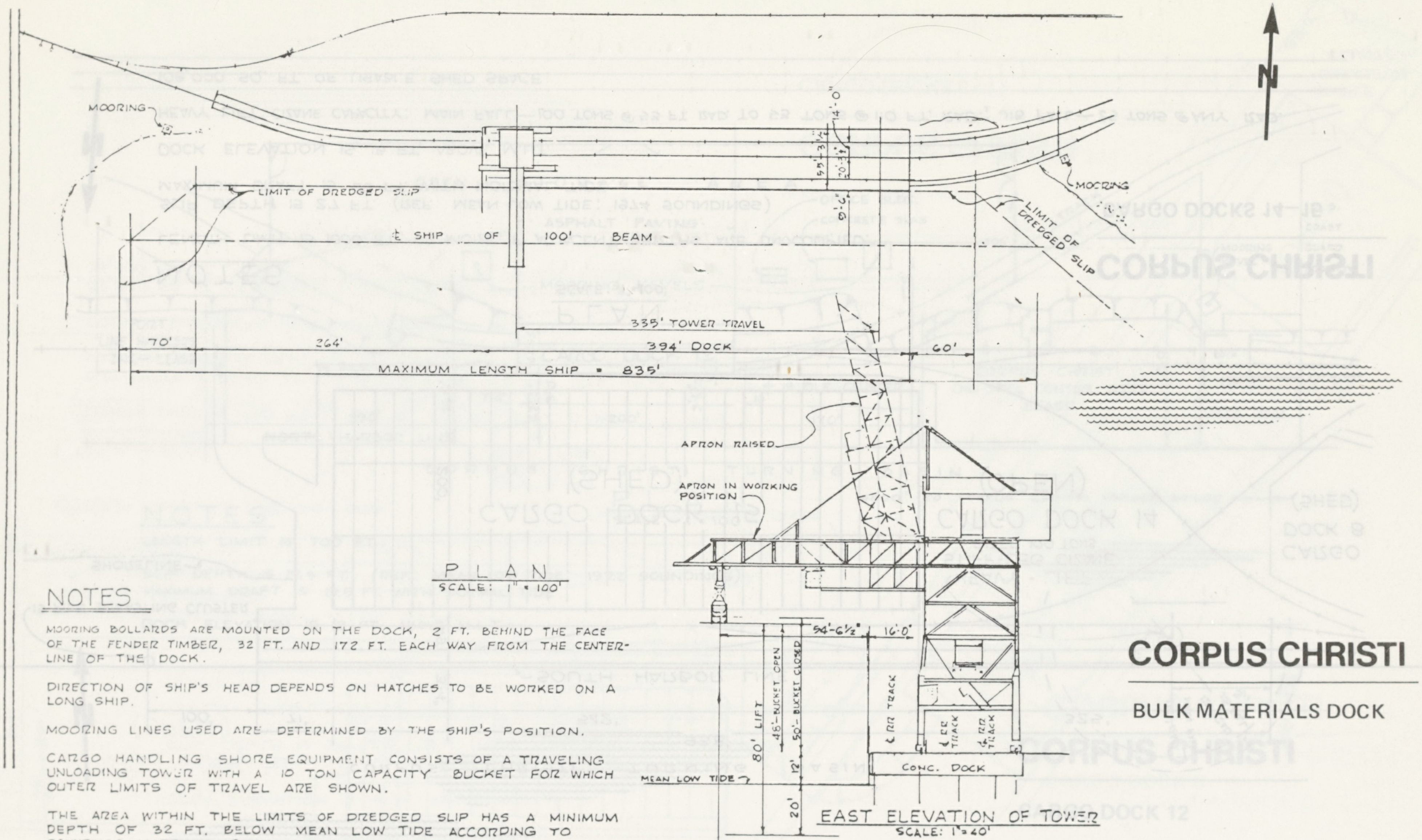
MOORING
LIMIT OF DREDGED SLIP
℄ SHIP OF 100' BEAM
55'-3½"
20'-3½"
4'-0"
9'-0"
MOORING
LIMIT OF DREDGED SLIP
335' TOWER TRAVEL
70'
264'
394' DOCK
60'
MAXIMUM LENGTH SHIP = 835'
N
APRON RAISED
APRON IN WORKING POSITION
54'-6½"
16'-0"
80' LIFT
48'-BUCKET OPEN
50'-BUCKET CLOSED
℄ RR TRACK
℄ RR TRACK
℄ RR TRACK
CONC. DOCK
MEAN LOW TIDE
12'
20'

PLAN
SCALE: 1" = 100'

EAST ELEVATION OF TOWER
SCALE: 1" = 40'

NOTES

MOORING BOLLARDS ARE MOUNTED ON THE DOCK, 2 FT. BEHIND THE FACE OF THE FENDER TIMBER, 32 FT. AND 172 FT. EACH WAY FROM THE CENTERLINE OF THE DOCK.

DIRECTION OF SHIP'S HEAD DEPENDS ON HATCHES TO BE WORKED ON A LONG SHIP.

MOORING LINES USED ARE DETERMINED BY THE SHIP'S POSITION.

CARGO HANDLING SHORE EQUIPMENT CONSISTS OF A TRAVELING UNLOADING TOWER WITH A 10 TON CAPACITY BUCKET FOR WHICH OUTER LIMITS OF TRAVEL ARE SHOWN.

THE AREA WITHIN THE LIMITS OF DREDGED SLIP HAS A MINIMUM DEPTH OF 32 FT. BELOW MEAN LOW TIDE ACCORDING TO SOUNDINGS MADE IN 1974.

BEAM UNLIMITED.

CORPUS CHRISTI

BULK MATERIALS DOCK

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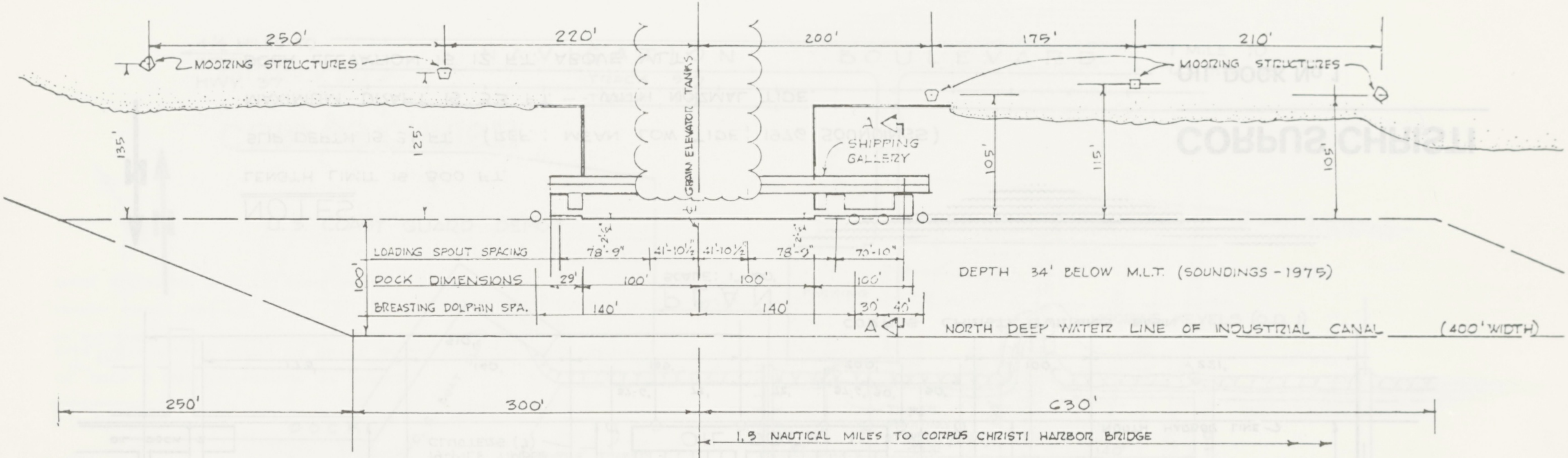
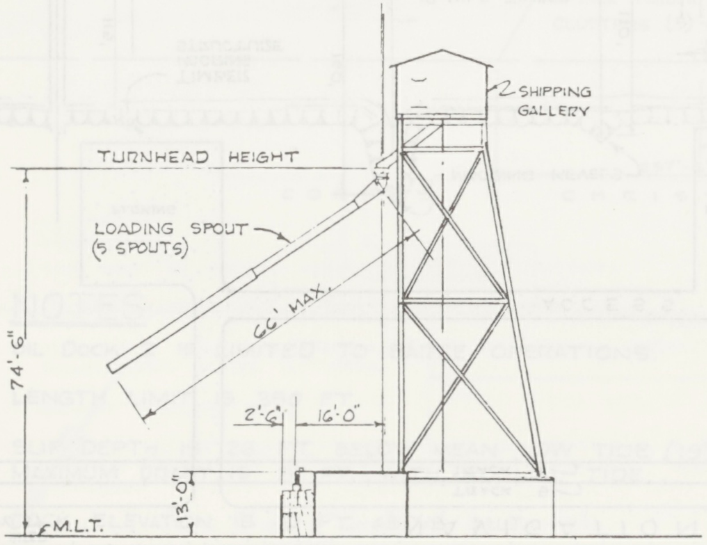

250'
220'
200'
175'
210'
MOORING STRUCTURES
MOORING STRUCTURES
GRAIN ELEVATOR TANKS
SHIPPING GALLERY
A
A
135'
125'
105'
115'
105'
N
2'-2¼"
2'-2¼"
LOADING SPOUT SPACING
78'-9"
41'-10½"
41'-10½"
78'-9"
73'-10"
100'
DOCK DIMENSIONS
29'
100'
100'
100'
BREASTING DOLPHIN SPA.
140'
140'
30'
40'
DEPTH 34' BELOW M.L.T. (SOUNDINGS - 1975)
NORTH DEEP WATER LINE OF INDUSTRIAL CANAL (400' WIDTH)
250'
300'
630'
1.5 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE

PLAN
SCALE: 1" = 100'

FOR ADDITIONAL INFORMATION, CONTACT CORPUS CHRISTI PUBLIC ELEVATOR, P. O. BOX 2229, CORPUS CHRISTI, TEXAS 78403; PHONE 512 - 882 - 1956


SHIPPING GALLERY
TURNHEAD HEIGHT
LOADING SPOUT (5 SPOUTS)
66' MAX.
74'-6"
2'-6"
16'-0"
13'-0"
M.L.T.

SECTION A-A
SCALE: 1" = 30'

CORPUS CHRISTI

Public Grain Elevator Dock

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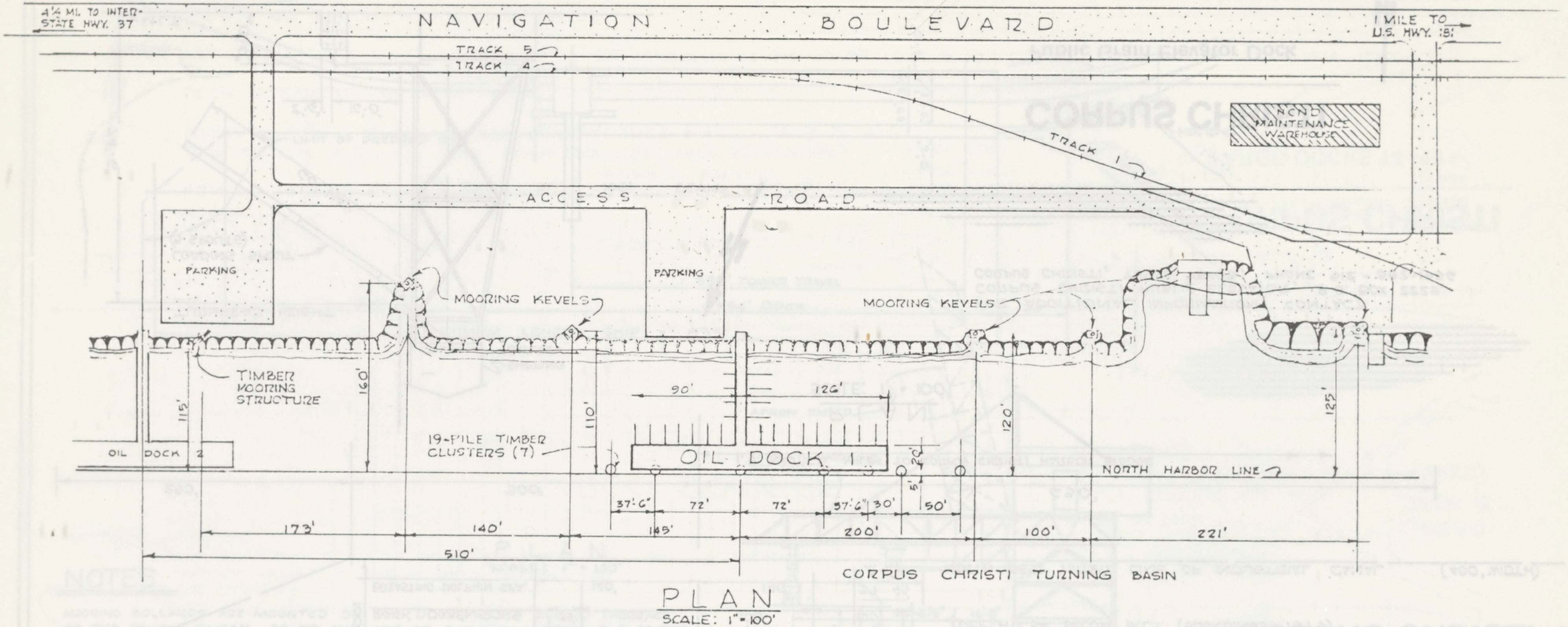
4¼ MI. TO INTER-STATE HWY. 37
NAVIGATION BOULEVARD
1 MILE TO U.S. HWY. 181
TRACK 5
TRACK 4
TRACK 1
NCND MAINTENANCE WAREHOUSE
ACCESS ROAD
PARKING
PARKING
MOORING KEVELS
MOORING KEVELS
TIMBER MOORING STRUCTURE
115'
160'
110'
90'
126'
120'
125'
19-PILE TIMBER CLUSTERS (7)
OIL DOCK 2
OIL DOCK
NORTH HARBOR LINE
5'
20'
37'-6"
72'
72'
37'-6"
30'
50'
173'
140'
145'
200'
100'
221'
510'
CORPUS CHRISTI TURNING BASIN

PLAN

SCALE: 1" = 100'

N

NOTES

LENGTH LIMIT IS 800 FT.

SLIP DEPTH IS 31 FT. (REF.: MEAN LOW TIDE; 1976 SOUNDINGS)

MAXIMUM DRAFT IS 33 FT. -- WITH NORMAL TIDE.

DOCK ELEVATION IS 12 FT. ABOVE MLT.

CORPUS CHRISTI

OIL DOCK No.1

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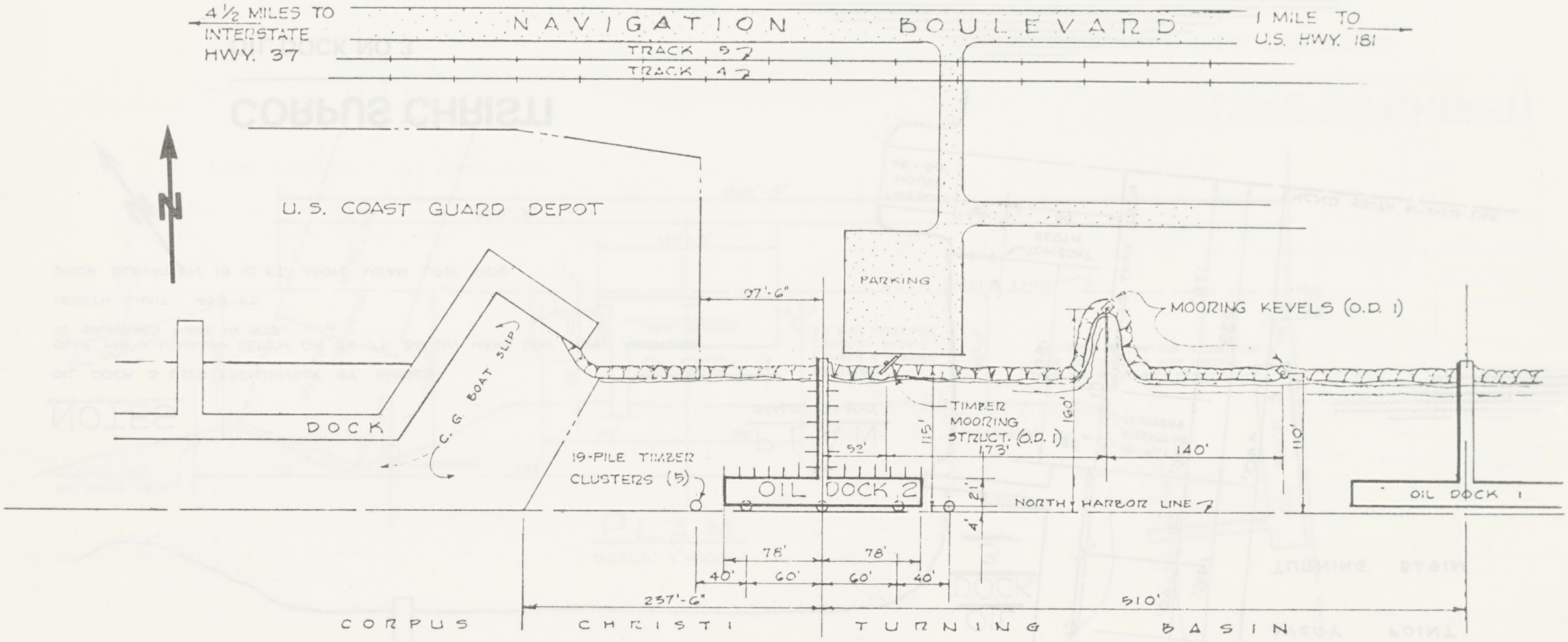
4½ MILES TO INTERSTATE HWY. 37
NAVIGATION BOULEVARD
1 MILE TO U.S. HWY. 181
TRACK 57
TRACK 47
N
U.S. COAST GUARD DEPOT
PARKING
97'-6"
MOORING KEVELS (O.D. 1)
DOCK
C.G. BOAT SLIP
TIMBER MOORING STRUCT. (O.D. 1)
115'
160'
52'
173'
140'
110'
19-PILE TIMBER CLUSTERS (5)
OIL DOCK 2
21'
4'
NORTH HARBOR LINE
OIL DOCK 1
78'
78'
40'
60'
60'
40'
237'-6"
510'
CORPUS CHRISTI TURNING BASIN

PLAN

SCALE: 1" = 100'

NOTES

OIL DOCK 2 IS LIMITED TO BARGE OPERATIONS.

LENGTH LIMIT IS 350 FT.

SLIP DEPTH IS 26 FT. BELOW MEAN LOW TIDE (1976 SOUNDINGS)
MAXIMUM DRAFT IS 28 FT. WITH NORMAL TIDE.

DOCK ELEVATION IS 10 FT. ABOVE M.L.T.

CORPUS CHRISTI

OIL DOCK No.2

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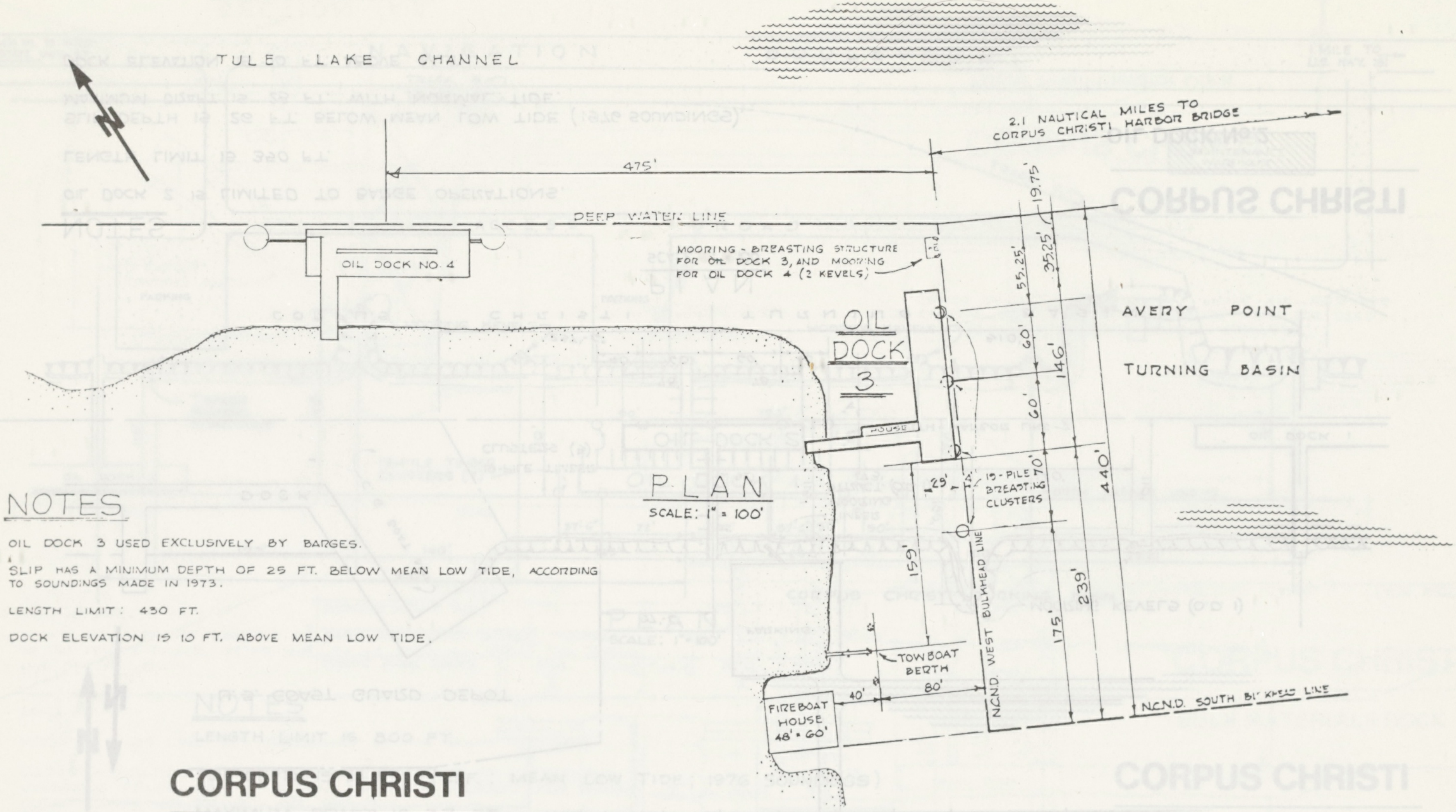
TULE LAKE CHANNEL
475'
2.1 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE
DEEP WATER LINE
OIL DOCK NO. 4
MOORING - BREASTING STRUCTURE FOR OIL DOCK 3, AND MOORING FOR OIL DOCK 4 (2 KEVELS)
OIL DOCK 3
AVERY POINT
TURNING BASIN
19.75'
55.25'
35.25'
60'
146'
60
70'
440'
HOUSE
25'
15-PILE BREASTING CLUSTERS
159'
239'
175'
N.C.N.D. WEST BULKHEAD LINE
TOWBOAT BERTH
80'
40'
FIREBOAT HOUSE 48' x 60'
N.C.N.D. SOUTH BULKHEAD LINE
PLAN
SCALE: 1" = 100'

NOTES

OIL DOCK 3 USED EXCLUSIVELY BY BARGES.

SLIP HAS A MINIMUM DEPTH OF 25 FT. BELOW MEAN LOW TIDE, ACCORDING TO SOUNDINGS MADE IN 1973.

LENGTH LIMIT: 430 FT.

DOCK ELEVATION IS 10 FT. ABOVE MEAN LOW TIDE.

CORPUS CHRISTI

OIL DOCK NO.3

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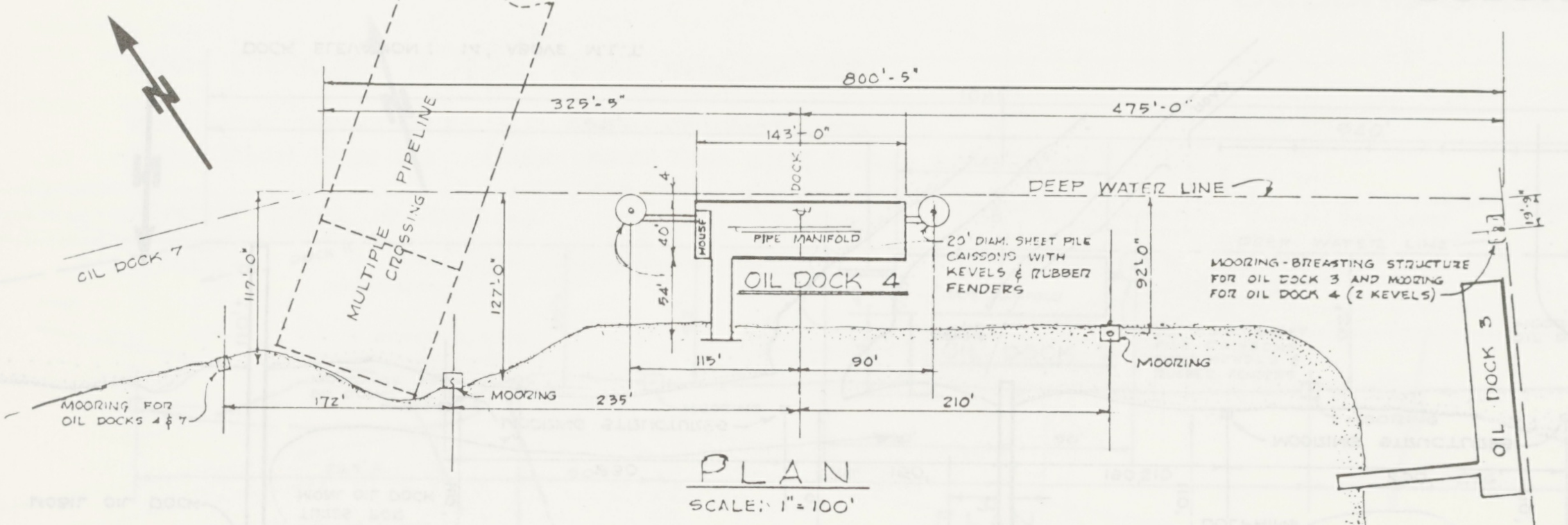
N
800'-5"
325'-5"
475'-0"
143'-0"
DOCK
4'
DEEP WATER LINE
MULTIPLE PIPELINE CROSSING
OIL DOCK 7
117'-0"
127'-0"
40'
54'
HOUSE
PIPE MANIFOLD
OIL DOCK 4
20' DIAM. SHEET PILE CAISSONS WITH KEVELS & RUBBER FENDERS
92'-0"
19'-9"
MOORING-BREASTING STRUCTURE FOR OIL DOCK 3 AND MOORING FOR OIL DOCK 4 (2 KEVELS)
OIL DOCK 3
MOORING FOR OIL DOCKS 4 & 7
172'
MOORING
235'
115'
90'
210'
MOORING
PLAN
SCALE: 1" = 100'

NOTES

SHIP MAY BE MOORED HEADED IN EITHER DIRECTION.

MOORING LINES USED DEPEND ON SHIP'S POSITION.

SLIP HAS A MINIMUM DEPTH OF 37 FT. BELOW MEAN LOW TIDE ACCORDING TO SOUNDINGS MADE IN 1974.

BEAM UNLIMITED.

LENGTH LIMIT: 850 FT. SHIPS AT OIL DOCKS 4, 7 & 11 AT THE SAME TIME. LONGER SHIPS MAY BE BERTHED WHEN ADJACENT SLIP IS NOT BEING FULLY UTILIZED.

DOCK ELEVATION IS 16 FT. ABOVE MEAN LOW TIDE.

CORPUS CHRISTI

OIL DOCK No.4

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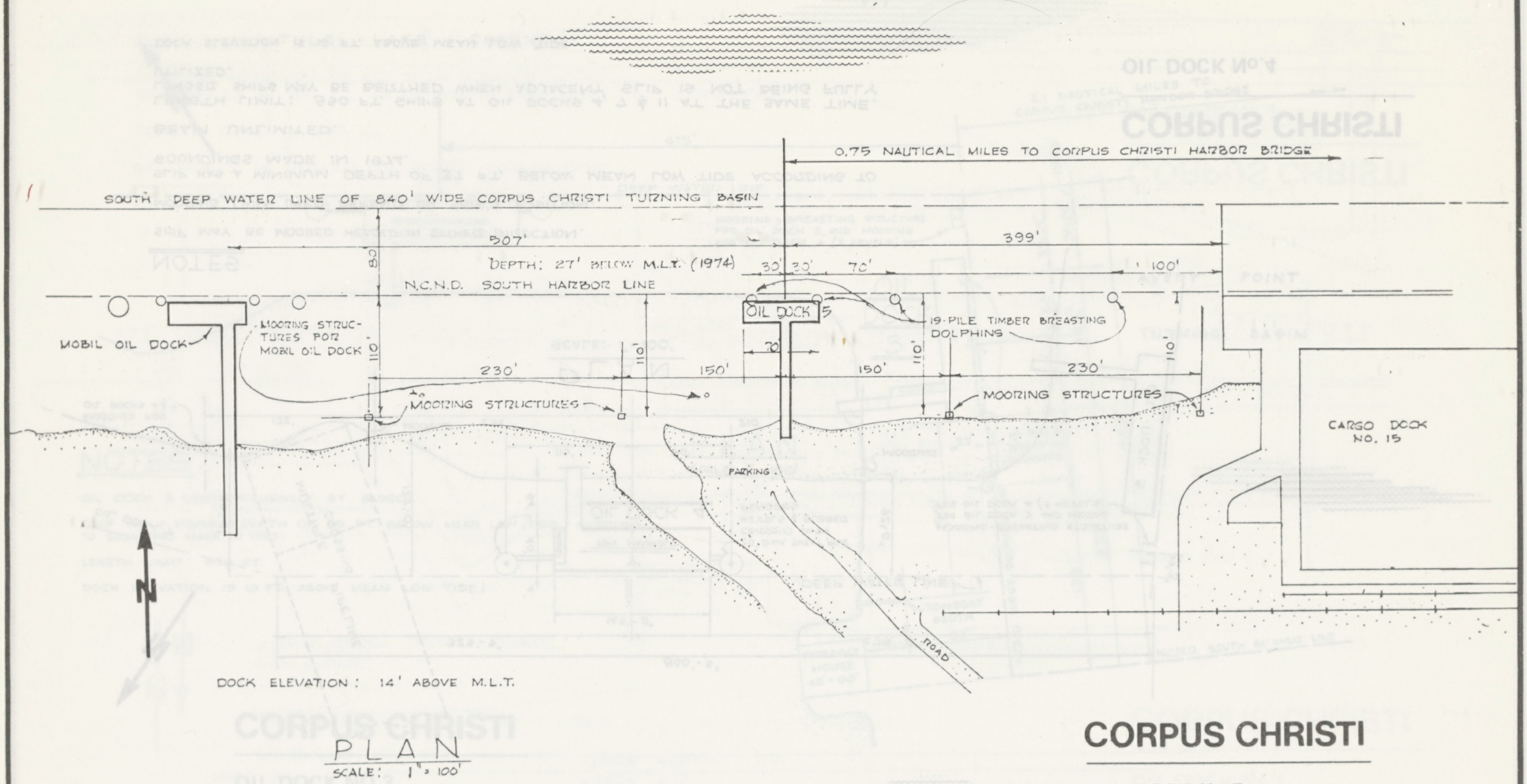
0.75 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE
SOUTH DEEP WATER LINE OF 840' WIDE CORPUS CHRISTI TURNING BASIN
507'
399'
80'
DEPTH: 27' BELOW M.L.T. (1974)
30' 30' 70'
100'
N.C.N.D. SOUTH HARBOR LINE
OIL DOCK 5
19-PILE TIMBER BREASTING DOLPHINS
MOBIL OIL DOCK
MOORING STRUCTURES FOR MOBIL OIL DOCK
110'
70'
110'
110'
230'
150'
150'
230'
MOORING STRUCTURES
MOORING STRUCTURES
CARGO DOCK NO. 15
PARKING
ROAD
N
DOCK ELEVATION: 14' ABOVE M.L.T.
PLAN
SCALE: 1" = 100'

CORPUS CHRISTI

OIL DOCK No.5

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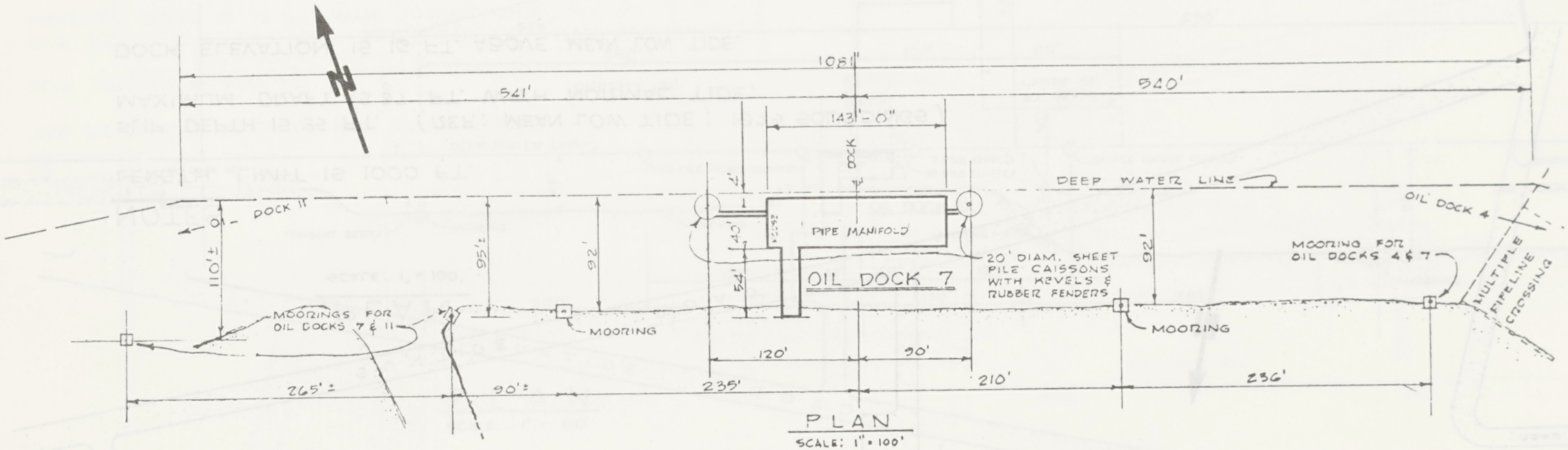
N
1081'
541'
540'
143'-0"
DOCK
4'
DEEP WATER LINE
OIL DOCK 4
O - DOCK 11
110'±
95'±
92'
40'
54'
PIPE MANIFOLD
OIL DOCK 7
20' DIAM. SHEET PILE CAISSONS WITH KEVELS & RUBBER FENDERS
92'
MOORING FOR OIL DOCKS 4 & 7
MULTIPLE PIPELINE CROSSING
MOORINGS FOR OIL DOCKS 7 & 11
MOORING
MOORING
120'
90'
265'±
90'±
235'
210'
236'

PLAN
SCALE: 1" = 100'

NOTES

SHIP MAY BE MOORED HEADED IN EITHER DIRECTION.

MOORING LINES USED DEPEND ON SHIP'S POSITION

SLIP HAS A MINIMUM DEPTH OF 36 FT. BELOW MEAN LOW TIDE ACCORDING TO SOUNDINGS MADE IN 1976.

BEAM UNLIMITED.

LENGTH LIMIT: 850 FT. SHIPS AT OIL DOCKS 4, 7 & 11 AT THE SAME TIME. LONGER SHIPS MAY BE BERTHED WHEN ADJACENT SLIP IS NOT BEING FULLY UTILIZED.

DOCK ELEVATION IS 16 FT. ABOVE MEAN LOW TIDE.

CORPUS CHRISTI

OIL DOCK No.7

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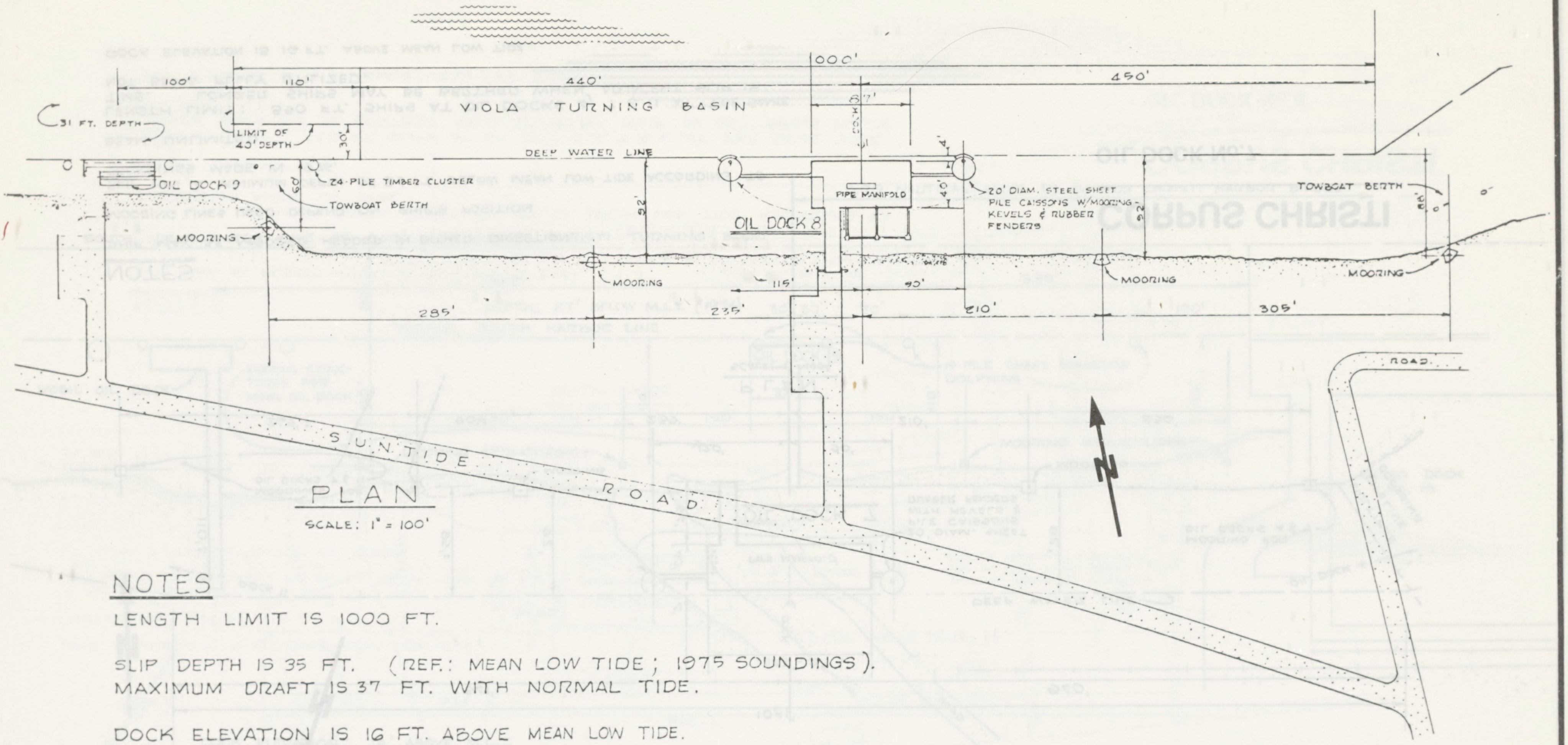
100'
110'
440'
1000'
450'
VIOLA TURNING BASIN
31 FT. DEPTH
LIMIT OF 40' DEPTH
30'
DEEP WATER LINE
OIL DOCK 9
24 PILE TIMBER CLUSTER
TOWBOAT BERTH
60'
92'
MOORING
OIL DOCK 8
PIPE MANIFOLD
37'
40'
20' DIAM. STEEL SHEET PILE CAISSONS W/MOORING KEVELS & RUBBER FENDERS
TOWBOAT BERTH
MOORING
MOORING
MOORING
115
90'
285'
235'
210'
305'
ROAD
SUNTIDE ROAD
N

PLAN

SCALE: 1" = 100'

NOTES

LENGTH LIMIT IS 1000 FT.

SLIP DEPTH IS 35 FT. (REF.: MEAN LOW TIDE; 1975 SOUNDINGS).
MAXIMUM DRAFT IS 37 FT. WITH NORMAL TIDE.

DOCK ELEVATION IS 16 FT. ABOVE MEAN LOW TIDE.

CORPUS CHRISTI

OIL DOCK No.8

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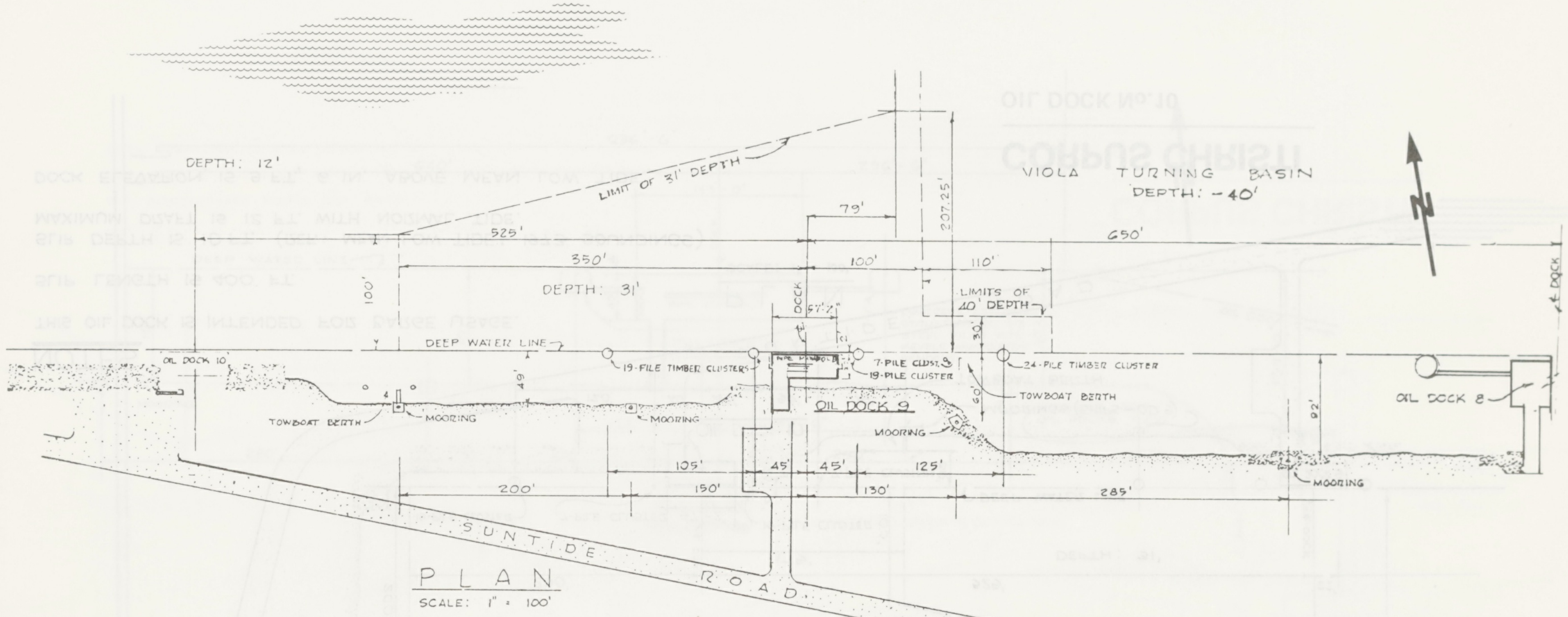
DEPTH: 12'
LIMIT OF 31' DEPTH
VIOLA TURNING BASIN
DEPTH: -40'
N
525'
79'
207.25'
650'
350'
100'
110'
℄ DOCK
100'
DEPTH: 31'
℄ DOCK
57'-7"
LIMITS OF
40' DEPTH
30'
DEEP WATER LINE
OIL DOCK 10
19-PILE TIMBER CLUSTERS
PIPE MANIFOLD
7-PILE CLUST. ℄
19-PILE CLUSTER
24-PILE TIMBER CLUSTER
TOWBOAT BERTH
OIL DOCK 8
49'
OIL DOCK 9
60'
92'
TOWBOAT BERTH
MOORING
MOORING
MOORING
MOORING
105'
45'
45'
125'
200'
150'
130'
285'
SUNTIDE ROAD

PLAN
SCALE: 1" = 100'

NOTES

LENGTH LIMIT IS DETERMINED BY LENGTH OF SHIP BERTHED AT OIL DOCK 8; OTHERWISE THE 350 FT. DIMENSION FROM ℄ DOCK TO WEST END OF SLIP WOULD DETERMINE MAX. LENGTH, HOWEVER 1973 SOUNDINGS SHOW WEST 75 FT. SILTED IN.

SLIP DEPTH IS 31 FT. (REF.: MEAN LOW TIDE; 1973 SOUNDINGS)

MAXIMUM DRAFT IS 33 FT. WITH NORMAL TIDE.

DOCK ELEVATION IS 9 FT.-6 IN. ABOVE MEAN LOW TIDE.

CORPUS CHRISTI

OIL DOCK No.9

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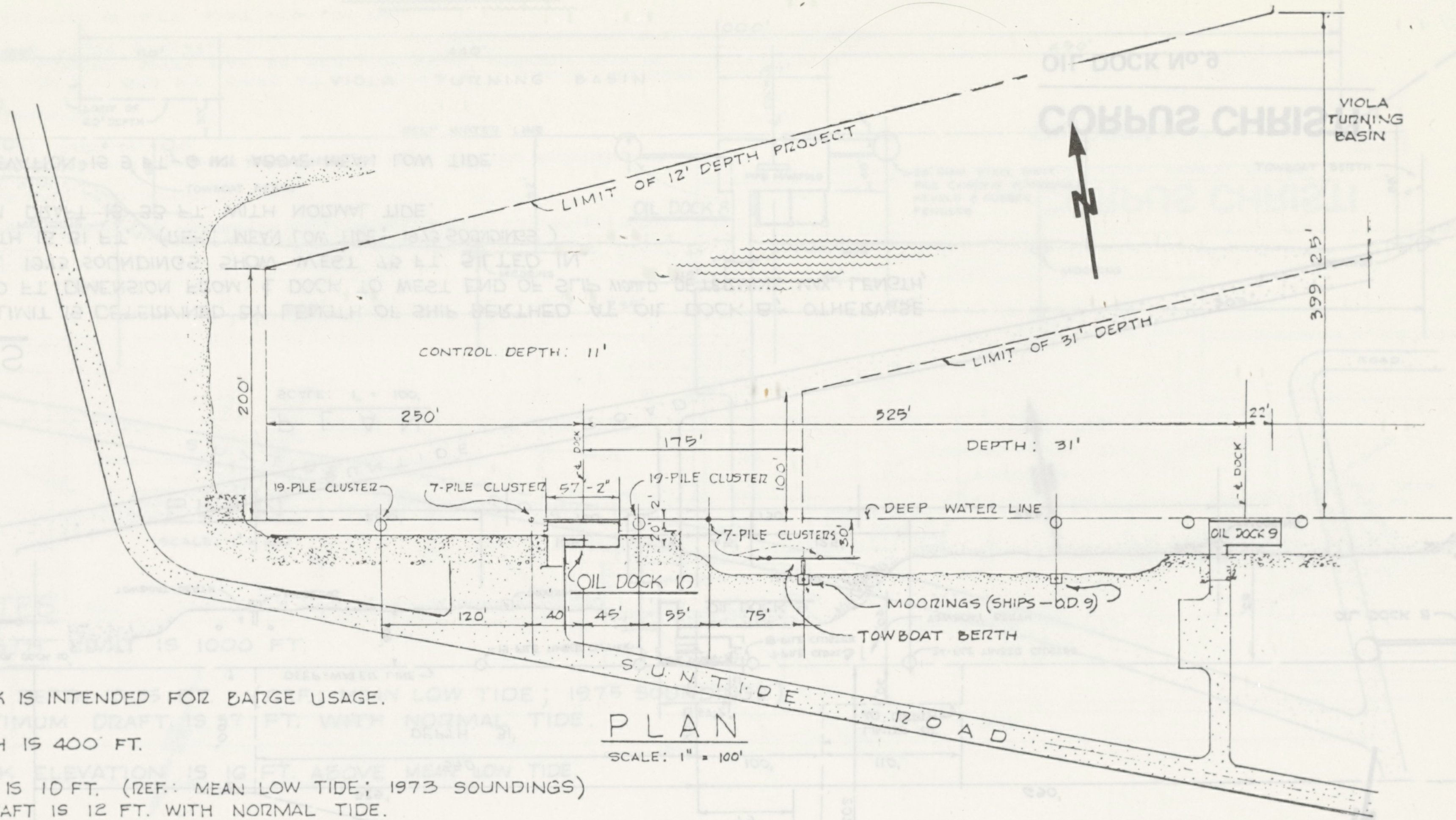
P938


LIMIT OF 12' DEPTH PROJECT
VIOLA TURNING BASIN
N
399'
25'
LIMIT OF 31' DEPTH
CONTROL DEPTH: 11'
200'
250'
175'
525'
22'
DEPTH: 31'
℄ DOCK
℄ DOCK
100'
19-PILE CLUSTER
7-PILE CLUSTER
57'-2"
19-PILE CLUSTER
20'
DEEP WATER LINE
7-PILE CLUSTERS
30'
OIL DOCK 9
OIL DOCK 10
MOORINGS (SHIPS - O.D. 9)
120'
40'
45'
55'
75'
TOWBOAT BERTH
SUNTIDE ROAD

PLAN

SCALE: 1" = 100'

NOTES

THIS OIL DOCK IS INTENDED FOR BARGE USAGE.

SLIP LENGTH IS 400' FT.

SLIP DEPTH IS 10 FT. (REF: MEAN LOW TIDE; 1973 SOUNDINGS)
MAXIMUM DRAFT IS 12 FT. WITH NORMAL TIDE.

DOCK ELEVATION IS 9 FT., 6 IN. ABOVE MEAN LOW TIDE.

CORPUS CHRISTI

OIL DOCK No.10

U.S.A.

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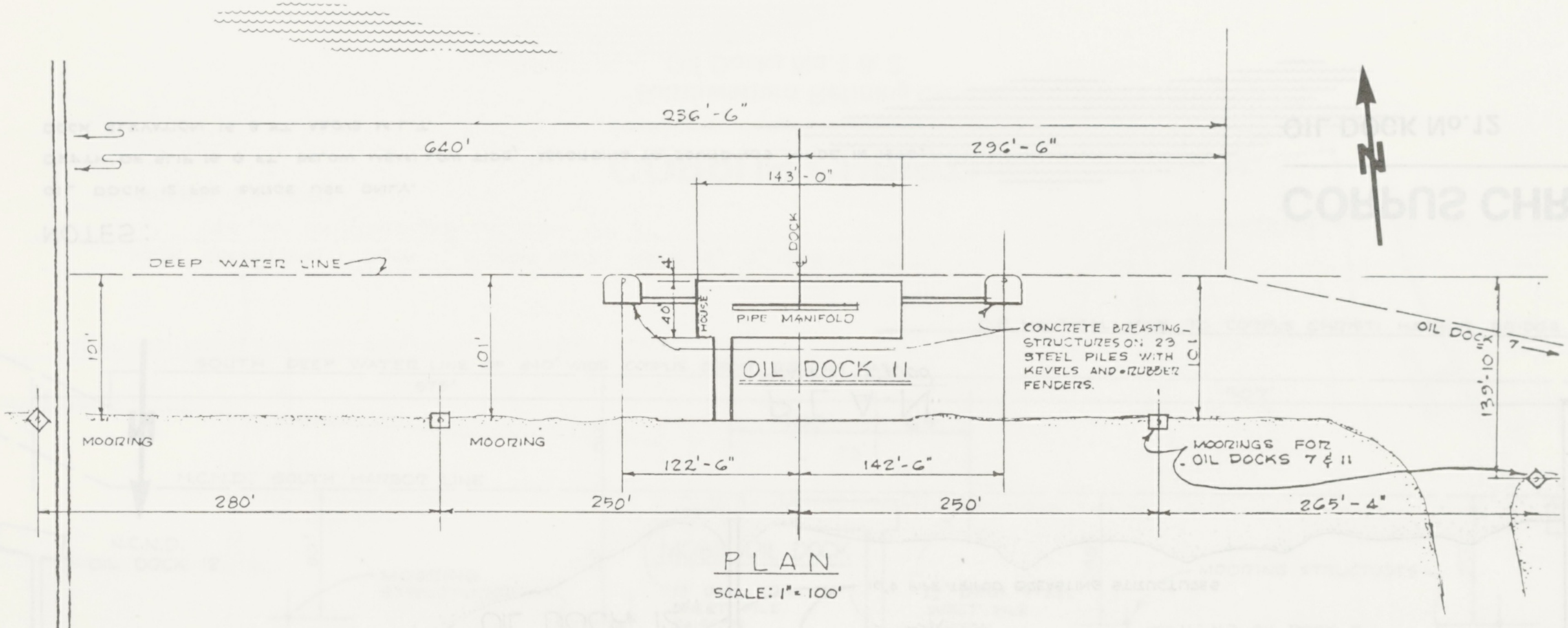
N
236'-6"
640'
296'-6"
143'-0"
DOCK
DEEP WATER LINE
4'
40'
HOUSE
PIPE MANIFOLD
101'
101'
101'
OIL DOCK 11
CONCRETE BREASTING STRUCTURES ON 23 STEEL PILES WITH KEVELS AND RUBBER FENDERS
OIL DOCK 7
139'-10"
MOORING
MOORING
MOORINGS FOR OIL DOCKS 7 & 11
122'-6"
142'-6"
280'
250'
250'
265'-4"
PLAN
SCALE: 1" = 100'

NOTES

SHIP MAY BE MOORED HEADED IN EITHER DIRECTION.

MOORING LINES USED DEPEND ON SHIP'S POSITION.

SLIP HAS A MINIMUM DEPTH OF 37 FT. BELOW MEAN LOW TIDE ACCORDING TO SOUNDINGS MADE IN 1973.

BEAM UNLIMITED.

LENGTH LIMIT: 850 FT. SHIPS AT OIL DOCKS 4, 7 & 11 AT THE SAME TIME. LONGER SHIPS MAY BE BERTHED WHEN ADJACENT SLIP IS NOT BEING FULLY UTILIZED.

DOCK ELEVATION IS 16 FT. ABOVE MEAN LOW TIDE.

CORPUS CHRISTI

OIL DOCK No.11

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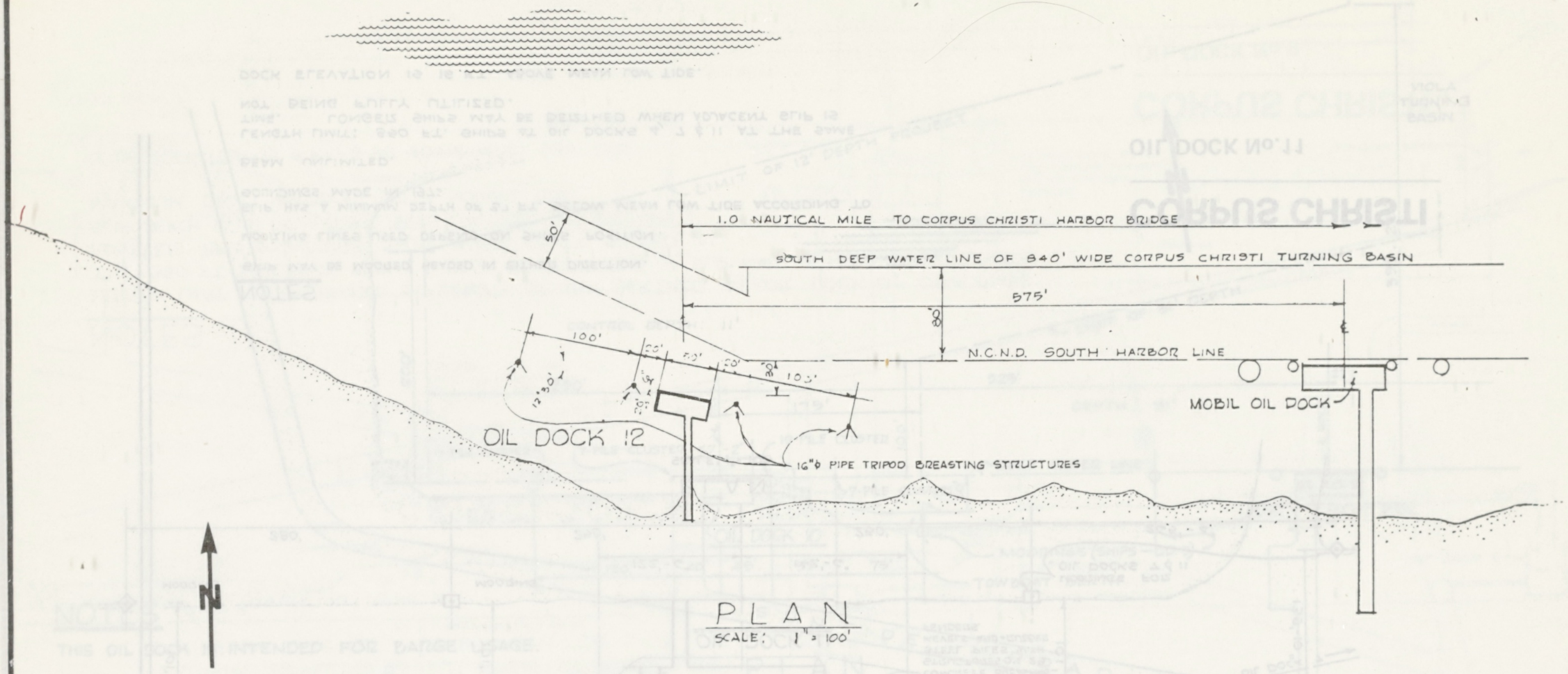
1.0 NAUTICAL MILE TO CORPUS CHRISTI HARBOR BRIDGE
SOUTH DEEP WATER LINE OF 840' WIDE CORPUS CHRISTI TURNING BASIN
575'
80'
50'
100'
20'
50'
20'
30'
105'
N.C.N.D. SOUTH HARBOR LINE
MOBIL OIL DOCK
OIL DOCK 12
16"φ PIPE TRIPOD BREASTING STRUCTURES
N

PLAN
SCALE: 1" = 100'

NOTES:

OIL DOCK 12 FOR BARGE USE ONLY.

DEPTH OF SLIP IS 9 FT. BELOW MEAN LOW TIDE, ACCORDING TO SOUNDINGS MADE IN 1974.

DOCK ELEVATION IS 8 FT. ABOVE M.L.T.

CORPUS CHRISTI

OIL DOCK No.12

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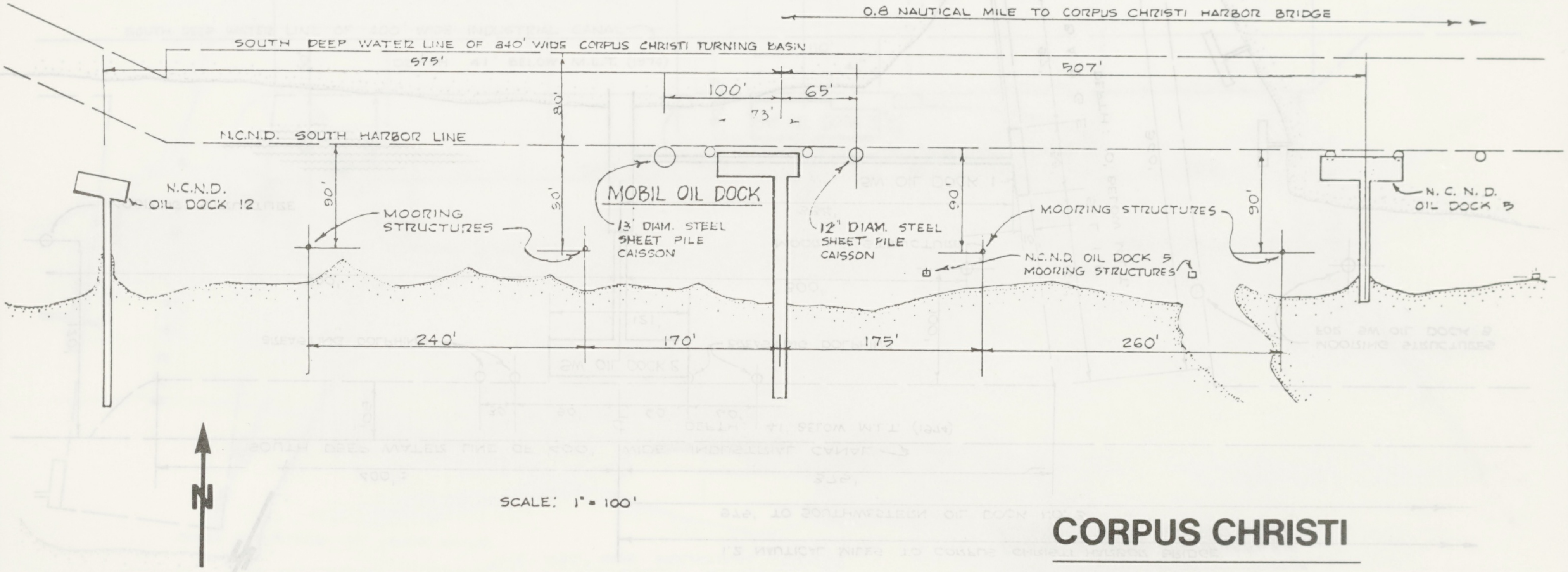
CORPUS CHRISTI

Mobil Oil Corp., Oil Dock


0.8 NAUTICAL MILE TO CORPUS CHRISTI HARBOR BRIDGE
SOUTH DEEP WATER LINE OF 840' WIDE CORPUS CHRISTI TURNING BASIN
575'
507'
100'
65'
73'
80'
N.C.N.D. SOUTH HARBOR LINE
N.C.N.D. OIL DOCK 12
90'
MOORING STRUCTURES
50'
MOBIL OIL DOCK
13' DIAM. STEEL SHEET PILE CAISSON
12' DIAM. STEEL SHEET PILE CAISSON
90'
MOORING STRUCTURES
N.C.N.D. OIL DOCK 5 MOORING STRUCTURES
90'
N. C. N. D. OIL DOCK 5
240'
170'
175'
260'
N
SCALE: 1" = 100'

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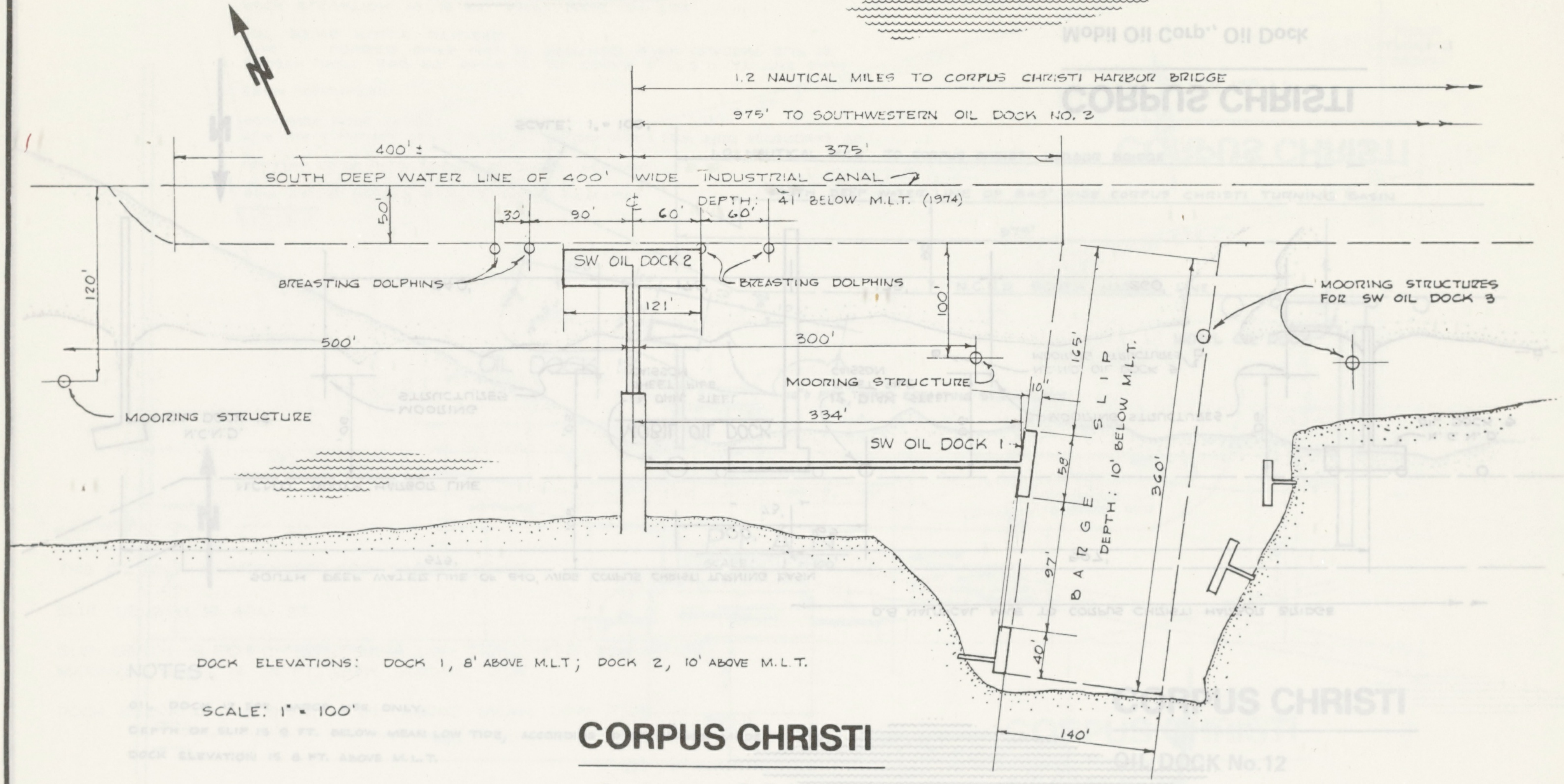
N
1.2 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE
975' TO SOUTHWESTERN OIL DOCK NO. 3
400' ±
375'
SOUTH DEEP WATER LINE OF 400' WIDE INDUSTRIAL CANAL
DEPTH: 41' BELOW M.L.T. (1974)
50'
30'
90'
℄
60'
60'
SW OIL DOCK 2
BREASTING DOLPHINS
BREASTING DOLPHINS
121'
120'
500'
300'
100'
MOORING STRUCTURES FOR SW OIL DOCK 3
MOORING STRUCTURE
MOORING STRUCTURE
334'
SW OIL DOCK 1
10'
165'
58'
97'
40'
BARGE SLIP
DEPTH: 10' BELOW M.L.T.
360'
140'
DOCK ELEVATIONS: DOCK 1, 8' ABOVE M.L.T; DOCK 2, 10' ABOVE M.L.T.
SCALE: 1" = 100'

CORPUS CHRISTI

Southwestern Refining Co.
Oil Docks No.1 & 2

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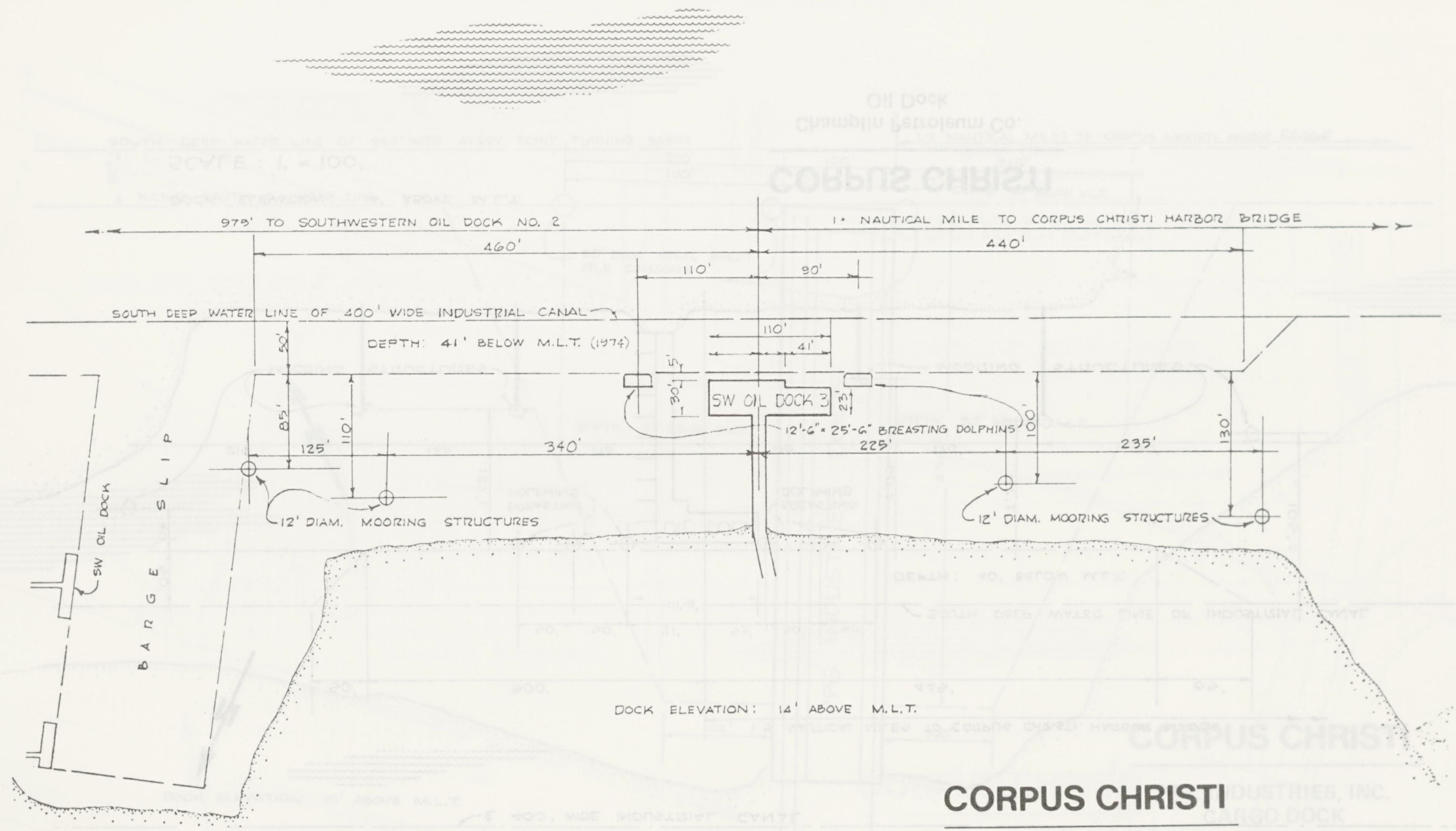
975' TO SOUTHWESTERN OIL DOCK NO. 2
1+ NAUTICAL MILE TO CORPUS CHRISTI HARBOR BRIDGE
460'
440'
110'
90'
SOUTH DEEP WATER LINE OF 400' WIDE INDUSTRIAL CANAL
110'
41'
DEPTH: 41' BELOW M.L.T. (1974)
50'
5'
30'
23'
85'
110'
SW OIL DOCK 3
12'-6" × 25'-6" BREASTING DOLPHINS
100'
130'
125'
340'
225'
235'
12' DIAM. MOORING STRUCTURES
12' DIAM. MOORING STRUCTURES
SW OIL DOCK
SW OIL DOCK
BARGE SLIP
DOCK ELEVATION: 14' ABOVE M.L.T.

PLAN
SCALE: 1" = 100'

CORPUS CHRISTI

Southwestern Refining Co.
Oil Dock No.3

P943

U.S.A.

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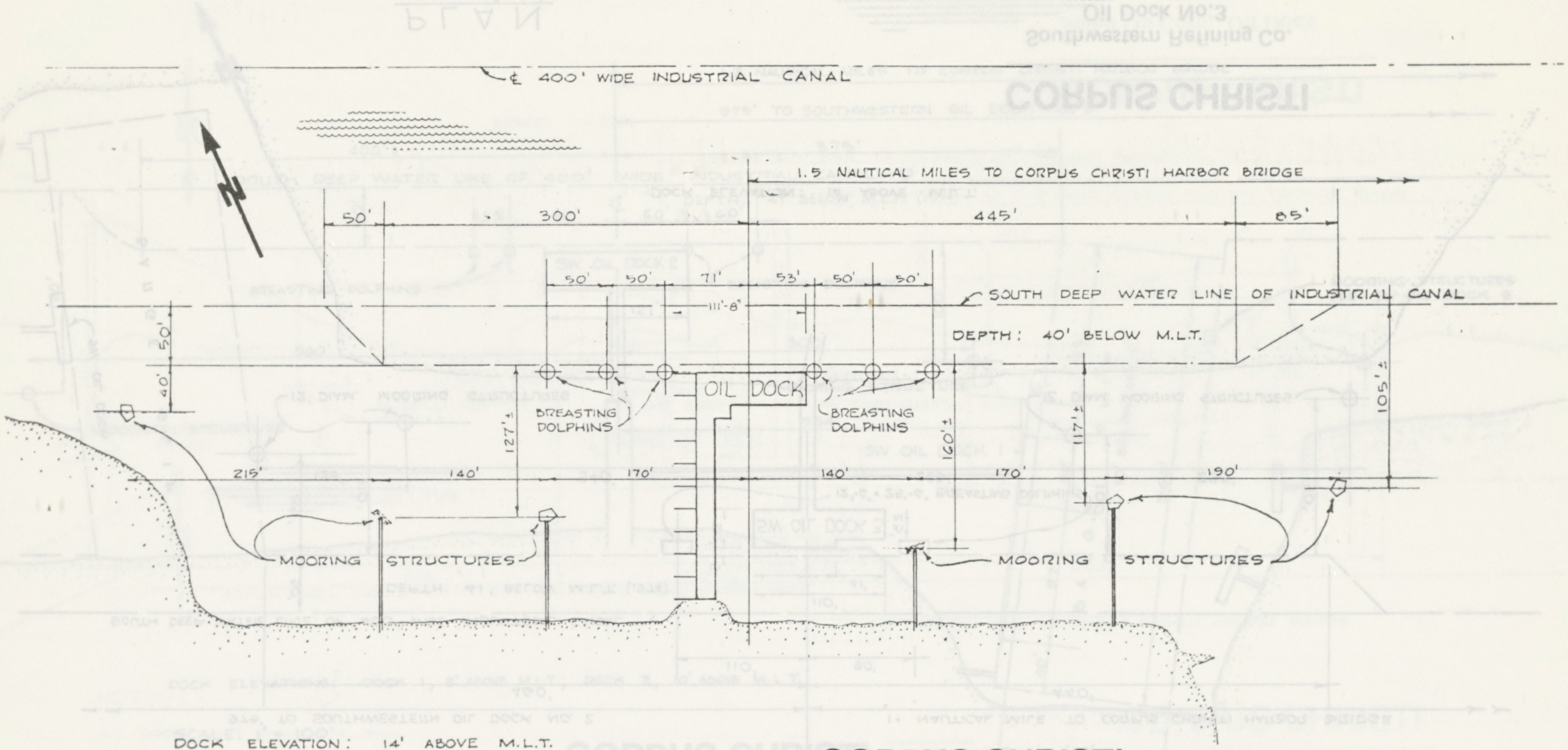
℄ 400' WIDE INDUSTRIAL CANAL
N
1.5 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE
50'
300'
445'
85'
50'
50'
71'
53'
50'
50'
111'-8"
SOUTH DEEP WATER LINE OF INDUSTRIAL CANAL
DEPTH: 40' BELOW M.L.T.
50'
40'
OIL DOCK
BREASTING DOLPHINS
BREASTING DOLPHINS
127' ±
160' ±
117' ±
105' ±
215'
140'
170'
140'
170'
190'
MOORING STRUCTURES
MOORING STRUCTURES

DOCK ELEVATION: 14' ABOVE M.L.T.

SCALE: 1" = 100'

CORPUS CHRISTI

Champlin Petroleum Co.
Oil Dock

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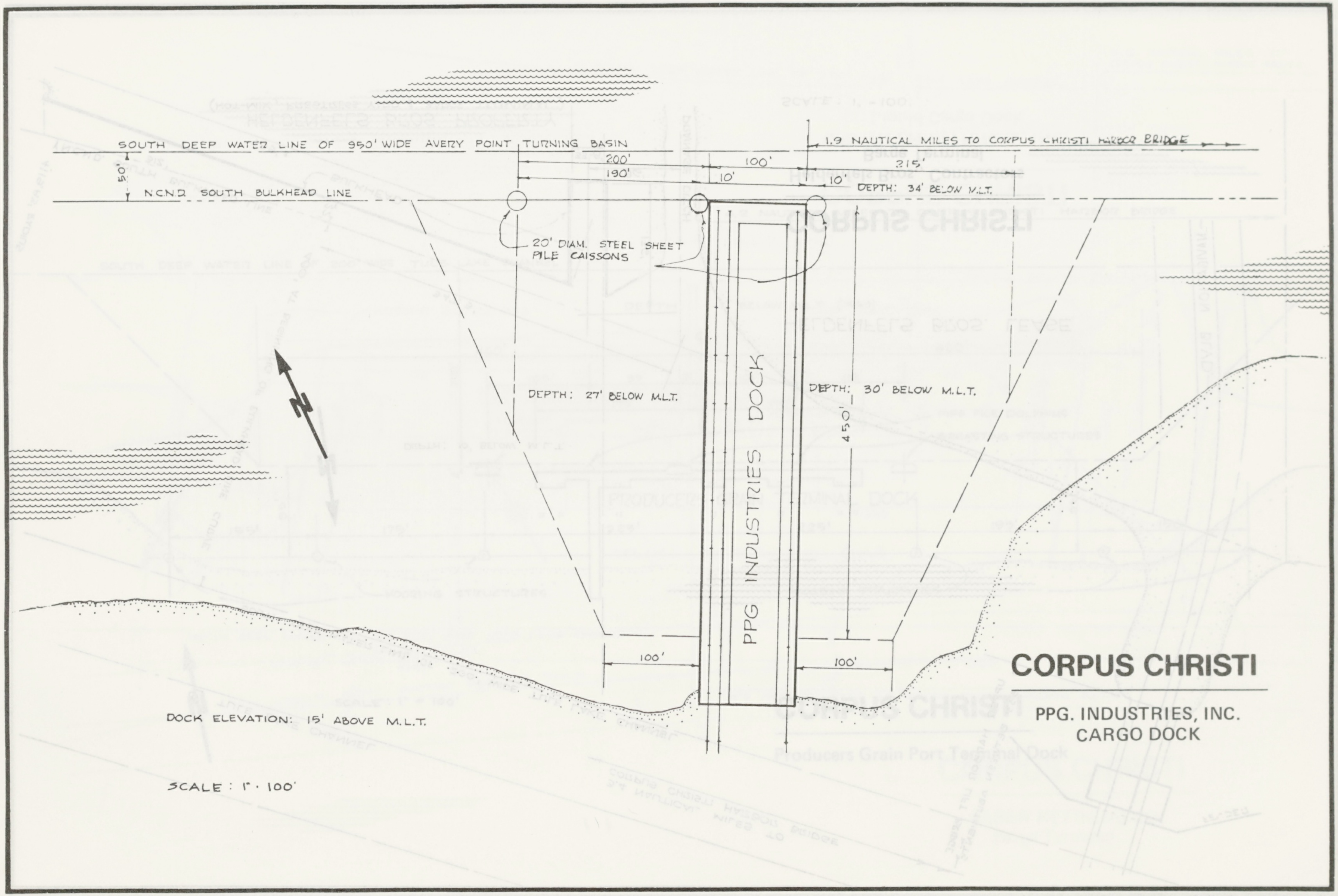
SOUTH DEEP WATER LINE OF 950' WIDE AVERY POINT TURNING BASIN
1.9 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE
50'
200'
190'
100'
10'
215'
10'
DEPTH: 34' BELOW M.L.T.
N.C.N.R. SOUTH BULKHEAD LINE
20' DIAM. STEEL SHEET PILE CAISSONS
N
DEPTH: 27' BELOW M.L.T.
PPG INDUSTRIES DOCK
DEPTH: 30' BELOW M.L.T.
450'
100'
100'
DOCK ELEVATION: 15' ABOVE M.L.T.
SCALE: 1" · 100'

CORPUS CHRISTI

PPG. INDUSTRIES, INC.
CARGO DOCK

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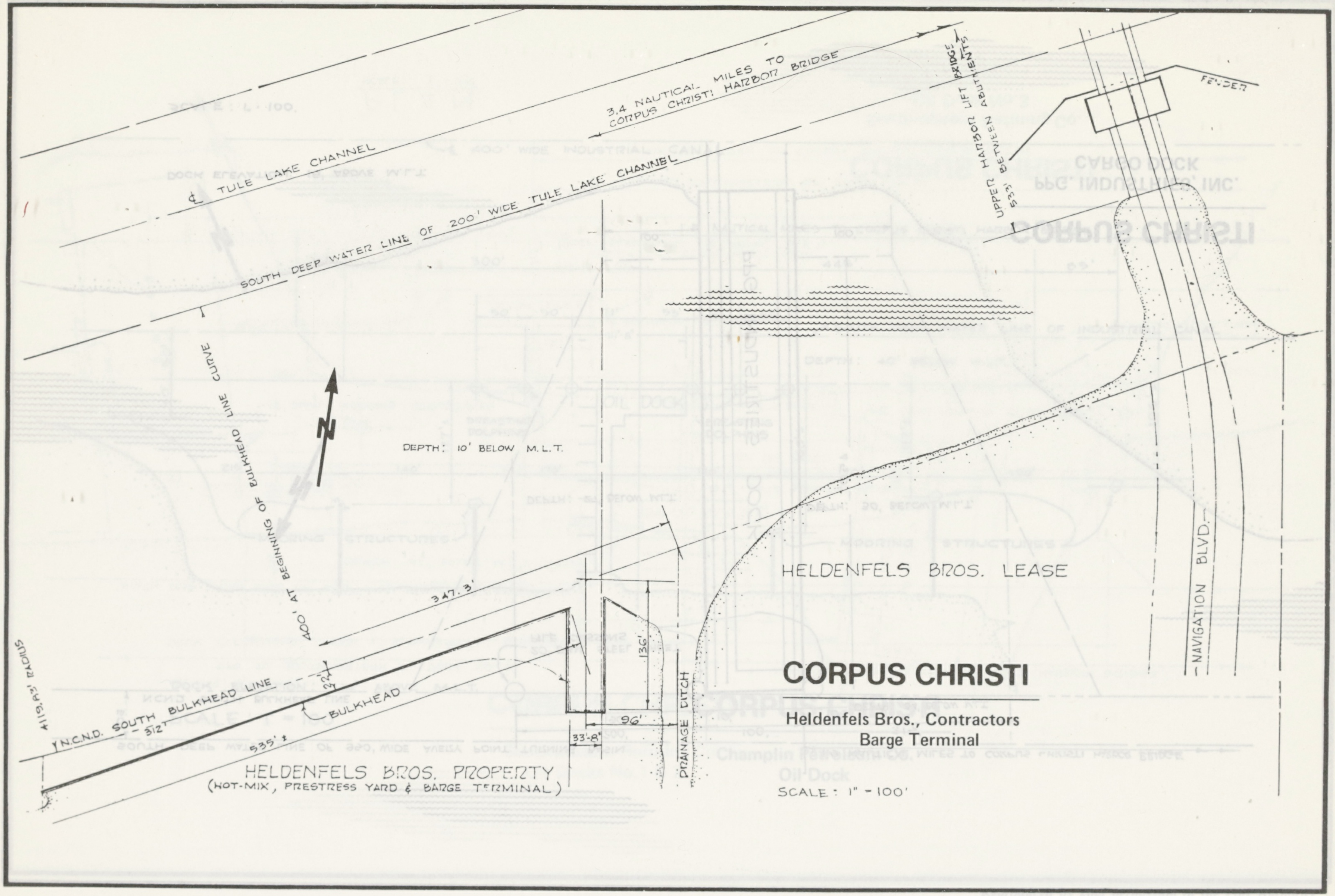
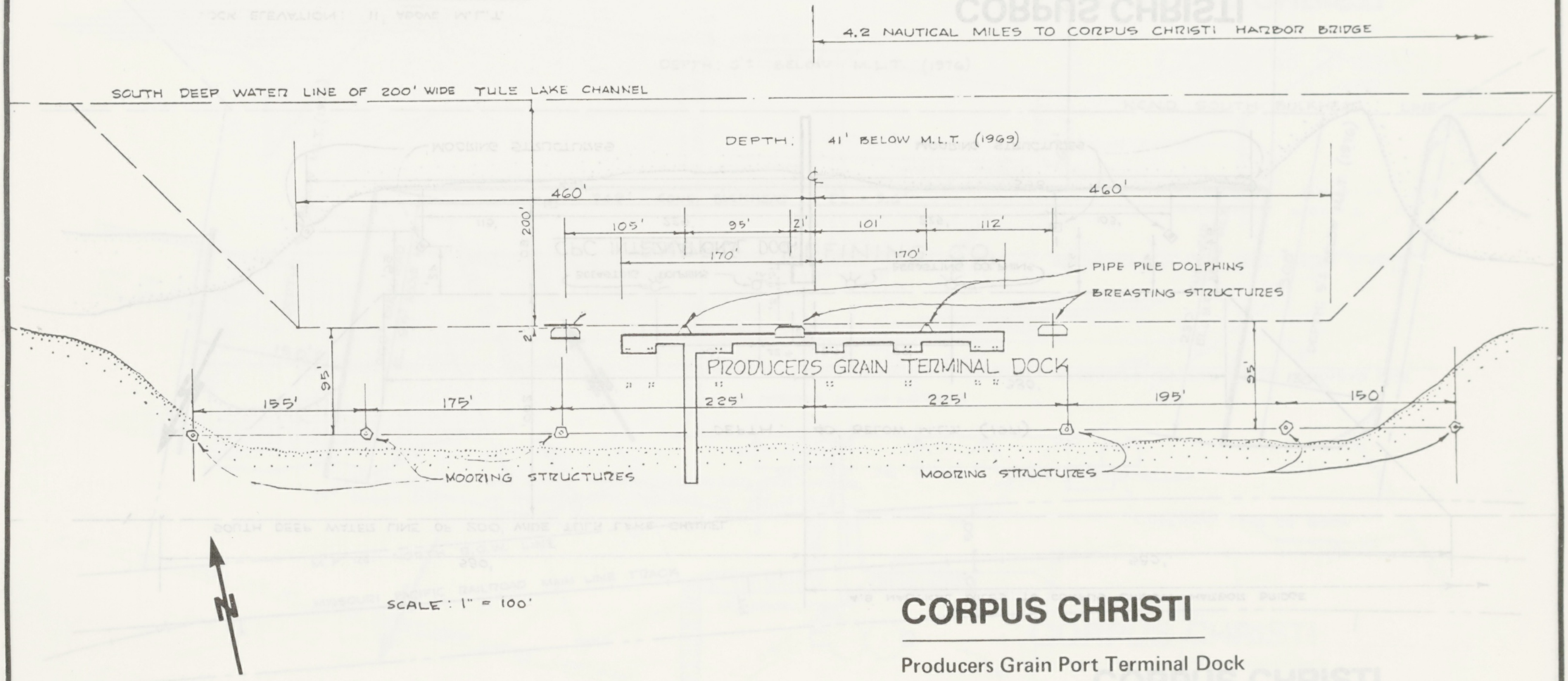

℄ TULE LAKE CHANNEL
3.4 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE
SOUTH DEEP WATER LINE OF 200' WIDE TULE LAKE CHANNEL
UPPER HARBOR LIFT BRIDGE 533' BETWEEN ABUTMENTS
FENDER
N
DEPTH: 10' BELOW M.L.T.
400' AT BEGINNING OF BULKHEAD LINE CURVE
347.3'
22'
Y.N.C.N.D. SOUTH BULKHEAD LINE
4119.83' RADIUS
2 - 312'
BULKHEAD
535' ±
136'
96'
33'-8"
DRAINAGE DITCH
HELDENFELS BROS. LEASE
HELDENFELS BROS. PROPERTY
(HOT-MIX, PRESTRESS YARD & BARGE TERMINAL)
NAVIGATION BLVD.

CORPUS CHRISTI

Heldenfels Bros., Contractors

Barge Terminal

SCALE: 1" - 100'


4.2 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE
SOUTH DEEP WATER LINE OF 200' WIDE TULE LAKE CHANNEL
DEPTH: 41' BELOW M.L.T. (1969)
℄
460'
460'
200'
105'
95'
21'
101'
112'
170'
170'
2'
PIPE PILE DOLPHINS
BREASTING STRUCTURES
PRODUCERS GRAIN TERMINAL DOCK
95'
95'
155'
175'
225'
225'
195'
150'
MOORING STRUCTURES
MOORING STRUCTURES
N
SCALE: 1" = 100'

CORPUS CHRISTI

Producers Grain Port Terminal Dock

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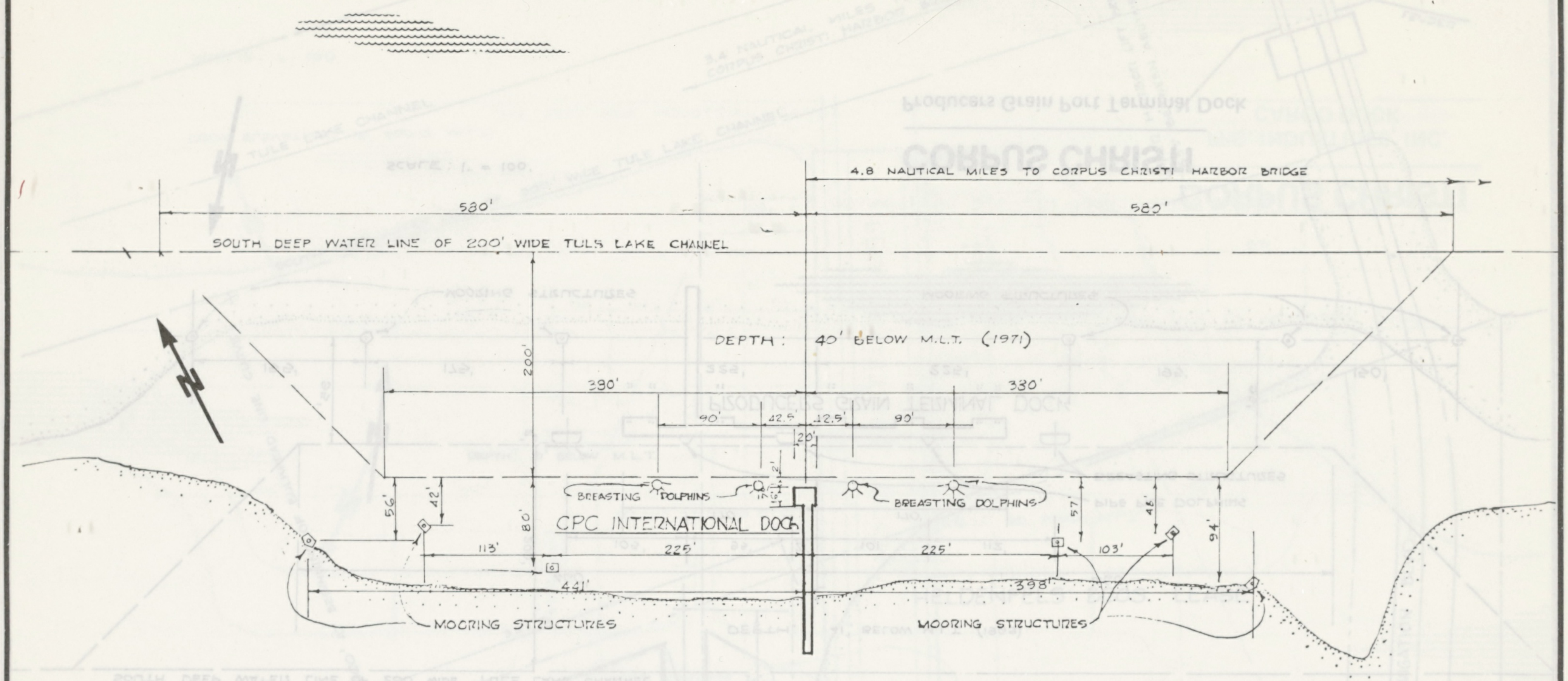
4.8 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE
580'
580'
SOUTH DEEP WATER LINE OF 200' WIDE TULS LAKE CHANNEL
200'
DEPTH: 40' BELOW M.L.T. (1971)
330'
330'
90'
42.5'
12.5'
90'
20'
12'
16'
BREASTING DOLPHINS
BREASTING DOLPHINS
CPC INTERNATIONAL DOCK
56'
42'
80'
57'
48'
94'
113'
225'
225'
103'
441'
398'
MOORING STRUCTURES
MOORING STRUCTURES

DOCK ELEVATION: 11' ABOVE M.L.T.

SCALE: 1" = 100'

CORPUS CHRISTI

CPC INTERNATIONAL, INC.
Liquid Cargo Dock

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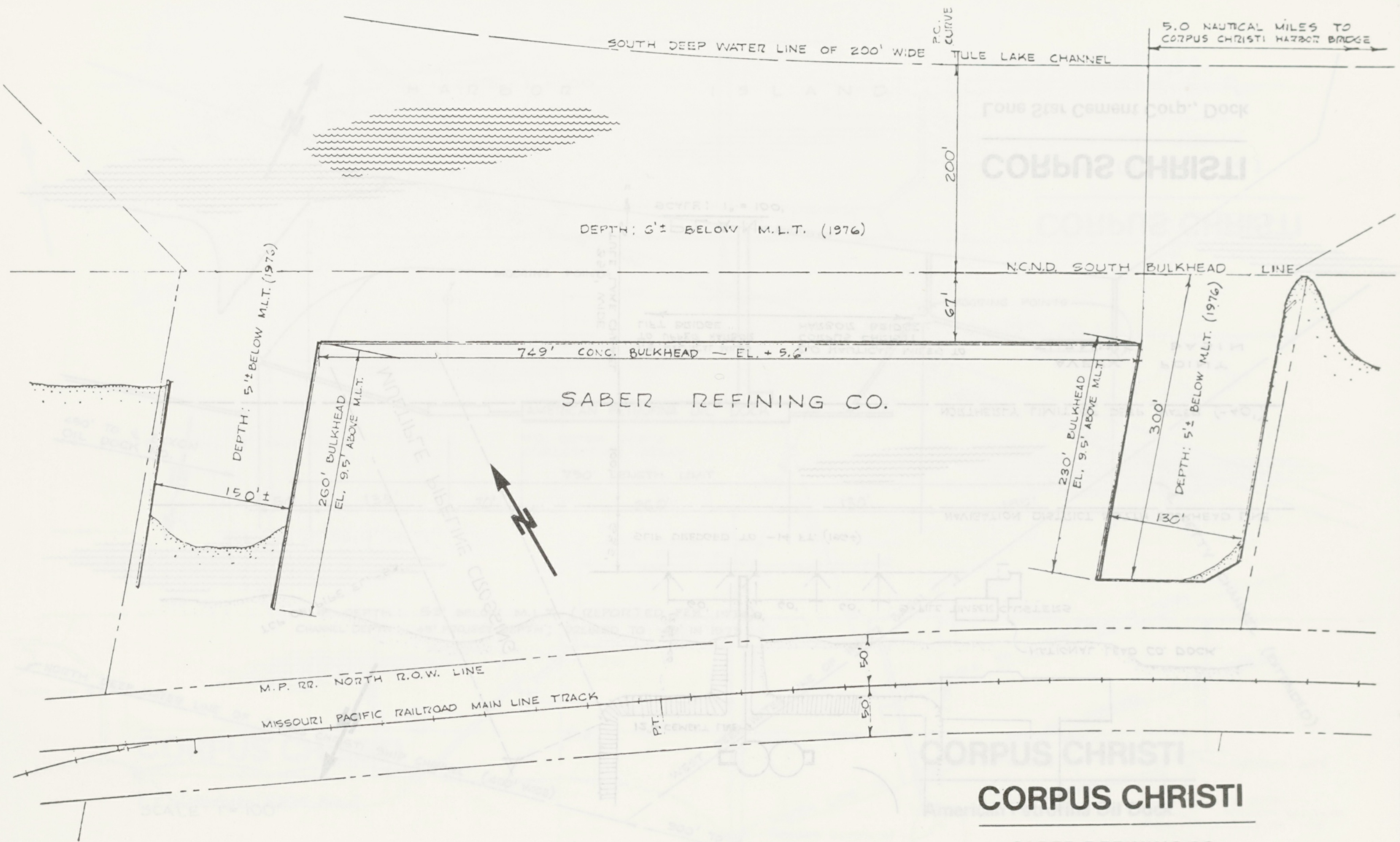
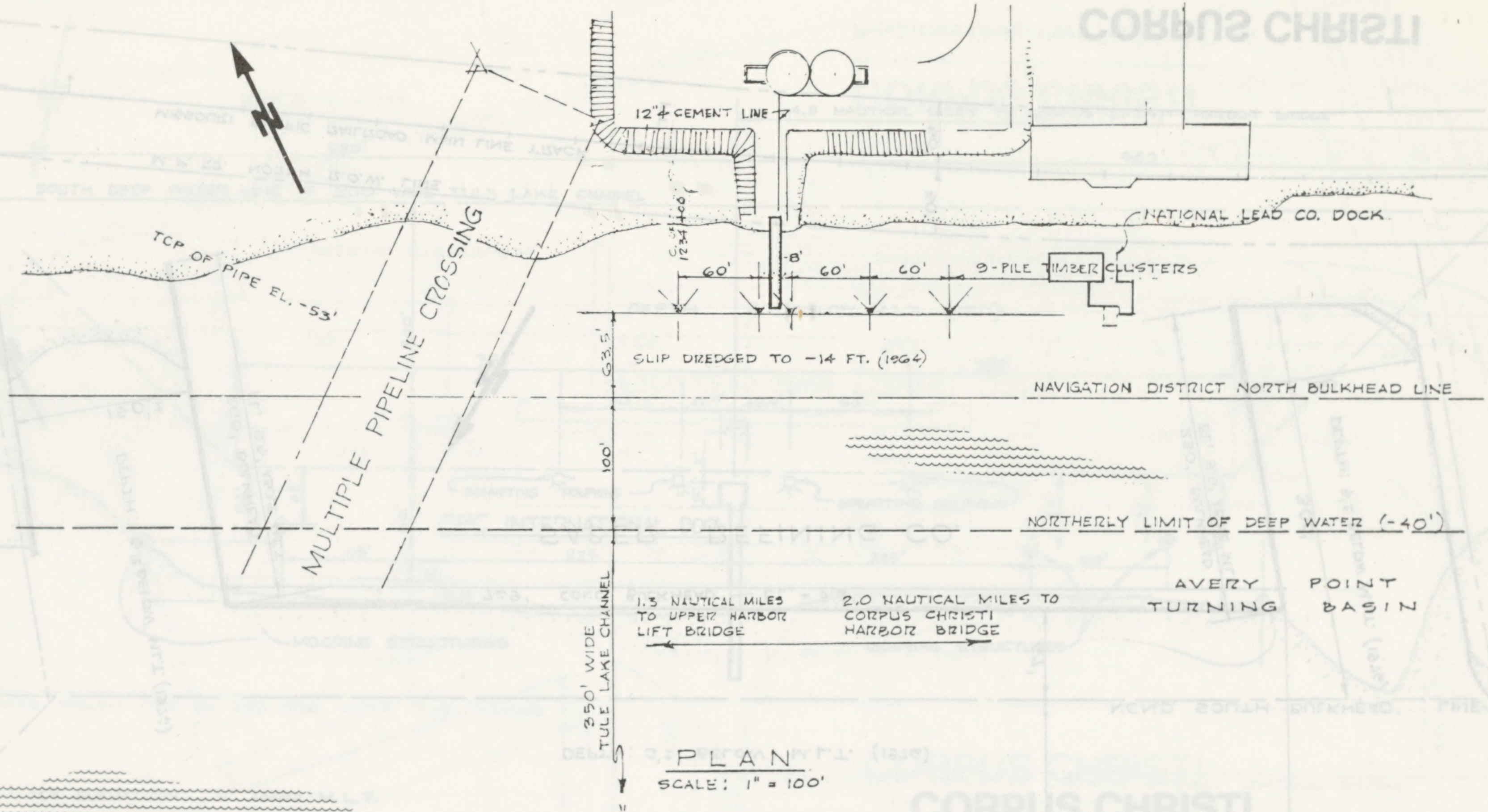

5.0 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE
SOUTH DEEP WATER LINE OF 200' WIDE TULE LAKE CHANNEL
P.C. CURVE
200'
DEPTH: 6'± BELOW M.L.T. (1976)
N.C.N.D. SOUTH BULKHEAD LINE
67'
749' CONC. BULKHEAD — EL. + 5.6'
SABER REFINING CO.
DEPTH: 5'± BELOW M.L.T. (1976)
260' BULKHEAD EL. 9.5' ABOVE M.L.T.
150'±
230' BULKHEAD EL. 9.5' ABOVE M.L.T.
300'
DEPTH: 5'± BELOW M.L.T. (1976)
130'
N
50'
50'
P.T.
M.P. RR. NORTH R.O.W. LINE
MISSOURI PACIFIC RAILROAD MAIN LINE TRACK

CORPUS CHRISTI

SABER REFINING CO.
Barge Terminal


N
12"⌀ CEMENT LINE
TOP OF PIPE EL. -53'
MULTIPLE PIPELINE CROSSING
C.L. 1234+00
NATIONAL LEAD CO. DOCK
-8'
60'
60'
60'
9-PILE TIMBER CLUSTERS
63.5'
SLIP DREDGED TO -14 FT. (1964)
NAVIGATION DISTRICT NORTH BULKHEAD LINE
100'
NORTHERLY LIMIT OF DEEP WATER (-40')
AVERY POINT
TURNING BASIN
1.3 NAUTICAL MILES TO UPPER HARBOR LIFT BRIDGE
2.0 NAUTICAL MILES TO CORPUS CHRISTI HARBOR BRIDGE
350' WIDE TULE LAKE CHANNEL
PLAN
SCALE: 1" = 100'

CORPUS CHRISTI

Lone Star Cement Corp., Dock

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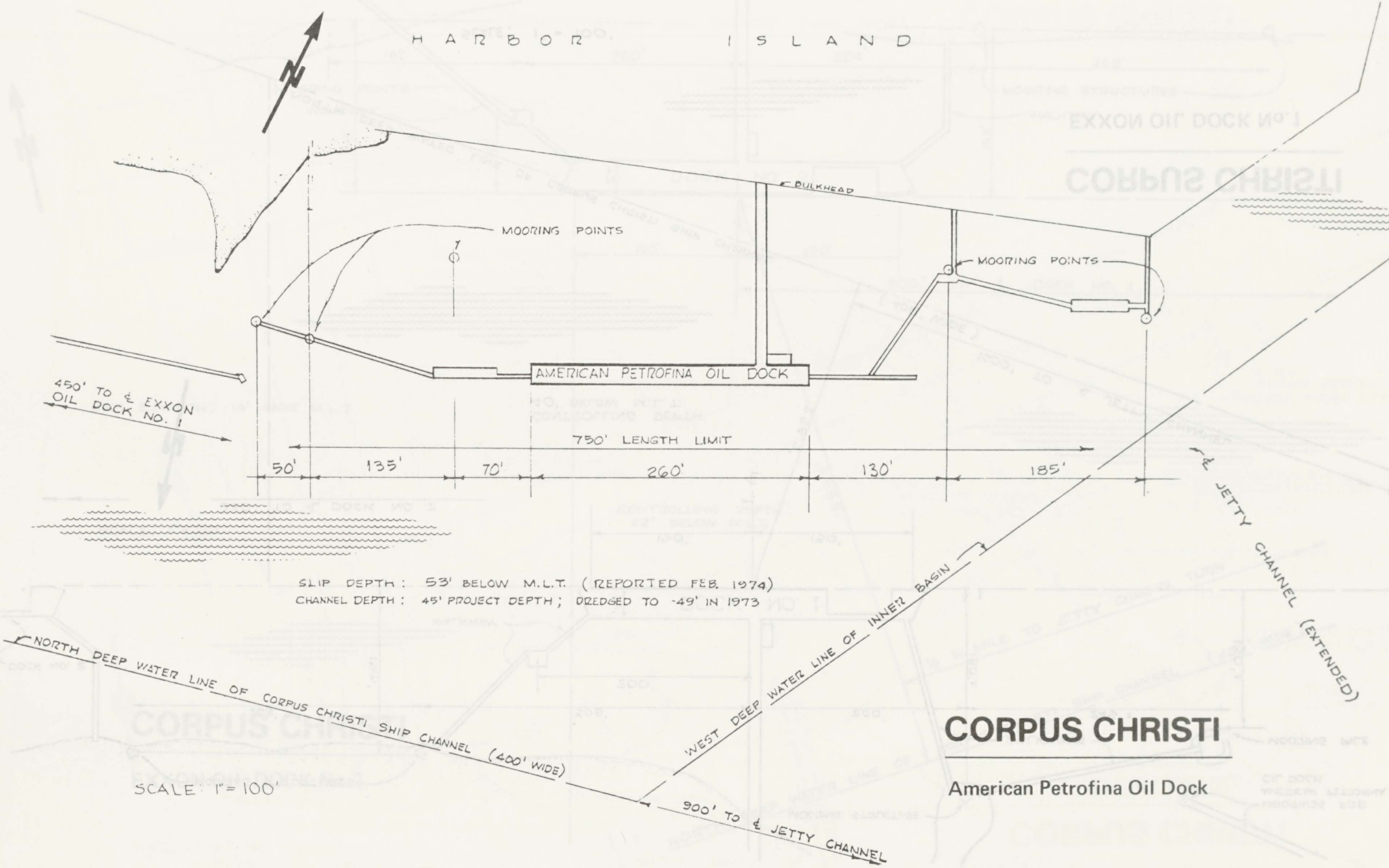
H A R B O R I S L A N D
BULKHEAD
MOORING POINTS
MOORING POINTS
AMERICAN PETROFINA OIL DOCK
450' TO ℄ EXXON OIL DOCK NO. 1
750' LENGTH LIMIT
50'
135'
70'
260'
130'
185'
℄ JETTY CHANNEL (EXTENDED)
SLIP DEPTH: 53' BELOW M.L.T. (REPORTED FEB. 1974)
CHANNEL DEPTH: 45' PROJECT DEPTH; DREDGED TO -49' IN 1973
WEST DEEP WATER LINE OF INNER BASIN
NORTH DEEP WATER LINE OF CORPUS CHRISTI SHIP CHANNEL (400' WIDE)
900' TO ℄ JETTY CHANNEL
SCALE: 1" = 100'

CORPUS CHRISTI

American Petrofina Oil Dock

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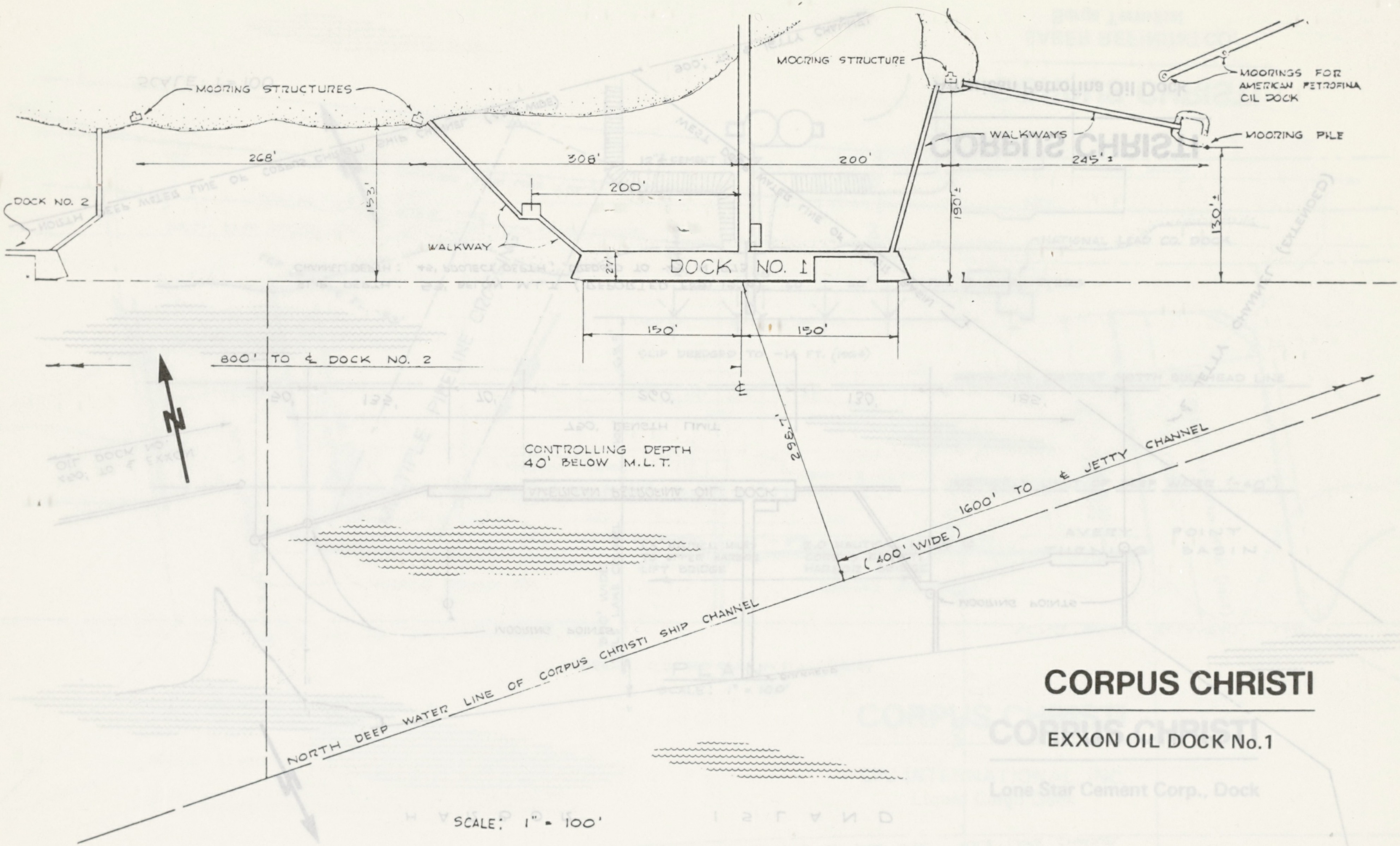
MOORING STRUCTURES
DOCK NO. 2
268'
153'
308'
200'
WALKWAY
27'
DOCK NO. 1
150'
150'
800' TO ℄ DOCK NO. 2
N
10'
298.7'
CONTROLLING DEPTH
40' BELOW M.L.T.
MOORING STRUCTURE
WALKWAYS
200'
190'±
245'±
130'±
MOORINGS FOR
AMERICAN PETROFINA
OIL DOCK
MOORING PILE
1600' TO ℄ JETTY CHANNEL
(400' WIDE)
NORTH DEEP WATER LINE OF CORPUS CHRISTI SHIP CHANNEL
SCALE: 1" = 100'

CORPUS CHRISTI

EXXON OIL DOCK No.1

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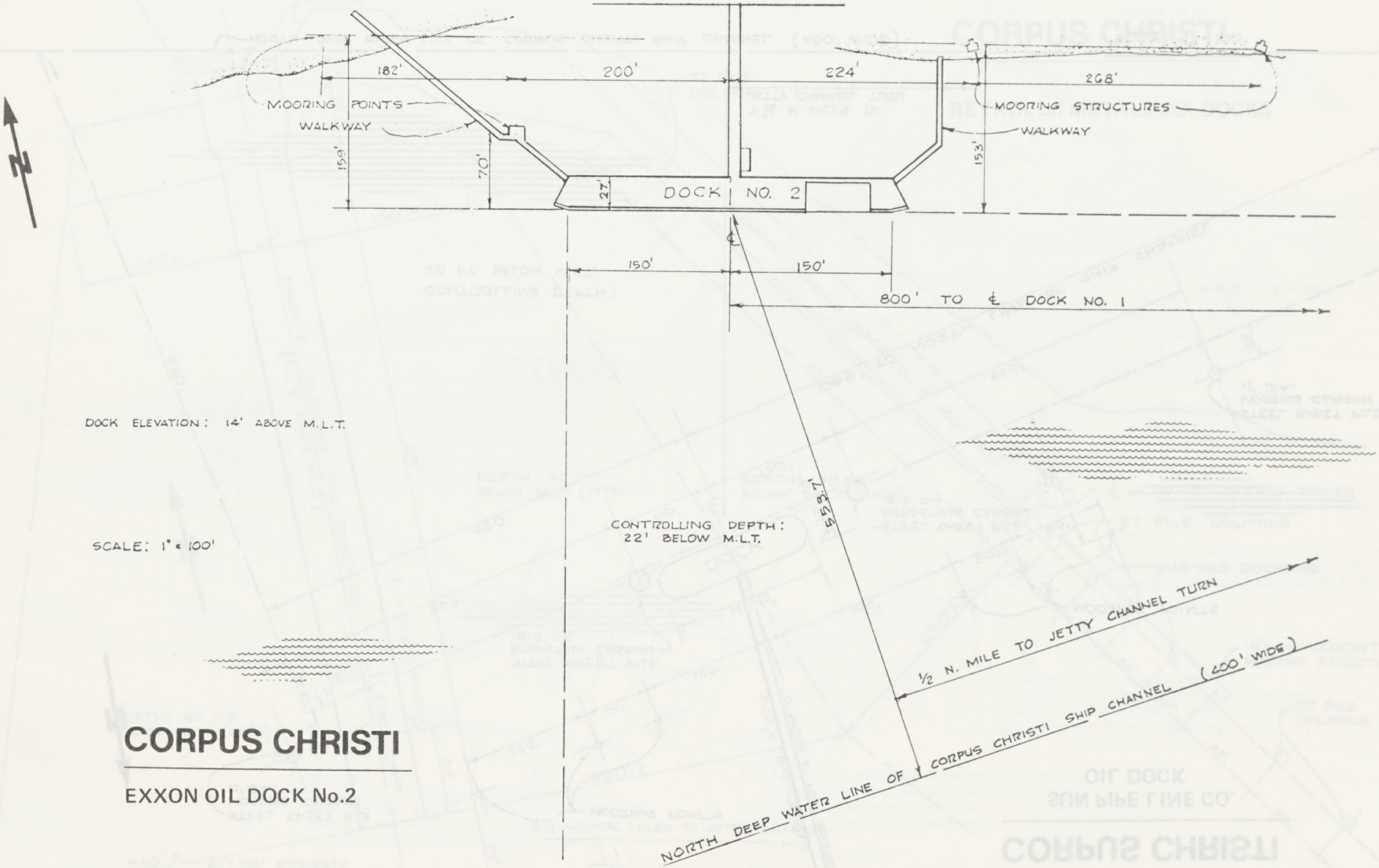
N
182'
200'
224'
268'
MOORING POINTS
WALKWAY
MOORING STRUCTURES
WALKWAY
159'
70'
27'
DOCK NO. 2
153'
150'
150'
800' TO ℄ DOCK NO. 1
DOCK ELEVATION: 14' ABOVE M.L.T.
SCALE: 1" = 100'
CONTROLLING DEPTH: 22' BELOW M.L.T.
553.7'
1/2 N. MILE TO JETTY CHANNEL TURN
NORTH DEEP WATER LINE OF CORPUS CHRISTI SHIP CHANNEL (400' WIDE)

CORPUS CHRISTI

EXXON OIL DOCK No.2

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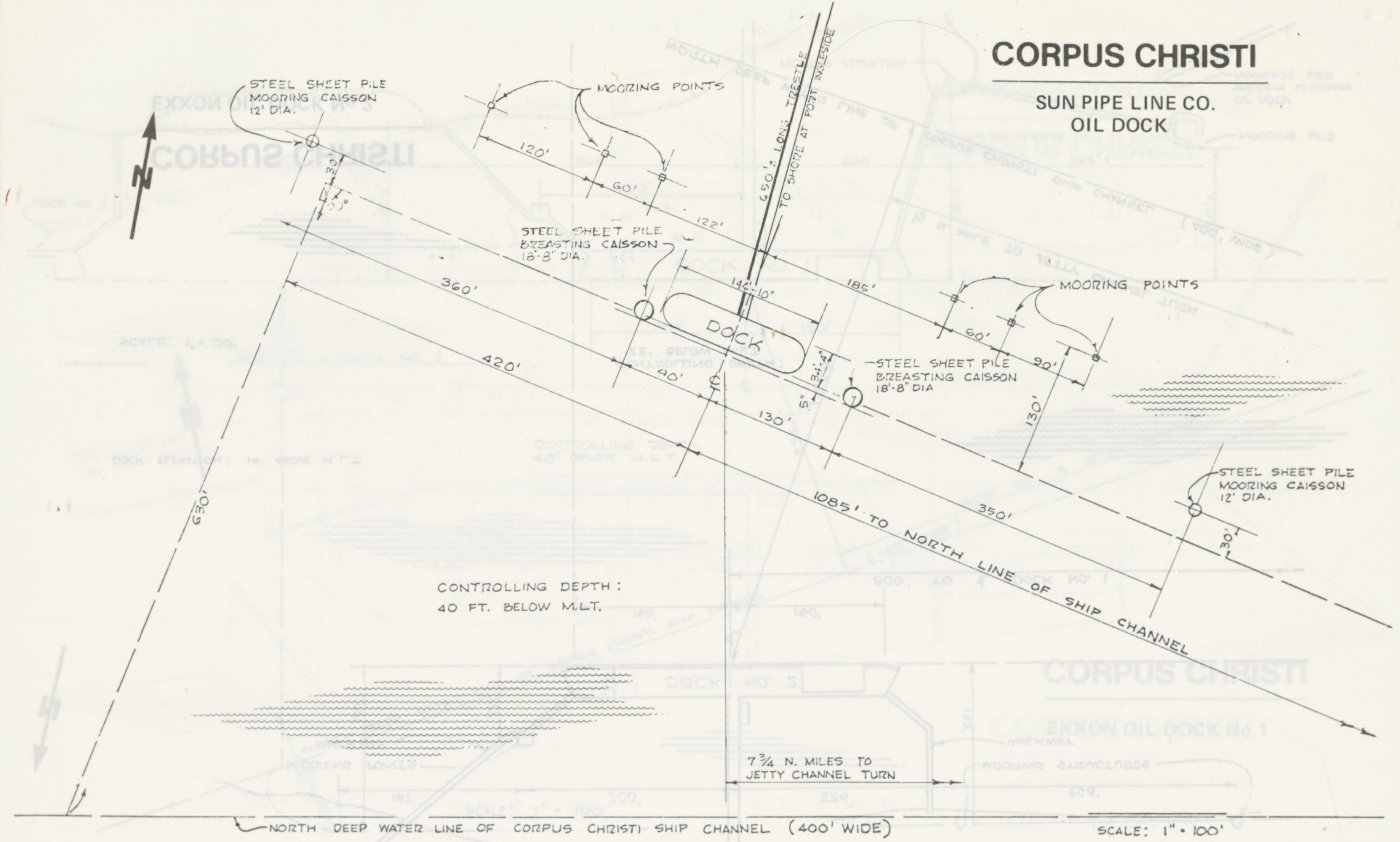
CORPUS CHRISTI

SUN PIPE LINE CO.
OIL DOCK


STEEL SHEET PILE
MOORING CAISSON
12' DIA.
MOORING POINTS
N
30'
30°
120'
60'
122'
650'± LONG TRESTLE
TO SHORE AT PORT INGLESIDE
STEEL SHEET PILE
BREASTING CAISSON
18'-8" DIA.
142'-10"
185'
DOCK
MOORING POINTS
60'
90'
360'
420'
90'
10'
34'-4"
5"
STEEL SHEET PILE
BREASTING CAISSON
18'-8" DIA
130'
130'
350'
1085' TO NORTH LINE OF SHIP CHANNEL
STEEL SHEET PILE
MOORING CAISSON
12' DIA.
30'
630'
CONTROLLING DEPTH :
40 FT. BELOW M.L.T.
7 3/4 N. MILES TO
JETTY CHANNEL TURN
NORTH DEEP WATER LINE OF CORPUS CHRISTI SHIP CHANNEL (400' WIDE)
SCALE: 1" = 100'

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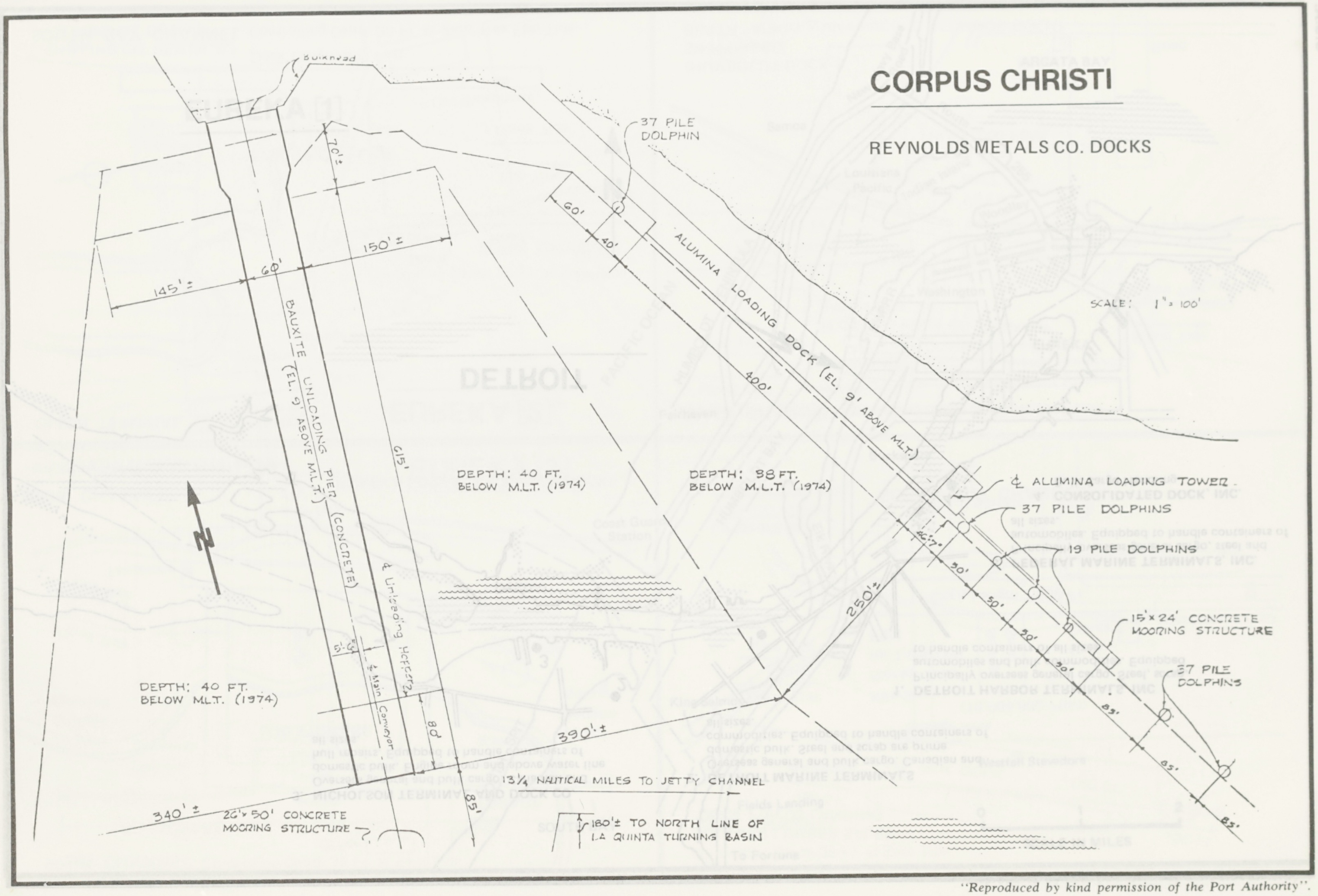
CORPUS CHRISTI

REYNOLDS METALS CO. DOCKS



Bulkhead
37 PILE DOLPHIN
70'±
60'
40'
150'±
145'±
60'
ALUMINA LOADING DOCK (EL 9' ABOVE M.L.T.)
400'
SCALE: 1" = 100'
BAUXITE UNLOADING PIER (EL 9' ABOVE M.L.T.) (CONCRETE)
615'
℄ Unloading Hoppers
℄ Main Conveyor
5'-3"
80'
DEPTH: 40 FT. BELOW M.L.T. (1974)
DEPTH: 38 FT. BELOW M.L.T. (1974)
DEPTH: 40 FT. BELOW M.L.T. (1974)
N
℄ ALUMINA LOADING TOWER
37 PILE DOLPHINS
19 PILE DOLPHINS
15'x24' CONCRETE MOORING STRUCTURE
37 PILE DOLPHINS
57.7'
50'
50'
50'
50'
85'
85'
85'
250'±
390'±
340'±
85'
13½ NAUTICAL MILES TO JETTY CHANNEL
26'x50' CONCRETE MOORING STRUCTURE
180'± TO NORTH LINE OF LA QUINTA TURNING BASIN

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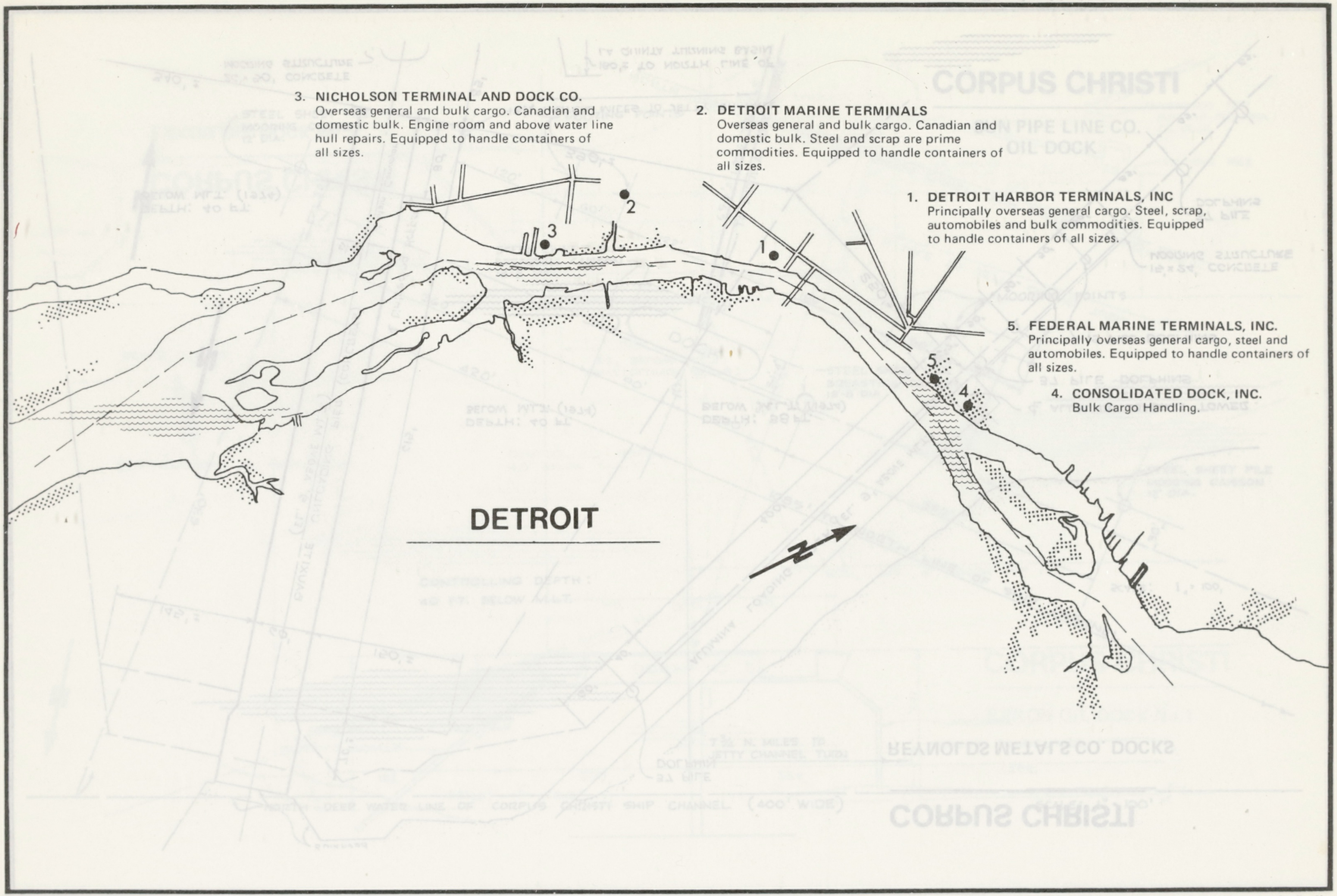

3. NICHOLSON TERMINAL AND DOCK CO.
Overseas general and bulk cargo. Canadian and domestic bulk. Engine room and above water line hull repairs. Equipped to handle containers of all sizes.

2. DETROIT MARINE TERMINALS
Overseas general and bulk cargo. Canadian and domestic bulk. Steel and scrap are prime commodities. Equipped to handle containers of all sizes.

1. DETROIT HARBOR TERMINALS, INC
Principally overseas general cargo. Steel, scrap, automobiles and bulk commodities. Equipped to handle containers of all sizes.

5. FEDERAL MARINE TERMINALS, INC.
Principally overseas general cargo, steel and automobiles. Equipped to handle containers of all sizes.

4. CONSOLIDATED DOCK, INC.
Bulk Cargo Handling.

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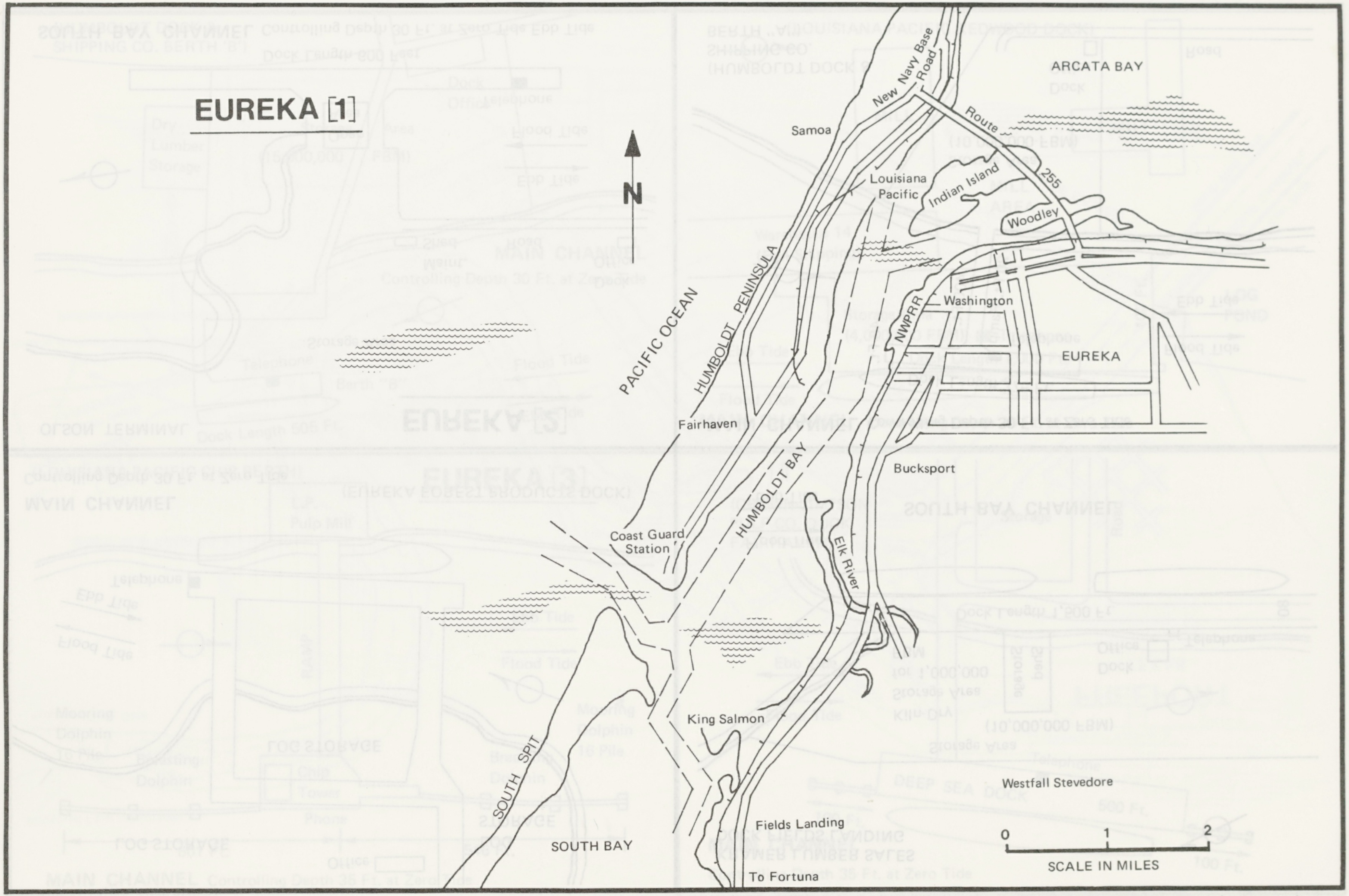
EUREKA [1]


N
ARCATA BAY
New Navy Base Road
Route 255
Samoa
Louisiana Pacific
Indian Island
Woodley
Washington
NWPRR
EUREKA
PACIFIC OCEAN
HUMBOLDT PENINSULA
Fairhaven
HUMBOLDT BAY
Buckport
Coast Guard Station
HUMBOLDT BAY
Elk River
King Salmon
SOUTH SPIT
Westfall Stevedore
Fields Landing
SOUTH BAY
To Fortuna
0
1
2
SCALE IN MILES

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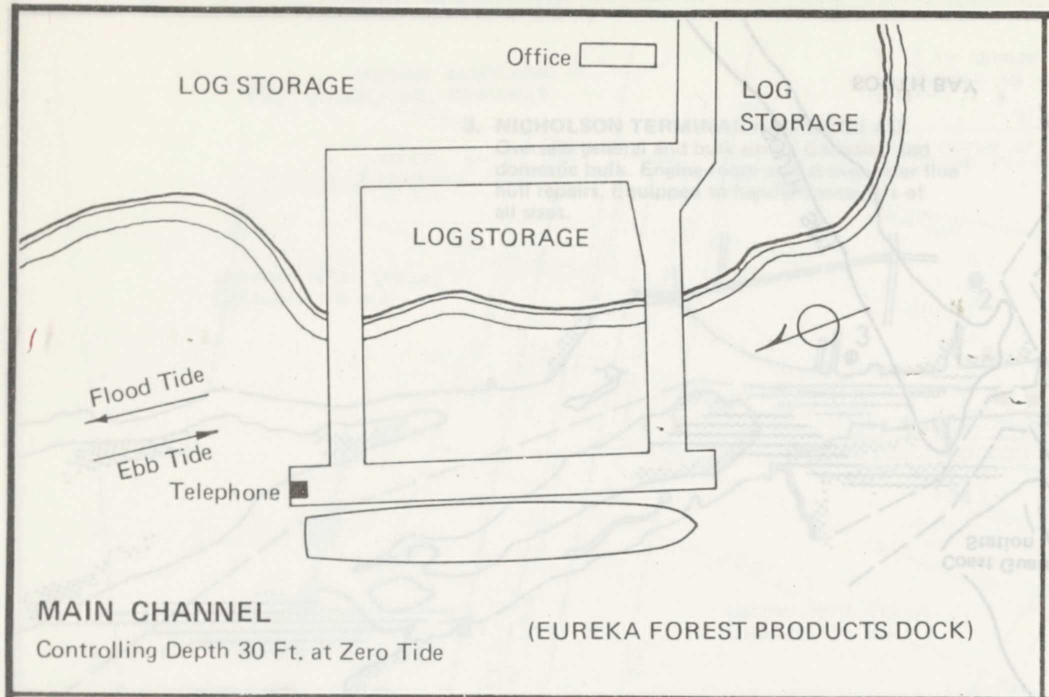
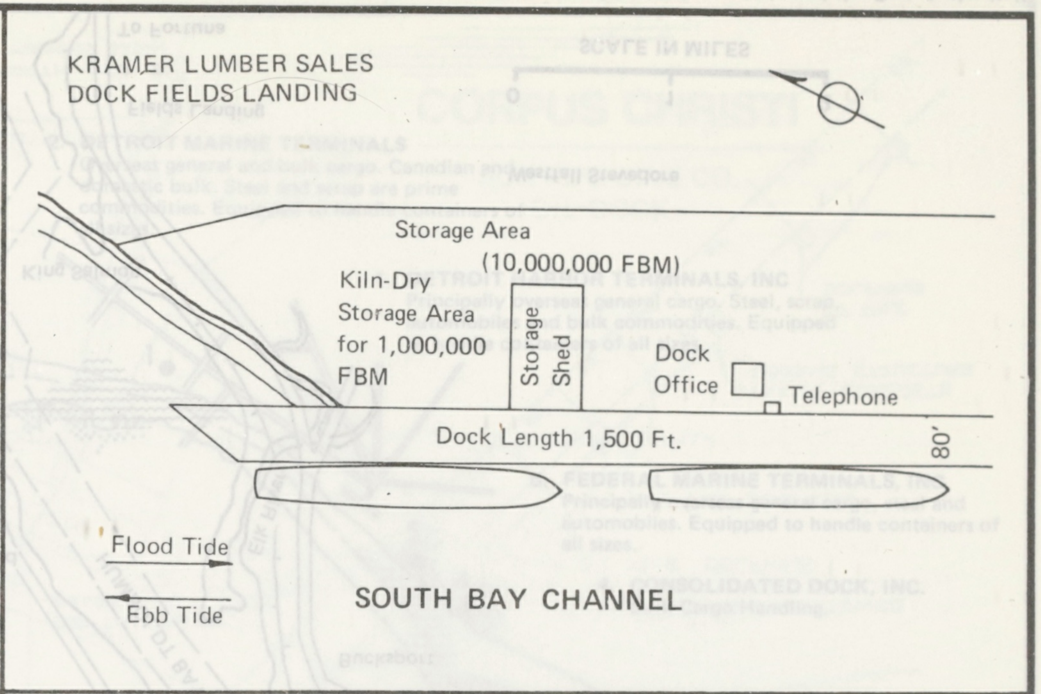
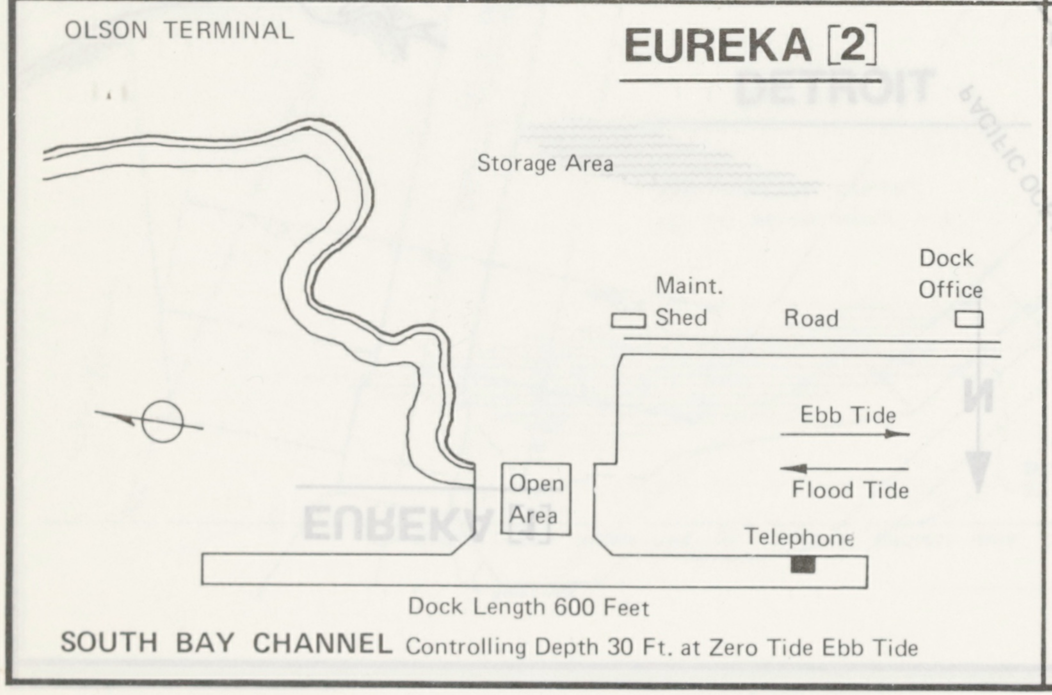
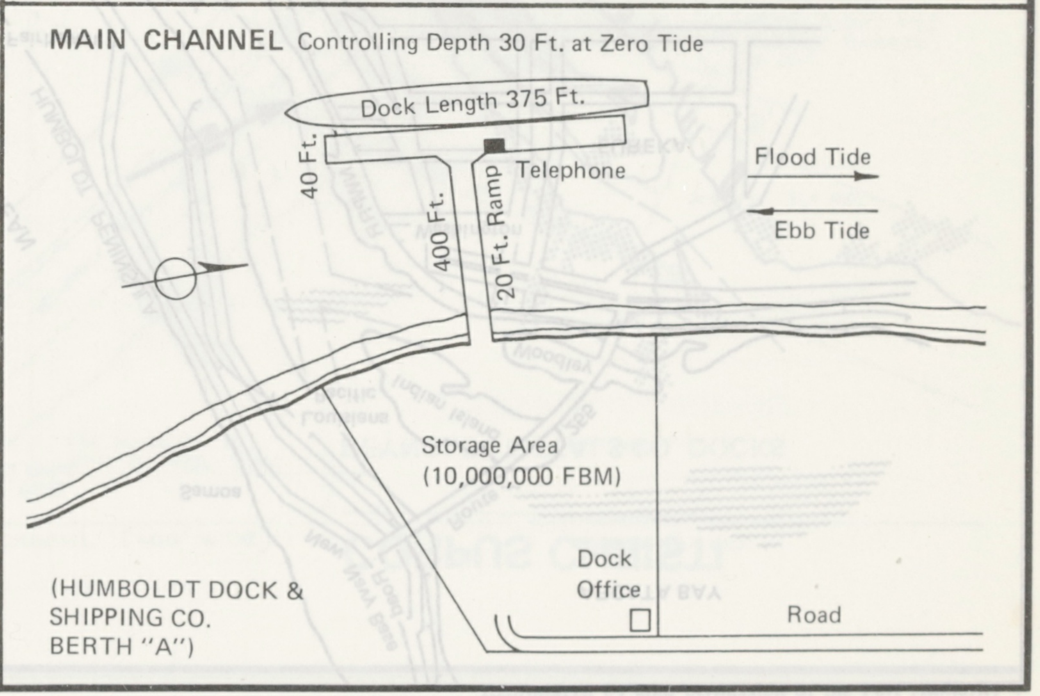
EUREKA [2]


Office
LOG STORAGE
LOG STORAGE
LOG STORAGE
Flood Tide
Ebb Tide
Telephone
MAIN CHANNEL
Controlling Depth 30 Ft. at Zero Tide
(EUREKA FOREST PRODUCTS DOCK)


KRAMER LUMBER SALES
DOCK FIELDS LANDING
Storage Area
(10,000,000 FBM)
Kiln-Dry Storage Area for 1,000,000 FBM
Storage Shed
Dock Office
Telephone
Dock Length 1,500 Ft.
80'
Flood Tide
Ebb Tide
SOUTH BAY CHANNEL


OLSON TERMINAL
Storage Area
Maint. Shed
Road
Dock Office
Ebb Tide
Flood Tide
Open Area
Telephone
Dock Length 600 Feet
SOUTH BAY CHANNEL Controlling Depth 30 Ft. at Zero Tide Ebb Tide


MAIN CHANNEL Controlling Depth 30 Ft. at Zero Tide
Dock Length 375 Ft.
40 Ft.
Telephone
400 Ft.
20 Ft. Ramp
Flood Tide
Ebb Tide
Storage Area
(10,000,000 FBM)
Dock Office
Road
(HUMBOLDT DOCK & SHIPPING CO. BERTH "A")

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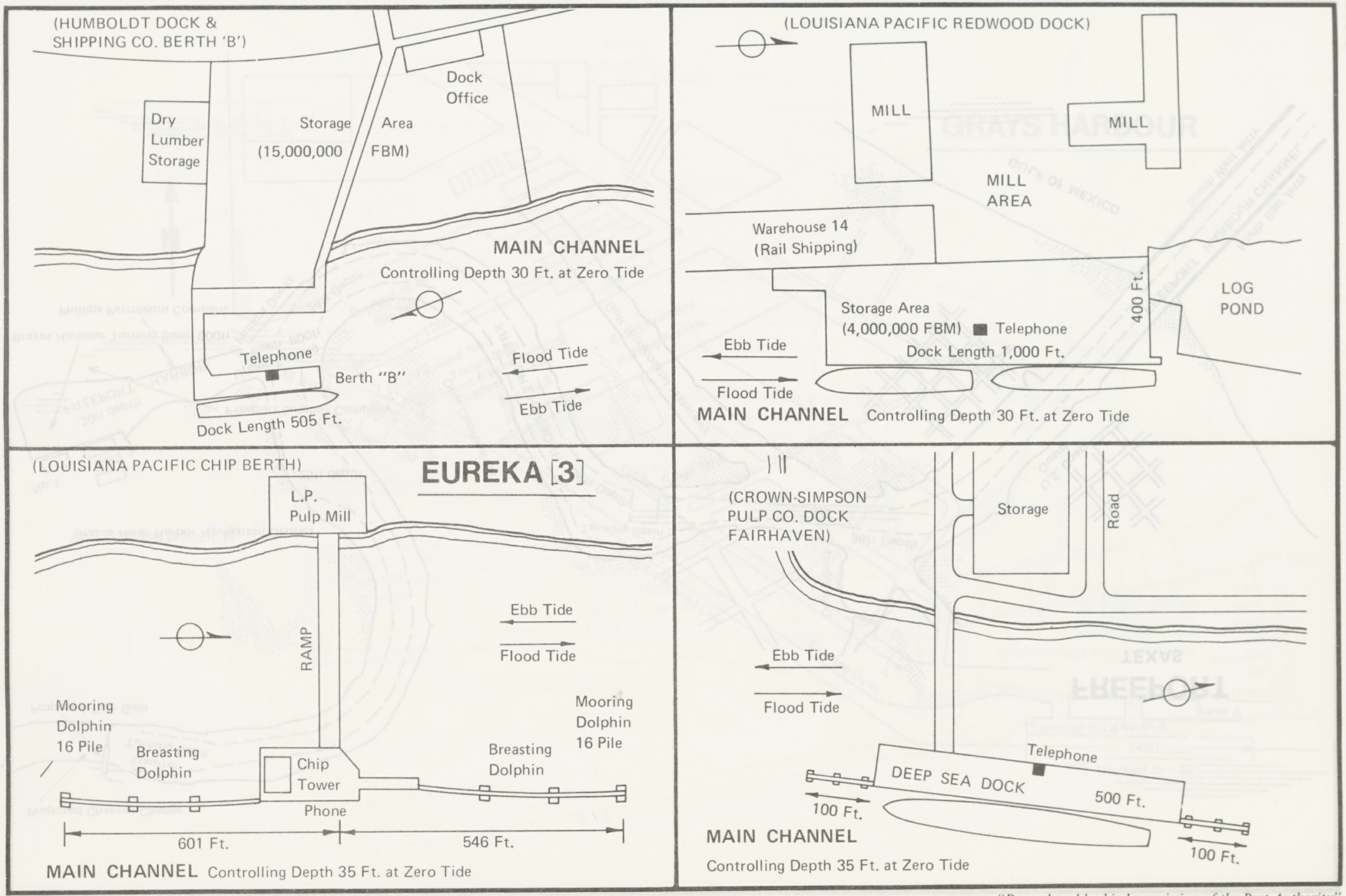
EUREKA [3]


(HUMBOLDT DOCK & SHIPPING CO. BERTH 'B')
Dry Lumber Storage
Storage Area (15,000,000 FBM)
Dock Office
MAIN CHANNEL
Controlling Depth 30 Ft. at Zero Tide
Telephone
Berth "B"
Flood Tide
Ebb Tide
Dock Length 505 Ft.
(LOUISIANA PACIFIC REDWOOD DOCK)
MILL
MILL
MILL AREA
Warehouse 14 (Rail Shipping)
Storage Area (4,000,000 FBM)
■ Telephone
Dock Length 1,000 Ft.
400 Ft.
LOG POND
Ebb Tide
Flood Tide
MAIN CHANNEL
Controlling Depth 30 Ft. at Zero Tide
(LOUISIANA PACIFIC CHIP BERTH)
L.P. Pulp Mill
RAMP
Ebb Tide
Flood Tide
Mooring Dolphin 16 Pile
Breasting Dolphin
Chip Tower
Phone
Breasting Dolphin
Mooring Dolphin 16 Pile
601 Ft.
546 Ft.
MAIN CHANNEL
Controlling Depth 35 Ft. at Zero Tide
(CROWN-SIMPSON PULP CO. DOCK FAIRHAVEN)
Storage
Road
Ebb Tide
Flood Tide
Telephone
DEEP SEA DOCK
500 Ft.
100 Ft.
100 Ft.
MAIN CHANNEL
Controlling Depth 35 Ft. at Zero Tide

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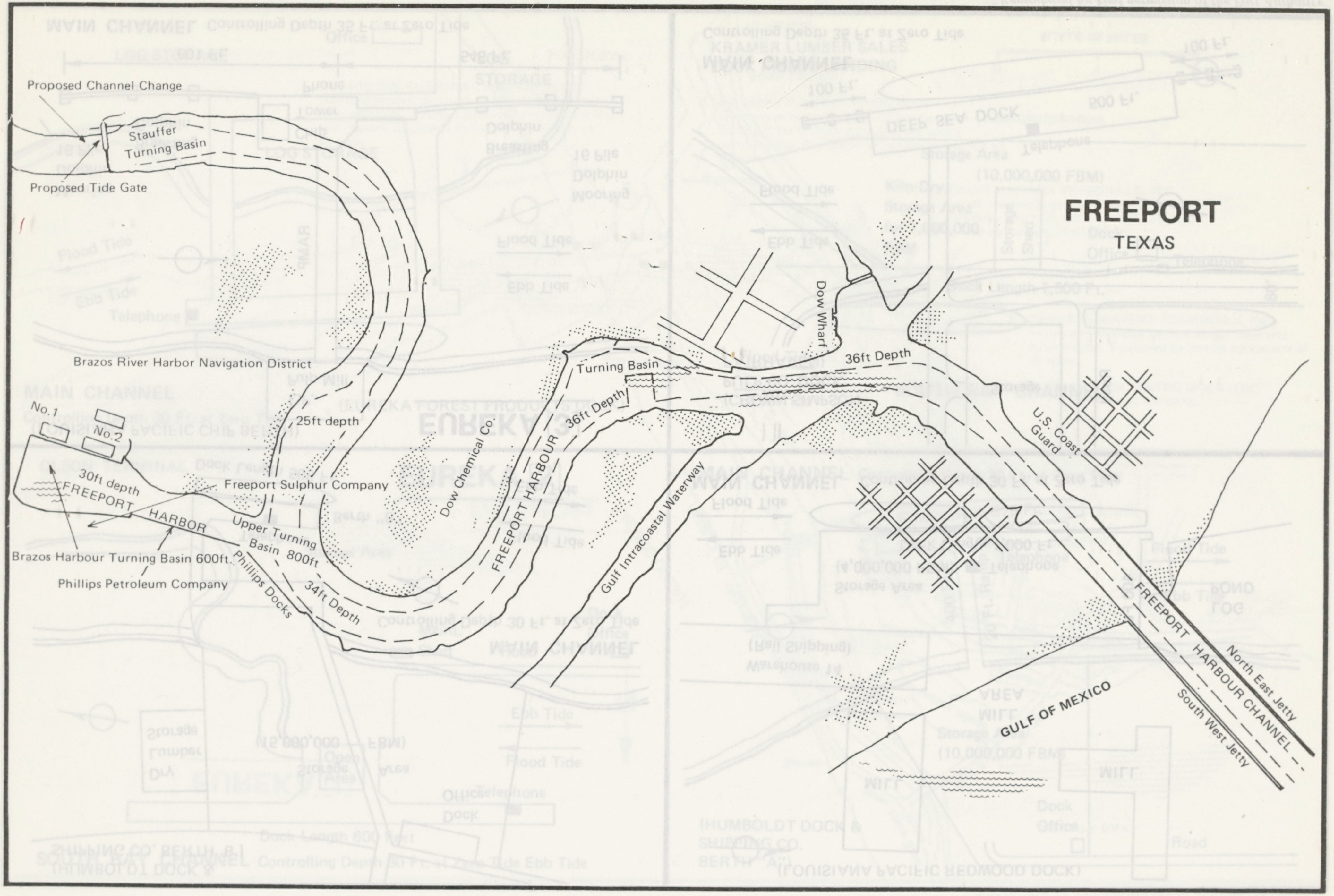
FREEPORT
TEXAS


Proposed Channel Change
Stauffer Turning Basin
Proposed Tide Gate
Brazos River Harbor Navigation District
No.1
No.2
25ft depth
30ft depth
FREEPORT HARBOR
Freeport Sulphur Company
Brazos Harbour Turning Basin 600ft.
Phillips Petroleum Company
Upper Turning Basin 800ft
Phillips Docks
34ft Depth
Dow Chemical Co.
FREEPORT HARBOUR
36ft Depth
Turning Basin
Gulf Intracoastal Waterway
Dow Wharf
36ft Depth
U.S. Coast Guard
GULF OF MEXICO
FREEPORT HARBOUR CHANNEL
North East Jetty
South West Jetty

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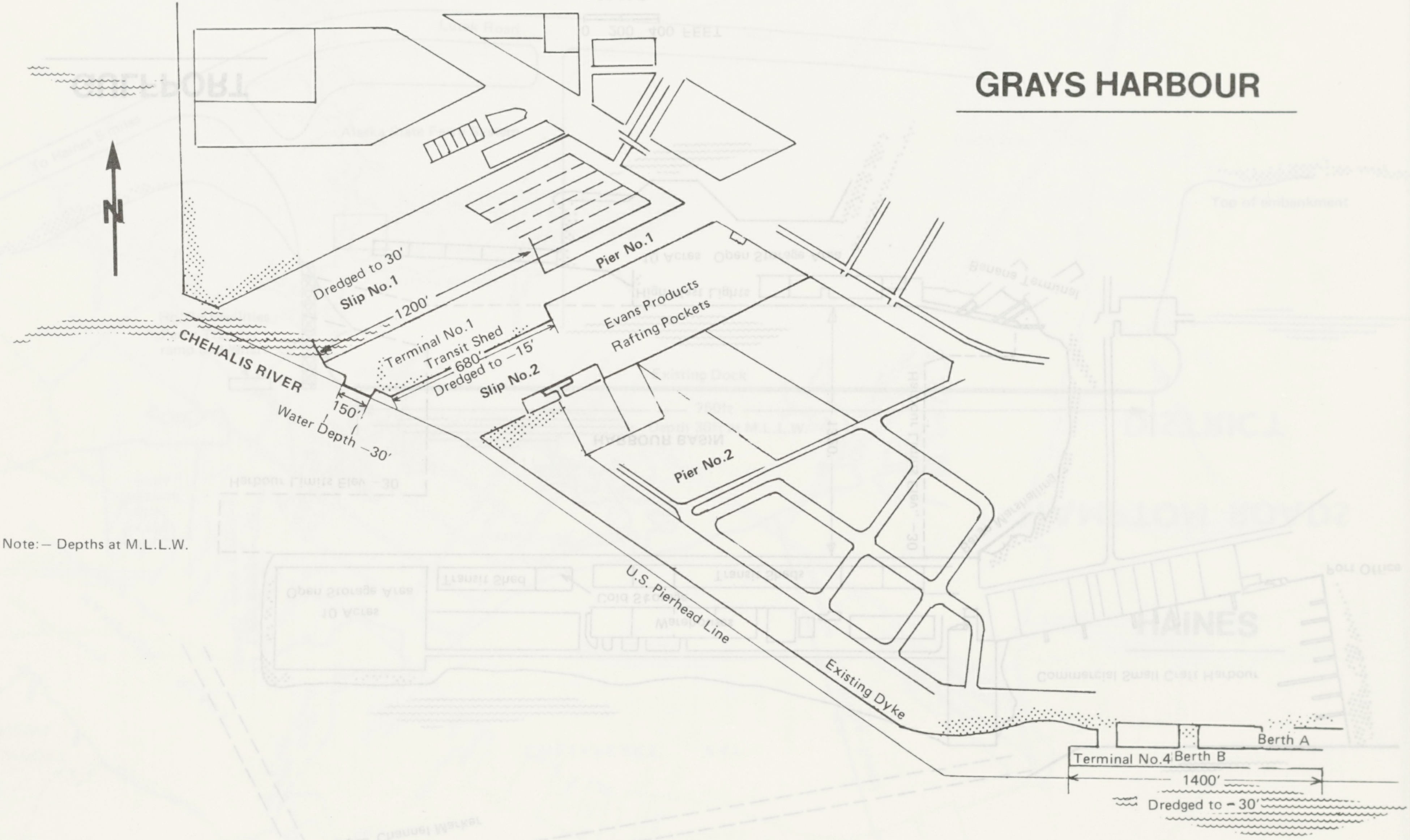
GRAYS HARBOUR


N
CHEHALIS RIVER
Dredged to 30'
Slip No.1
1200'
Pier No.1
Terminal No.1
Transit Shed
680'
Dredged to −15'
Slip No.2
Evans Products
Rafting Pockets
150'
Water Depth −30'
Pier No.2
U.S. Pierhead Line
Existing Dyke
Terminal No.4
Berth B
Berth A
1400'
Dredged to − 30'

Note:– Depths at M.L.L.W.

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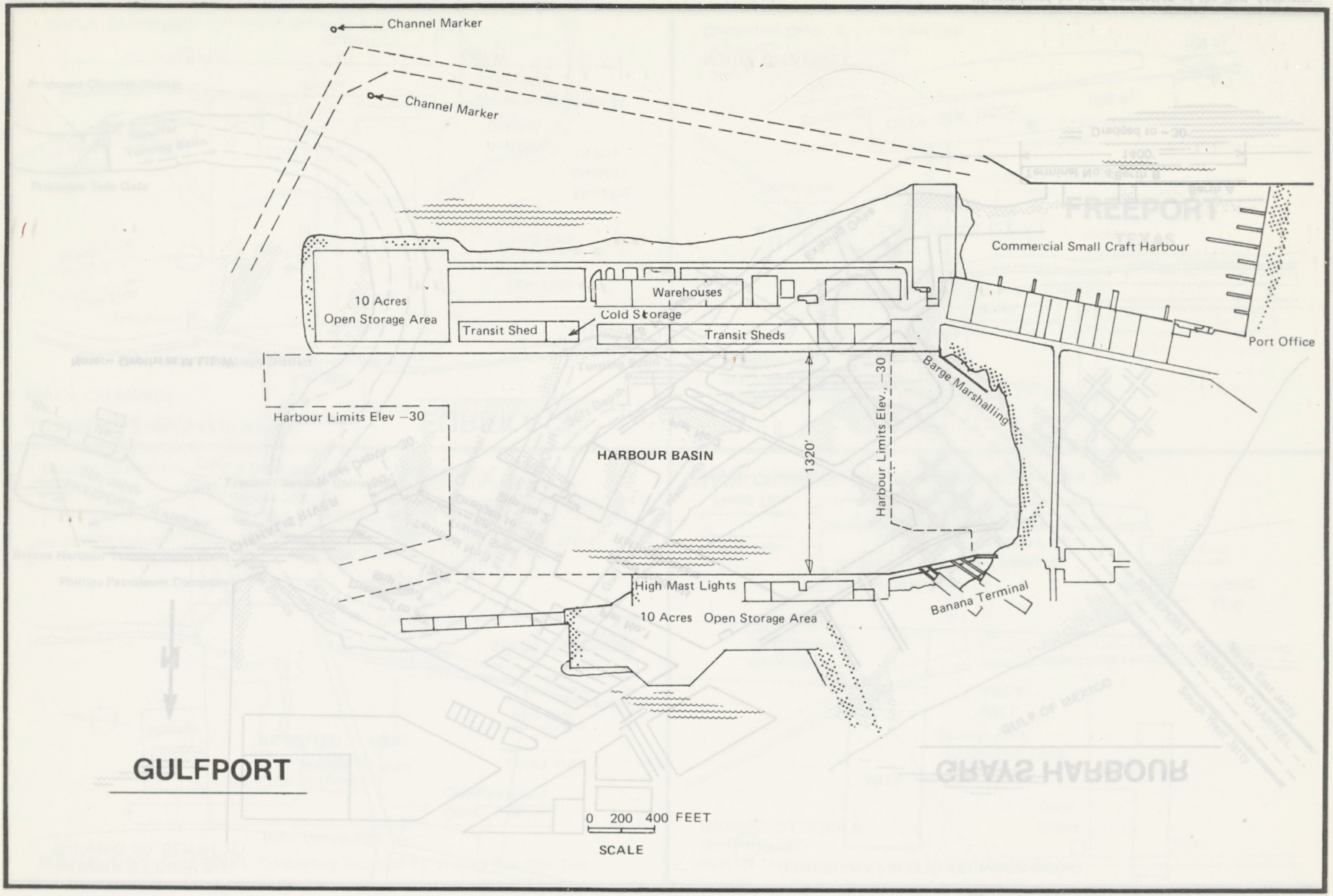
Channel Marker
Channel Marker
10 Acres
Open Storage Area
Transit Shed
Cold Storage
Warehouses
Transit Sheds
Commercial Small Craft Harbour
Port Office
Barge Marshalling
Harbour Limits Elev —30
HARBOUR BASIN
1320'
Harbour Limits Elev., —30
High Mast Lights
10 Acres
Open Storage Area
Banana Terminal
0 200 400 FEET
SCALE

GULFPORT

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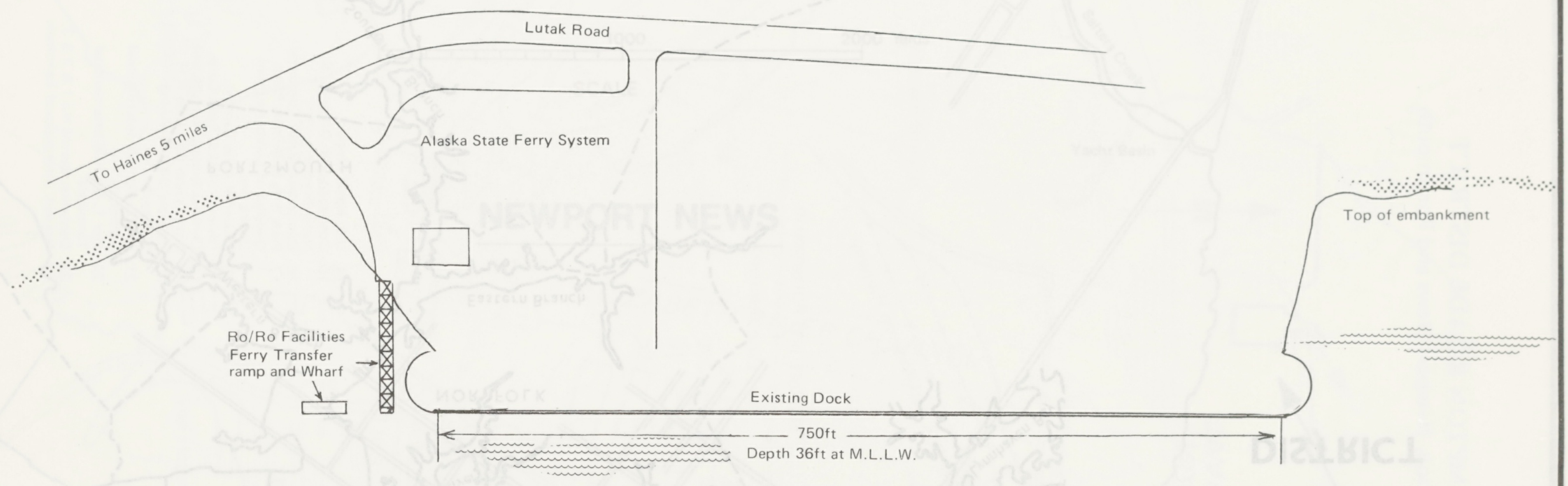
Lutak Road
To Haines 5 miles
Alaska State Ferry System
Ro/Ro Facilities
Ferry Transfer
ramp and Wharf
Top of embankment
Existing Dock
750ft
Depth 36ft at M.L.L.W.

HAINES

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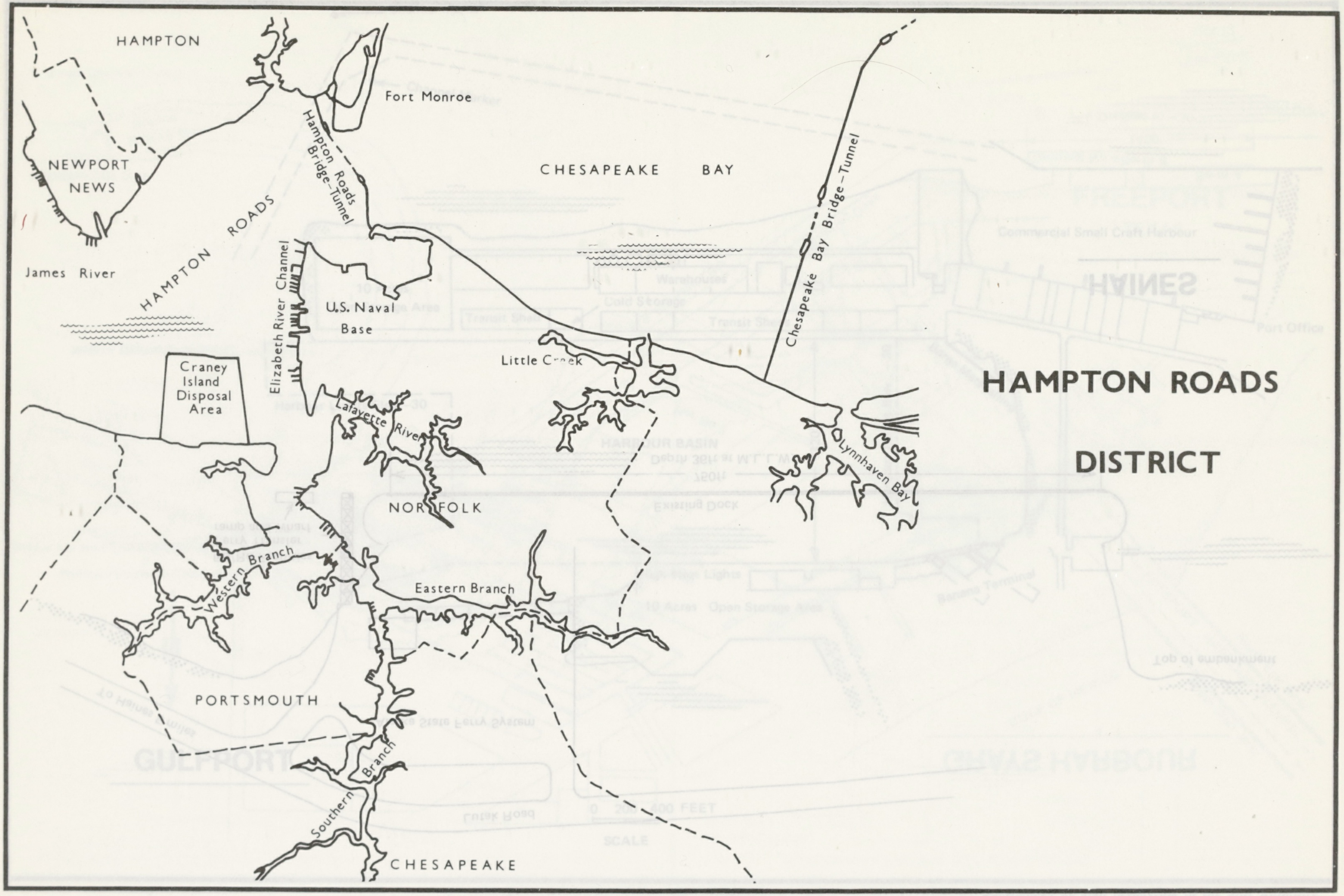
HAMPTON ROADS DISTRICT


HAMPTON
Fort Monroe
NEWPORT NEWS
Hampton Roads Bridge–Tunnel
CHESAPEAKE BAY
Chesapeake Bay Bridge–Tunnel
HAMPTON ROADS
James River
Elizabeth River Channel
U.S. Naval Base
Little Creek
Craney Island Disposal Area
Lafayette River
Lynnhaven Bay
NORFOLK
Western Branch
Eastern Branch
PORTSMOUTH
Southern Branch
CHESAPEAKE

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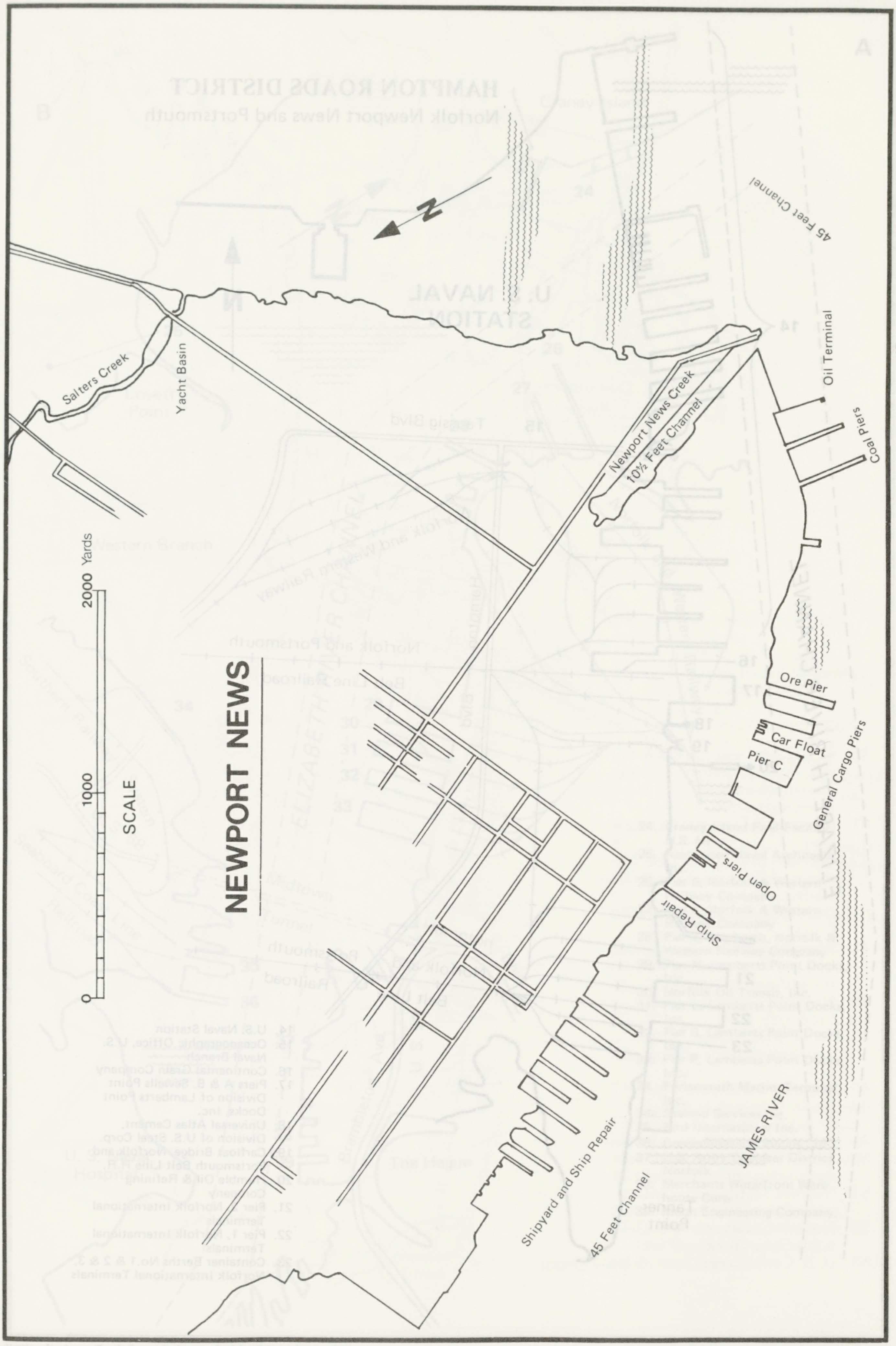
45 Feet Channel
N
Oil Terminal
Coal Piers
Yacht Basin
Salters Creek
Newport News Creek
10½ Feet Channel
2000 Yards
1000
SCALE
NEWPORT NEWS
Ore Pier
Car Float
Pier C
General Cargo Piers
Open Piers
Ship Repair
JAMES RIVER
Shipyard and Ship Repair
45 Feet Channel

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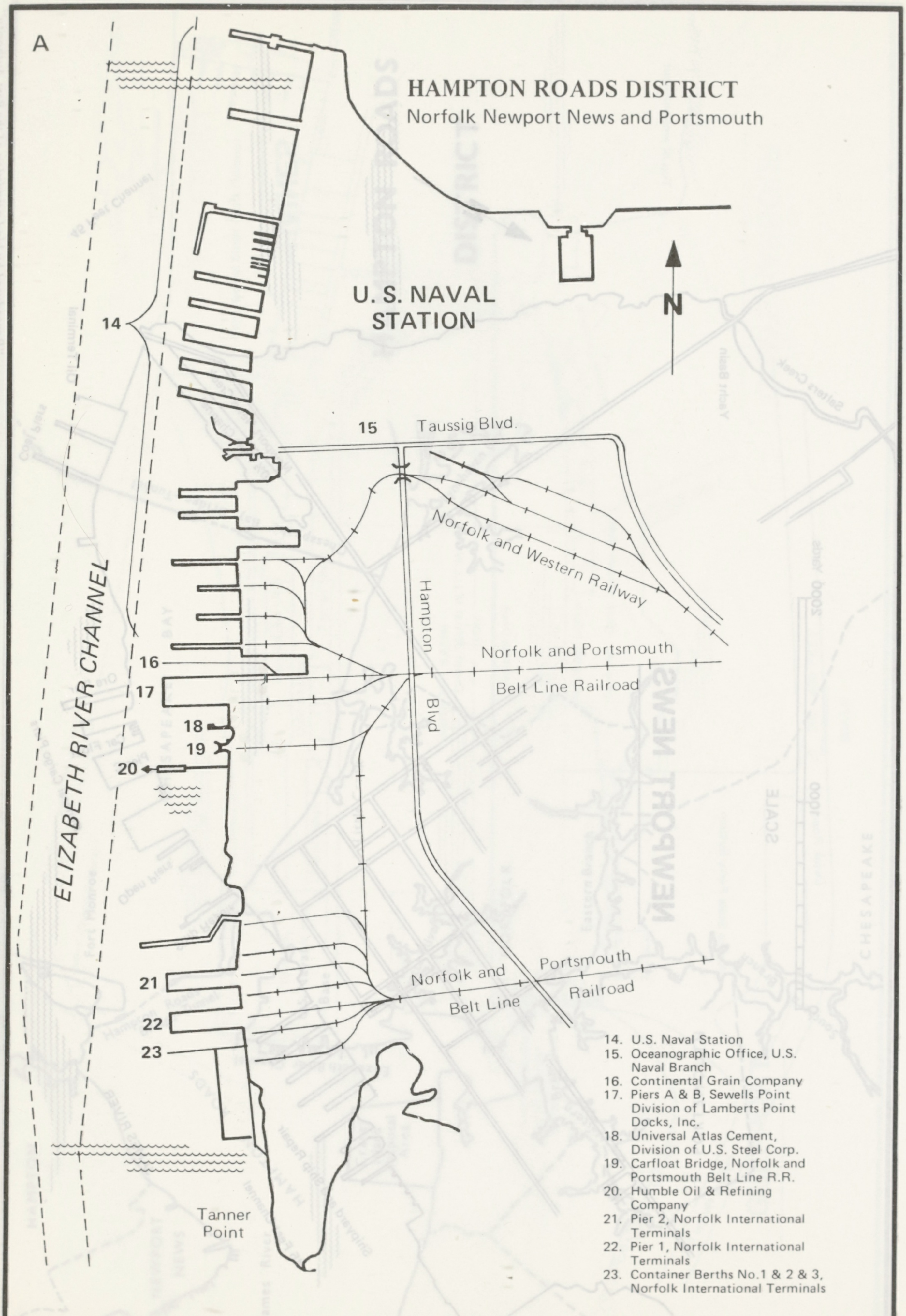
A
HAMPTON ROADS DISTRICT
Norfolk Newport News and Portsmouth
U. S. NAVAL STATION
N
ELIZABETH RIVER CHANNEL
Taussig Blvd.
Norfolk and Western Railway
Hampton Blvd
Norfolk and Portsmouth Belt Line Railroad
Norfolk and Portsmouth Belt Line Railroad
Tanner Point
14
15
16
17
18
19
20
21
22
23

14. U.S. Naval Station
15. Oceanographic Office, U.S. Naval Branch
16. Continental Grain Company
17. Piers A & B, Sewells Point Division of Lamberts Point Docks, Inc.
18. Universal Atlas Cement, Division of U.S. Steel Corp.
19. Carfloat Bridge, Norfolk and Portsmouth Belt Line R.R.
20. Humble Oil & Refining Company
21. Pier 2, Norfolk International Terminals
22. Pier 1, Norfolk International Terminals
23. Container Berths No.1 & 2 & 3, Norfolk International Terminals

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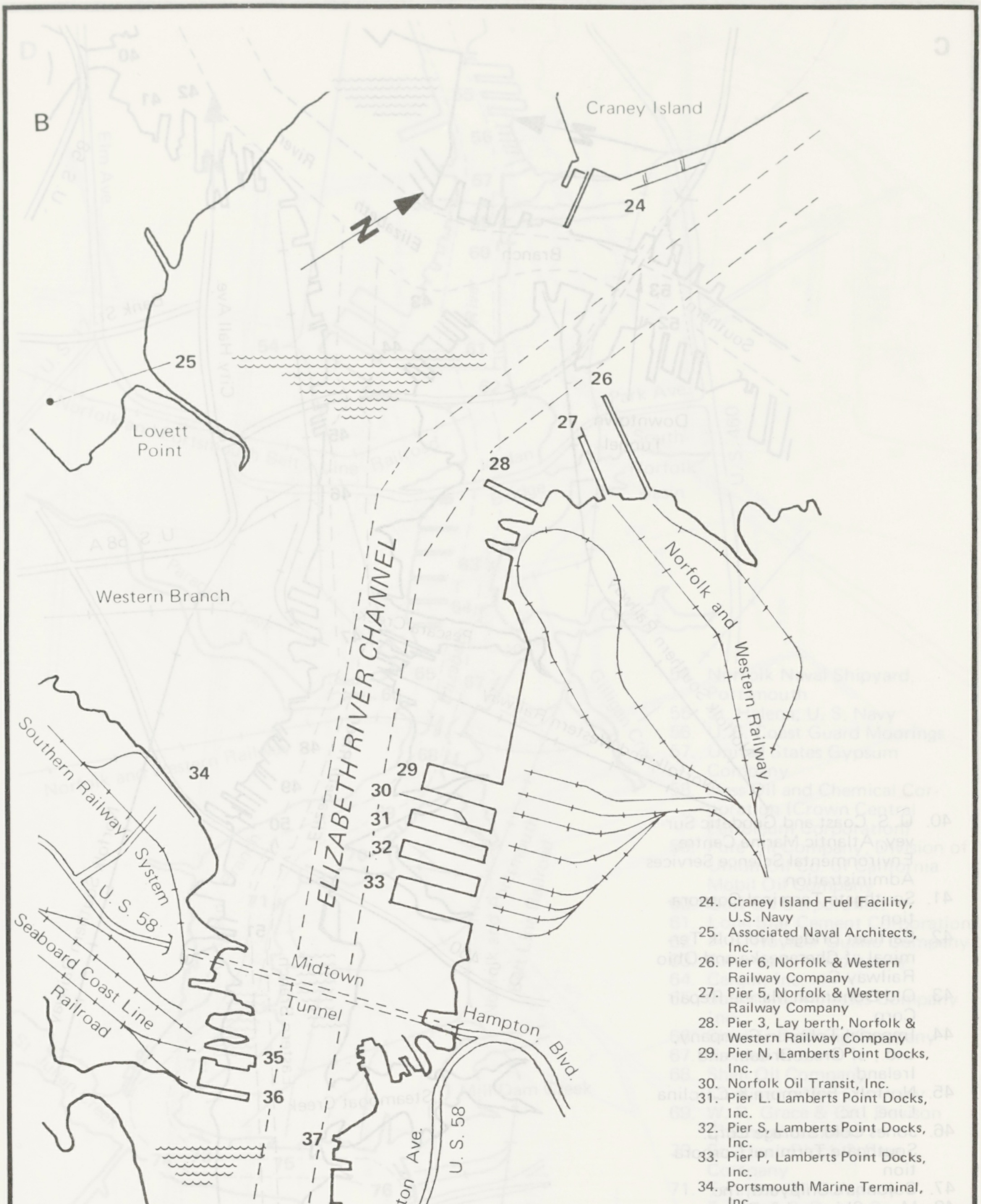
B
Craney Island
N
24
25
Lovett Point
26
27
28
Western Branch
ELIZABETH RIVER CHANNEL
Norfolk and Western Railway
29
30
31
32
33
34
Southern Railway System
U. S. 58
Seaboard Coast Line Railroad
Midtown Tunnel
Hampton Blvd.
35
36
37
Brambleton Ave.
U. S. 58
38
39
The Hague
U. S. Naval Hospital

24. Craney Island Fuel Facility, U.S. Navy
25. Associated Naval Architects, Inc.
26. Pier 6, Norfolk & Western Railway Company
27. Pier 5, Norfolk & Western Railway Company
28. Pier 3, Lay berth, Norfolk & Western Railway Company
29. Pier N, Lamberts Point Docks, Inc.
30. Norfolk Oil Transit, Inc.
31. Pier L. Lamberts Point Docks, Inc.
32. Pier S, Lamberts Point Docks, Inc.
33. Pier P, Lamberts Point Docks, Inc.
34. Portsmouth Marine Terminal, Inc.

34a. Sealand Services Inc.

35. Bird International Inc.
36. Commonwealth Metals Ltd.
37. U.S. Army Engineer District, Norfolk
38. Merchants Waterfront Warehouse Corp.
39. Moon Engineering Company, Inc.

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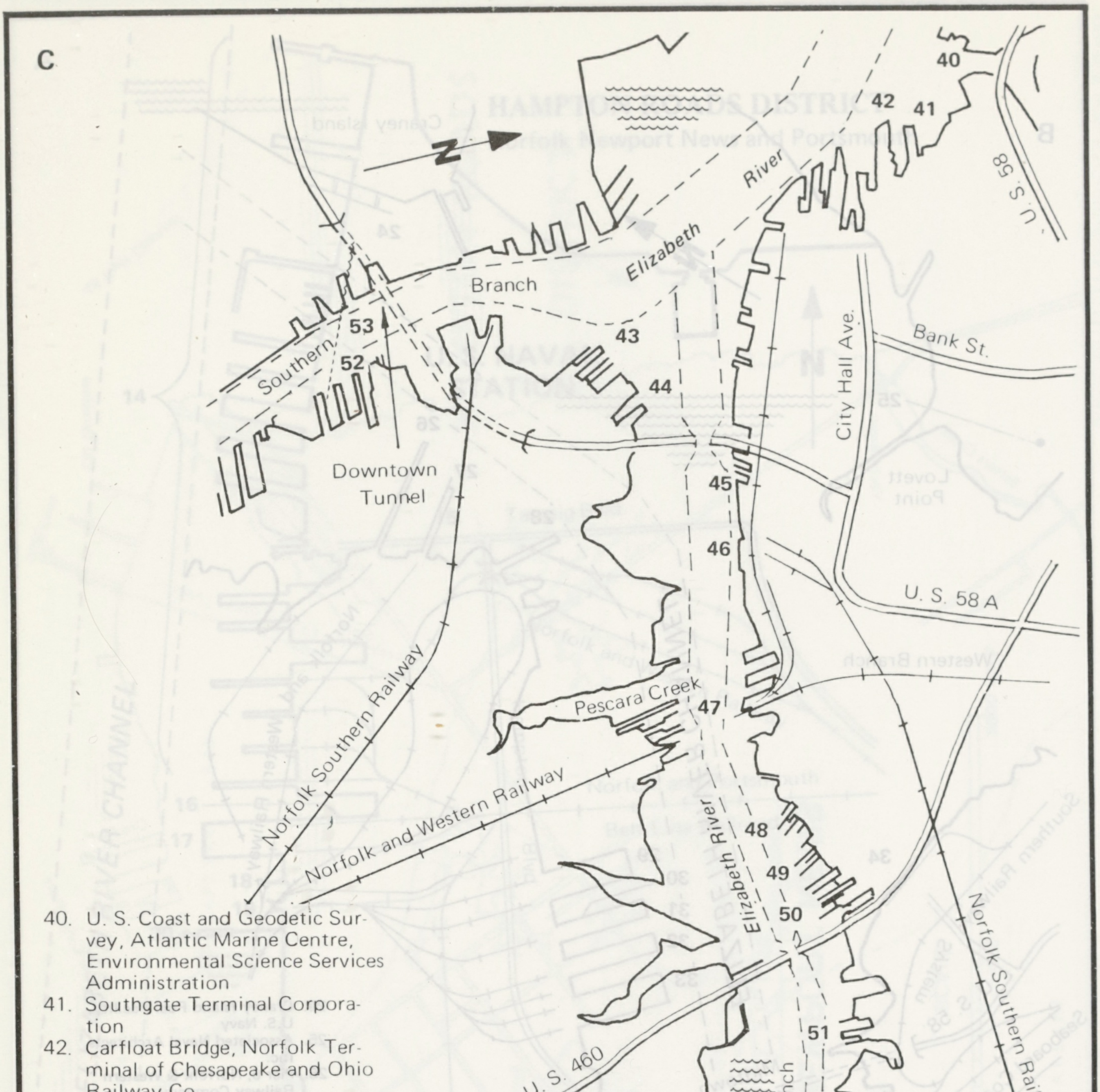
C
N
40
41
42
U. S. 58
Elizabeth
River
Branch
Southern
53
52
43
44
Bank St.
City Hall Ave.
Downtown
Tunnel
45
46
U. S. 58 A
Pescara Creek
47
Norfolk Southern Railway
Norfolk and Western Railway
48
49
50
Elizabeth River
Norfolk Southern Railway
51
U. S. 460
Eastern Branch
Steamboat Creek
Norfolk and
Western Railway

40. U. S. Coast and Geodetic Survey, Atlantic Marine Centre, Environmental Science Services Administration
41. Southgate Terminal Corporation
42. Carfloat Bridge, Norfolk Terminal of Chesapeake and Ohio Railway Co.
43. Old Dominion Marine Repair Corp.
44. Imperial Tobacco Company, Ltd., of Great Britain and Ireland
45. Norfolk, Baltimore & Carolina Line, Inc.
46. Jones Cold Storage Corp. Southgate Terminal Corporation
47. Colonna's Shipyard, Inc.
48. Moon Shipyard & Repair Corporation
49. Craig Brothers Marine Railway
50. Norfolk Shipbuilding & Drydock Corp., Norfolk Plant
51. Norfolk Shipbuilding & Drydock Corp., Southern Plant
52. Norfolk Shipbuilding & Drydock Corp., Berkley Plant
53. U. S. Coast Guard Base, Supply Depot

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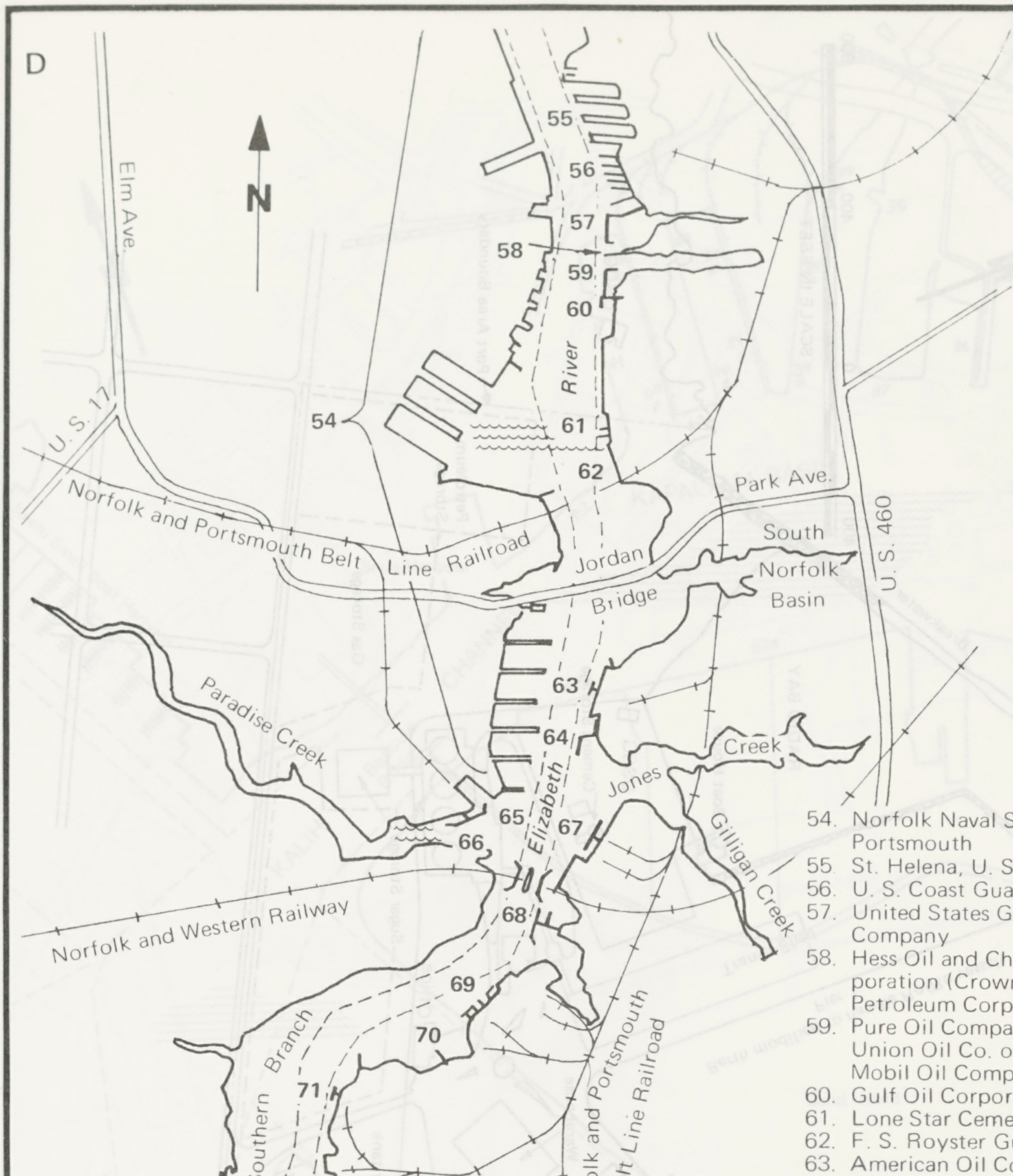
D
N
Elm Ave.
U.S. 17
54
55
56
57
58
59
60
61
62
River
Park Ave.
Norfolk and Portsmouth Belt Line Railroad
Jordan Bridge
South Norfolk Basin
U.S. 460
Paradise Creek
63
64
Jones Creek
65
66
67
Elizabeth
Gilligan Creek
Norfolk and Western Railway
68
69
70
Southern Branch
71
Norfolk and Portsmouth Belt Line Railroad
72
St. Julian Creek
Mill Dam Creek
74
73
75
76
U.S. 13
77
Norfolk and Western Railway
78
Newton Creek

54. Norfolk Naval Shipyard, Portsmouth
55. St. Helena, U. S. Navy
56. U. S. Coast Guard Moorings
57. United States Gypsum Company
58. Hess Oil and Chemical Corporation (Crown Central Petroleum Corporation)
59. Pure Oil Company, Division of Union Oil Co. of California Mobil Oil Company
60. Gulf Oil Corporation
61. Lone Star Cement Corporation
62. F. S. Royster Guano Company
63. American Oil Company
64. Cargill, Inc.
65. Southgate Molasses Company Inc.
66. Sinclair Refining Company
67. Texaco Inc.
68. Shell Oil Company Continental Oil Company
69. W. R. Grace & Co., Davison Chemical Division
70. Southern Block & Pipe Company
71. Tenneco Oil Company Eppinger & Russel Company
72. Chas. W. Priddy & Co., Inc.
73. Atlantic Cement Co., Inc.
74. Phillips Petroleum Company
75. Elizabeth River Terminals Inc.
76. Chilean Nitrate Sales Corp.
77. Smith-Douglas, A Division of the Borden Chemical Co.
78. Hitch Terminal

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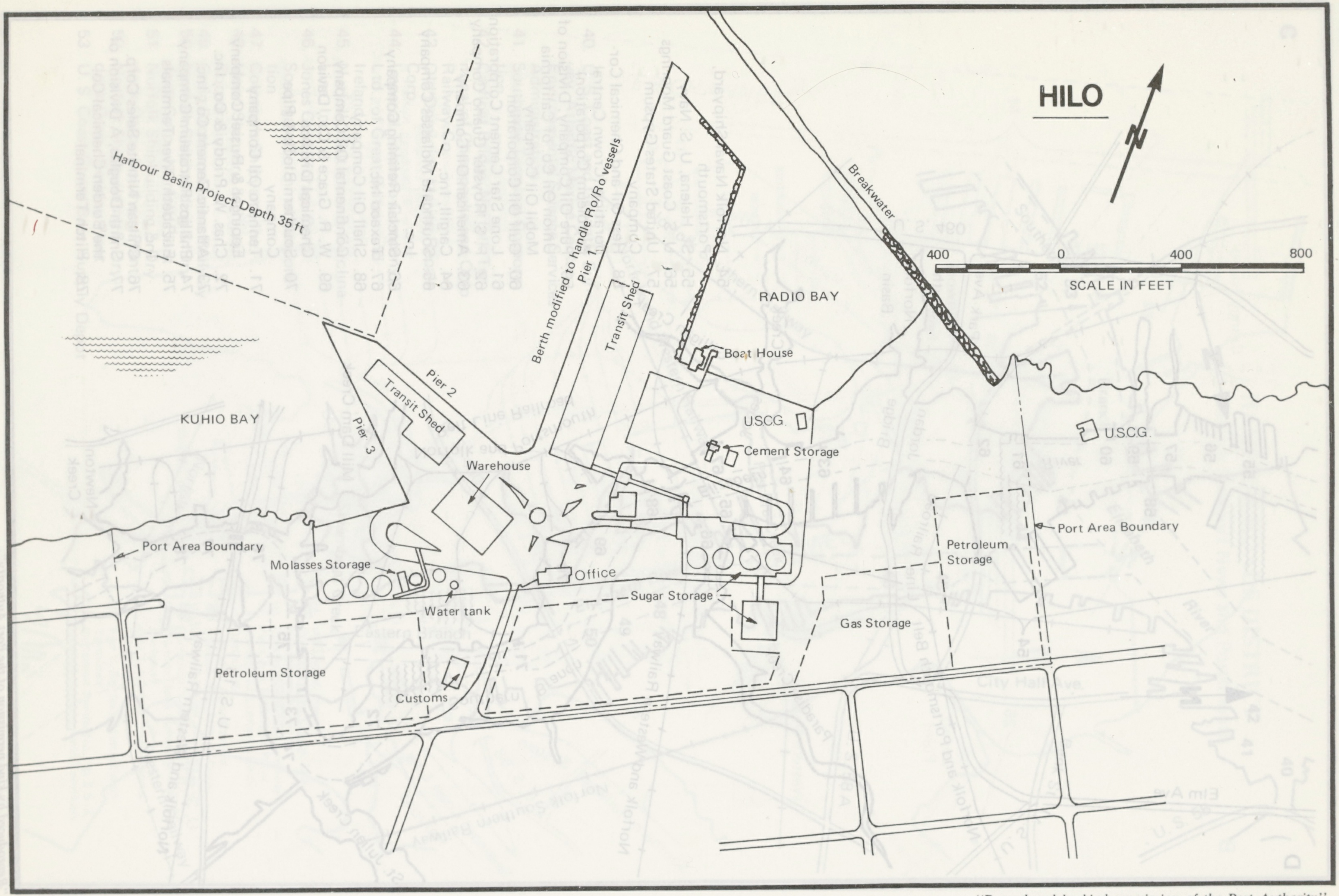
HILO
N
400
0
400
800
SCALE IN FEET
Breakwater
RADIO BAY
Boat House
Harbour Basin Project Depth 35 ft
Berth modified to handle Ro/Ro vessels
Pier 1
Transit Shed
Pier 2
Transit Shed
Pier 3
KUHIO BAY
USCG
USCG.
Cement Storage
Warehouse
Port Area Boundary
Port Area Boundary
Molasses Storage
Office
Water tank
Sugar Storage
Petroleum Storage
Petroleum Storage
Gas Storage
Customs

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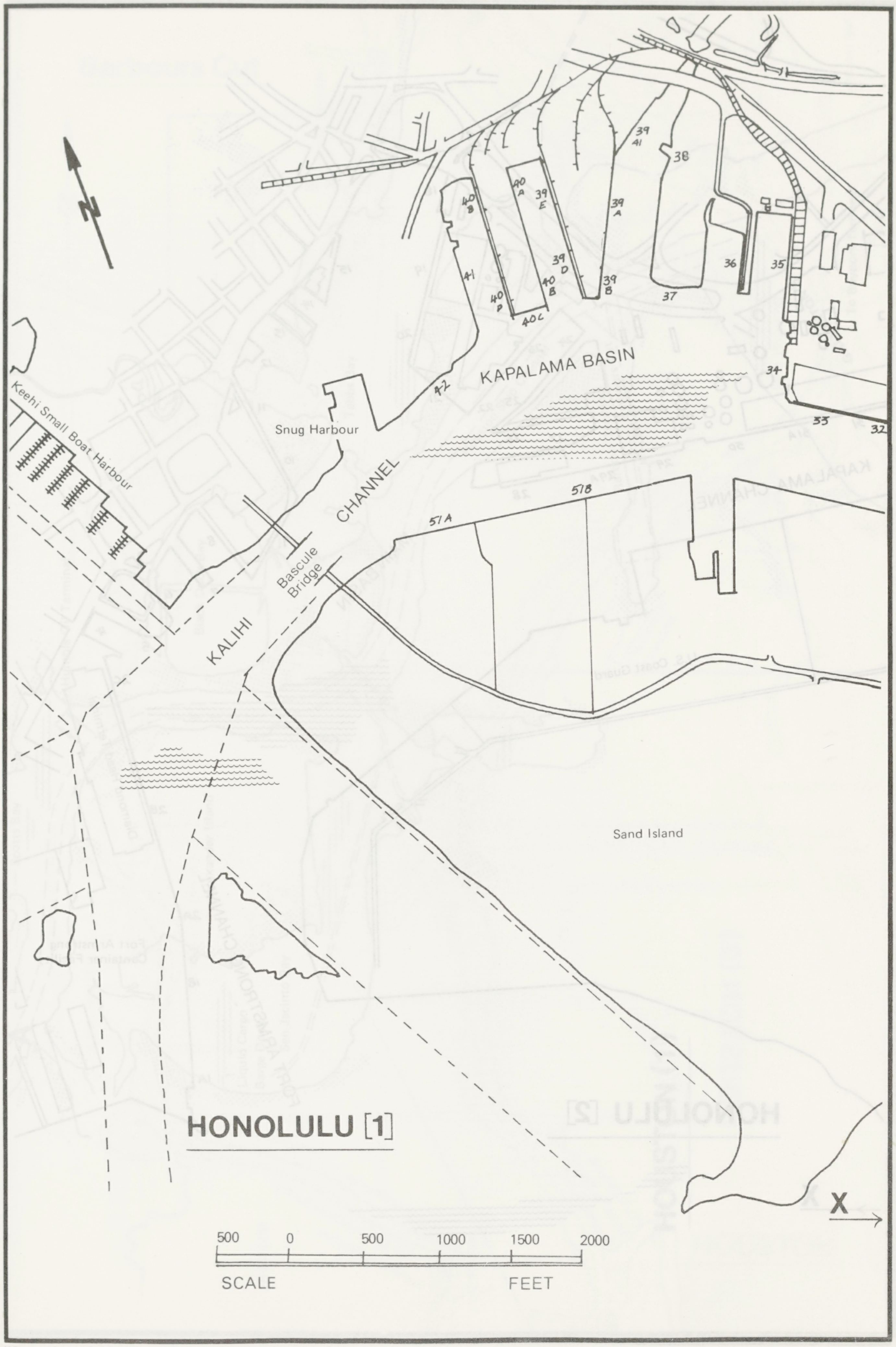
N
40 B
41
40 D
40 A
39 E
40 B
39 D
40C
39 A1
39 A
39 B
38
37
36
35
34
33
32
42
KAPALAMA BASIN
Snug Harbour
Keehi Small Boat Harbour
CHANNEL
KALIHI
Bascule Bridge
51A
51B
Sand Island
X
500
0
500
1000
1500
2000
SCALE
FEET

HONOLULU [1]

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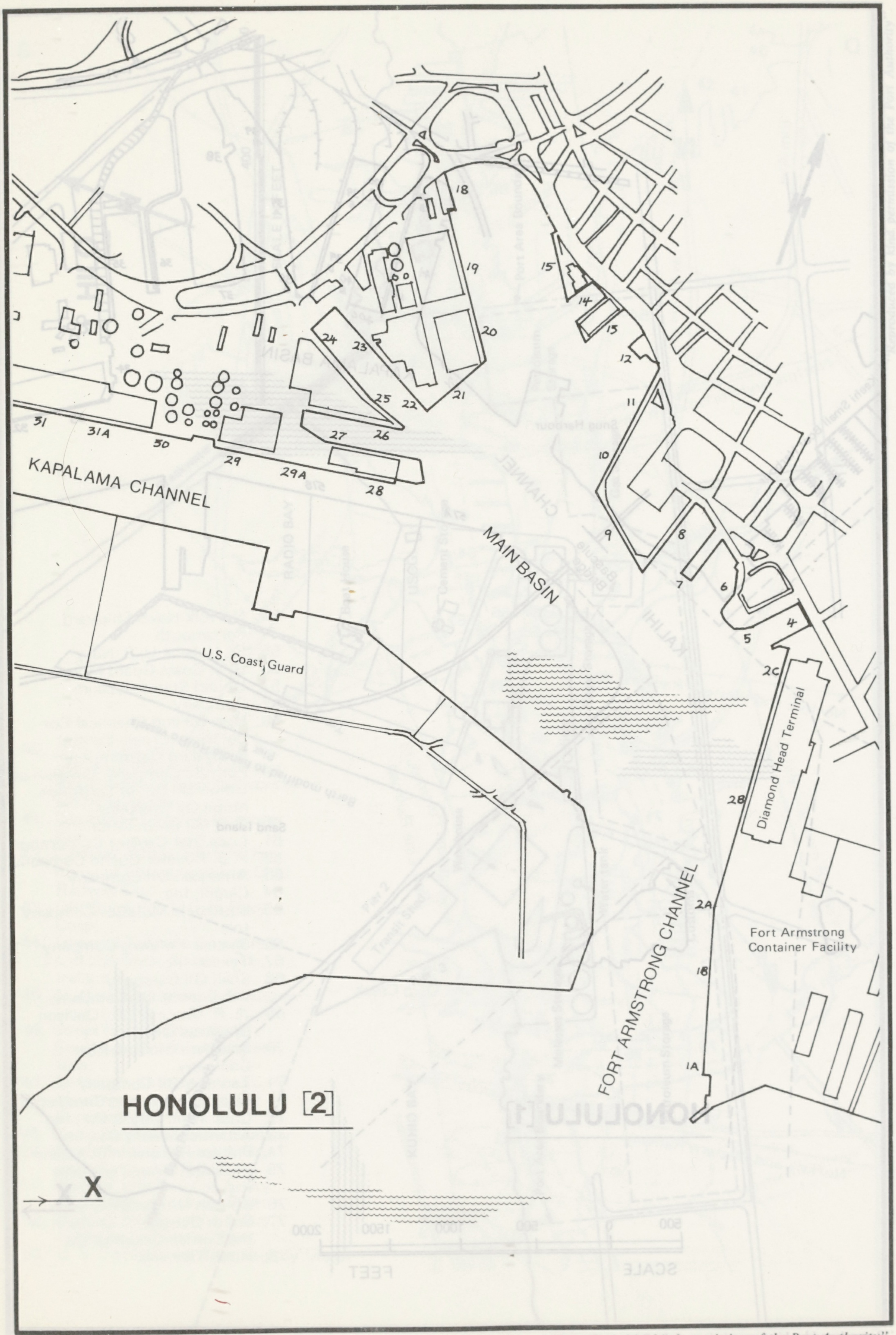
18
19
15
14
13
20
24
23
12
11
25
22
21
31
31A
50
29
29A
27
26
28
10
KAPALAMA CHANNEL
MAIN BASIN
9
8
7
6
4
5
U.S. Coast Guard
2C
Diamond Head Terminal
2B
FORT ARMSTRONG CHANNEL
2A
Fort Armstrong Container Facility
1B
1A
HONOLULU [2]
X

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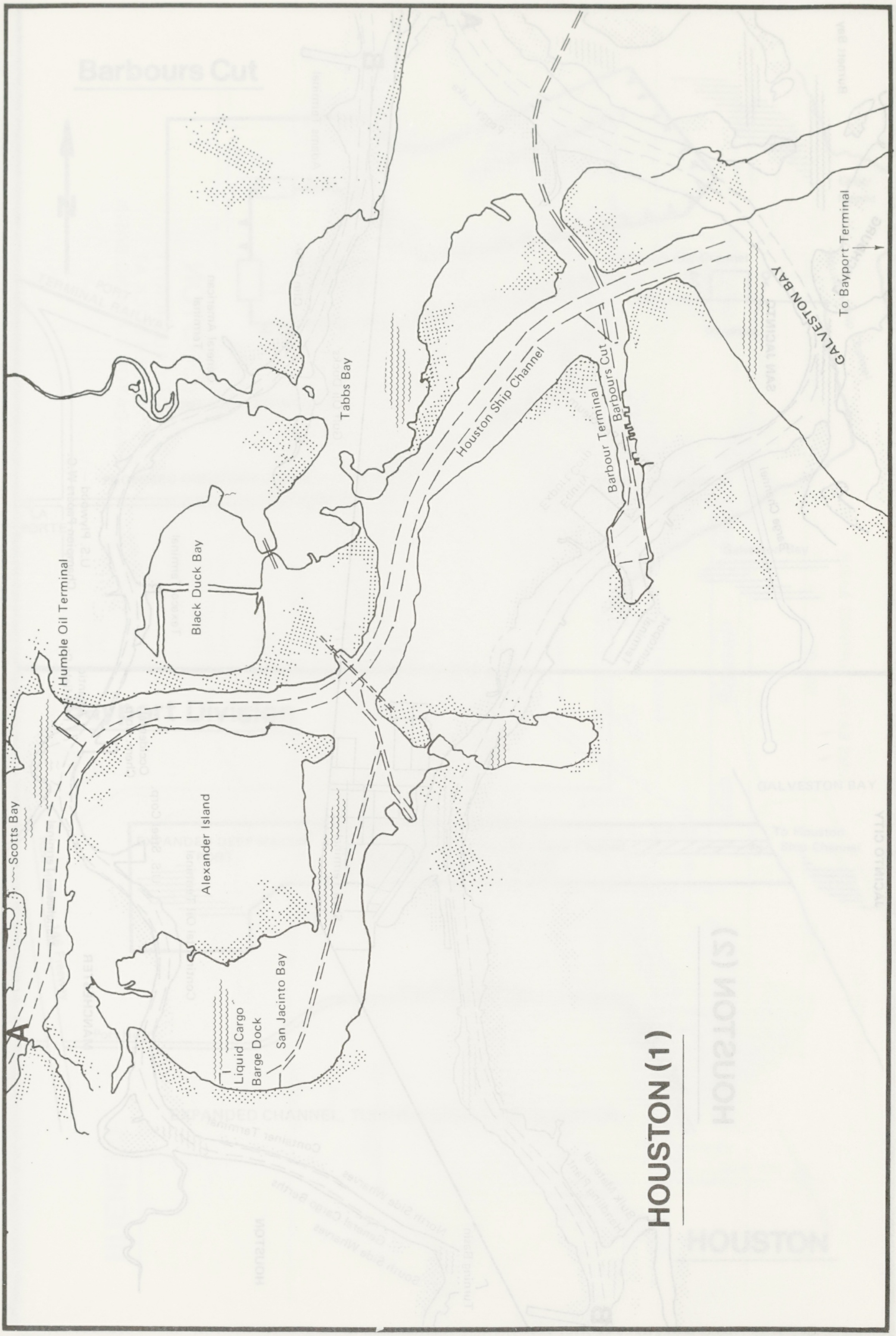
A
Scotts Bay
Humble Oil Terminal
Black Duck Bay
Tabbs Bay
Houston Ship Channel
Barbour Terminal
Barbours Cut
GALVESTON BAY
To Bayport Terminal
Alexander Island
Liquid Cargo
Barge Dock
San Jacinto Bay

HOUSTON (1)

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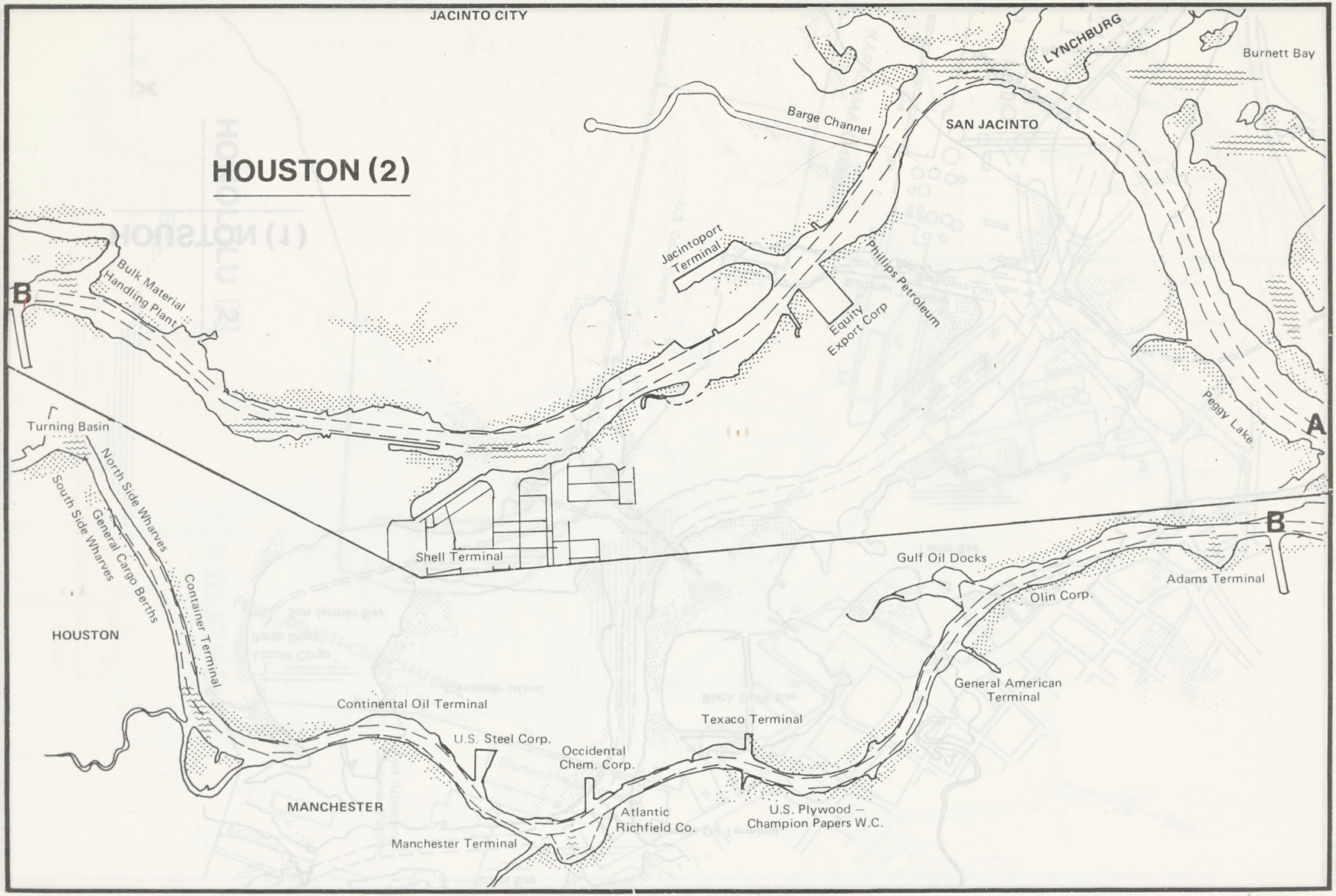
HOUSTON (2)


JACINTO CITY
LYNCHBURG
Burnett Bay
Barge Channel
SAN JACINTO
Jacintoport Terminal
Phillips Petroleum
Equity Export Corp
Bulk Material Handling Plant
B
A
Peggy Lake
Turning Basin
North Side Wharves
South Side Wharves
General Cargo Berths
Container Terminal
HOUSTON
Shell Terminal
B
Gulf Oil Docks
Adams Terminal
Olin Corp.
General American Terminal
Texaco Terminal
Continental Oil Terminal
U.S. Steel Corp.
Occidental Chem. Corp.
Atlantic Richfield Co.
U.S. Plywood – Champion Papers W.C.
MANCHESTER
Manchester Terminal

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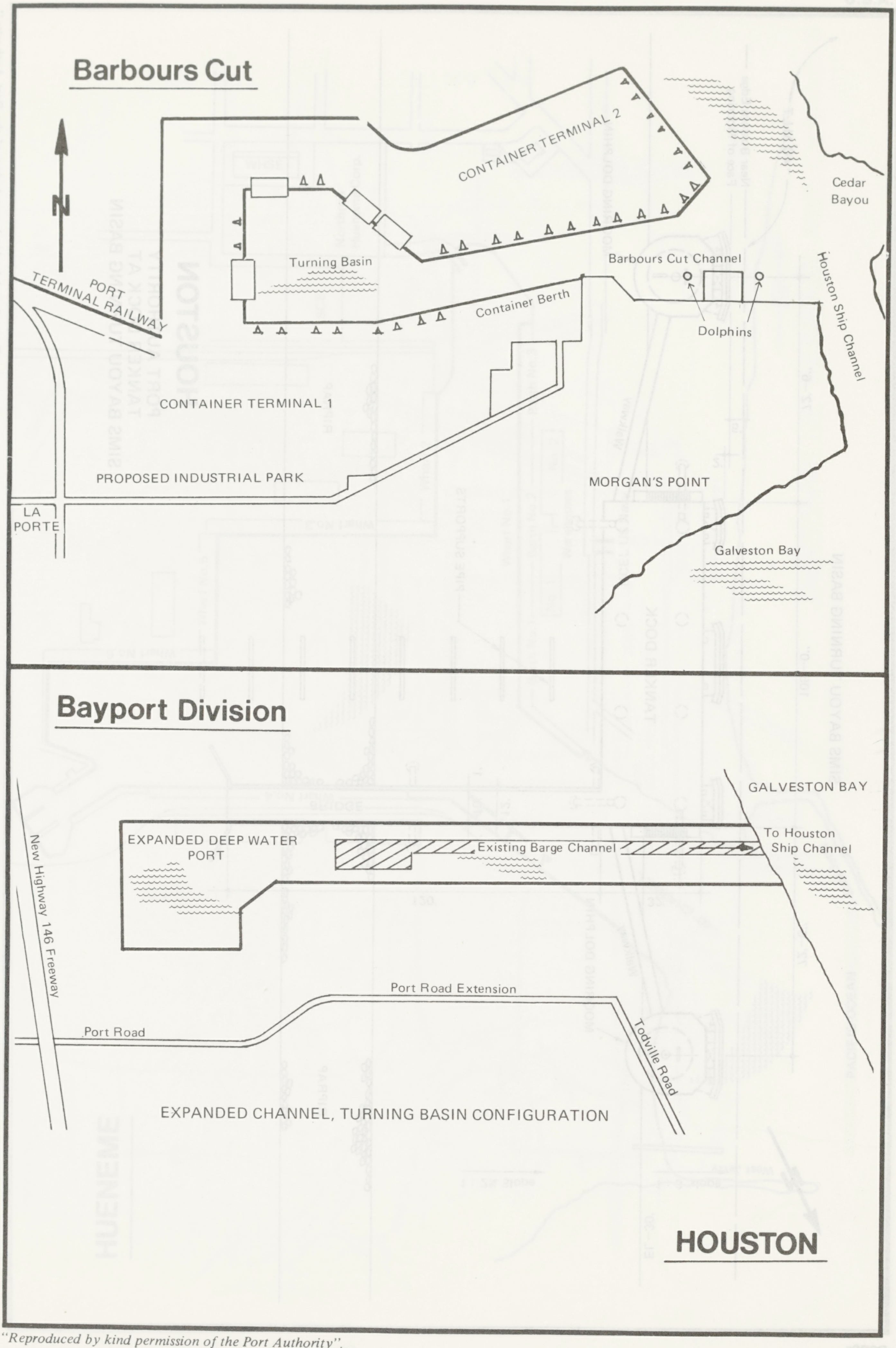
Barbours Cut
N
PORT TERMINAL RAILWAY
CONTAINER TERMINAL 2
Cedar Bayou
Turning Basin
Barbours Cut Channel
Houston Ship Channel
Container Berth
Dolphins
CONTAINER TERMINAL 1
PROPOSED INDUSTRIAL PARK
MORGAN'S POINT
LA PORTE
Galveston Bay
Bayport Division
GALVESTON BAY
EXPANDED DEEP WATER PORT
Existing Barge Channel
To Houston Ship Channel
New Highway 146 Freeway
Port Road Extension
Port Road
Todville Road
EXPANDED CHANNEL, TURNING BASIN CONFIGURATION
HOUSTON

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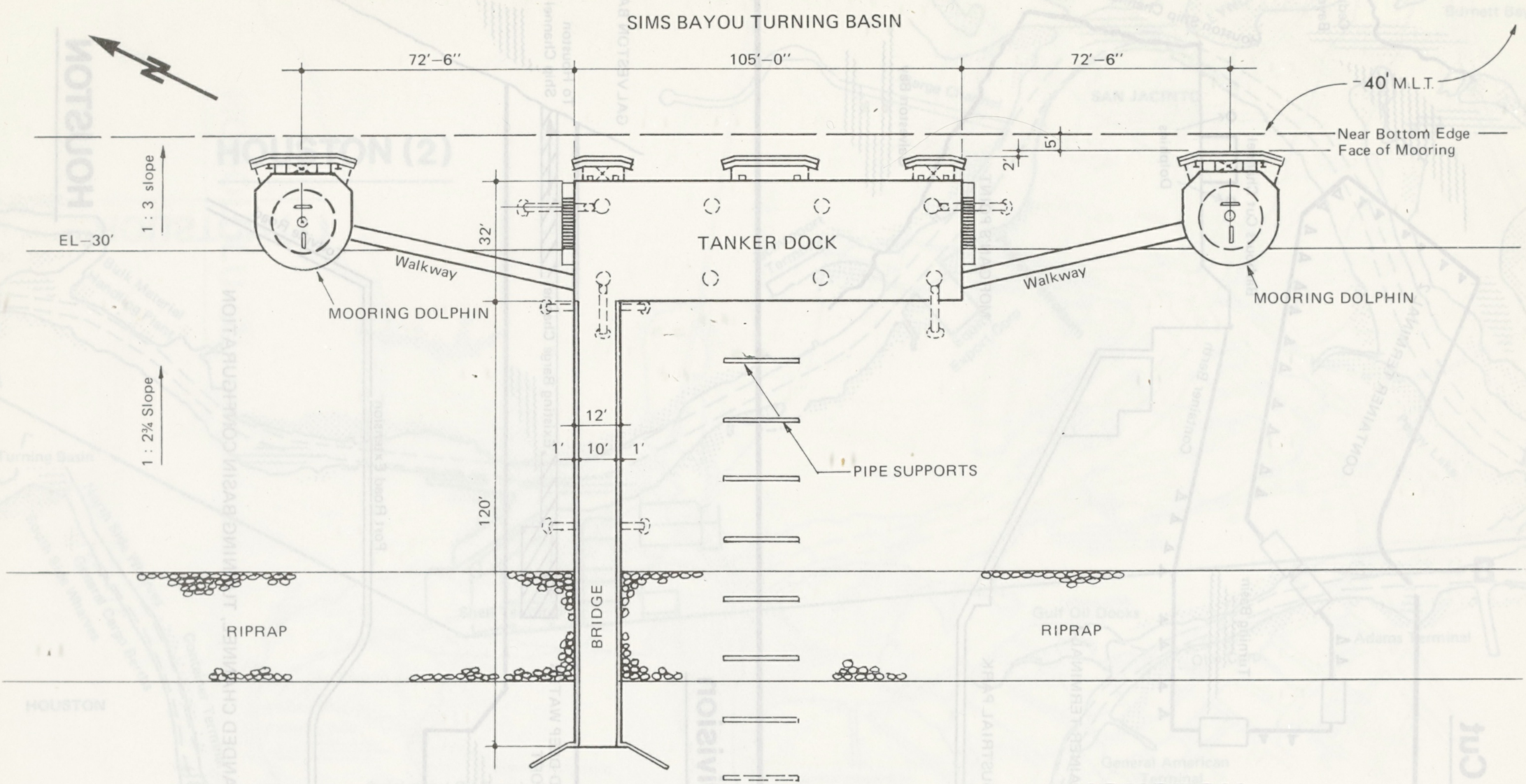
SIMS BAYOU TURNING BASIN
N
72'–6"
105'–0"
72'–6"
-40' M.L.T.
Near Bottom Edge
Face of Mooring
5'
2'
1 : 3 slope
EL–30'
32'
TANKER DOCK
Walkway
Walkway
MOORING DOLPHIN
MOORING DOLPHIN
1 : 2¾ Slope
12'
1'
10'
1'
PIPE SUPPORTS
120'
BRIDGE
RIPRAP
RIPRAP

HOUSTON

PORT AUTHORITY
TANKER DOCK AT
SIMS BAYOU TURNING BASIN

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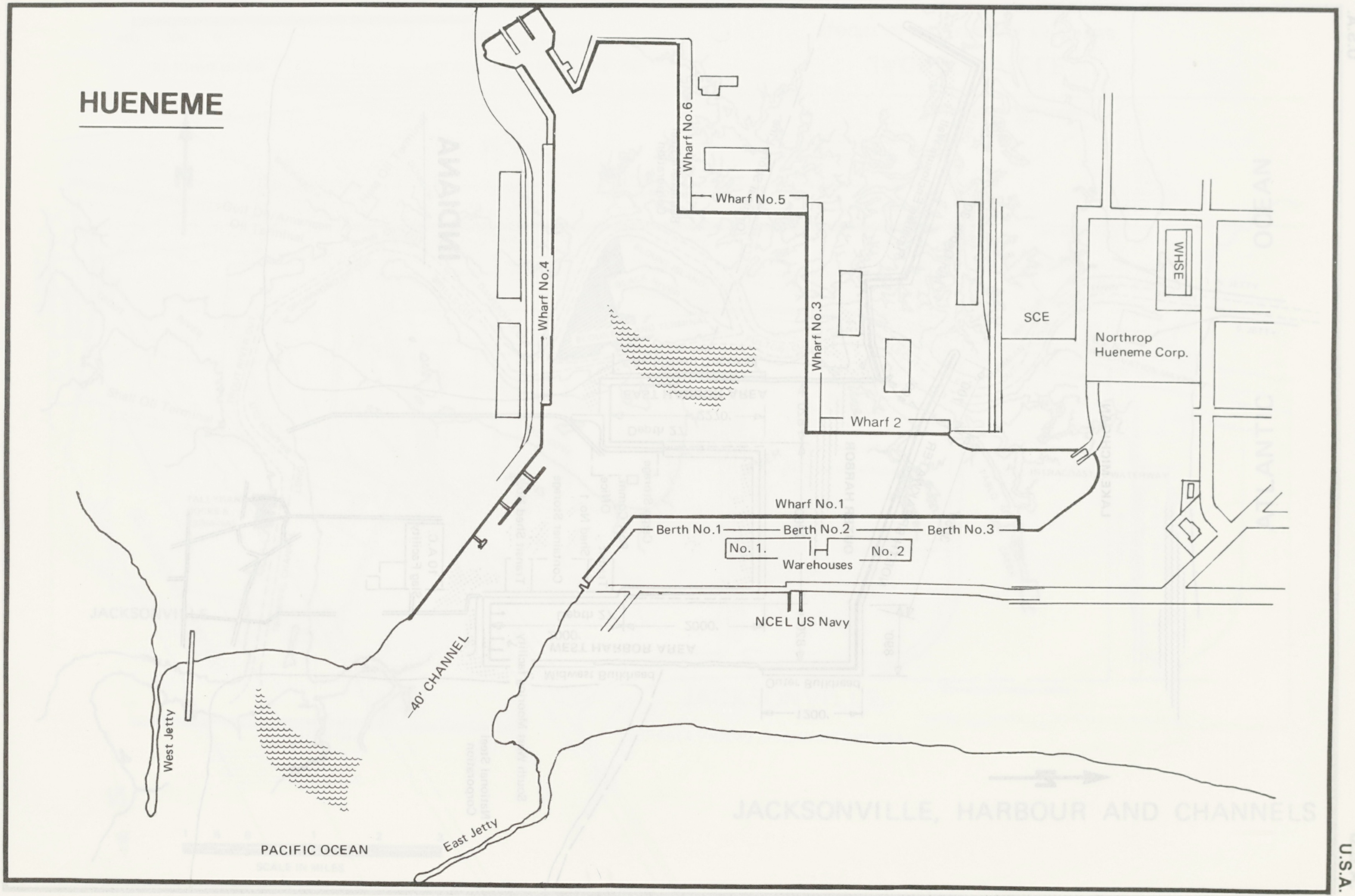
HUENEME


Wharf No.6
Wharf No.5
Wharf No.4
Wharf No.3
Wharf 2
SCE
WHSE
Northrop
Hueneme Corp.
Wharf No.1
Berth No.1
Berth No.2
Berth No.3
No. 1.
No. 2
Warehouses
NCEL US Navy
40' CHANNEL
West Jetty
East Jetty
PACIFIC OCEAN

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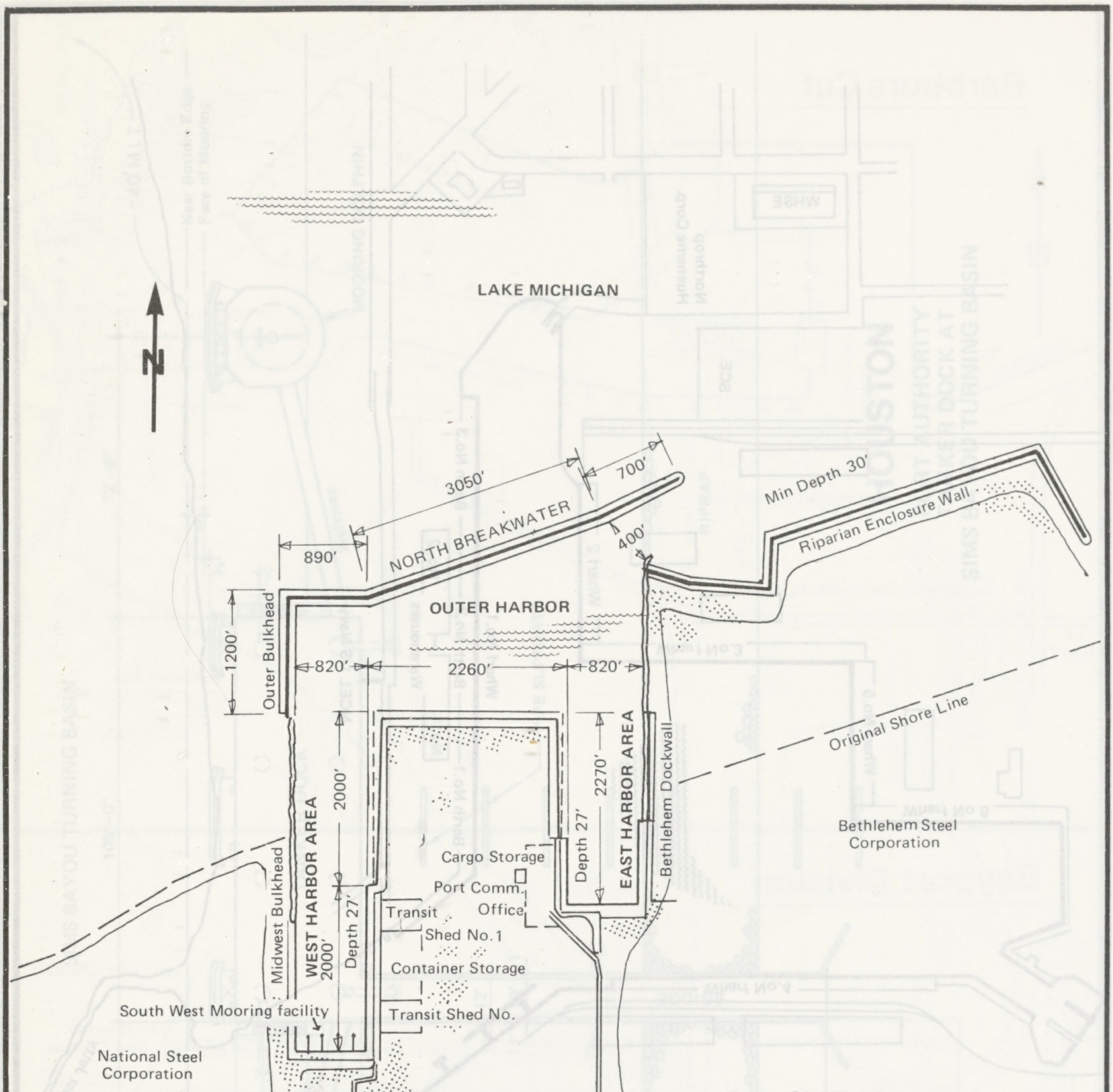
LAKE MICHIGAN
N
3050'
700'
890'
NORTH BREAKWATER
400'
Min Depth 30'
Riparian Enclosure Wall
OUTER HARBOR
Outer Bulkhead
1200'
820'
2260'
820'
Original Shore Line
2000'
2270'
WEST HARBOR AREA
EAST HARBOR AREA
Bethlehem Dockwall
Depth 27'
Depth 27'
Bethlehem Steel Corporation
Cargo Storage
Port Comm. Office
Transit
Shed No.1
Container Storage
Transit Shed No.
Midwest Bulkhead
2000'
South West Mooring facility
National Steel Corporation
10 A.C. Slag Facility
INDIANA

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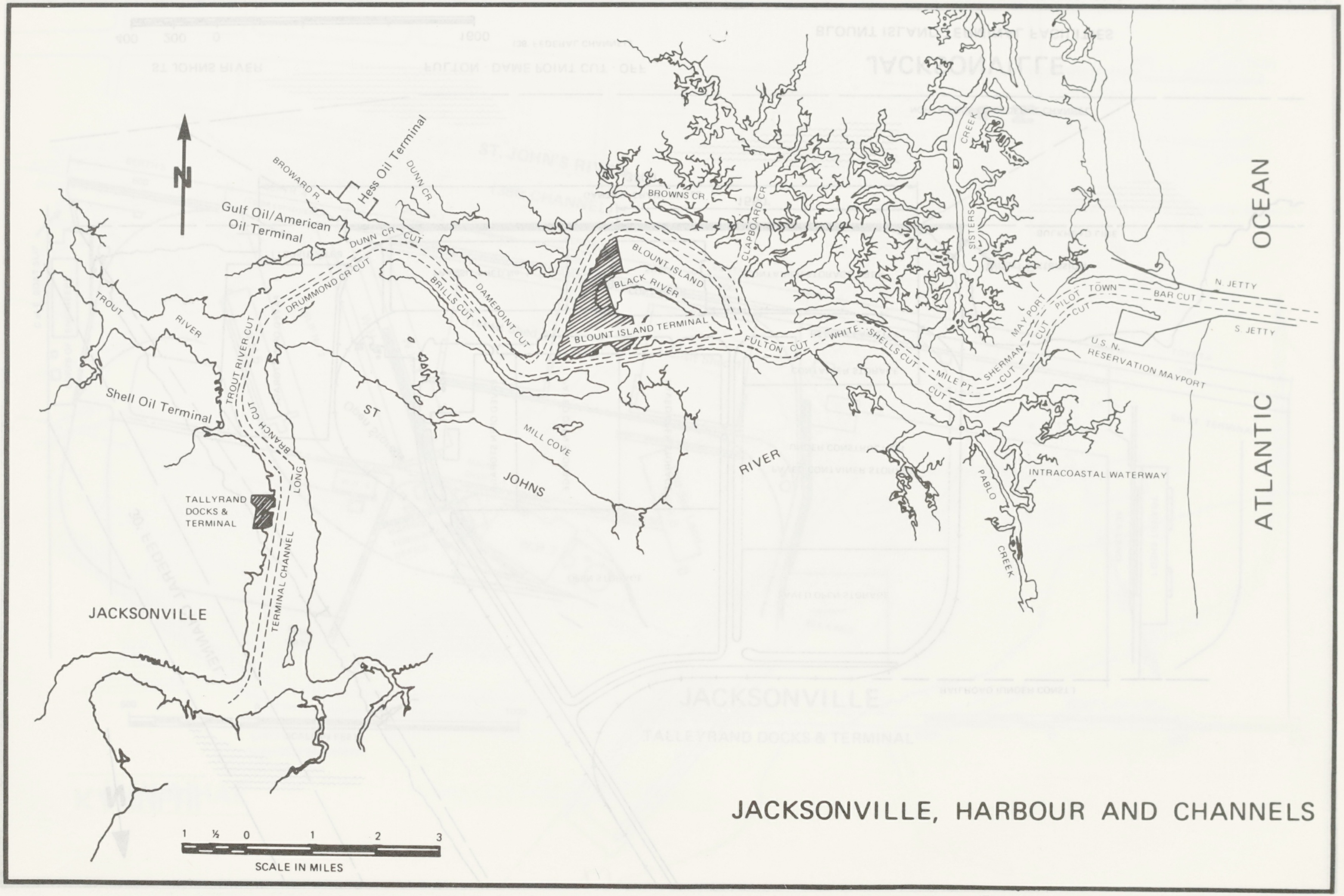
N
BROWARD R
Hess Oil Terminal
DUNN CR
Gulf Oil/American Oil Terminal
DUNN CR CUT
DRUMMOND CR CUT
TROUT
RIVER
TROUT RIVER CUT
BRILLS CUT
DAMEPOINT CUT
BROWNS CR
BLOUNT ISLAND
BLACK RIVER
BLOUNT ISLAND TERMINAL
CLAPBOARD CR
CREEK
SISTERS
FULTON CUT
WHITE SHELLS CUT
MILE PT CUT
SHERMAN CUT
MAY PORT CUT
PILOT TOWN CUT
BAR CUT
N. JETTY
S. JETTY
U.S.N. RESERVATION MAYPORT
ATLANTIC OCEAN
Shell Oil Terminal
BRANCH CUT
LONG
TERMINAL CHANNEL
TALLYRAND DOCKS & TERMINAL
ST JOHNS RIVER
MILL COVE
PABLO CREEK
INTRACOASTAL WATERWAY
JACKSONVILLE
1 ½ 0 1 2 3
SCALE IN MILES

JACKSONVILLE, HARBOUR AND CHANNELS

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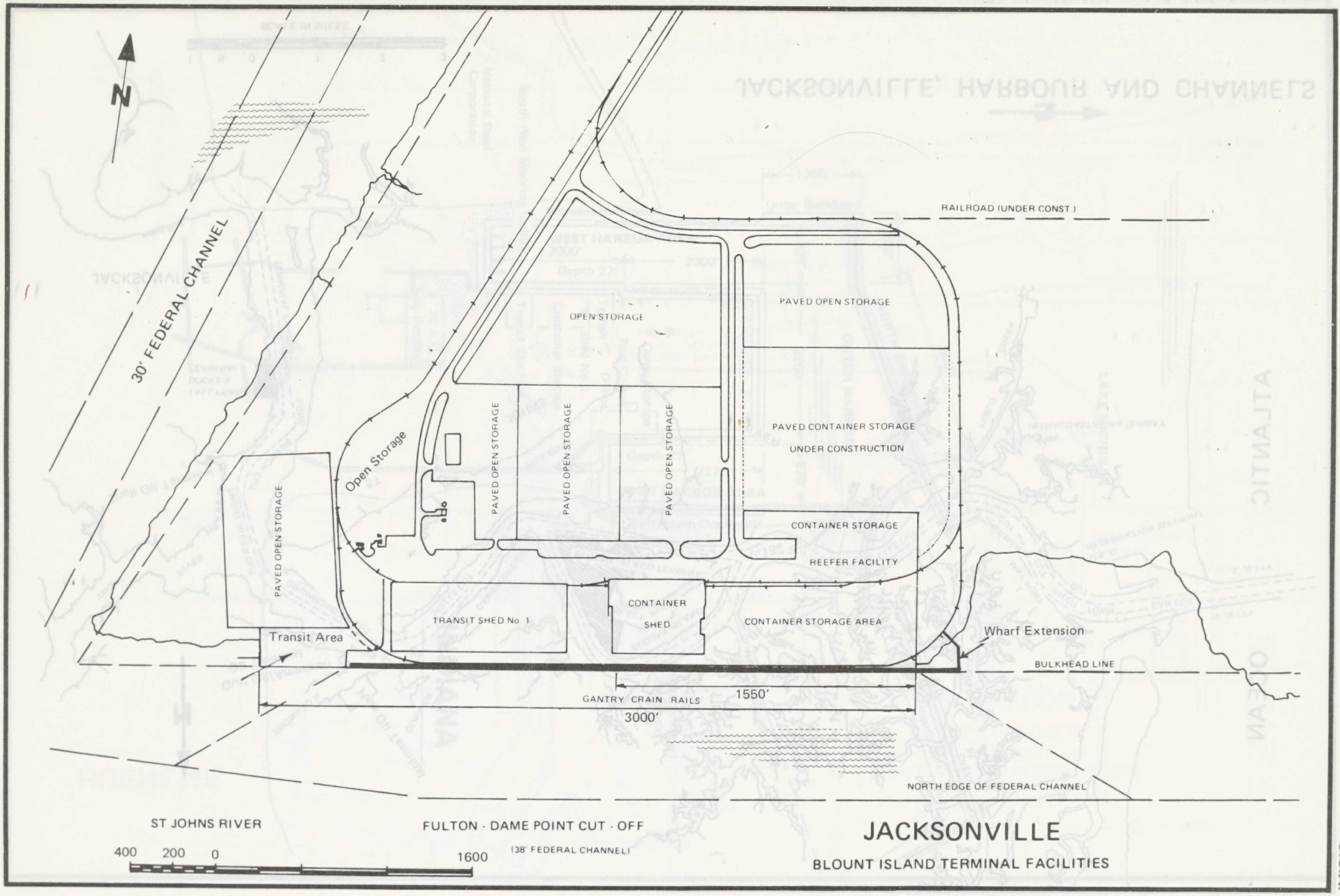

JACKSONVILLE

BLOUNT ISLAND TERMINAL FACILITIES

N
30' FEDERAL CHANNEL
RAILROAD (UNDER CONST.)
OPEN STORAGE
PAVED OPEN STORAGE
Open Storage
PAVED OPEN STORAGE
PAVED OPEN STORAGE
PAVED OPEN STORAGE
PAVED OPEN STORAGE
PAVED CONTAINER STORAGE
UNDER CONSTRUCTION
CONTAINER STORAGE
REEFER FACILITY
CONTAINER SHED
TRANSIT SHED No. 1
CONTAINER STORAGE AREA
Transit Area
Wharf Extension
BULKHEAD LINE
1550'
GANTRY CRAIN RAILS
3000'
NORTH EDGE OF FEDERAL CHANNEL
ST JOHNS RIVER
FULTON - DAME POINT CUT - OFF
(38' FEDERAL CHANNEL)
400
200
0
1600

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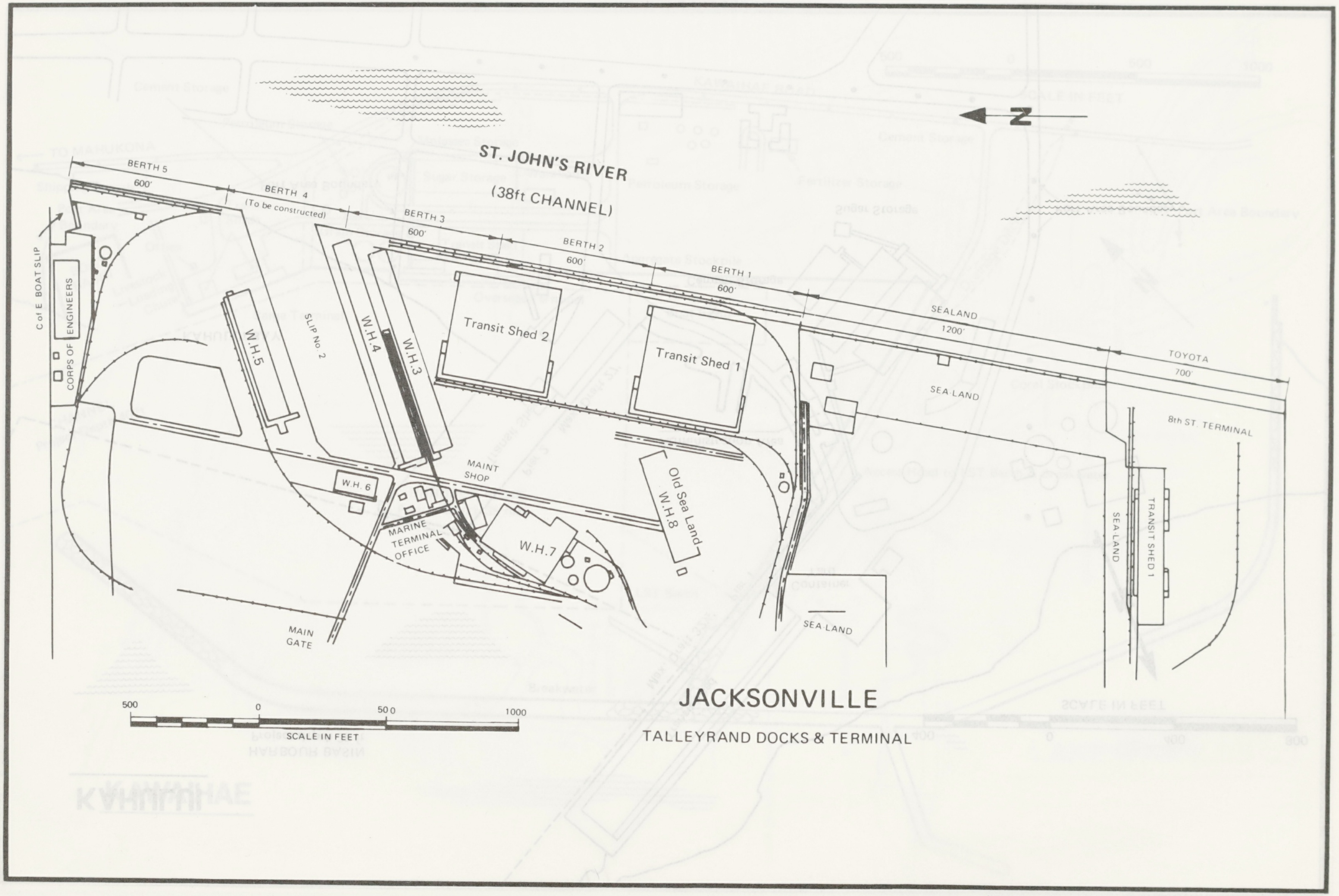
ST. JOHN'S RIVER
(38ft CHANNEL)
N
BERTH 5
600'
BERTH 4
(To be constructed)
BERTH 3
600'
BERTH 2
600'
BERTH 1
600'
SEALAND
1200'
TOYOTA
700'
C of E BOAT SLIP
CORPS OF ENGINEERS
W.H.5
SLIP No. 2
W.H.4
W.H.3
Transit Shed 2
Transit Shed 1
SEA LAND
8th ST. TERMINAL
W.H. 6
MAINT SHOP
MARINE TERMINAL OFFICE
W.H.7
Old Sea Land W.H.8
SEA-LAND
TRANSIT SHED 1
SEA-LAND
MAIN GATE
500
0
500
1000
SCALE IN FEET
JACKSONVILLE
TALLEYRAND DOCKS & TERMINAL

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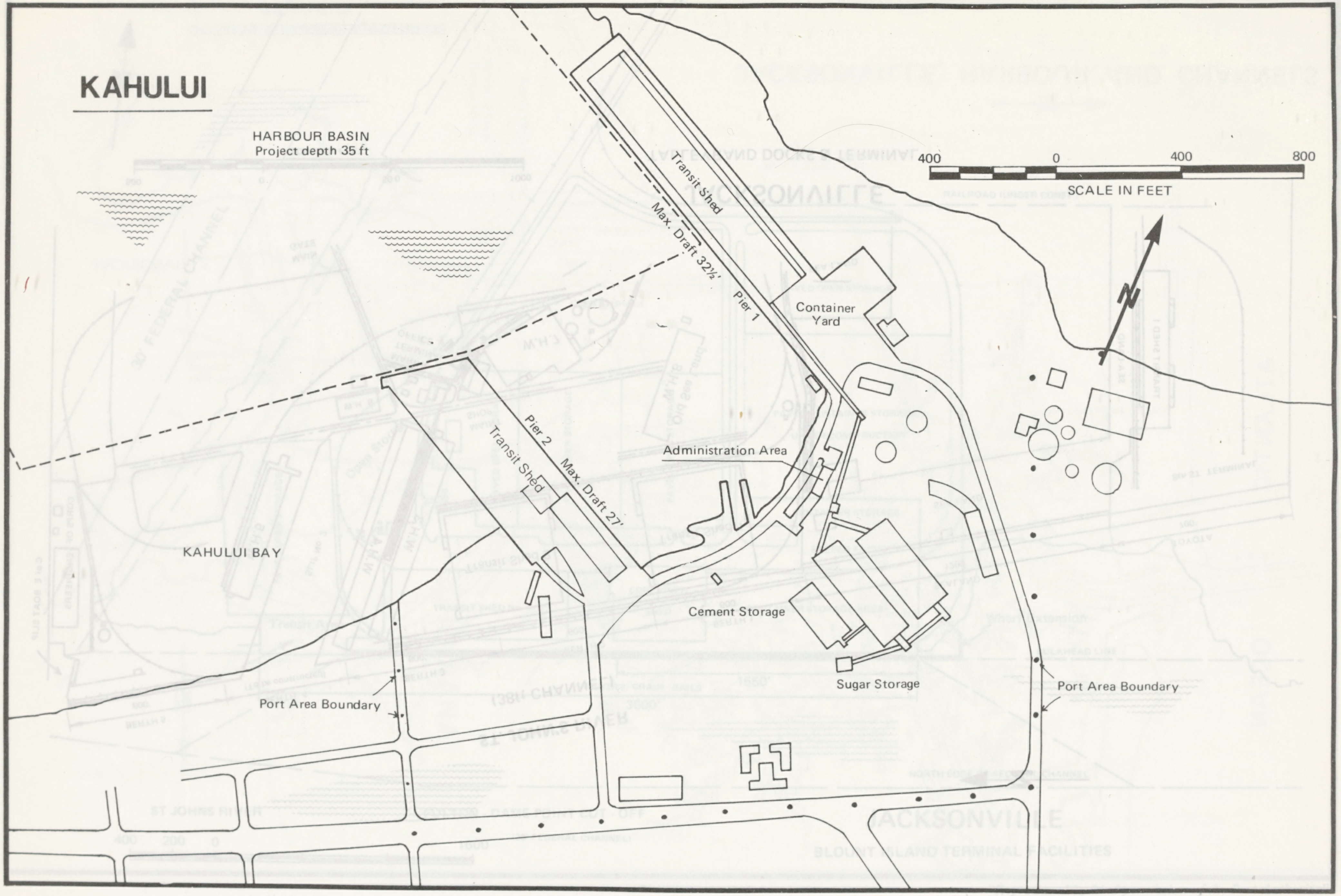
KAHULUI


HARBOUR BASIN
Project depth 35 ft
Transit Shed
Max. Draft 32½'
Pier 1
Container Yard
400
0
400
800
SCALE IN FEET
Pier 2
Transit Shed
Max. Draft 27'
Administration Area
KAHULUI BAY
Cement Storage
Sugar Storage
Port Area Boundary
Port Area Boundary

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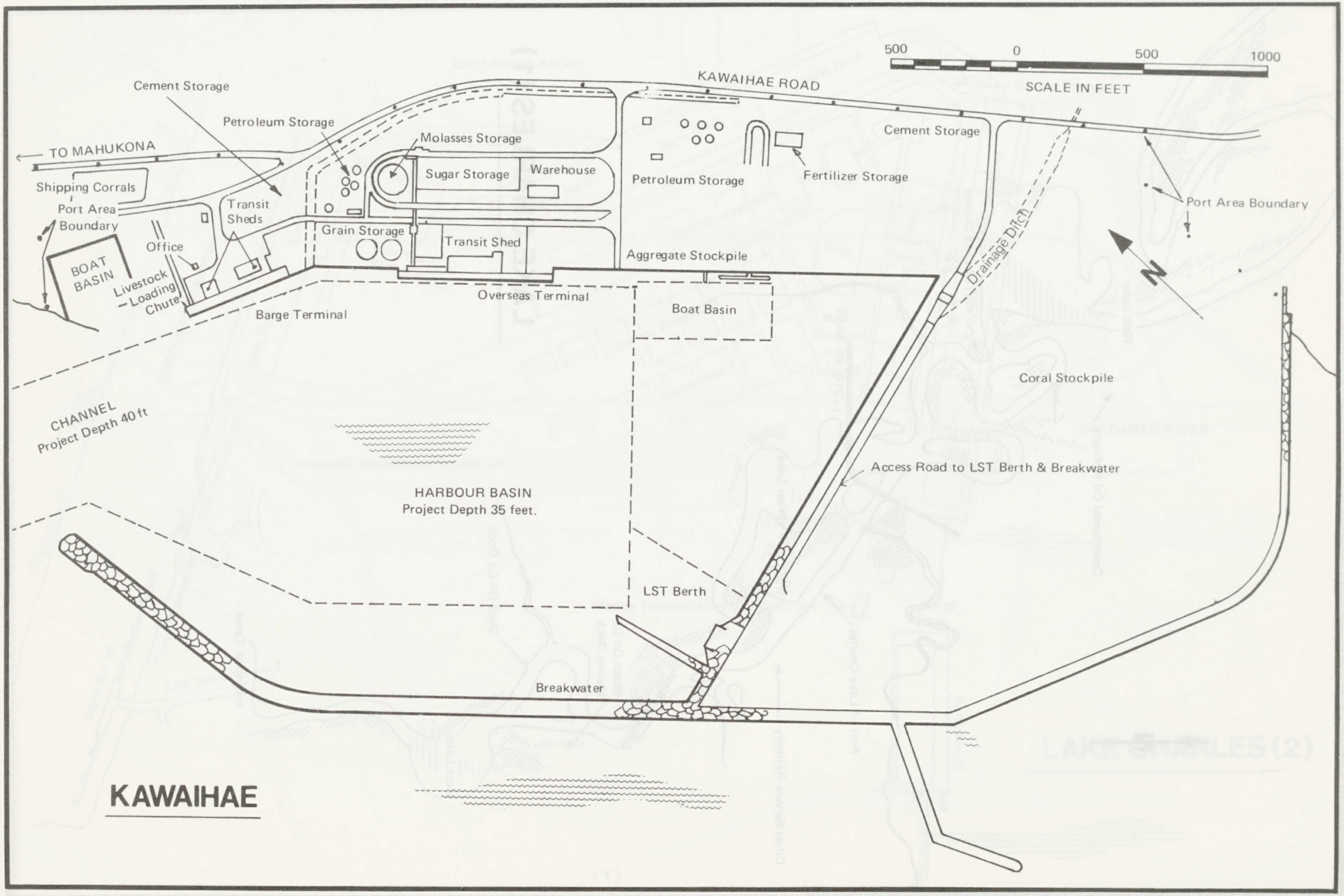
KAWAIHAE
500
0
500
1000
SCALE IN FEET
KAWAIHAE ROAD
TO MAHUKONA
Cement Storage
Petroleum Storage
Molasses Storage
Sugar Storage
Warehouse
Petroleum Storage
Fertilizer Storage
Cement Storage
Shipping Corrals
Port Area Boundary
Transit Sheds
Grain Storage
Transit Shed
Office
BOAT BASIN
Livestock Loading Chute
Aggregate Stockpile
Drainage Ditch
Port Area Boundary
N
Overseas Terminal
Barge Terminal
Boat Basin
Coral Stockpile
CHANNEL
Project Depth 40 ft
HARBOUR BASIN
Project Depth 35 feet.
Access Road to LST Berth & Breakwater
LST Berth
Breakwater

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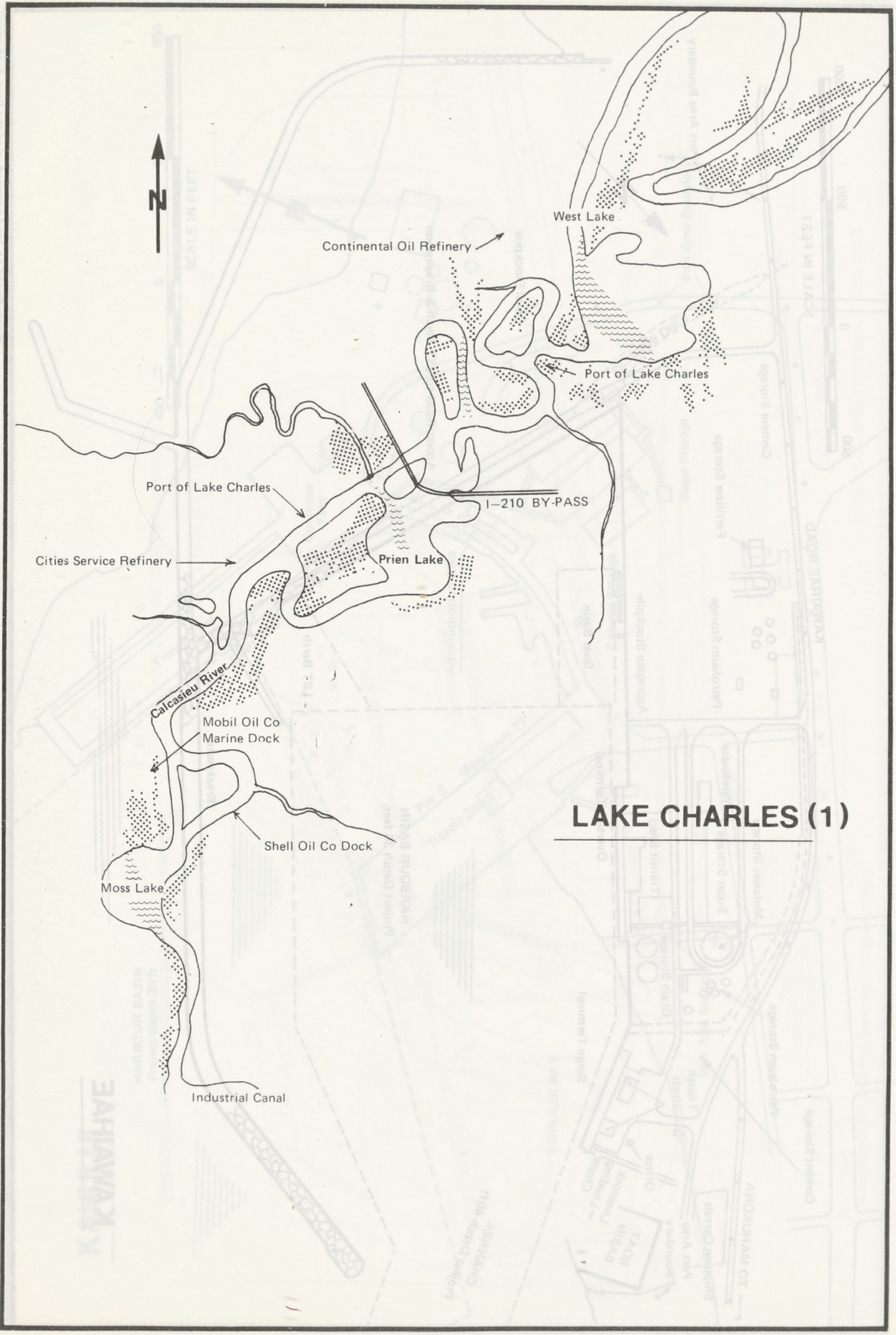

N
West Lake
Continental Oil Refinery
Port of Lake Charles
Port of Lake Charles
I–210 BY-PASS
Cities Service Refinery
Prien Lake
Calcasieu River
Mobil Oil Co
Marine Dock
Shell Oil Co Dock
Moss Lake
Industrial Canal

LAKE CHARLES (1)

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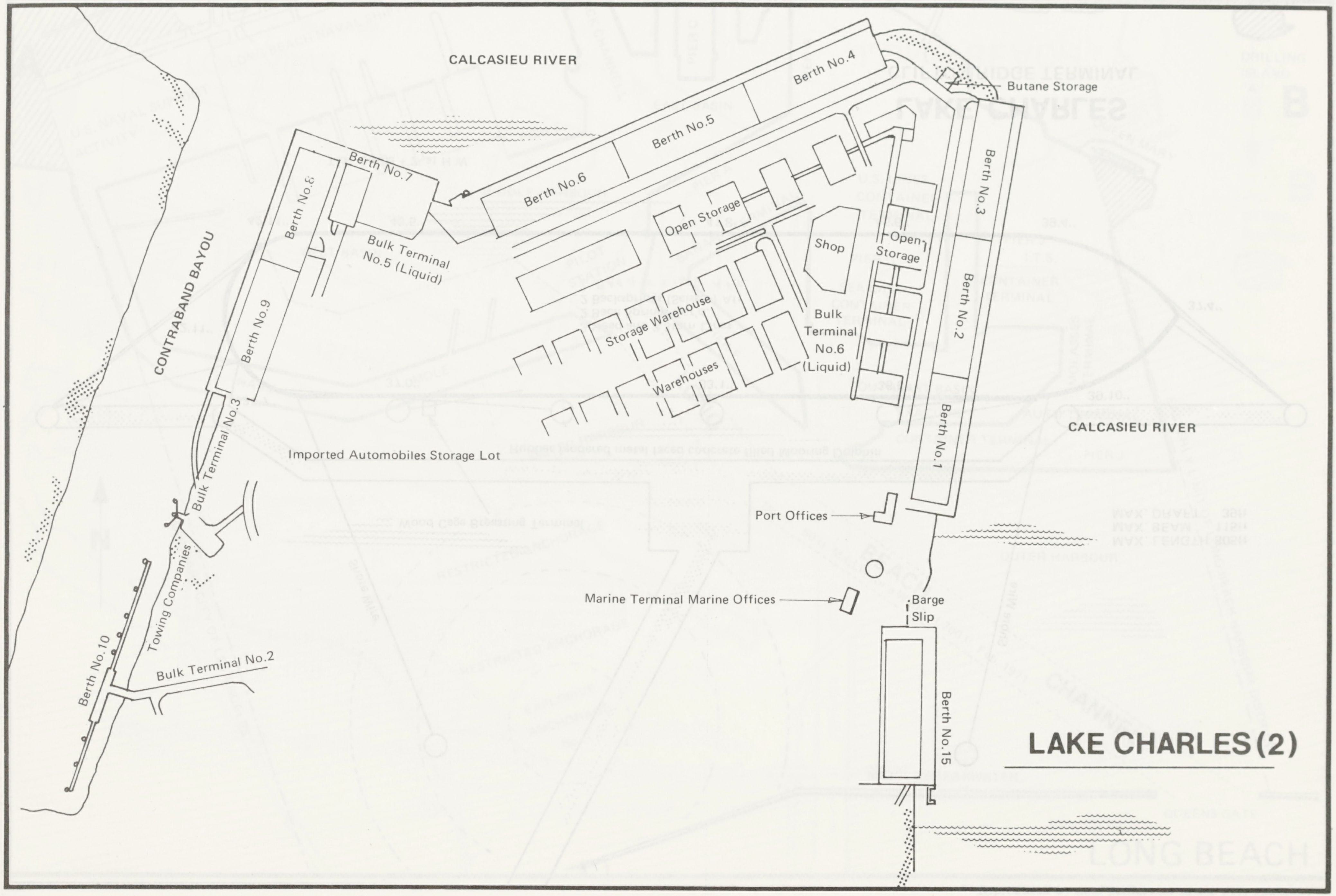
CALCASIEU RIVER
Berth No.4
Butane Storage
Berth No.5
Berth No.6
Berth No.7
Berth No.8
Berth No.3
Bulk Terminal No.5 (Liquid)
Open Storage
Shop
Open Storage
CONTRABAND BAYOU
Berth No.9
Storage Warehouse
Berth No.2
Bulk Terminal No.6 (Liquid)
Warehouses
Bulk Terminal No.3
Berth No.1
CALCASIEU RIVER
Imported Automobiles Storage Lot
Port Offices
Towing Companies
Marine Terminal Marine Offices
Barge Slip
Berth No.10
Bulk Terminal No.2
Berth No.15

LAKE CHARLES (2)

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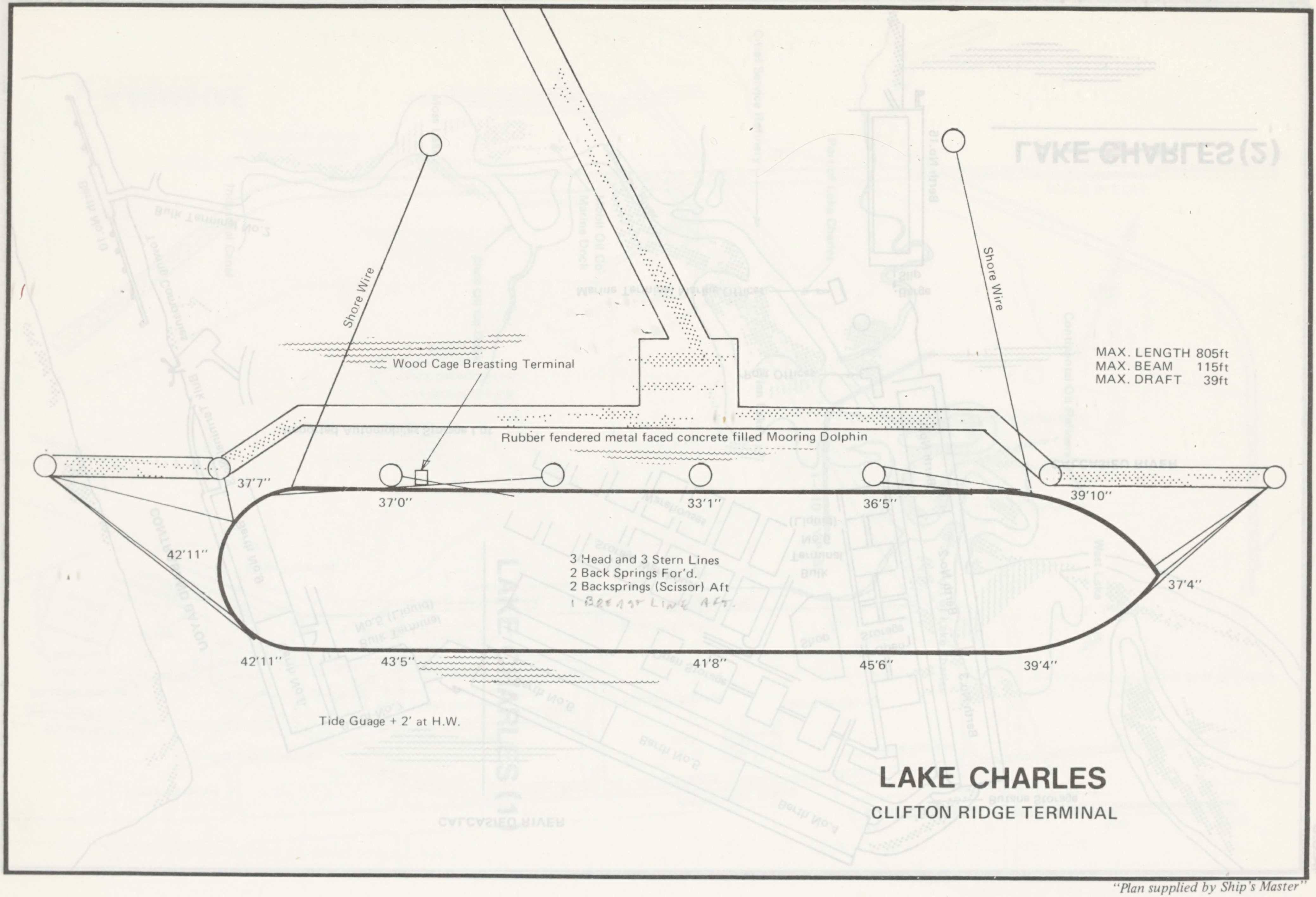
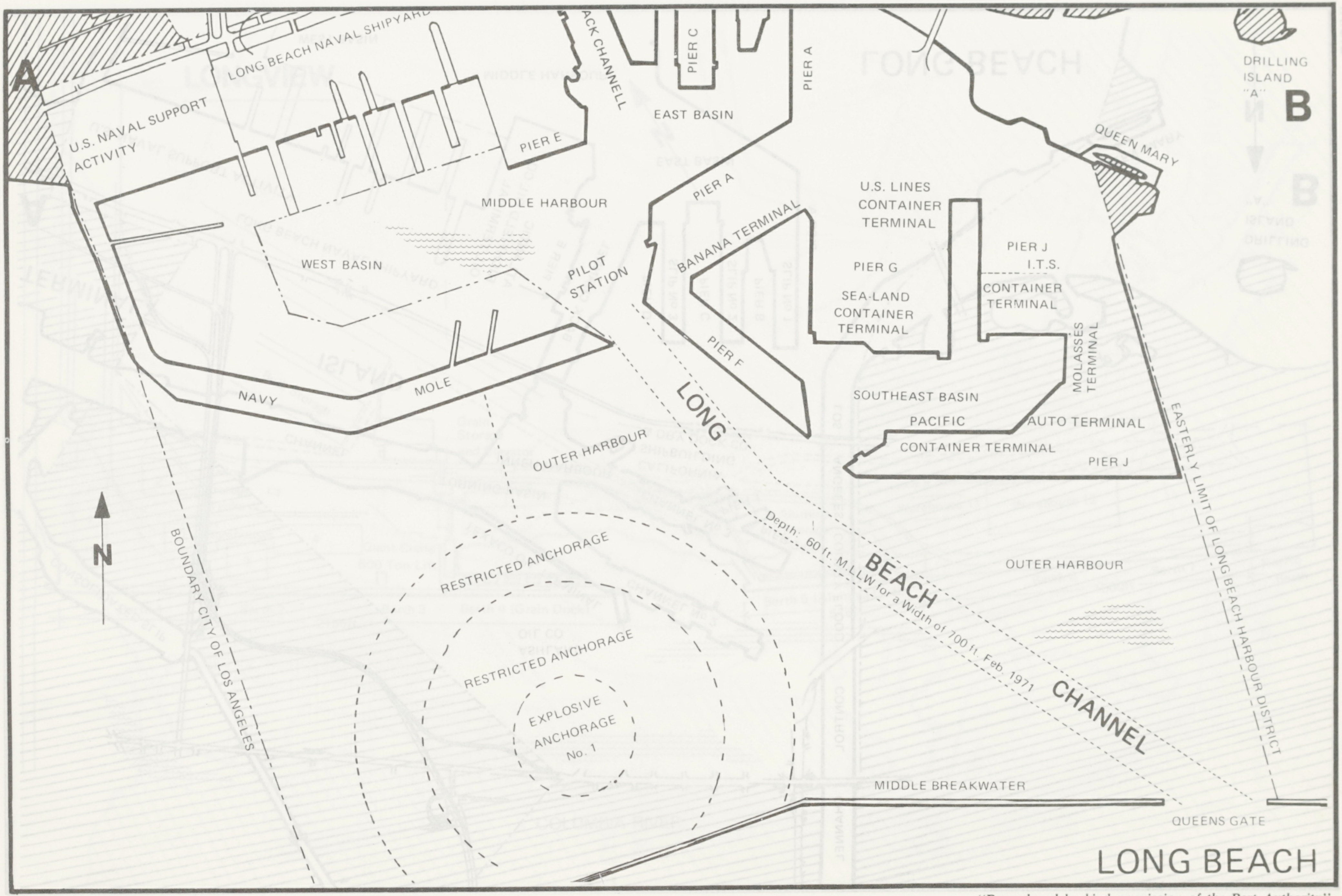

Shore Wire
Shore Wire
Wood Cage Breasting Terminal
Rubber fendered metal faced concrete filled Mooring Dolphin
37'7"
37'0"
33'1"
36'5"
39'10"
42'11"
37'4"
42'11"
43'5"
41'8"
45'6"
39'4"
3 Head and 3 Stern Lines
2 Back Springs For'd.
2 Backsprings (Scissor) Aft
1 BREAST LINE AFT.
Tide Guage + 2' at H.W.

MAX. LENGTH 805ft
MAX. BEAM 115ft
MAX. DRAFT 39ft

LAKE CHARLES

CLIFTON RIDGE TERMINAL

"Plan supplied by Ship's Master"


A
B
LONG BEACH NAVAL SHIPYARD
U.S. NAVAL SUPPORT ACTIVITY
BACK CHANNELL
PIER C
PIER A
EAST BASIN
PIER E
MIDDLE HARBOUR
PIER A
BANANA TERMINAL
WEST BASIN
PILOT STATION
U.S. LINES CONTAINER TERMINAL
PIER G
SEA-LAND CONTAINER TERMINAL
PIER J
I.T.S.
CONTAINER TERMINAL
PIER F
DRILLING ISLAND "A"
QUEEN MARY
MOLASSES TERMINAL
NAVY
MOLE
LONG
BEACH
CHANNEL
Depth 60 ft. M.L.L.W for a Width of 700 ft. Feb. 1971
SOUTHEAST BASIN
PACIFIC CONTAINER TERMINAL
AUTO TERMINAL
PIER J
OUTER HARBOUR
OUTER HARBOUR
EASTERLY LIMIT OF LONG BEACH HARBOUR DISTRICT
N
BOUNDARY CITY OF LOS ANGELES
RESTRICTED ANCHORAGE
RESTRICTED ANCHORAGE
EXPLOSIVE ANCHORAGE No. 1
MIDDLE BREAKWATER
QUEENS GATE
LONG BEACH

U.S.A.

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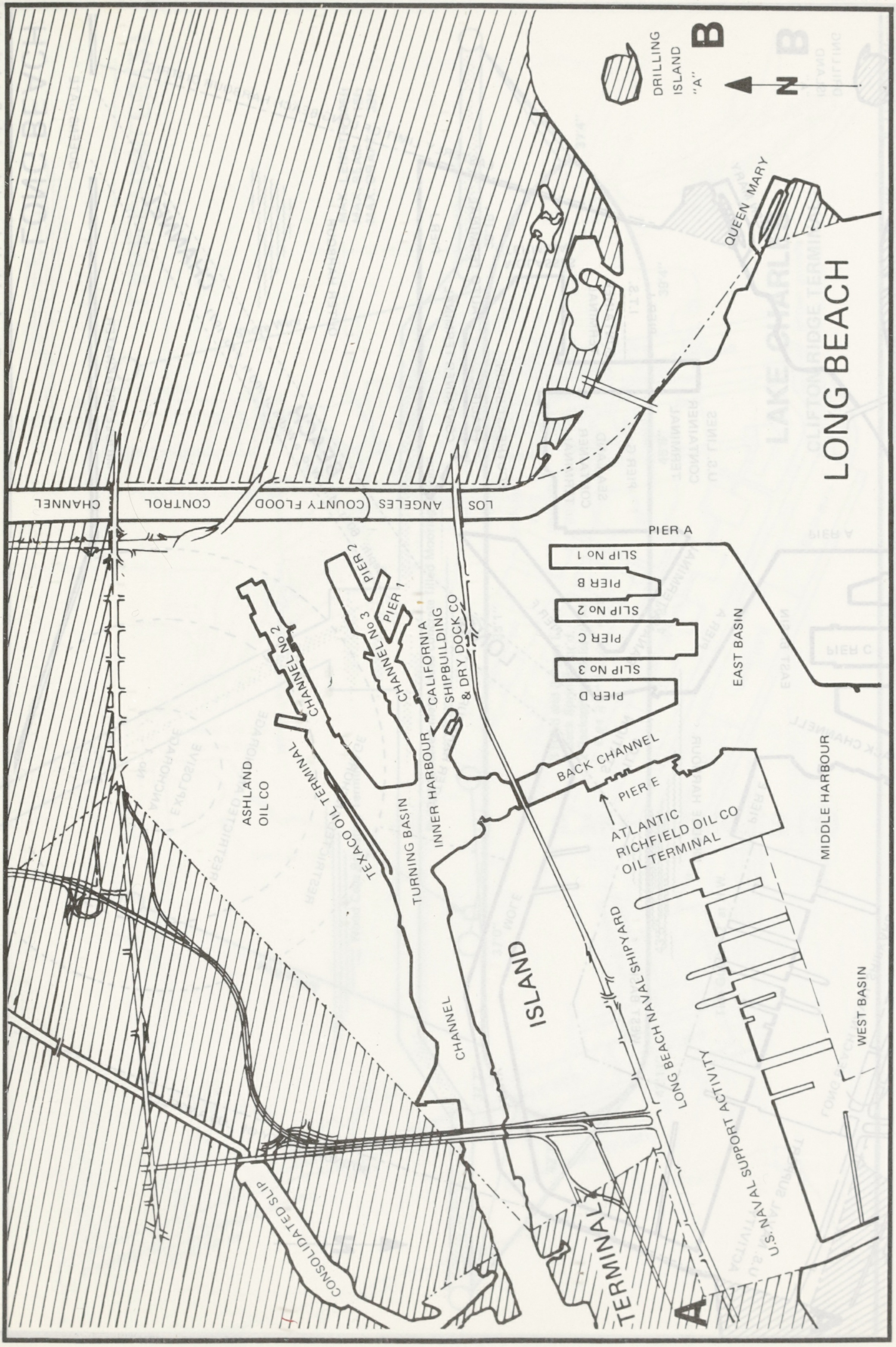
P987


A
B
N
DRILLING ISLAND "A"
QUEEN MARY
LONG BEACH
LOS ANGELES COUNTY FLOOD CONTROL CHANNEL
PIER A
SLIP No 1
PIER B
SLIP No 2
PIER C
SLIP No 3
PIER D
EAST BASIN
BACK CHANNEL
PIER E
ATLANTIC RICHFIELD OIL CO OIL TERMINAL
MIDDLE HARBOUR
WEST BASIN
PIER 2
PIER 1
CHANNEL No 3
CHANNEL No 2
CALIFORNIA SHIPBUILDING & DRY DOCK CO
INNER HARBOUR
TURNING BASIN
TEXACO OIL TERMINAL
ASHLAND OIL CO
CHANNEL
ISLAND
LONG BEACH NAVAL SHIPYARD
U.S. NAVAL SUPPORT ACTIVITY
TERMINAL
CONSOLIDATED SLIP

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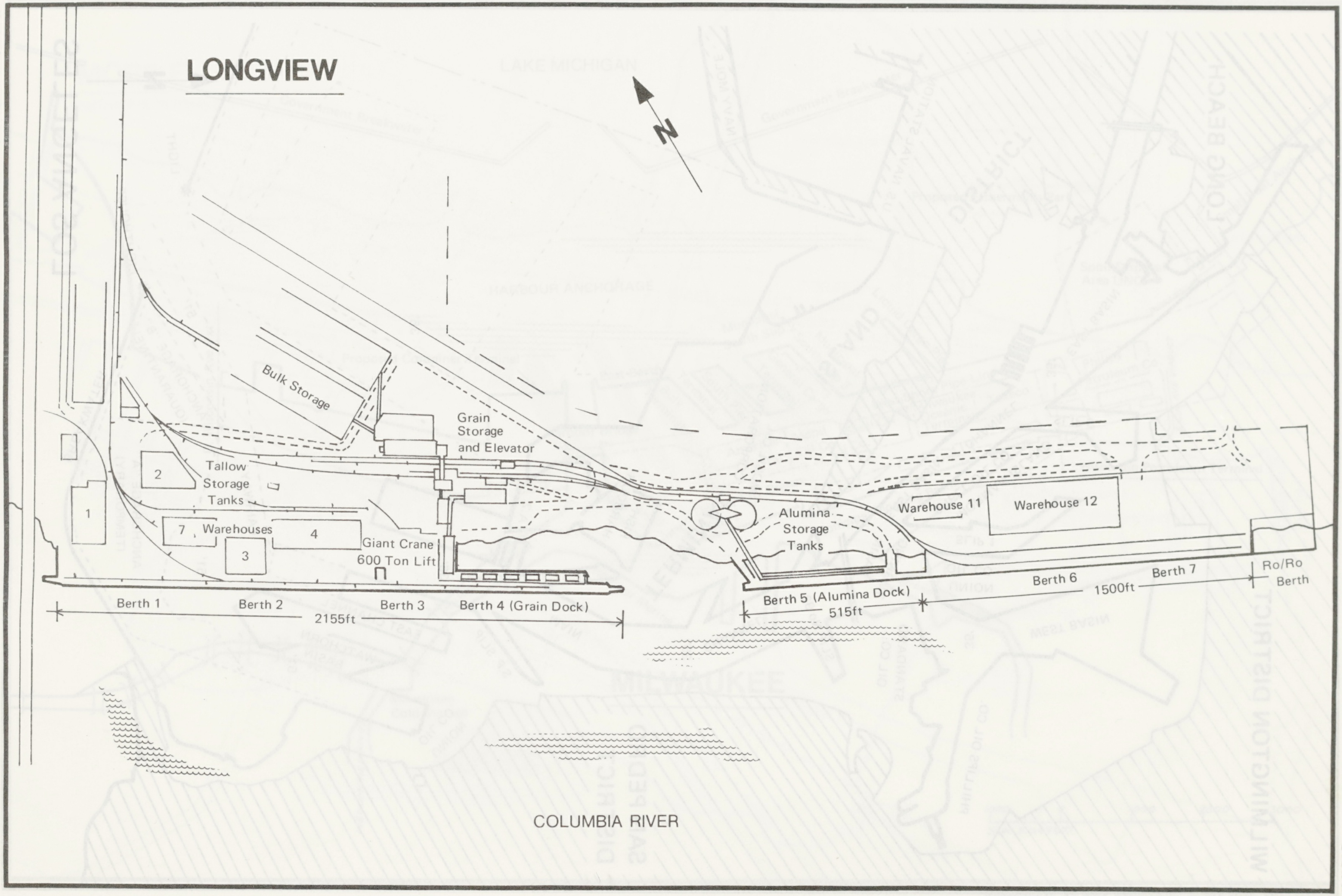
LONGVIEW


N
Bulk Storage
Grain Storage and Elevator
Tallow Storage Tanks
2
1
7
Warehouses
4
3
Giant Crane 600 Ton Lift
Alumina Storage Tanks
Warehouse 11
Warehouse 12
Berth 1
Berth 2
Berth 3
Berth 4 (Grain Dock)
2155ft
Berth 5 (Alumina Dock)
515ft
Berth 6
Berth 7
1500ft
Ro/Ro Berth
COLUMBIA RIVER

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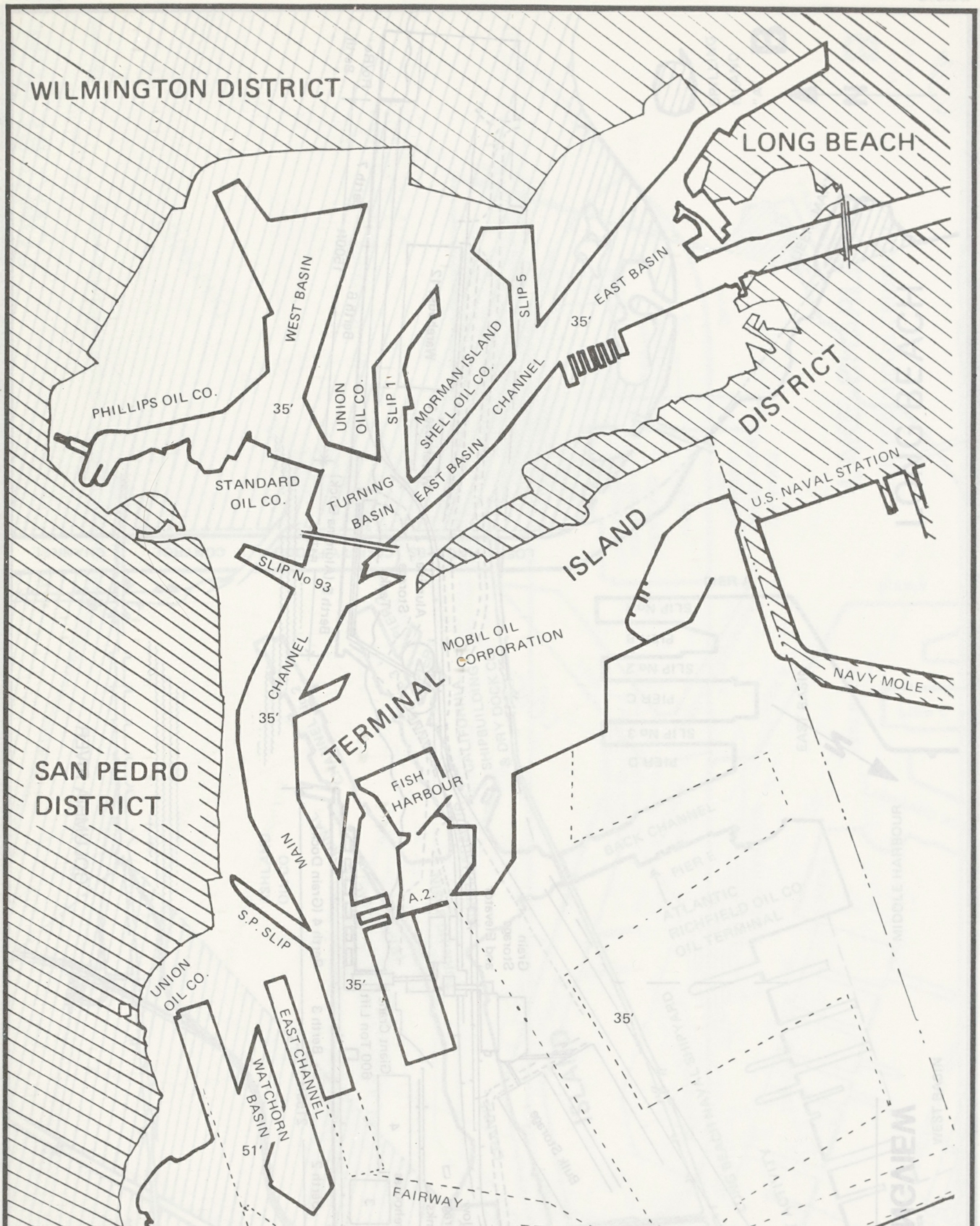
WILMINGTON DISTRICT
LONG BEACH
DISTRICT
WEST BASIN
PHILLIPS OIL CO.
35′
UNION OIL CO.
SLIP 1
MORMAN ISLAND
SHELL OIL CO.
SLIP 5
EAST BASIN
35′
EAST BASIN
CHANNEL
STANDARD OIL CO.
TURNING BASIN
U.S. NAVAL STATION
ISLAND
SLIP No 93
MOBIL OIL CORPORATION
CHANNEL
35′
TERMINAL
NAVY MOLE
SAN PEDRO DISTRICT
FISH HARBOUR
MAIN
A.2.
S.P. SLIP
UNION OIL CO.
35′
EAST CHANNEL
WATCHORN BASIN
35′
51′
FAIRWAY
51′
ANCHORAGE "B" (QUARANTINE)
51′
LIGHT
N
ANCHORAGE "A" (TEMPORARY)
LIGHTHOUSE
BREAKWATER
LOS ANGELES

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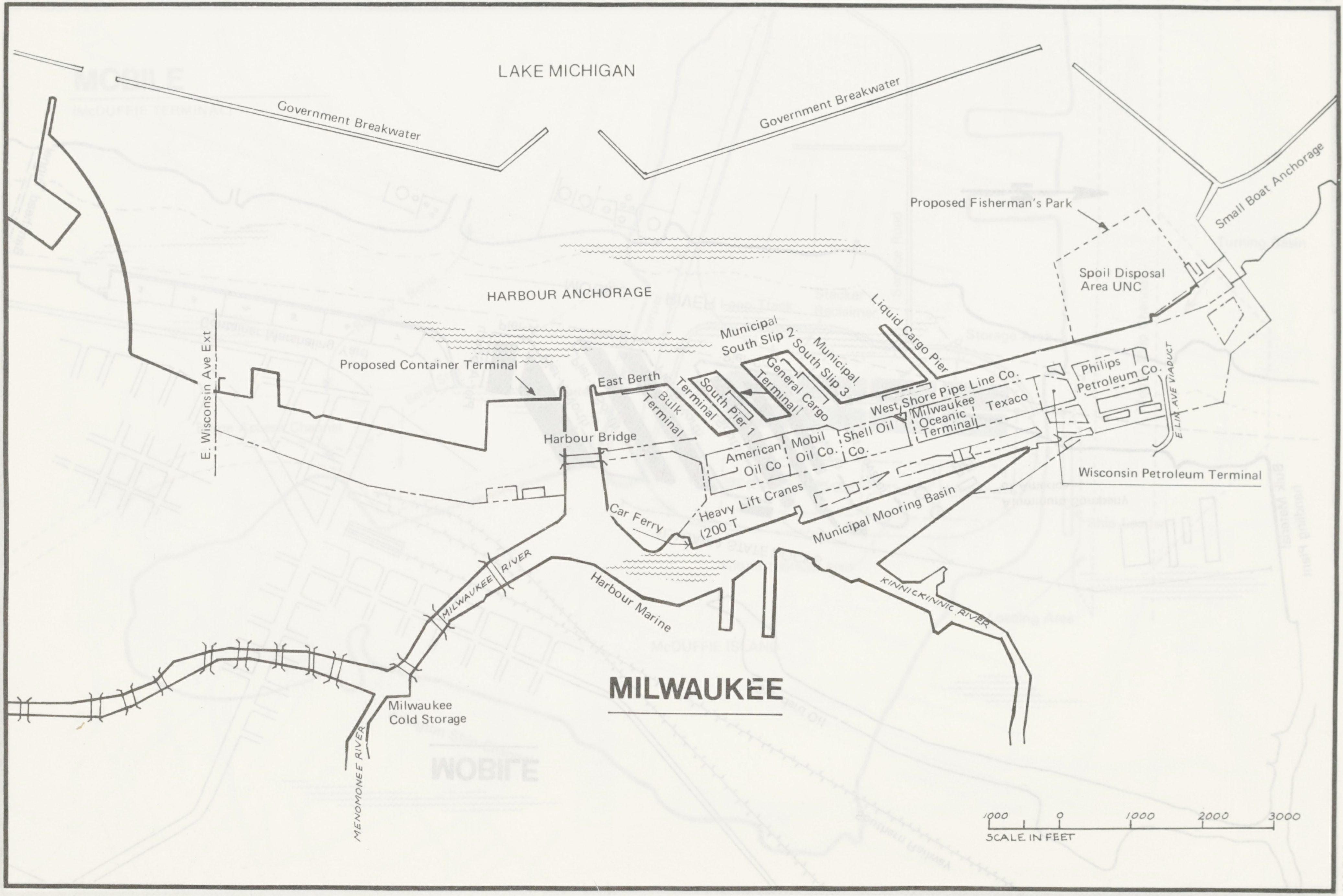
LAKE MICHIGAN
Government Breakwater
Government Breakwater
Small Boat Anchorage
Proposed Fisherman's Park
Spoil Disposal Area UNC
HARBOUR ANCHORAGE
Liquid Cargo Pier
Municipal South Slip 2
Municipal South Slip 3
General Cargo Terminal
South Pier 1
Bulk Terminal
Terminal
East Berth
Proposed Container Terminal
E. Wisconsin Ave Ext
Harbour Bridge
West Shore Pipe Line Co.
Milwaukee Oceanic Terminal
Texaco
Philips Petroleum Co.
E. LIN. AVE VIADUCT
American Oil Co
Mobil Oil Co.
Shell Oil Co.
Wisconsin Petroleum Terminal
Heavy Lift Cranes 200 T
Car Ferry
Municipal Mooring Basin
KINNICKINNIC RIVER
Harbour Marine
MILWAUKEE RIVER
MILWAUKEE
Milwaukee Cold Storage
MENOMONEE RIVER
1000
0
1000
2000
3000
SCALE IN FEET

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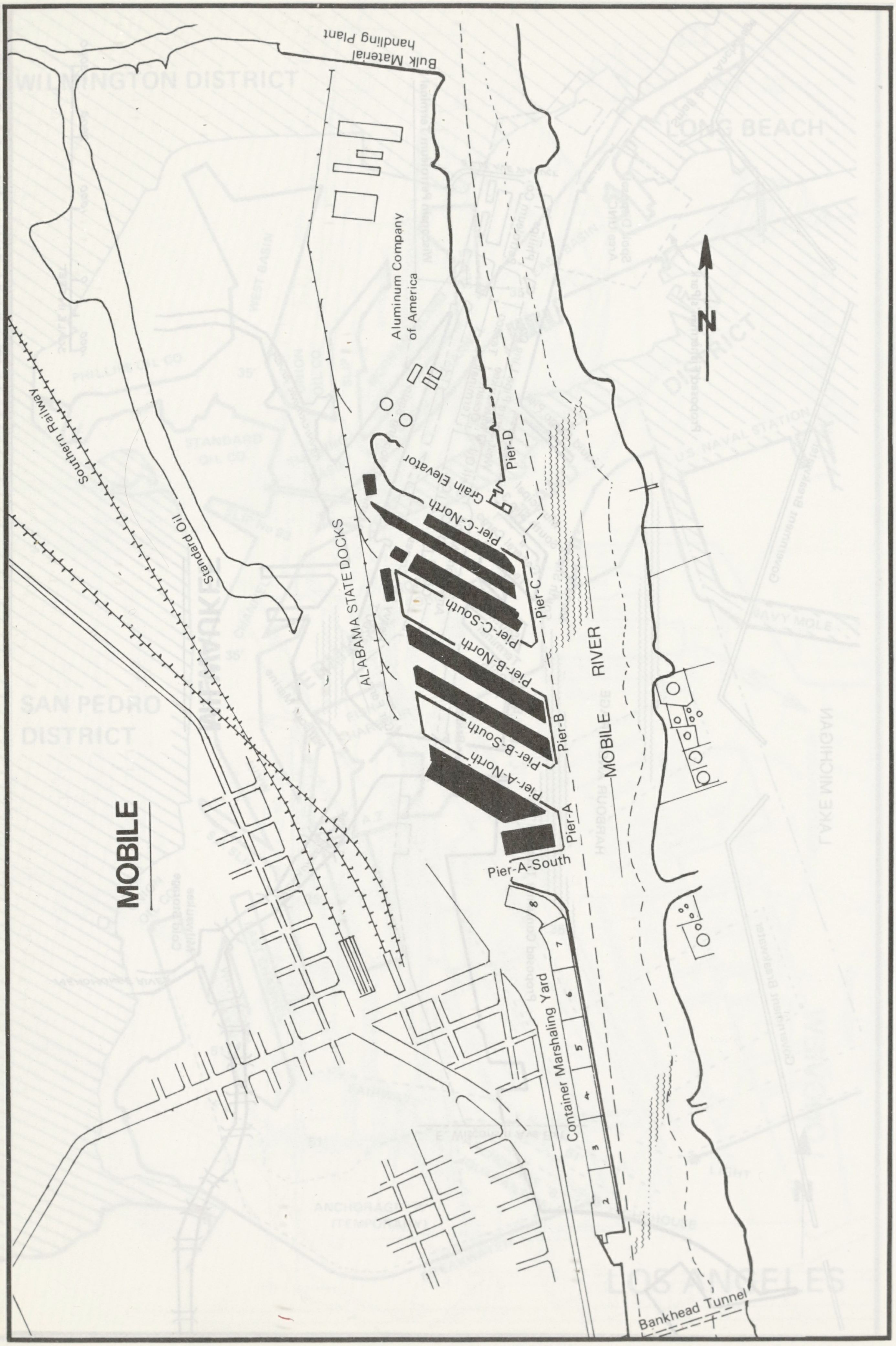
MOBILE
Southern Railway
Standard Oil
ALABAMA STATE DOCKS
Aluminum Company of America
Bulk Material handling Plant
Grain Elevator
Pier-D
Pier-C-North
Pier-C
Pier-C-South
Pier-B-North
Pier-B
Pier-B-South
Pier-A-North
Pier-A
Pier-A-South
MOBILE RIVER
Container Marshaling Yard
2
3
4
5
6
7
8
Bankhead Tunnel
N

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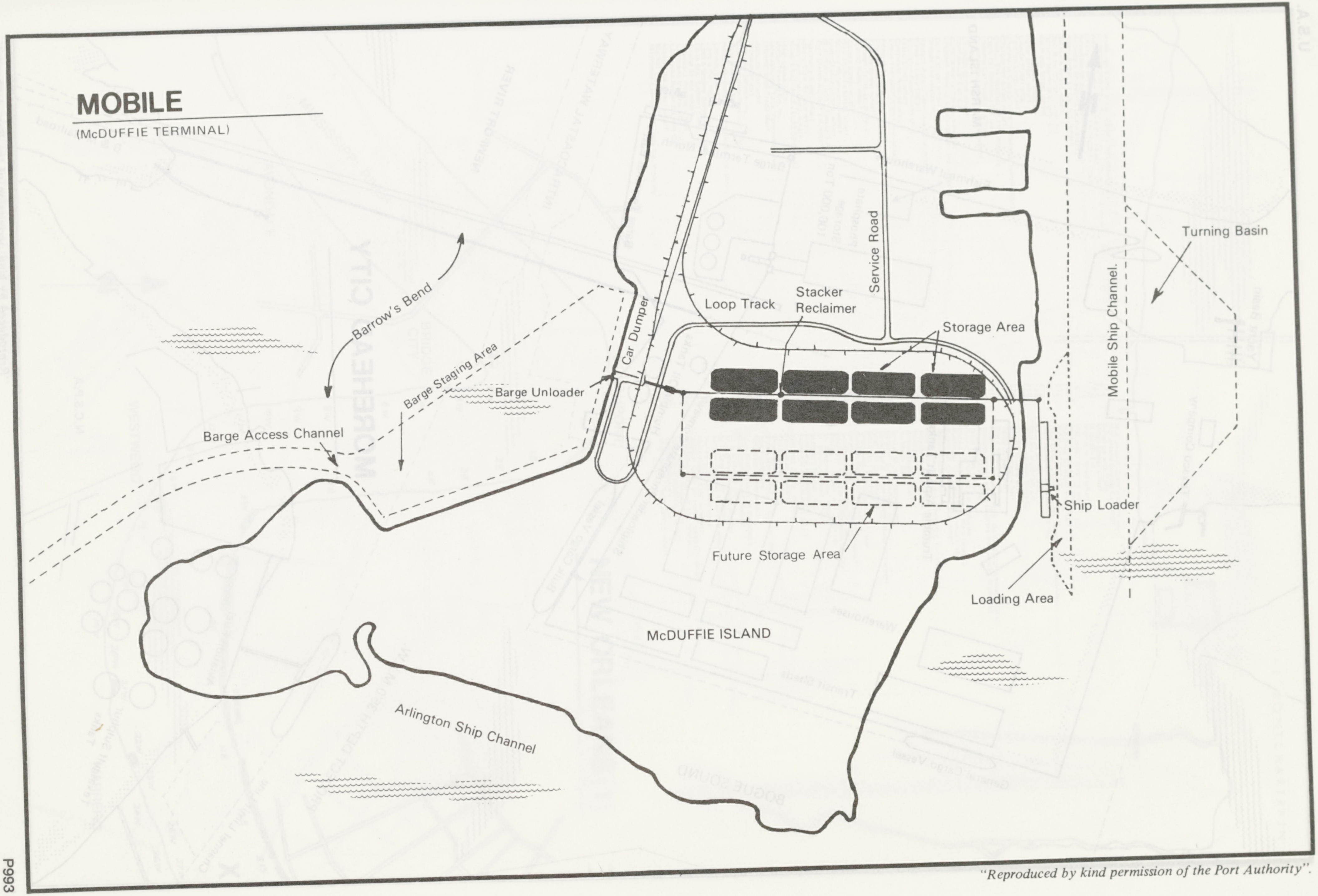
MOBILE

(McDUFFIE TERMINAL)


Turning Basin
Service Road
Stacker Reclaimer
Loop Track
Storage Area
Mobile Ship Channel.
Car Dumper
Barrow's Bend
Barge Staging Area
Barge Unloader
Barge Access Channel
Ship Loader
Future Storage Area
Loading Area
McDUFFIE ISLAND
Arlington Ship Channel

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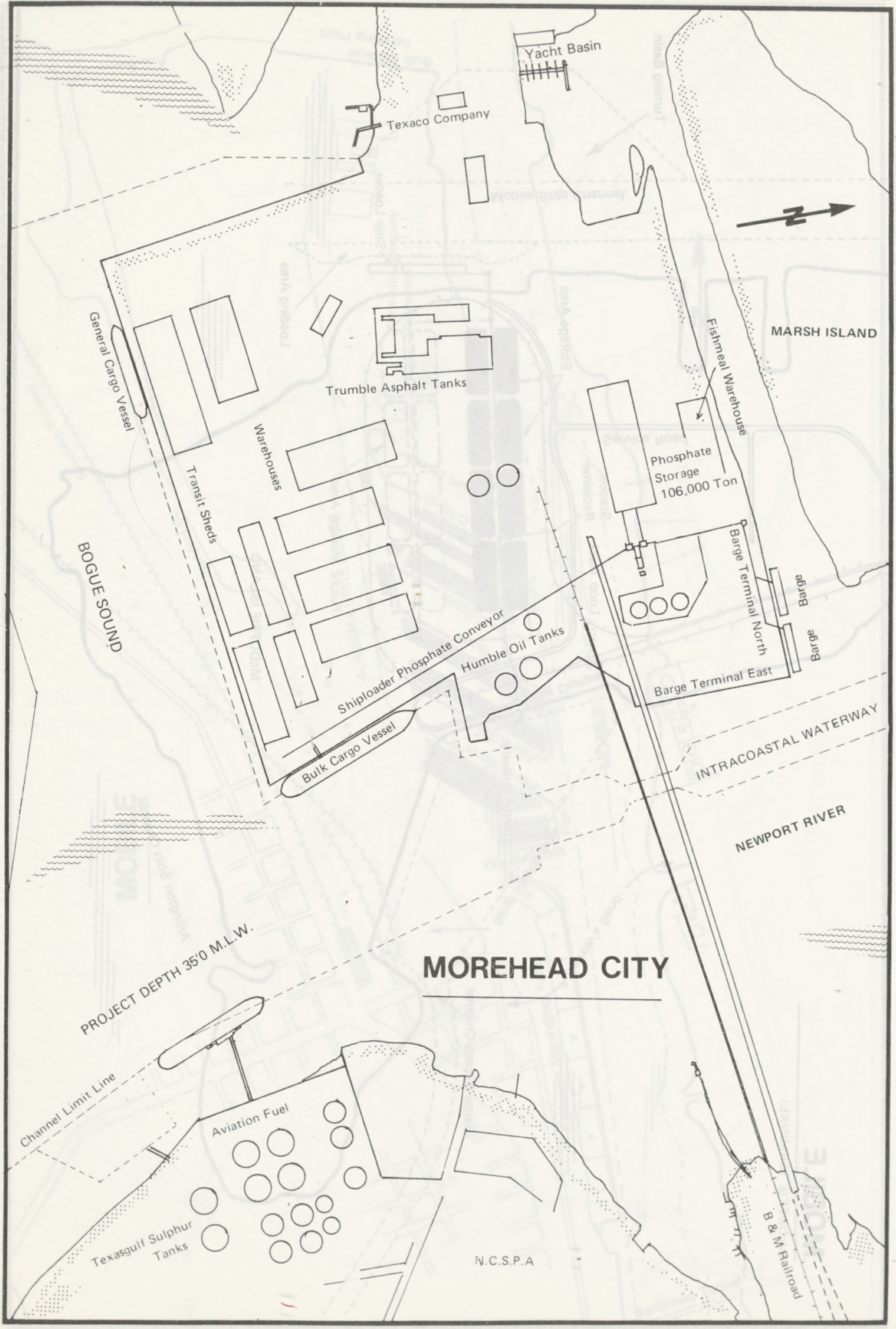
Yacht Basin
Texaco Company
Trumble Asphalt Tanks
General Cargo Vessel
Warehouses
Transit Sheds
BOGUE SOUND
N
MARSH ISLAND
Fishmeal Warehouse
Phosphate Storage 106,000 Ton
Barge Terminal North
Barge
Barge
Humble Oil Tanks
Shiploader Phosphate Conveyor
Barge Terminal East
Bulk Cargo Vessel
INTRACOASTAL WATERWAY
NEWPORT RIVER
PROJECT DEPTH 35'0 M.L.W.
MOREHEAD CITY
Channel Limit Line
Aviation Fuel
Texasgulf Sulphur Tanks
N.C.S.P.A
B & M Railroad

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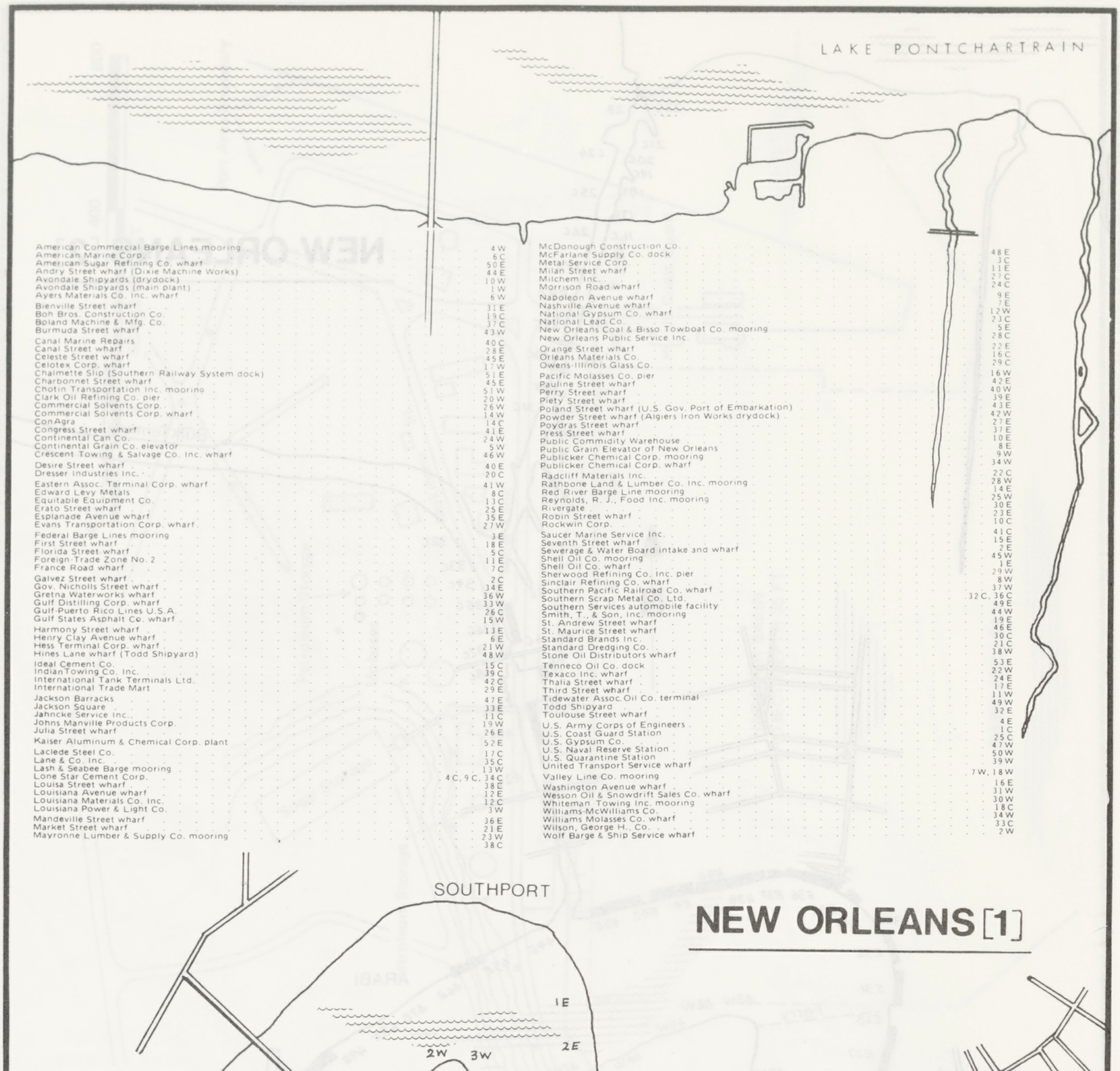
NEW ORLEANS [1]



American Commercial Barge Lines mooring	4 W
American Marine Corp.	6 C
American Sugar Refining Co. wharf	50 E
Andry Street wharf (Dixie Machine Works)	44 E
Avondale Shipyards (drydock)	10 W
Avondale Shipyards (main plant)	1 W
Ayers Materials Co. Inc. wharf	6 W
Bienville Street wharf	31 E
Boh Bros. Construction Co.	19 C
Boland Machine & Mfg. Co.	37 C
Burmuda Street wharf	43 W
Canal Marine Repairs	40 C
Canal Street wharf	28 E
Celeste Street wharf	45 E
Celotex Corp. wharf	17 W
Chalmette Slip (Southern Railway System dock)	51 E
Charbonnet Street wharf	45 E
Chotin Transportation Inc. mooring	51 W
Clark Oil Refining Co. pier	20 W
Commercial Solvents Corp.	26 W
Commercial Solvents Corp. wharf	14 W
ConAgra	14 C
Congress Street wharf	41 E
Continental Can Co.	24 W
Continental Grain Co. elevator	5 W
Crescent Towing & Salvage Co. Inc. wharf	46 W
Desire Street wharf	40 E
Dresser Industries Inc.	20 C
Eastern Assoc. Terminal Corp. wharf	41 W
Edward Levy Metals	8 C
Equitable Equipment Co.	13 C
Erato Street wharf	25 E
Esplanade Avenue wharf	35 E
Evans Transportation Corp. wharf	27 W
Federal Barge Lines mooring	3 E
First Street wharf	18 E
Florida Street wharf	5 C
Foreign-Trade Zone No. 2	11 E
France Road wharf	7 C
Galvez Street wharf	2 C
Gov. Nicholls Street wharf	34 E
Gretna Waterworks wharf	36 W
Gulf Distilling Corp. wharf	33 W
Gulf-Puerto Rico Lines U.S.A.	26 C
Gulf States Asphalt Co. wharf	15 W
Harmony Street wharf	13 E
Henry Clay Avenue wharf	6 E
Hess Terminal Corp. wharf	21 W
Hines Lane wharf (Todd Shipyard)	48 W
Ideal Cement Co.	15 C
IndianTowing Co. Inc.	39 C
International Tank Terminals Ltd.	42 C
International Trade Mart	29 E
Jackson Barracks	47 E
Jackson Square	33 E
Jahncke Service Inc.	11 C
Johns Manville Products Corp.	19 W
Julia Street wharf	26 E
Kaiser Aluminum & Chemical Corp. plant	52 E
Laclede Steel Co.	17 C
Lane & Co. Inc.	35 C
Lash & Seabee Barge mooring	13 W
Lone Star Cement Corp.	4 C, 9 C, 34 C
Louisa Street wharf	38 E
Louisiana Avenue wharf	12 E
Louisiana Materials Co. Inc.	12 C
Louisiana Power & Light Co.	3 W
Mandeville Street wharf	36 E
Market Street wharf	21 E
Mayronne Lumber & Supply Co. mooring	23 W
McDonough Construction Co.	38 C
McFarlane Supply Co. dock	48 E
Metal Service Corp.	3 C
Milan Street wharf	11 E
Milchem Inc.	27 C
Morrison Road wharf	24 C
Napoleon Avenue wharf	9 E
Nashville Avenue wharf	7 E
National Gypsum Co. wharf	12 W
National Lead Co.	23 C
New Orleans Coal & Bisso Towboat Co. mooring	5 E
New Orleans Public Service Inc.	28 C
Orange Street wharf	22 E
Orleans Materials Co.	16 C
Owens-Illinois Glass Co.	29 C
Pacific Molasses Co. pier	16 W
Pauline Street wharf	42 E
Perry Street wharf	40 W
Piety Street wharf	39 E
Poland Street wharf (U.S. Gov. Port of Embarkation)	43 E
Powder Street wharf (Algiers Iron Works drydock)	42 W
Poydras Street wharf	27 E
Press Street wharf	37 E
Public Commidity Warehouse	10 E
Public Grain Elevator of New Orleans	8 E
Publicker Chemical Corp. mooring	9 W
Publicker Chemical Corp. wharf	34 W
Radcliff Materials Inc.	22 C
Rathbone Land & Lumber Co. Inc. mooring	28 W
Red River Barge Line mooring	14 E
Reynolds, R. J., Food Inc. mooring	25 W
Rivergate	30 E
Robin Street wharf	23 E
Rockwin Corp.	10 C
Saucer Marine Service Inc.	41 C
Seventh Street wharf	15 E
Sewerage & Water Board intake and wharf	2 E
Shell Oil Co. mooring	45 W
Shell Oil Co. wharf	1 E
Sherwood Refining Co. Inc. pier	29 W
Sinclair Refining Co. wharf	8 W
Southern Pacific Railroad Co. wharf	37 W
Southern Scrap Metal Co. Ltd.	32 C, 36 C
Southern Services automobile facility	49 E
Smith, T., & Son, Inc. mooring	44 W
St. Andrew Street wharf	19 E
St. Maurice Street wharf	46 E
Standard Brands Inc.	30 C
Standard Dredging Co.	21 C
Stone Oil Distributors wharf	38 W
Tenneco Oil Co. dock	53 E
Texaco Inc. wharf	22 W
Thalia Street wharf	24 E
Third Street wharf	17 E
Tidewater Assoc. Oil Co. terminal	11 W
Todd Shipyard	49 W
Toulouse Street wharf	32 E
U.S. Army Corps of Engineers	4 E
U.S. Coast Guard Station	1 C
U.S. Gypsum Co.	25 C
U.S. Naval Reserve Station	47 W
U.S. Quarantine Station	50 W
United Transport Service wharf	39 W
Valley Line Co. mooring	7 W, 18 W
Washington Avenue wharf	16 E
Wesson Oil & Snowdrift Sales Co. wharf	31 W
Whiteman Towing Inc. mooring	30 W
Williams-McWilliams Co.	18 C
Williams Molasses Co. wharf	34 W
Wilson, George H., Co.	33 C
Wolf Barge & Ship Service wharf	2 W

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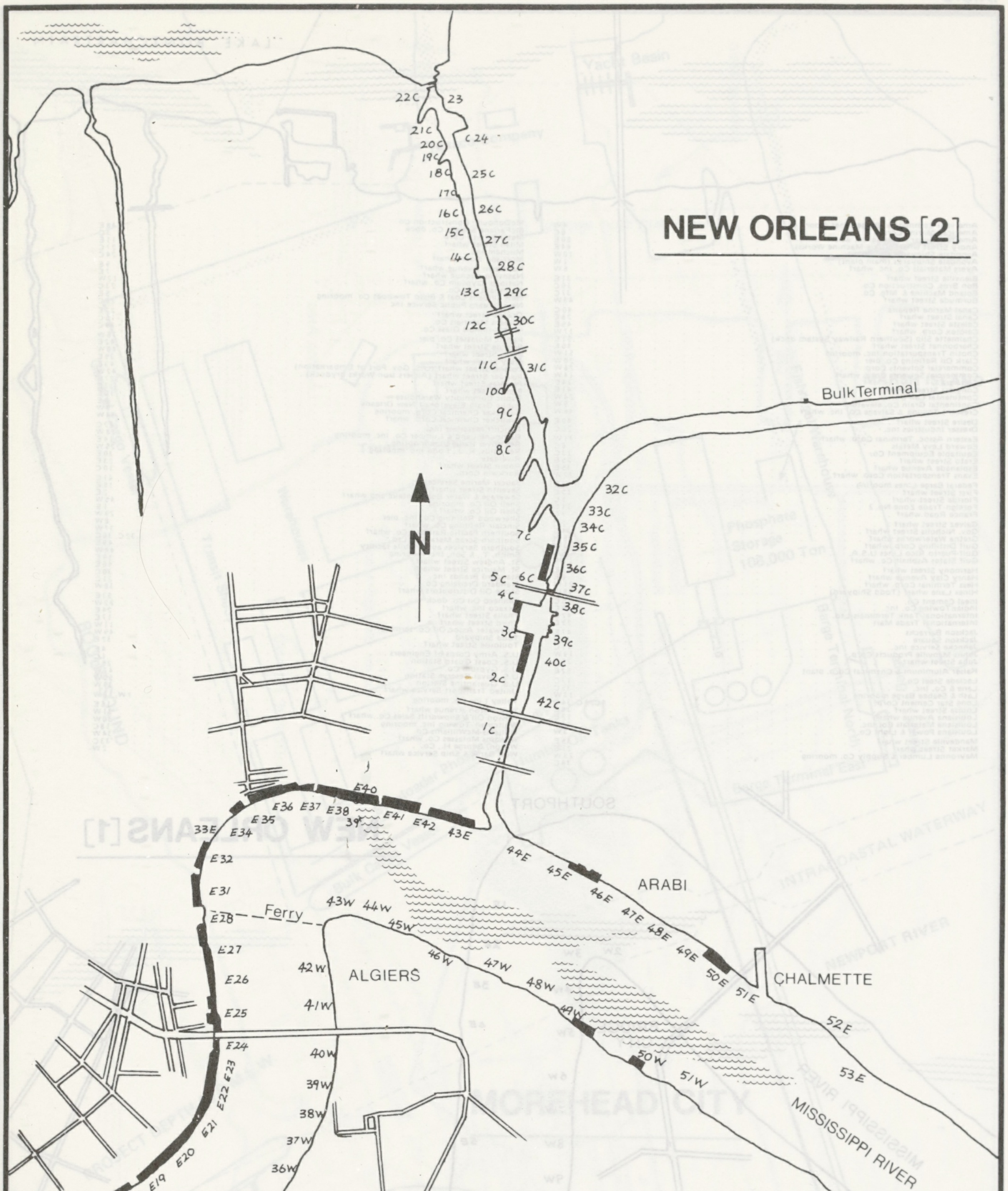
NEW ORLEANS [2]


22c
23
21c
20c
19c
c24
18c
25c
17c
16c
26c
15c
27c
14c
28c
13c
29c
12c
30c
11c
31c
10c
9c
8c
Bulk Terminal
32c
33c
34c
7c
35c
36c
5c
6c
4c
37c
38c
3c
39c
40c
2c
42c
1c
N
E40
E36
E37
E38
39
E41
E42
43E
E35
33E
E34
E32
44E
45E
46E
ARABI
E31
Ferry
43W
44W
45W
E28
47E
48E
49E
E27
42W
ALGIERS
46W
47W
48W
50E
51E
CHALMETTE
E26
41W
E25
49W
52E
E24
50W
51W
40W
53E
E23
E22
39W
E21
38W
MISSISSIPPI RIVER
E20
37W
E19
36W
E18
E17
E16
35W
E15
E14
E13
34W
Lock
33W
32W
X
31W
GRETNA
30W
29W
28W
27W
HARVEY
26W
GULF INTRACOASTAL WATERWAY (ALTERNATE)

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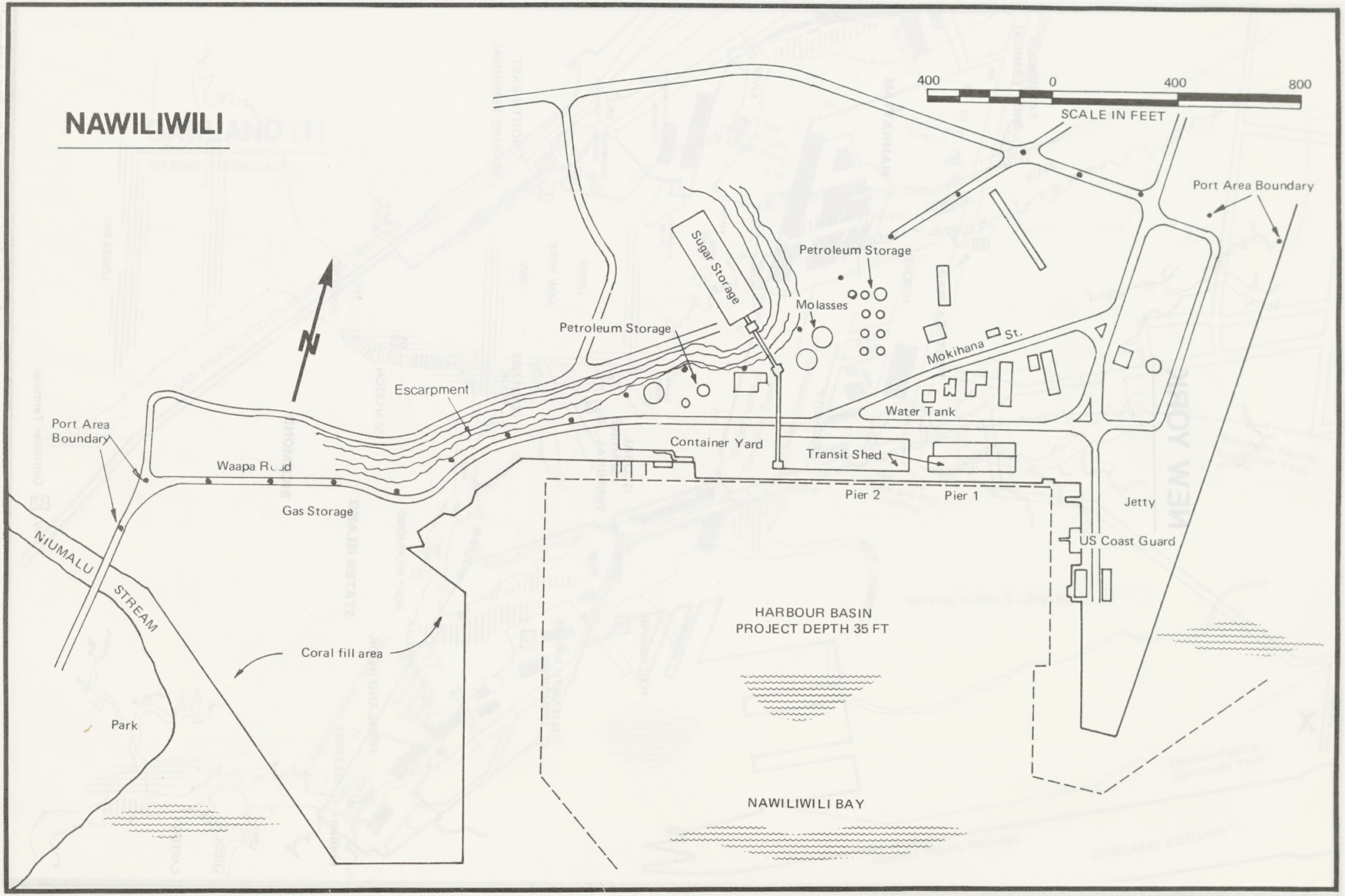
NAWILIWILI


400
0
400
800
SCALE IN FEET
Port Area Boundary
Petroleum Storage
Sugar Storage
Molasses
Petroleum Storage
Mokihana St.
Escarpment
Port Area Boundary
Water Tank
Container Yard
Transit Shed
Waapa Road
Gas Storage
Pier 2
Pier 1
Jetty
US Coast Guard
NIUMALU STREAM
Coral fill area
HARBOUR BASIN
PROJECT DEPTH 35 FT
Park
NAWILIWILI BAY

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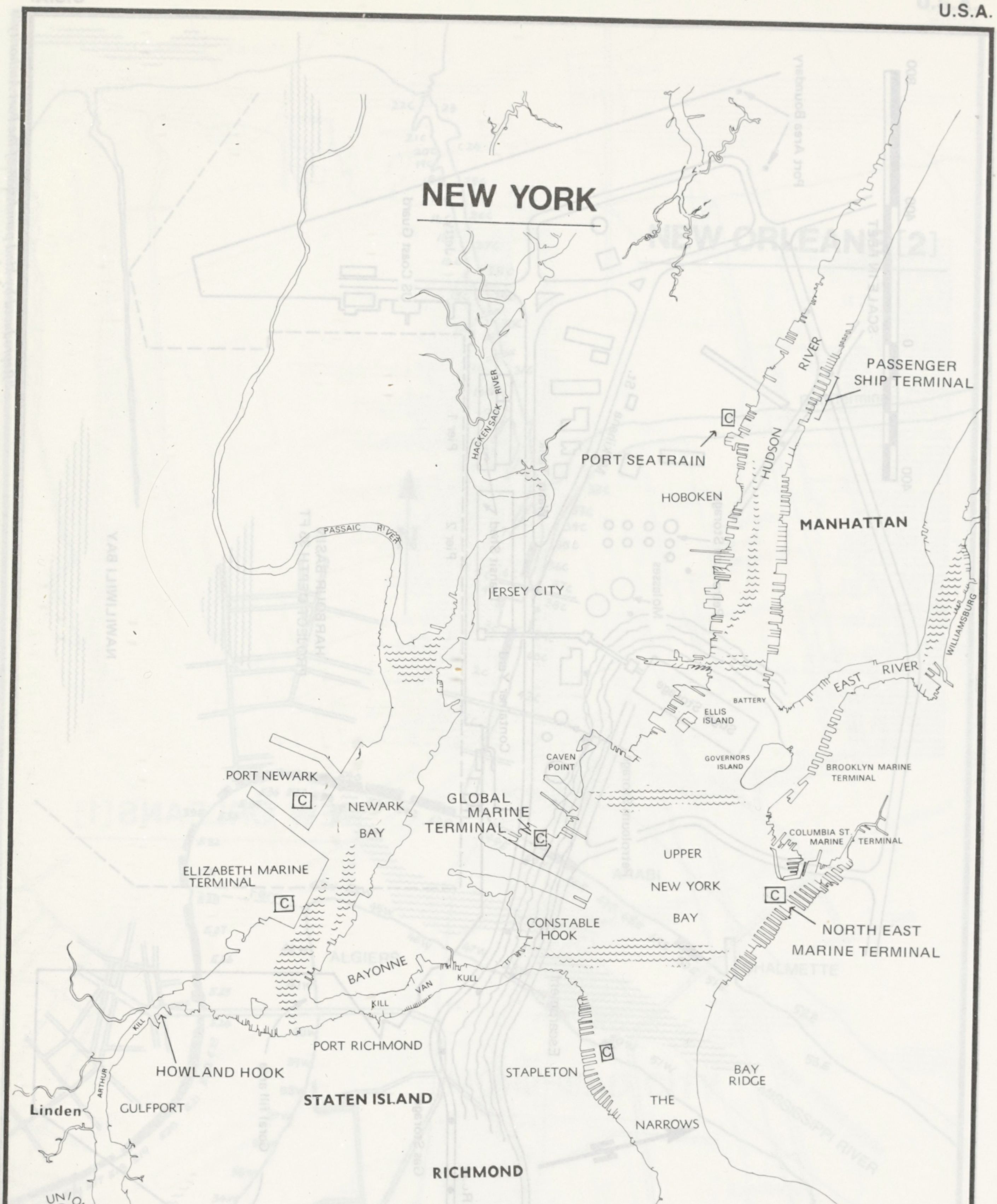
NEW YORK
PASSENGER SHIP TERMINAL
RIVER
HUDSON
C
PORT SEATRAIN
HOBOKEN
MANHATTAN
HACKENSACK RIVER
PASSAIC RIVER
JERSEY CITY
WILLIAMSBURG
EAST RIVER
BATTERY
ELLIS ISLAND
GOVERNORS ISLAND
BROOKLYN MARINE TERMINAL
CAVEN POINT
PORT NEWARK
C
NEWARK BAY
GLOBAL MARINE TERMINAL
C
COLUMBIA ST. MARINE TERMINAL
UPPER NEW YORK BAY
ELIZABETH MARINE TERMINAL
C
C
NORTH EAST MARINE TERMINAL
CONSTABLE HOOK
BAYONNE
KILL VAN KULL
KILL
ARTHUR
HOWLAND HOOK
PORT RICHMOND
C
STAPLETON
BAY RIDGE
Linden
GULFPORT
STATEN ISLAND
THE NARROWS
RICHMOND
UNION
MIDDLESEX
CARTERET
LOWER BAY
Key: C Container Terminal

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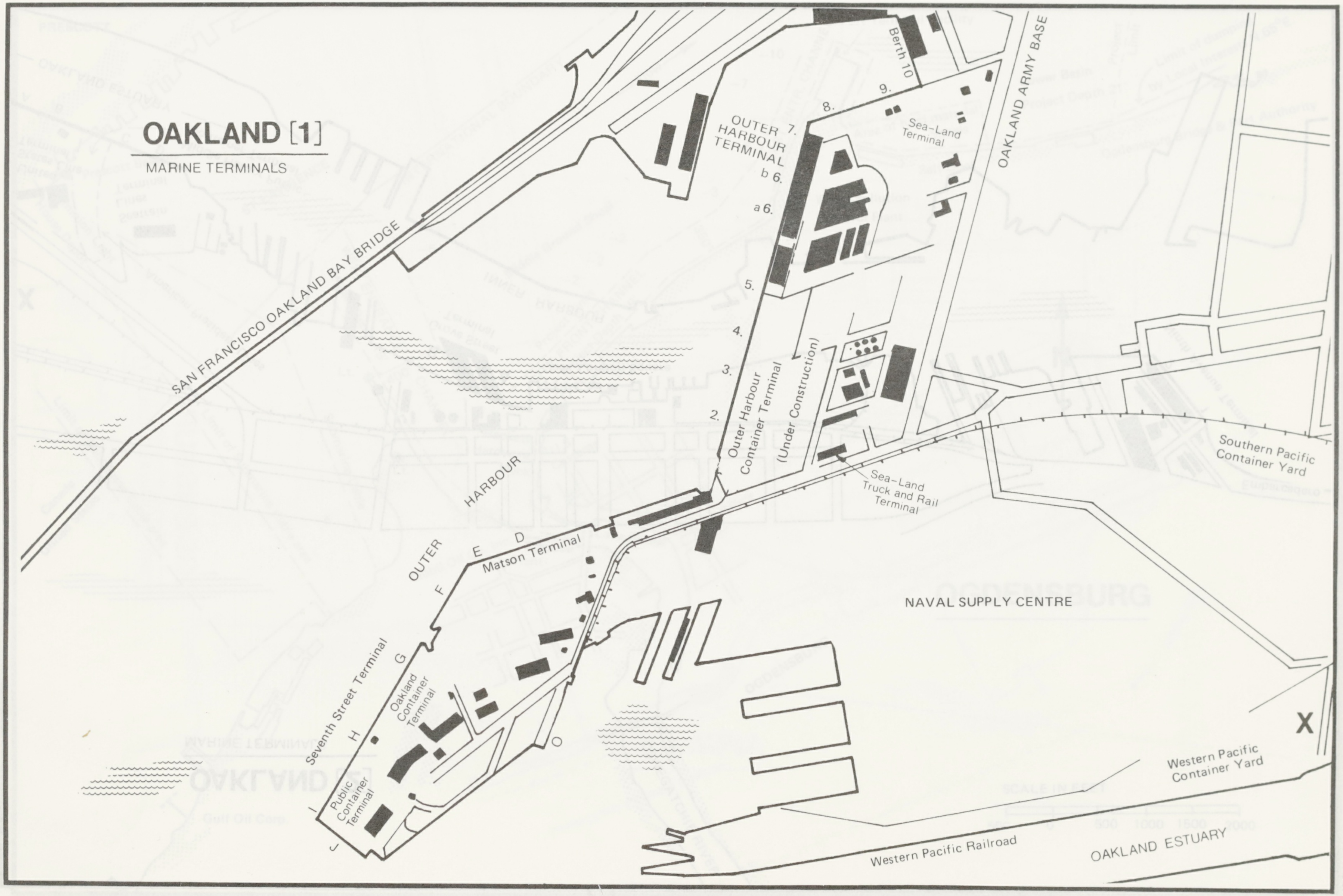
OAKLAND [1]

MARINE TERMINALS


SAN FRANCISCO OAKLAND BAY BRIDGE
OUTER HARBOUR TERMINAL
Berth 10
9.
8.
7.
b 6.
a 6.
5.
4.
3.
2.
Sea-Land Terminal
OAKLAND ARMY BASE
Outer Harbour Container Terminal
(Under Construction)
Sea-Land Truck and Rail Terminal
Southern Pacific Container Yard
OUTER HARBOUR
D
E
F
G
H
I
J
Matson Terminal
Seventh Street Terminal
Oakland Container Terminal
Public Container Terminal
O
NAVAL SUPPLY CENTRE
X
Western Pacific Container Yard
Western Pacific Railroad
OAKLAND ESTUARY

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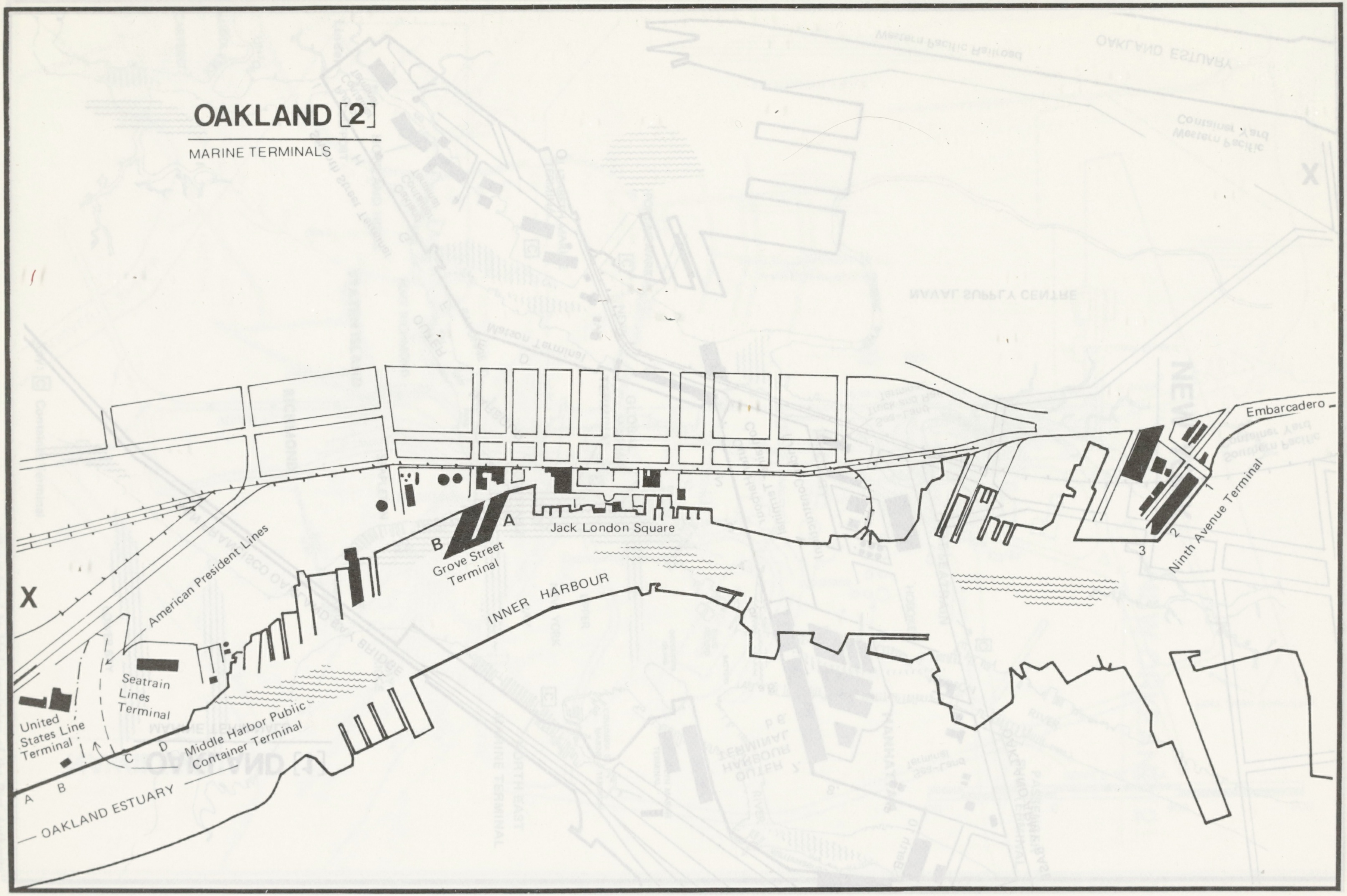
OAKLAND [2]

MARINE TERMINALS


X
Embarcadero
1
2
3
Ninth Avenue Terminal
A
B
Jack London Square
Grove Street Terminal
INNER HARBOUR
X
American President Lines
Seatrain Lines Terminal
United States Line Terminal
A
B
C
D
Middle Harbor Public Container Terminal
OAKLAND ESTUARY

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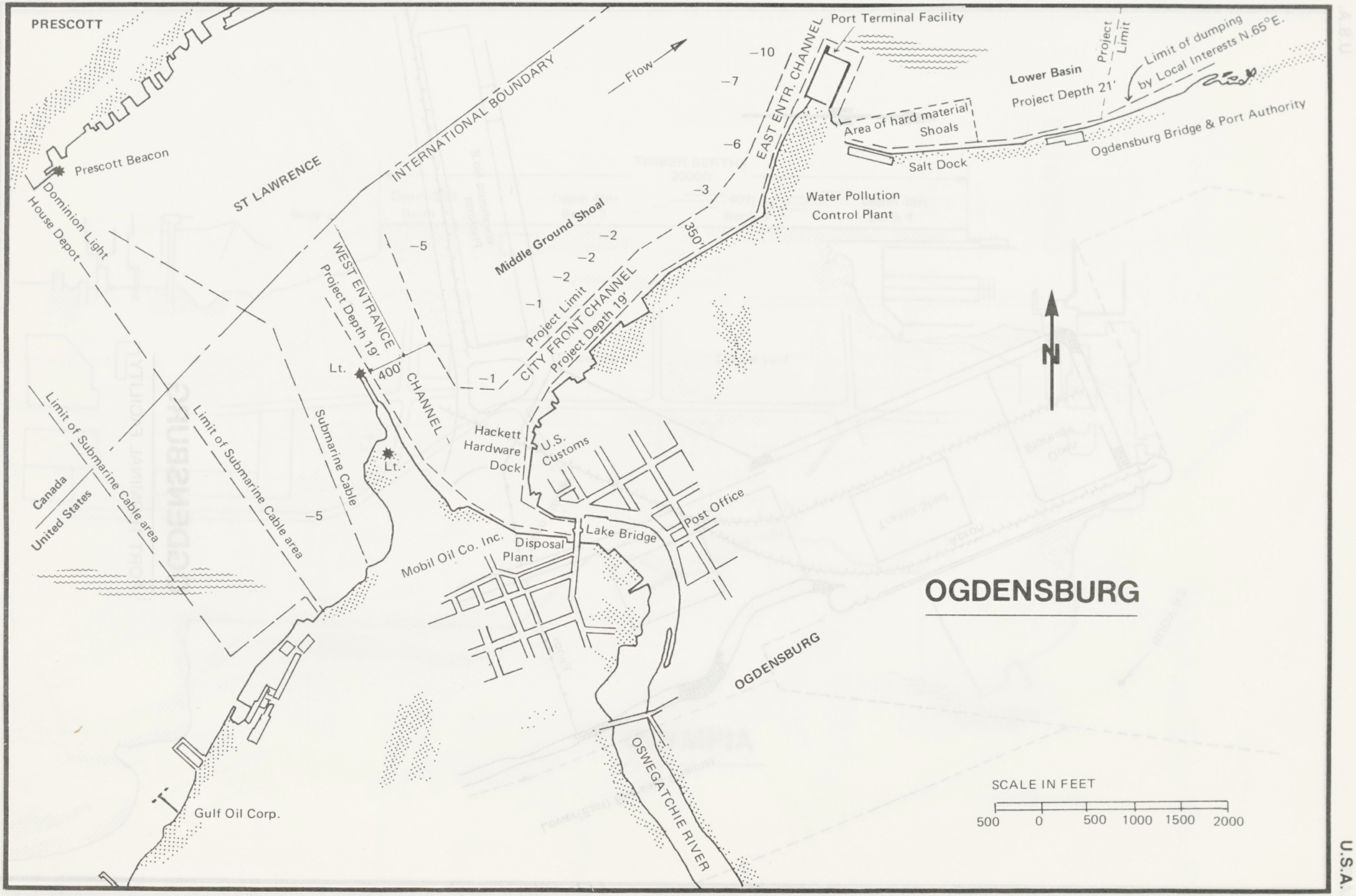
PRESCOTT
Prescott Beacon
ST LAWRENCE
INTERNATIONAL BOUNDARY
Flow
Port Terminal Facility
EAST ENTR. CHANNEL
Lower Basin
Project Depth 21'
Project Limit
Limit of dumping by Local Interests N.65°E.
Area of hard material Shoals
Salt Dock
Ogdensburg Bridge & Port Authority
Water Pollution Control Plant
−10
−7
−6
−3
−2
−2
−2
−1
−1
−5
−5
350'
Middle Ground Shoal
Dominion Light House Depot
WEST ENTRANCE Project Depth 19'
400'
CHANNEL
Project Limit
CITY FRONT CHANNEL Project Depth 19'
Lt.
Lt.
Hackett Hardware Dock
U.S. Customs
Post Office
Lake Bridge
Disposal Plant
Mobil Oil Co. Inc.
Submarine Cable
Limit of Submarine Cable area
Limit of Submarine Cable area
Canada
United States
OGDENSBURG
OSWEGATCHIE RIVER
Gulf Oil Corp.
N
OGDENSBURG
SCALE IN FEET
500
0
500
1000
1500
2000

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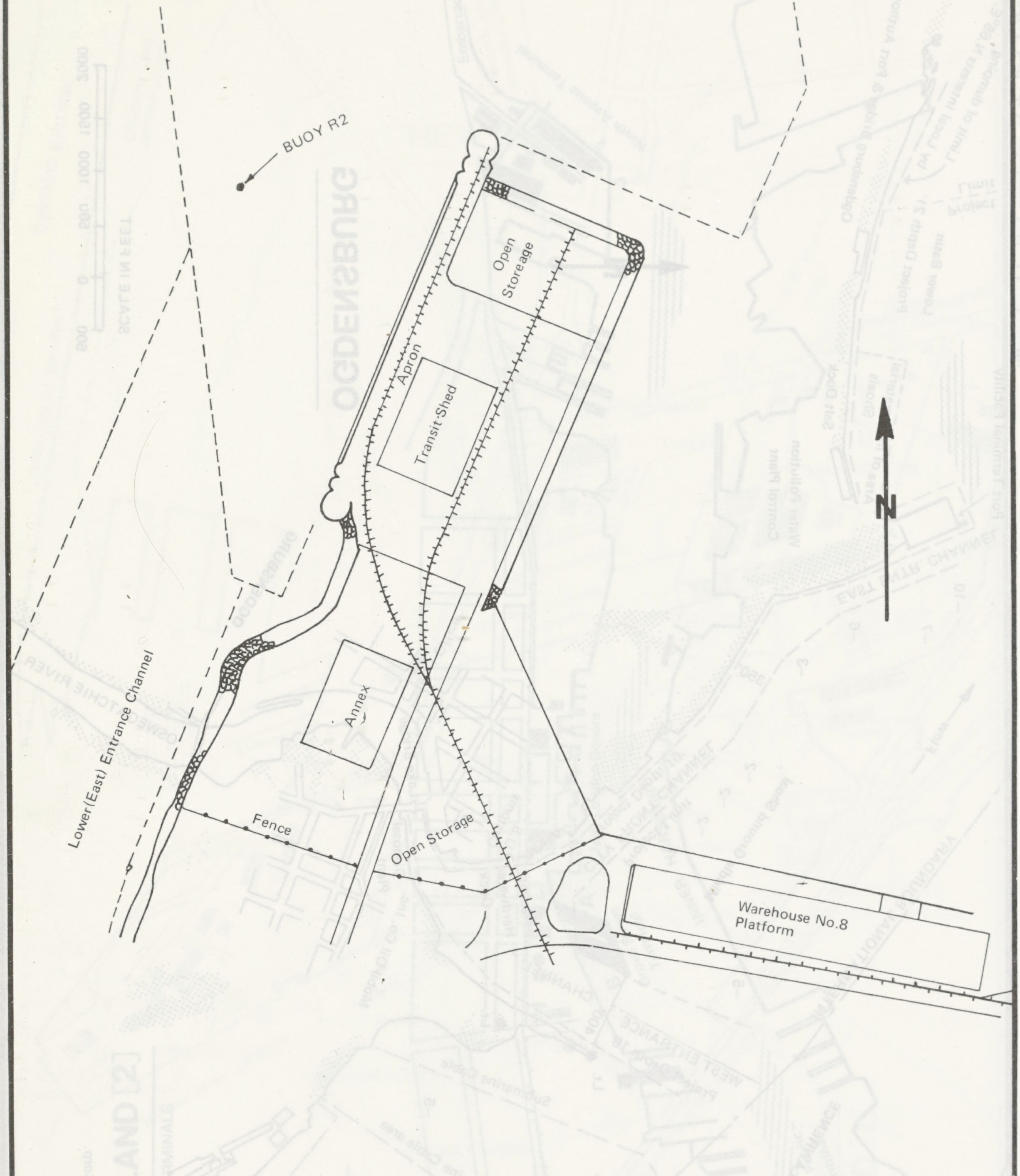
BUOY R2
Apron
Open Storeage
Transit Shed
Annex
Lower(East) Entrance Channel
Fence
Open Storage
Warehouse No.8 Platform
N

OGDENSBURG

PORT TERMINAL FACILITY

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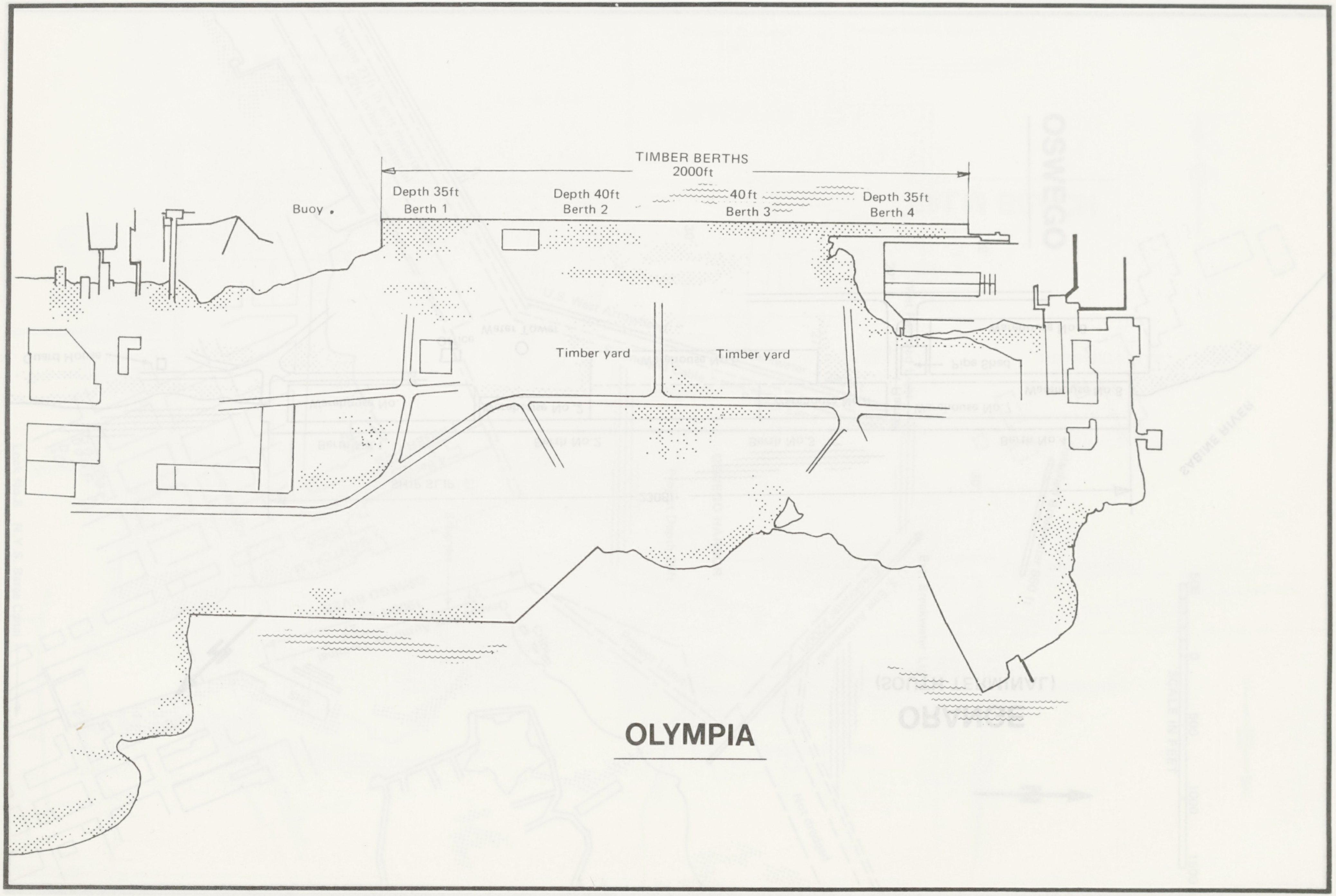
TIMBER BERTHS
2000ft
Depth 35ft
Berth 1
Depth 40ft
Berth 2
40ft
Berth 3
Depth 35ft
Berth 4
Buoy
Timber yard
Timber yard

OLYMPIA

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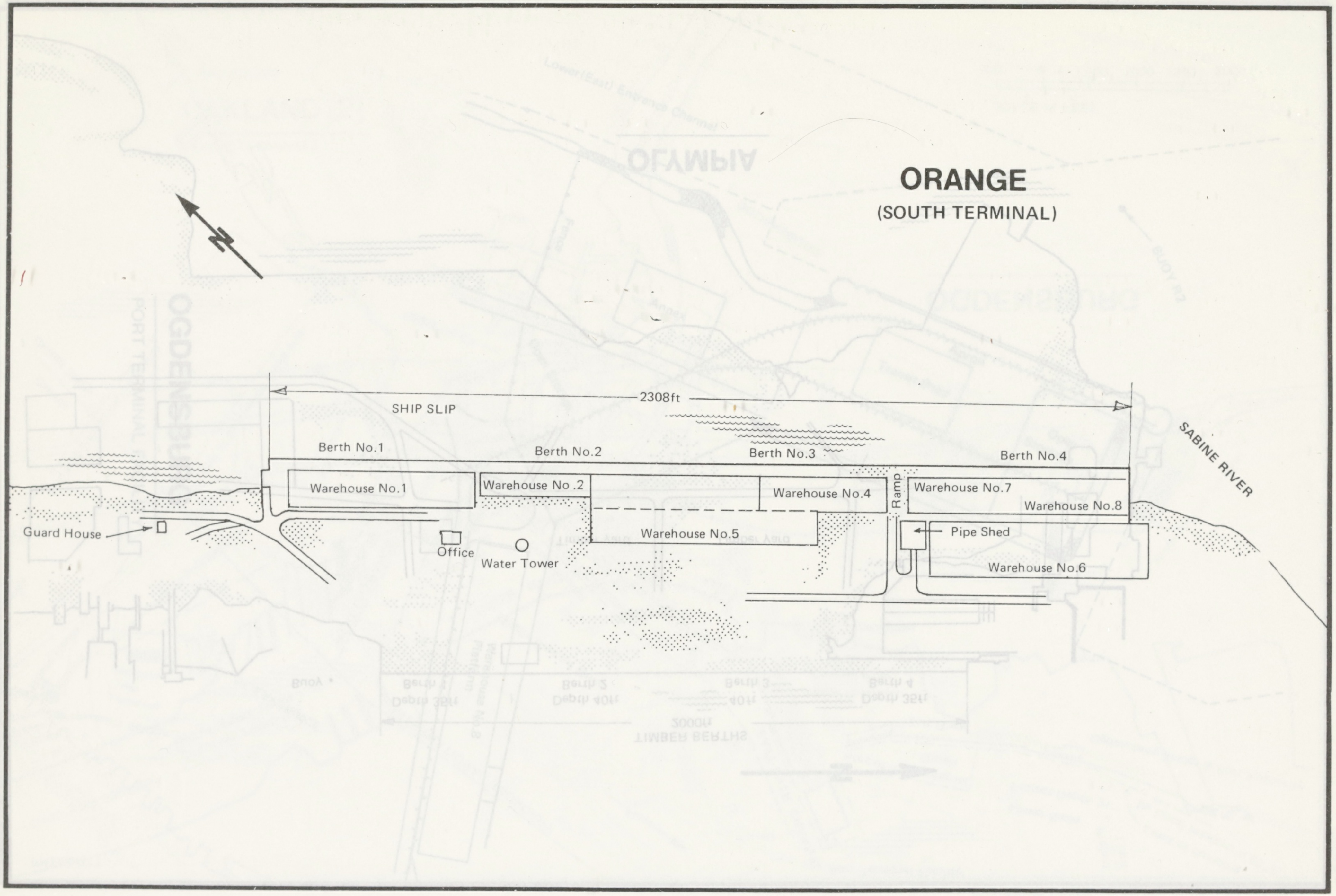

ORANGE
(SOUTH TERMINAL)

2308ft
SHIP SLIP
Berth No.1
Berth No.2
Berth No.3
Berth No.4
Warehouse No.1
Warehouse No.2
Warehouse No.4
Warehouse No.5
Warehouse No.7
Warehouse No.8
Warehouse No.6
Ramp
Pipe Shed
Guard House
Office
Water Tower
SABINE RIVER
N

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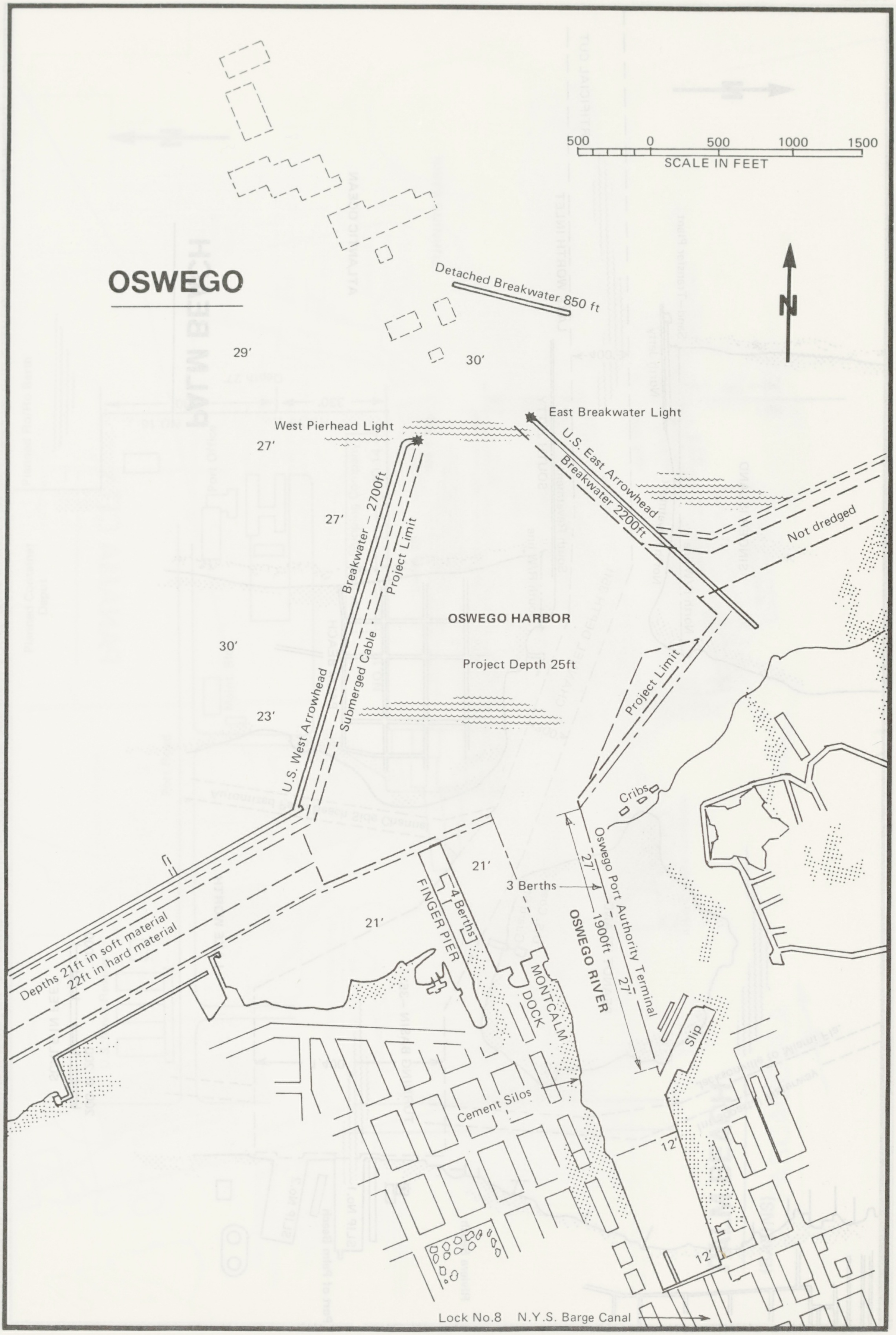
OSWEGO
500
0
500
1000
1500
SCALE IN FEET
N
Detached Breakwater 850 ft
29'
30'
West Pierhead Light
East Breakwater Light
27'
U.S. East Arrowhead
Breakwater 2200ft
Not dredged
27'
Breakwater – 2700ft
Project Limit
OSWEGO HARBOR
Project Depth 25ft
30'
23'
U.S. West Arrowhead
Submerged Cable
Project Limit
Cribs
Oswego Port Authority Terminal
3 Berths
27'
1900ft
27'
OSWEGO RIVER
21'
21'
4 Berths
FINGER PIER
Depths 21ft in soft material
22ft in hard material
MONTCALM
DOCK
Slip
Cement Silos
12'
12'
Lock No.8 N.Y.S. Barge Canal

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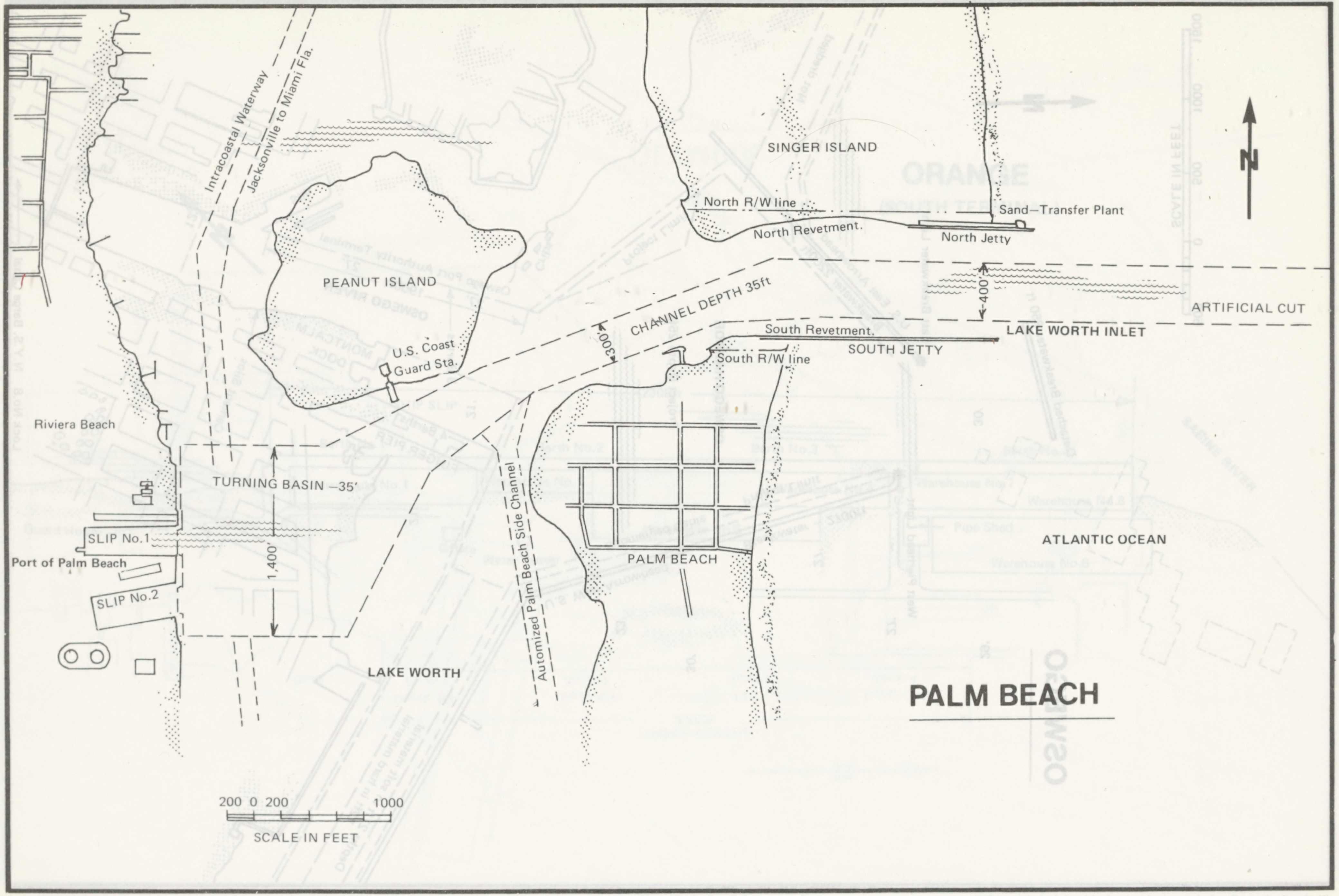
Intracoastal Waterway
Jacksonville to Miami Fla.
PEANUT ISLAND
U.S. Coast Guard Sta.
SINGER ISLAND
North R/W line
North Revetment.
Sand–Transfer Plant
North Jetty
N
CHANNEL DEPTH 35ft
300'
400'
ARTIFICIAL CUT
LAKE WORTH INLET
South Revetment.
SOUTH JETTY
South R/W line
Riviera Beach
TURNING BASIN –35'
SLIP No.1
Port of Palm Beach
SLIP No.2
1,400'
Automized Palm Beach Side Channel
PALM BEACH
ATLANTIC OCEAN
LAKE WORTH
200 0 200 1000
SCALE IN FEET

PALM BEACH

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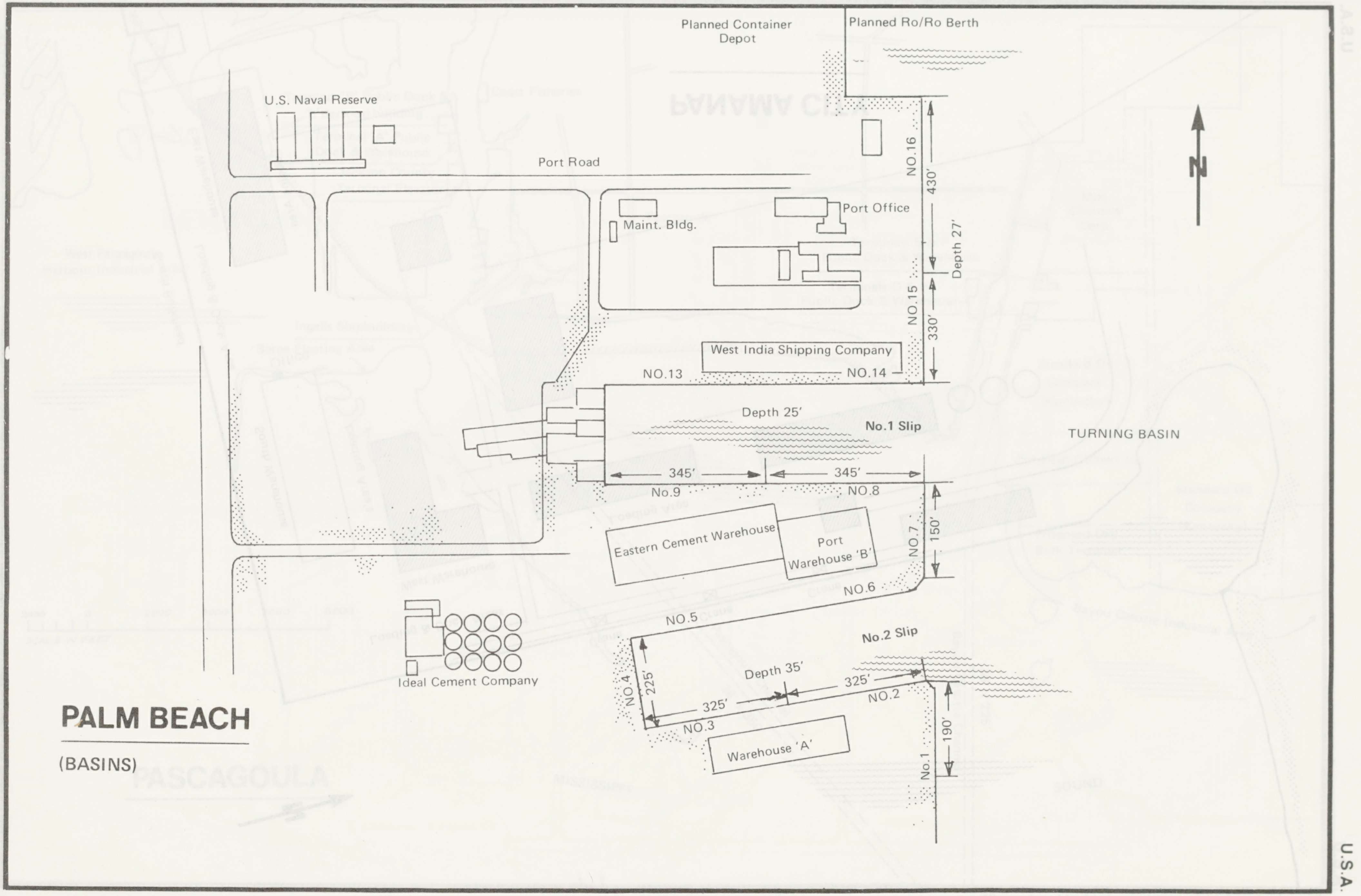
Planned Container Depot
Planned Ro/Ro Berth
U.S. Naval Reserve
Port Road
N
NO.16
430'
Port Office
Maint. Bldg.
Depth 27'
NO.15
330'
West India Shipping Company
NO.13
NO.14
Depth 25'
No.1 Slip
TURNING BASIN
345'
345'
No.9
NO.8
Eastern Cement Warehouse
Port Warehouse 'B'
NO.7
150'
NO.6
NO.5
No.2 Slip
Ideal Cement Company
Depth 35'
325'
325'
NO.4
225'
NO.3
NO.2
190'
Warehouse 'A'
No.1

PALM BEACH

(BASINS)

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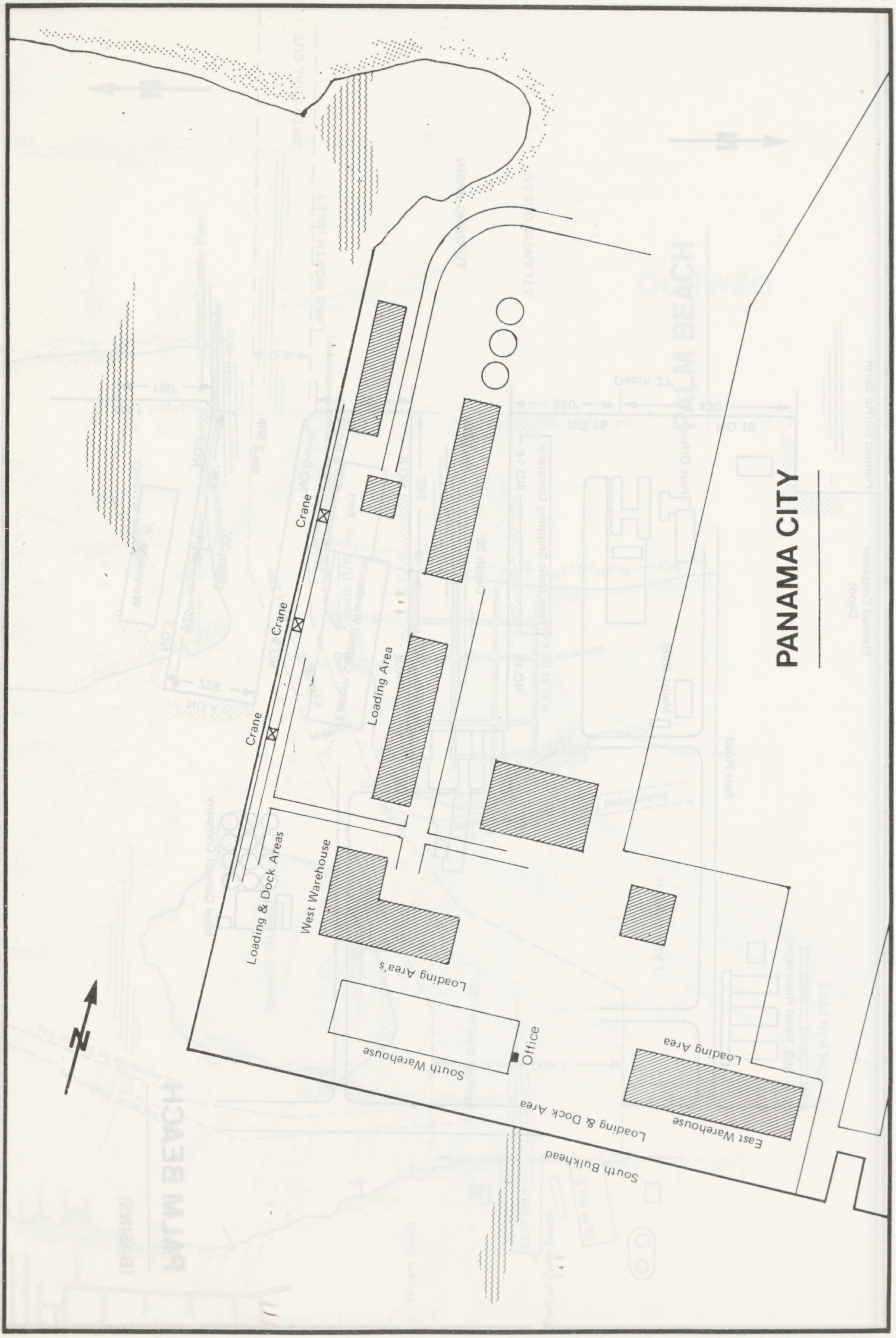
PANAMA CITY
Crane
Crane
Crane
Loading Area
Loading & Dock Areas
West Warehouse
Loading Area's
South Warehouse
Office
Loading & Dock Area
South Bulkhead
East Warehouse
Loading Area
N

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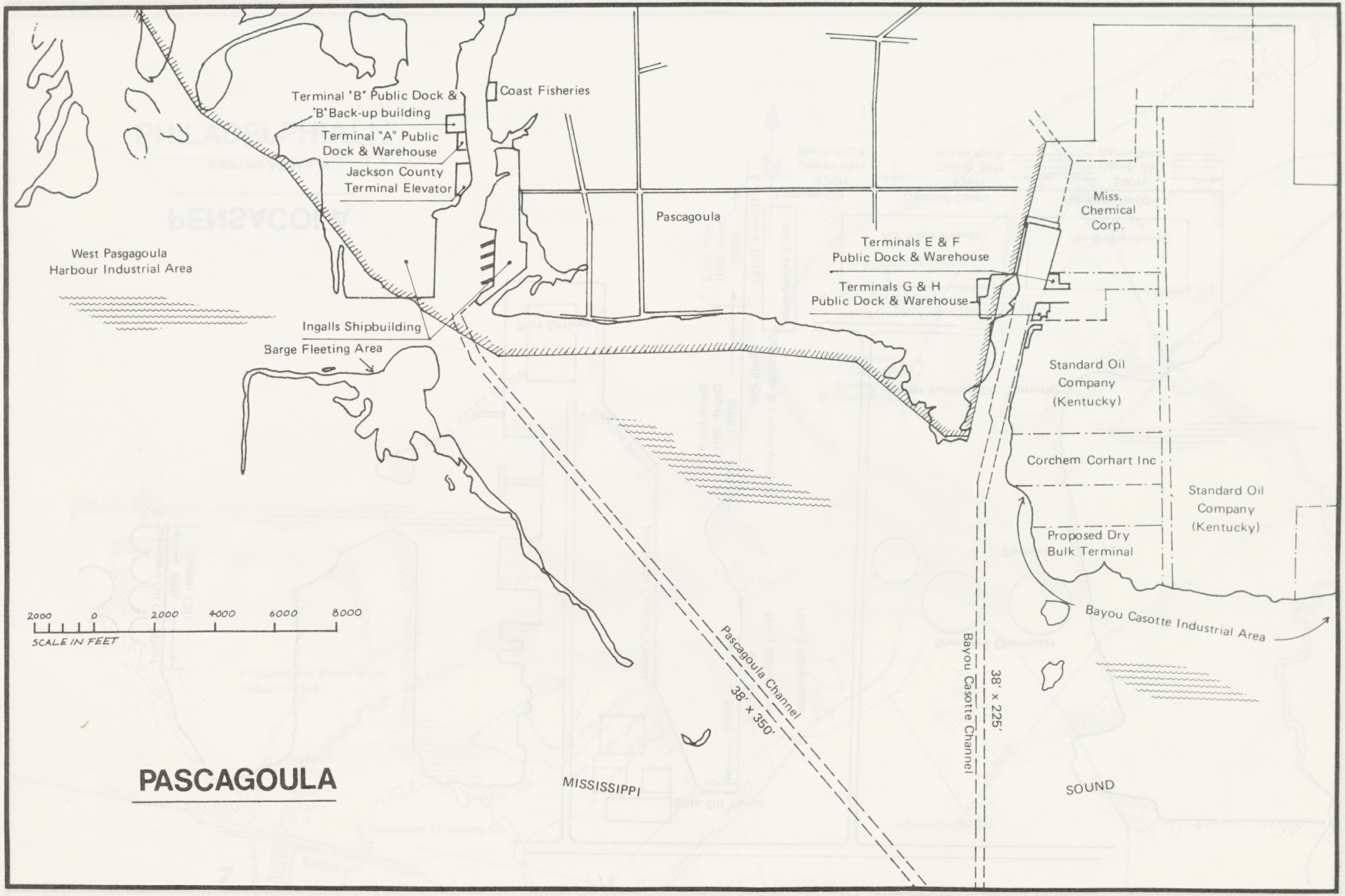
Terminal "B" Public Dock &
"B" Back-up building
Coast Fisheries
Terminal "A" Public
Dock & Warehouse
Jackson County
Terminal Elevator
Pascagoula
Miss.
Chemical
Corp.
Terminals E & F
Public Dock & Warehouse
Terminals G & H
Public Dock & Warehouse
West Pasgagoula
Harbour Industrial Area
Ingalls Shipbuilding
Barge Fleeting Area
Standard Oil
Company
(Kentucky)
Corchem Corhart Inc
Standard Oil
Company
(Kentucky)
Proposed Dry
Bulk Terminal
Bayou Casotte Industrial Area
2000
0
2000
4000
6000
8000
SCALE IN FEET
Pascagoula Channel
38' x 350'
Bayou Casotte Channel
38' x 225'
PASCAGOULA
MISSISSIPPI
SOUND

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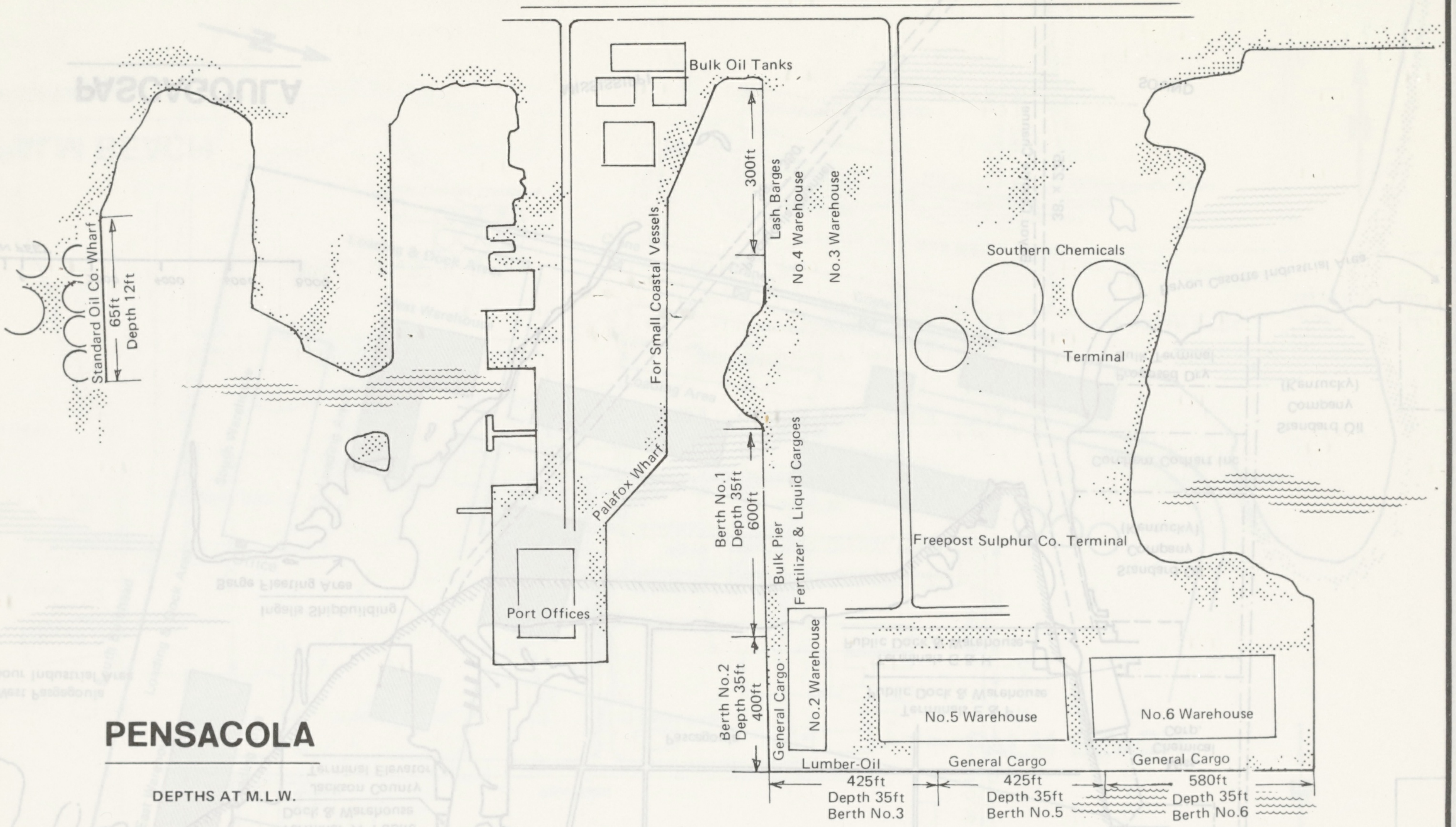
Bulk Oil Tanks
Standard Oil Co. Wharf
65ft
Depth 12ft
For Small Coastal Vessels
Palafox Wharf
Port Offices
300ft
Lash Barges
No.4 Warehouse
No.3 Warehouse
Southern Chemicals
Terminal
Berth No.1
Depth 35ft
600ft
Bulk Pier
Fertilizer & Liquid Cargoes
Freepost Sulphur Co. Terminal
Berth No.2
Depth 35ft
400ft
General Cargo
No.2 Warehouse
No.5 Warehouse
No.6 Warehouse
Lumber-Oil
425ft
Depth 35ft
Berth No.3
General Cargo
425ft
Depth 35ft
Berth No.5
General Cargo
580ft
Depth 35ft
Berth No.6

PENSACOLA

DEPTHS AT M.L.W.

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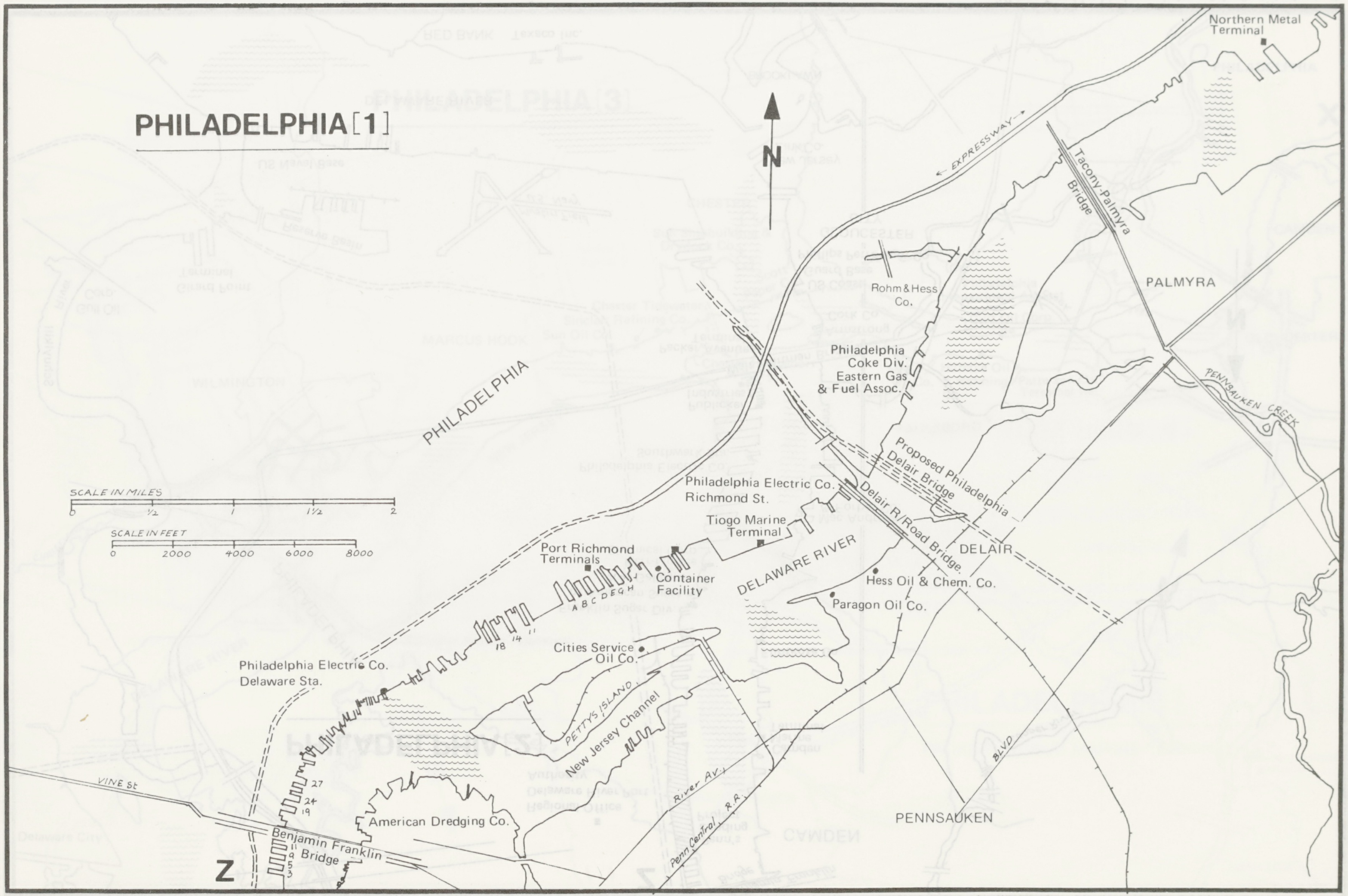
PHILADELPHIA [1]


N
Northern Metal Terminal
EXPRESSWAY
Tacony-Palmyra Bridge
PALMYRA
Rohm & Hess Co.
Philadelphia Coke Div. Eastern Gas & Fuel Assoc.
PENNSAUKEN CREEK
PHILADELPHIA
Proposed Philadelphia Delair Bridge
Delair R/Road Bridge
DELAIR
Philadelphia Electric Co. Richmond St.
Tiogo Marine Terminal
SCALE IN MILES
0
1/2
1
1 1/2
2
SCALE IN FEET
0
2000
4000
6000
8000
Port Richmond Terminals
Container Facility
DELAWARE RIVER
Hess Oil & Chem. Co.
Paragon Oil Co.
A B C D E G H
18
14
11
Cities Service Oil Co.
Philadelphia Electric Co. Delaware Sta.
PETTYS ISLAND
New Jersey Channel
River Av.
Penn Central R.R.
BLVD
VINE St
27
24
19
11
9
5
3
American Dredging Co.
Benjamin Franklin Bridge
PENNSAUKEN
Z

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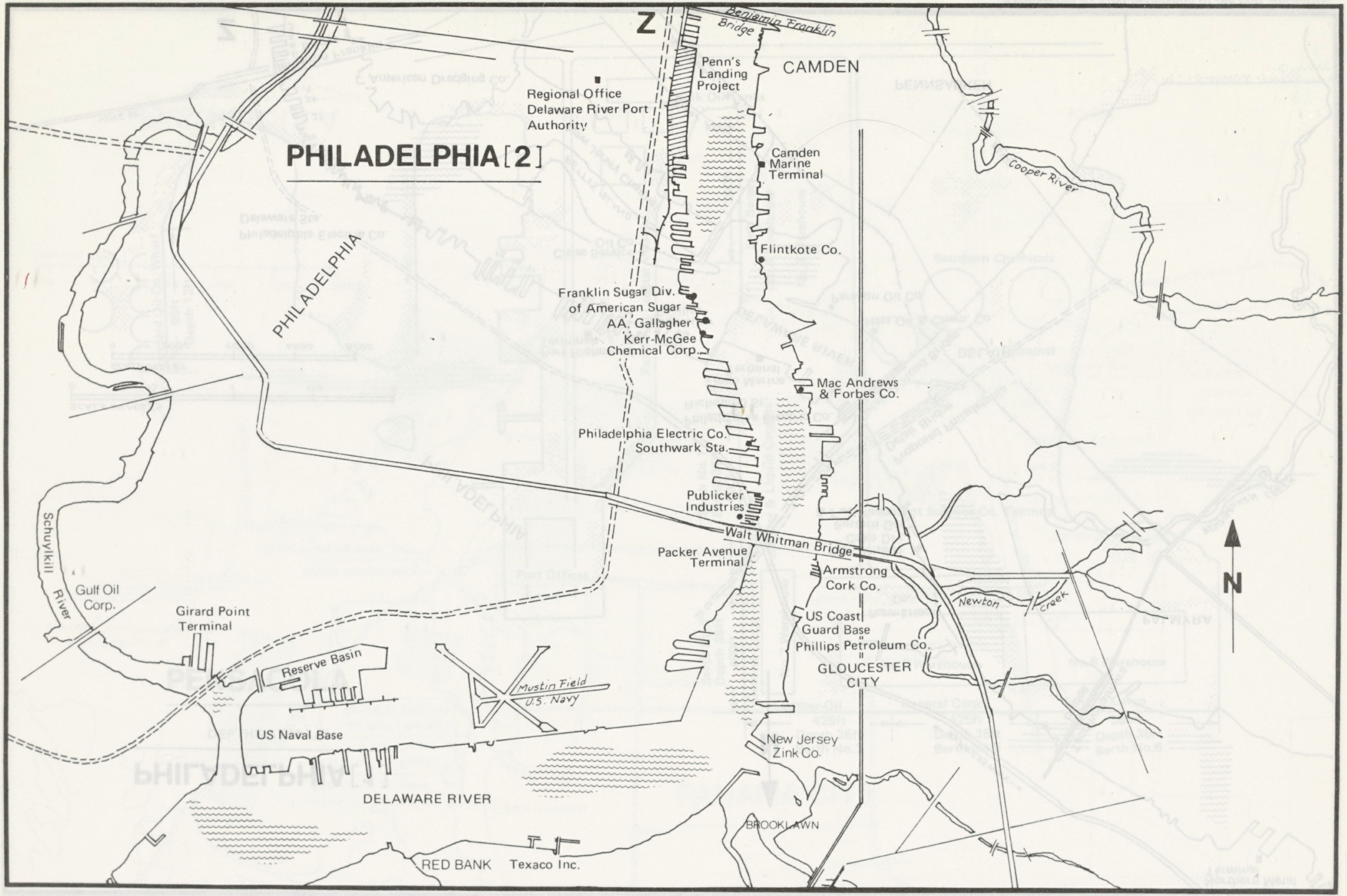
PHILADELPHIA [2]
Z
Benjamin Franklin Bridge
Penn's Landing Project
CAMDEN
Regional Office Delaware River Port Authority
Camden Marine Terminal
Cooper River
PHILADELPHIA
Flintkote Co.
Franklin Sugar Div. of American Sugar
AA. Gallagher
Kerr-McGee Chemical Corp.
Mac Andrews & Forbes Co.
Philadelphia Electric Co. Southwark Sta.
Publicker Industries
Walt Whitman Bridge
Packer Avenue Terminal
Armstrong Cork Co.
Newton Creek
N
US Coast Guard Base
Phillips Petroleum Co.
GLOUCESTER CITY
Schuylkill River
Gulf Oil Corp.
Girard Point Terminal
Reserve Basin
Mustin Field U.S. Navy
US Naval Base
New Jersey Zink Co.
DELAWARE RIVER
BROOKLAWN
RED BANK
Texaco Inc.

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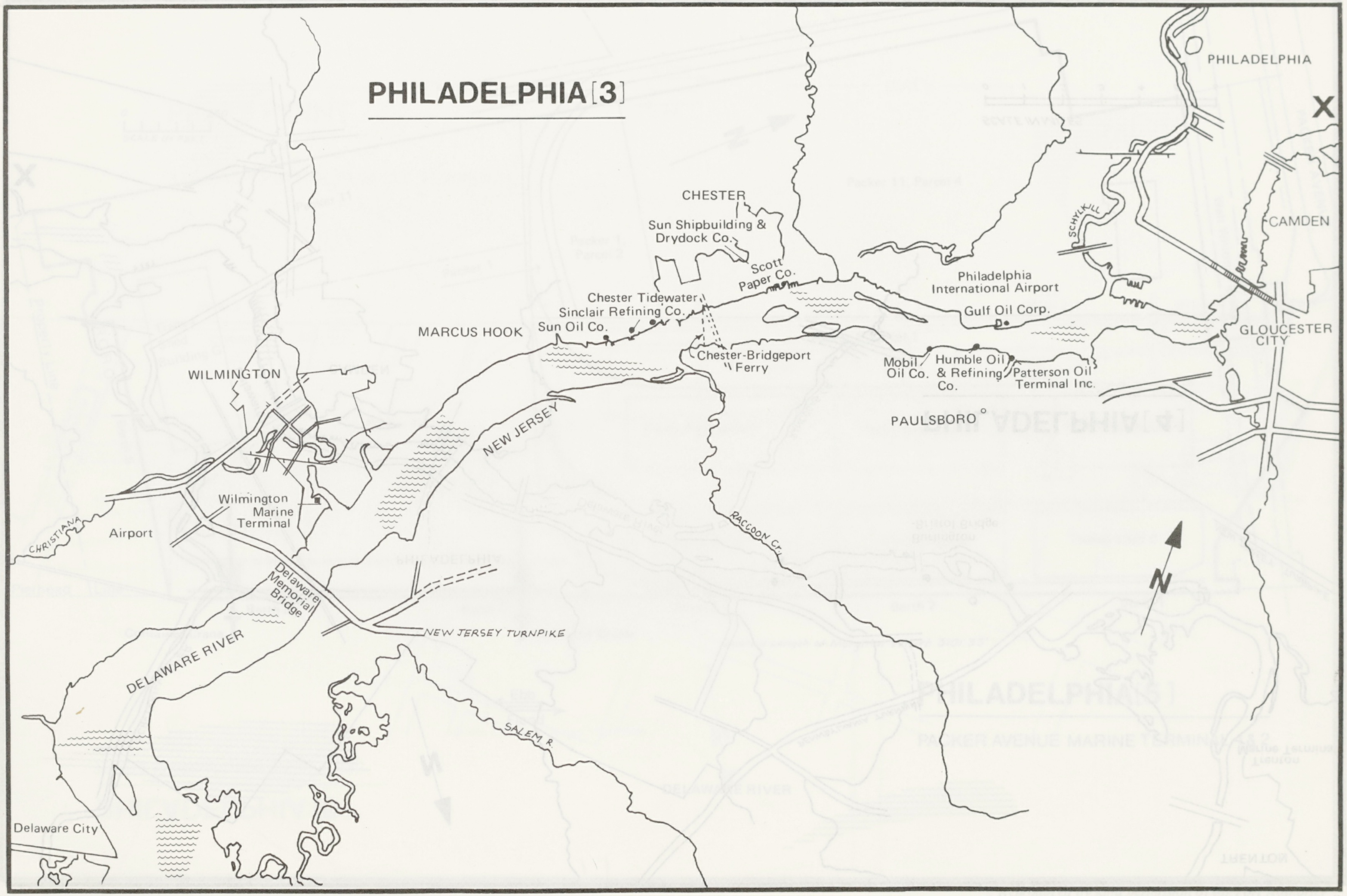
PHILADELPHIA[3]


X
PHILADELPHIA
X
CHESTER
Sun Shipbuilding & Drydock Co.
Scott Paper Co.
SCHYLKILL
CAMDEN
Philadelphia International Airport
Chester Tidewater
Sinclair Refining Co.
Sun Oil Co.
MARCUS HOOK
Gulf Oil Corp.
GLOUCESTER CITY
Chester-Bridgeport Ferry
Mobil Oil Co.
Humble Oil & Refining Co.
Patterson Oil Terminal Inc.
WILMINGTON
PAULSBORO
NEW JERSEY
Wilmington Marine Terminal
RACCOON CR.
CHRISTIANA
Airport
N
Delaware Memorial Bridge
NEW JERSEY TURNPIKE
DELAWARE RIVER
SALEM R
Delaware City

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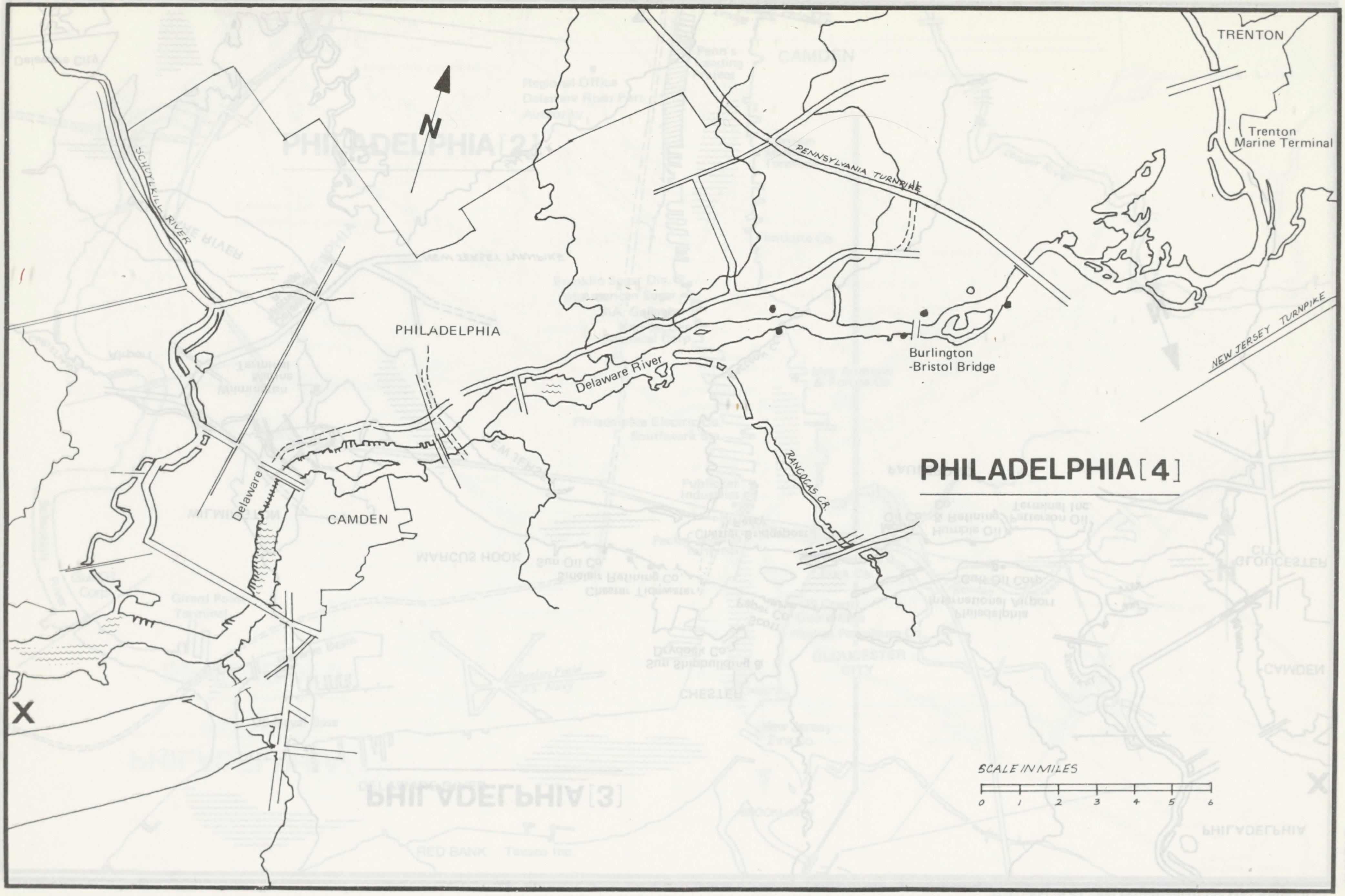
PHILADELPHIA [4]


TRENTON
Trenton Marine Terminal
N
SCHUYLKILL RIVER
PENNSYLVANIA TURNPIKE
PHILADELPHIA
Delaware River
Burlington -Bristol Bridge
NEW JERSEY TURNPIKE
RANCOCAS CR.
Delaware
CAMDEN
X
SCALE IN MILES
0
1
2
3
4
5
6

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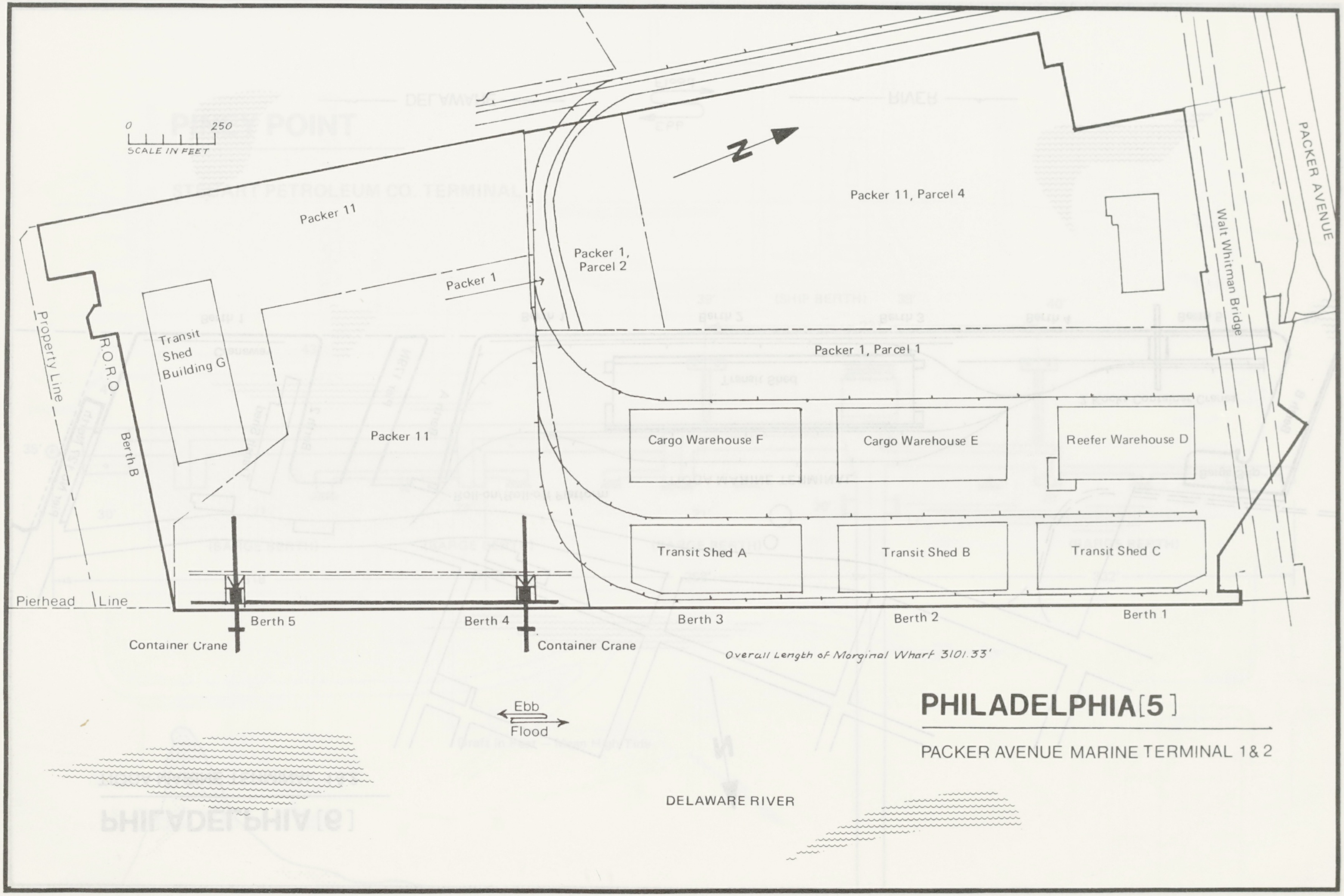
0
250
SCALE IN FEET
N
Packer 11, Parcel 4
Packer 11
Packer 1, Parcel 2
Packer 1
PACKER AVENUE
Walt Whitman Bridge
Property Line
R.O.R.O
Transit Shed Building G
Packer 1, Parcel 1
Packer 11
Cargo Warehouse F
Cargo Warehouse E
Reefer Warehouse D
Berth B
Transit Shed A
Transit Shed B
Transit Shed C
Pierhead Line
Berth 5
Berth 4
Berth 3
Berth 2
Berth 1
Container Crane
Container Crane
Overall Length of Marginal Wharf 3101.33'
Ebb
Flood
DELAWARE RIVER

PHILADELPHIA[5]

PACKER AVENUE MARINE TERMINAL 1& 2

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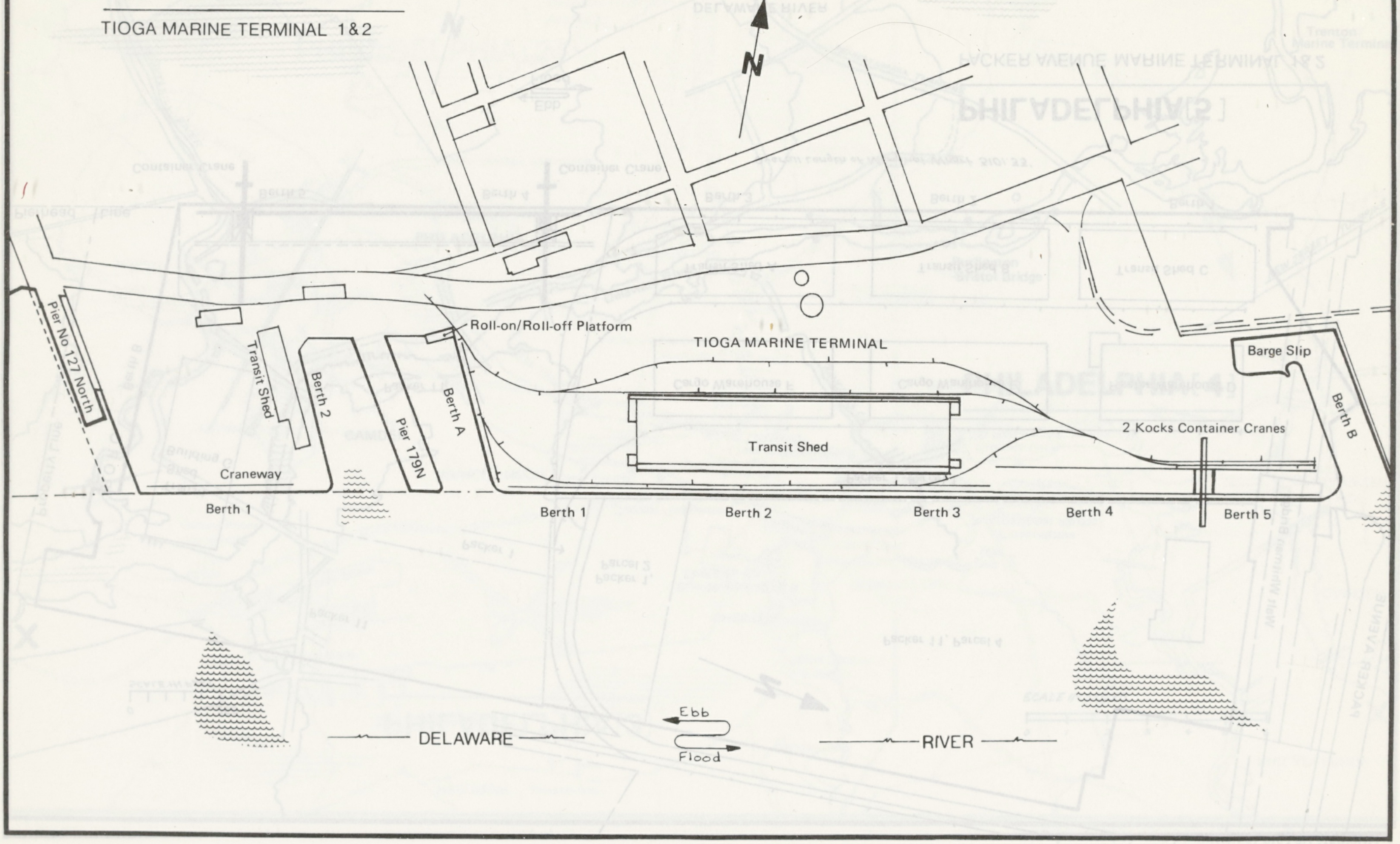
PHILADELPHIA [6]

TIOGA MARINE TERMINAL 1 & 2


N
Roll-on/Roll-off Platform
TIOGA MARINE TERMINAL
Pier No 127 North
Transit Shed
Berth 2
Pier 179N
Berth A
Craneway
Berth 1
Berth 1
Transit Shed
Berth 2
Berth 3
2 Kocks Container Cranes
Berth 4
Barge Slip
Berth B
Berth 5
Ebb
Flood
DELAWARE
RIVER

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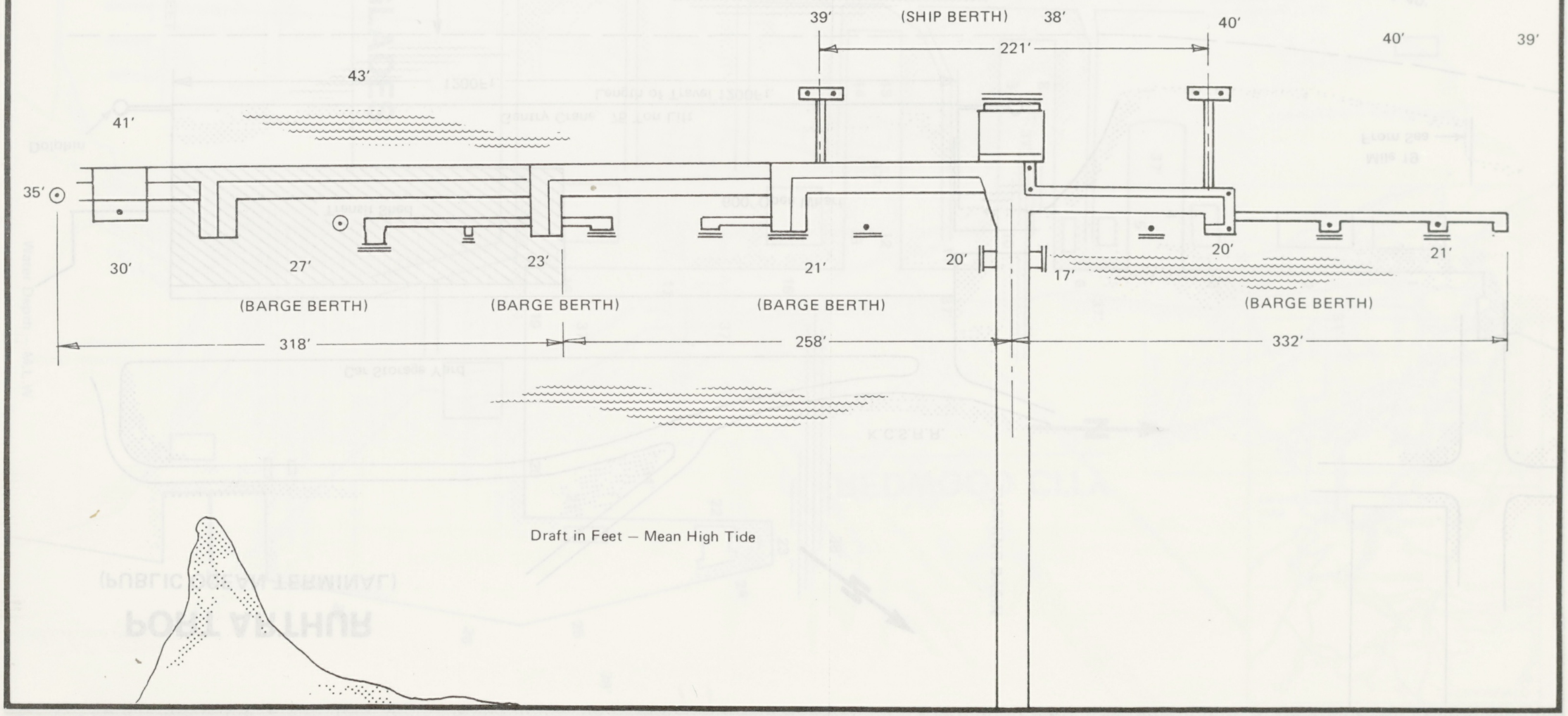
PINEY POINT

STEUART PETROLEUM CO. TERMINAL


39′
(SHIP BERTH)
38′
40′
221′
40′
39′
43′
41′
35′
30′
27′
23′
21′
20′
17′
20′
21′
(BARGE BERTH)
(BARGE BERTH)
(BARGE BERTH)
(BARGE BERTH)
318′
258′
332′

Draft in Feet – Mean High Tide

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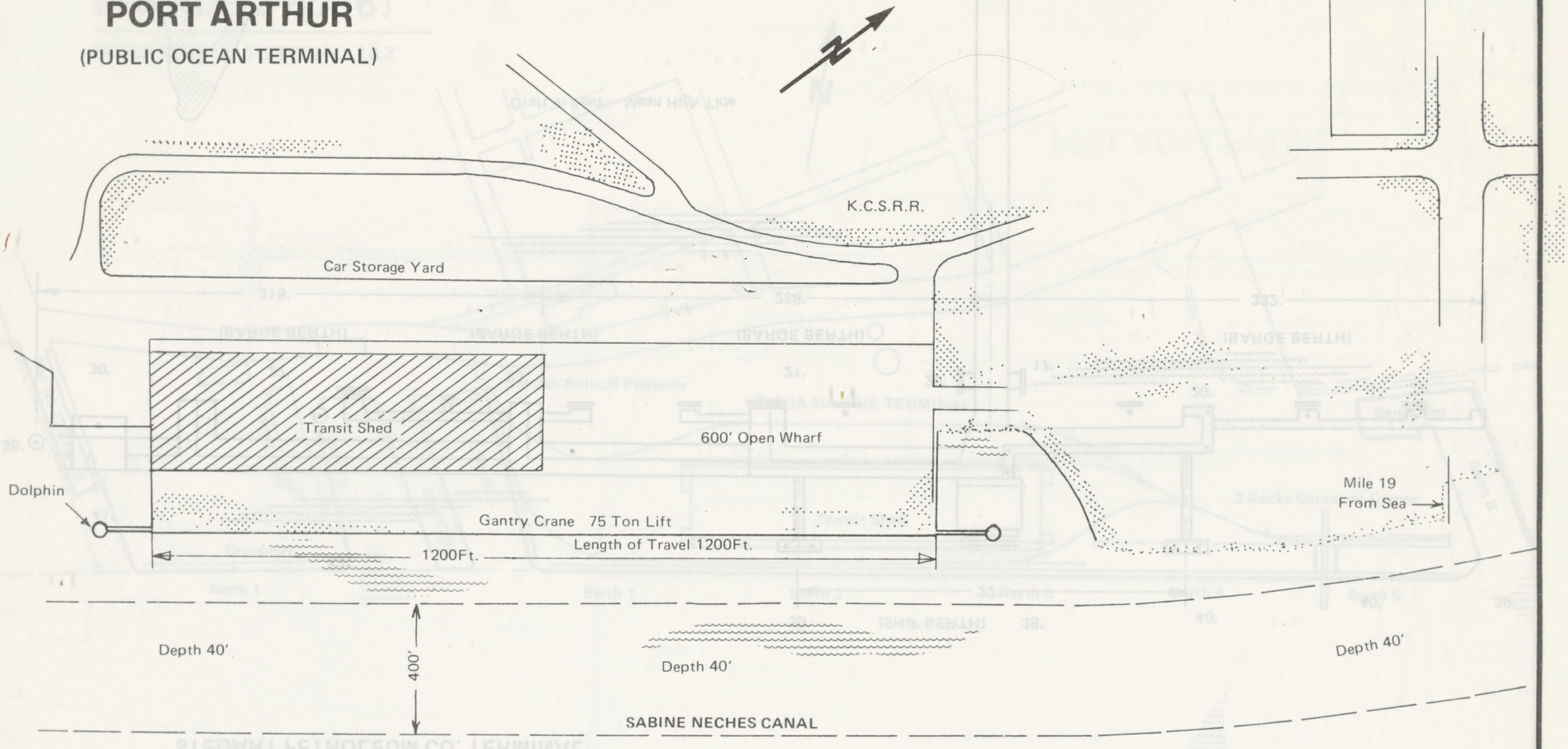
PORT ARTHUR

(PUBLIC OCEAN TERMINAL)


K.C.S.R.R.
Car Storage Yard
Transit Shed
600' Open Wharf
Dolphin
Gantry Crane 75 Ton Lift
1200Ft.
Length of Travel 1200Ft.
Mile 19
From Sea
Depth 40'
400'
Depth 40'
Depth 40'
SABINE NECHES CANAL

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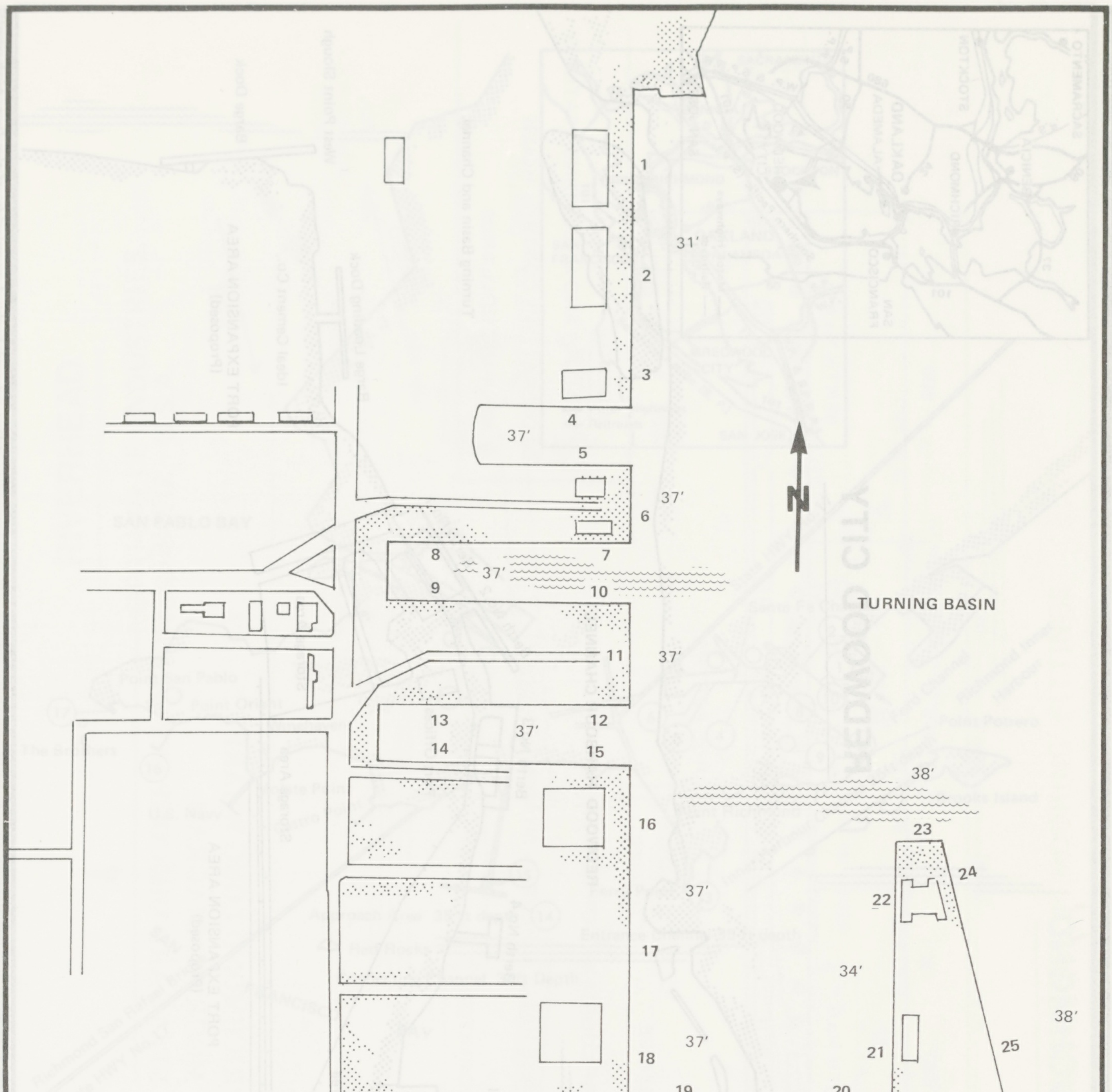
1
31′
2
3
4
37′
5
37′
6
8
37′
7
9
10
TURNING BASIN
11
37′
13
37′
12
14
15
38′
16
23
24
37′
22
17
34′
38′
37′
25
18
21
19
20
26
27
28
SCALE 0 200 400 600 FEET
Water Depth — M.L.W.

PORT EVERGLADES

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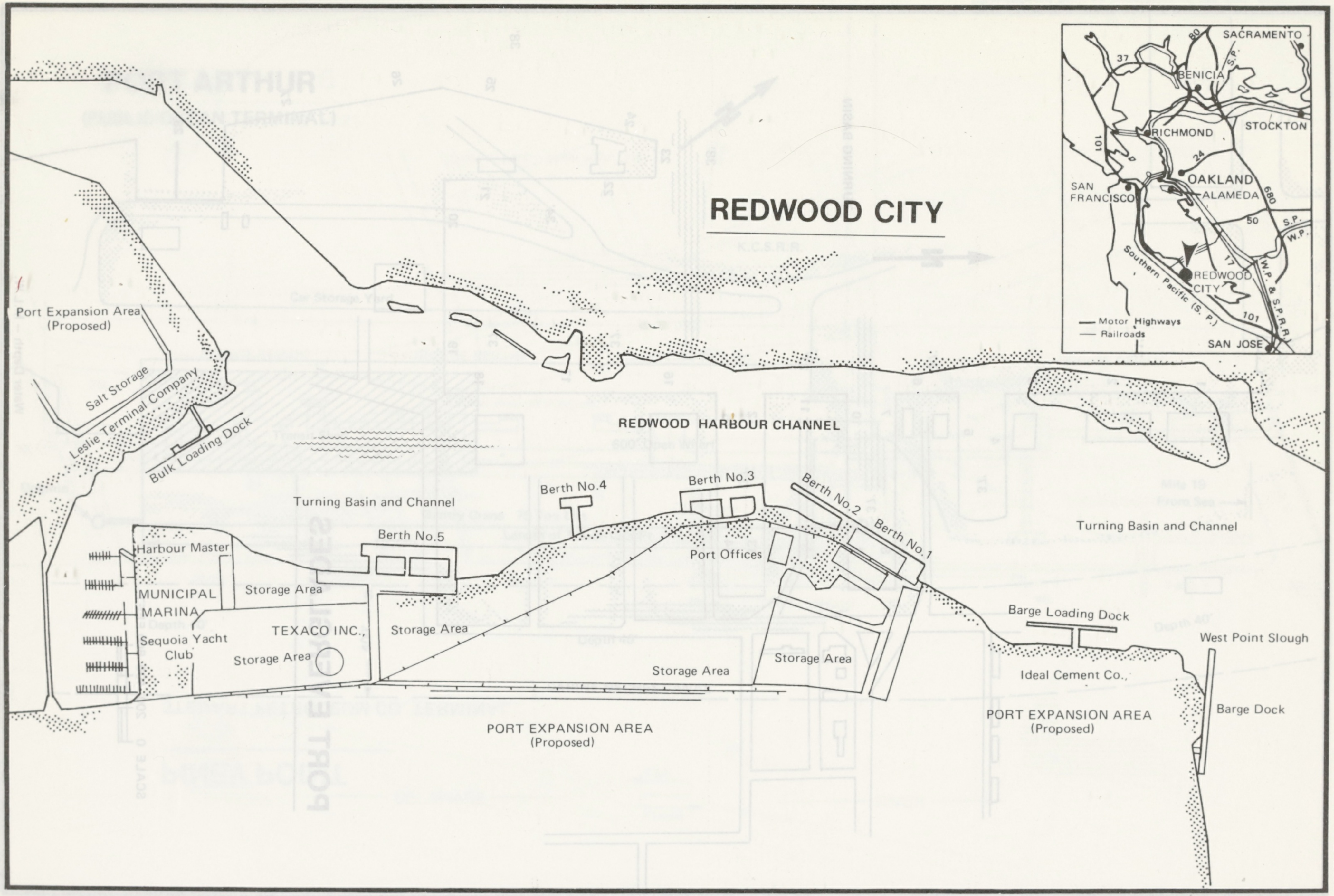
REDWOOD CITY
SACRAMENTO
BENICIA
S.P.
37
80
RICHMOND
STOCKTON
101
24
OAKLAND
ALAMEDA
680
SAN
FRANCISCO
50
S.P.
W.P.
Southern Pacific (S. P.)
REDWOOD
CITY
17
W.P. & S.P.R.R.
101
Motor Highways
Railroads
SAN JOSE
Port Expansion Area
(Proposed)
Salt Storage
Leslie Terminal Company
Bulk Loading Dock
REDWOOD HARBOUR CHANNEL
Turning Basin and Channel
Berth No.4
Berth No.3
Berth No.2
Berth No.1
Berth No.5
Harbour Master
MUNICIPAL
MARINA
Storage Area
Port Offices
Turning Basin and Channel
Sequoia Yacht
Club
TEXACO INC.,
Storage Area
Storage Area
Storage Area
Storage Area
Barge Loading Dock
West Point Slough
Ideal Cement Co.,
PORT EXPANSION AREA
(Proposed)
Barge Dock
PORT EXPANSION AREA
(Proposed)

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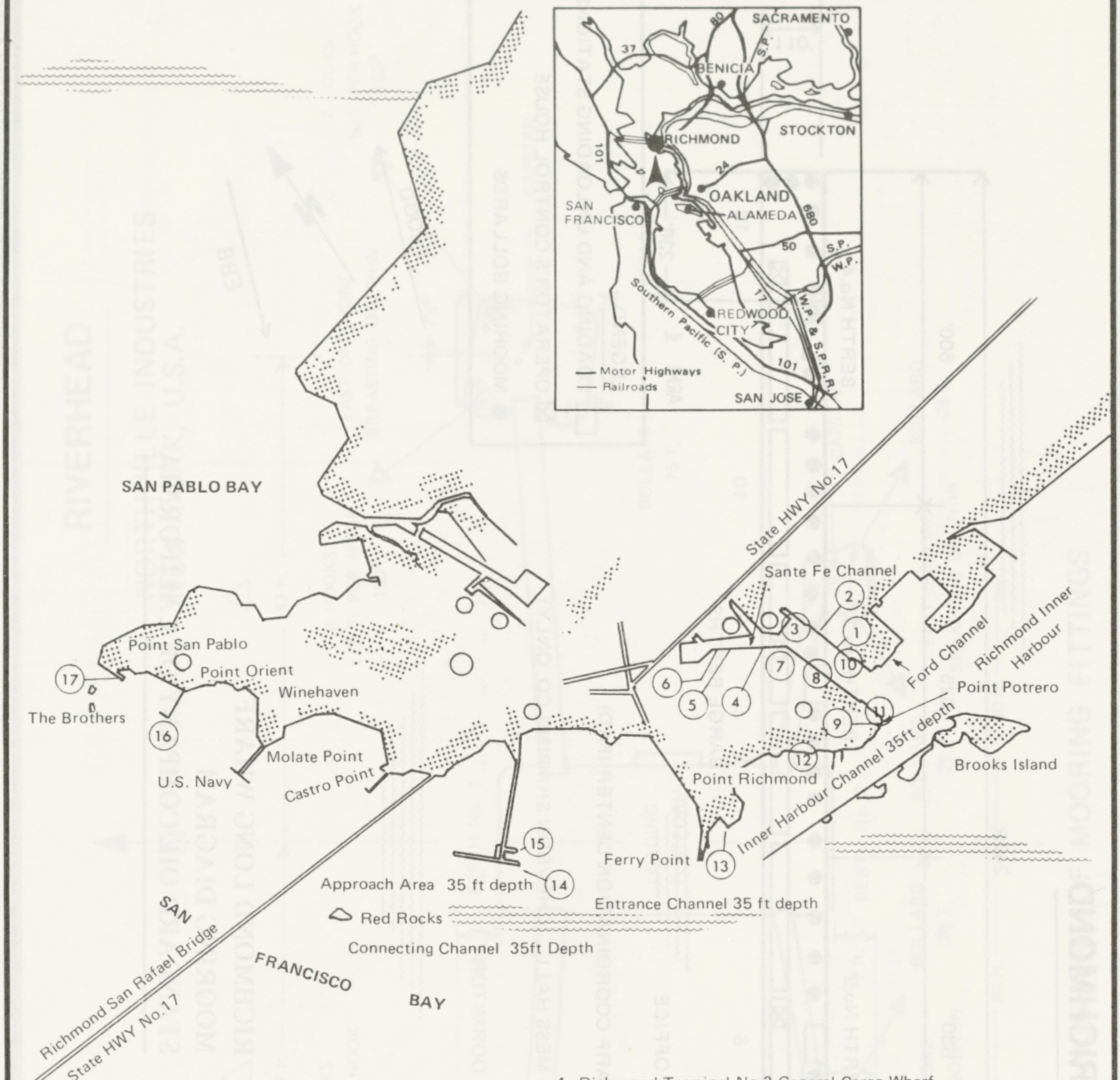
SACRAMENTO
80
37
BENICIA
S.P.
RICHMOND
STOCKTON
101
24
OAKLAND
SAN FRANCISCO
ALAMEDA
680
50
S.P.
W.P.
Southern Pacific (S.P.)
17
W.P. & S.P.R.R.
REDWOOD CITY
101
Motor Highways
Railroads
SAN JOSE
SAN PABLO BAY
State HWY No.17
Sante Fe Channel
2
1
3
10
Ford Channel
Richmond Inner Harbour
6
7
8
5
4
11
Point Potrero
9
12
Brooks Island
Point Richmond
Inner Harbour Channel 35ft depth
Point San Pablo
17
Point Orient
The Brothers
Winehaven
16
Molate Point
U.S. Navy
Castro Point
15
Ferry Point
13
Approach Area 35 ft depth
14
Entrance Channel 35 ft depth
Red Rocks
Connecting Channel 35ft Depth
SAN FRANCISCO BAY
Richmond San Rafael Bridge
State HWY No.17

1. Richmond Terminal No.3 General Cargo Wharf
2. Richmond Terminal No.3 Liquid Cargo Wharf
3. Time Oil Company Wharf
4. Parr-Richmond Bulk Commodity Wharf
5. Texaco Wharf
6. Santa Fe Sugar Dock
7. Union Oil Co. Barge Dock
8. Union Oil Co. Tanker Dock
9. Atlantic Richfield Barge Dock
10. Atlantic Richfield Tanker Dock
11. Canal Industrial Park and Willamette Iron & Steel Co.
12. Levin Metals Corporation
13. Richmond Terminal No.1 Wharf
14. Standard Oil Co. Richmond Refinery Long Wharf
15. Standard Oil Co. Richmond Refinery Repair and Mooring Dock
16. Standard Oil Co. Richmond Refinery Point Orient Wharf
17. Richmond Terminal No.4 Wharf. Point San Pablo

RICHMOND

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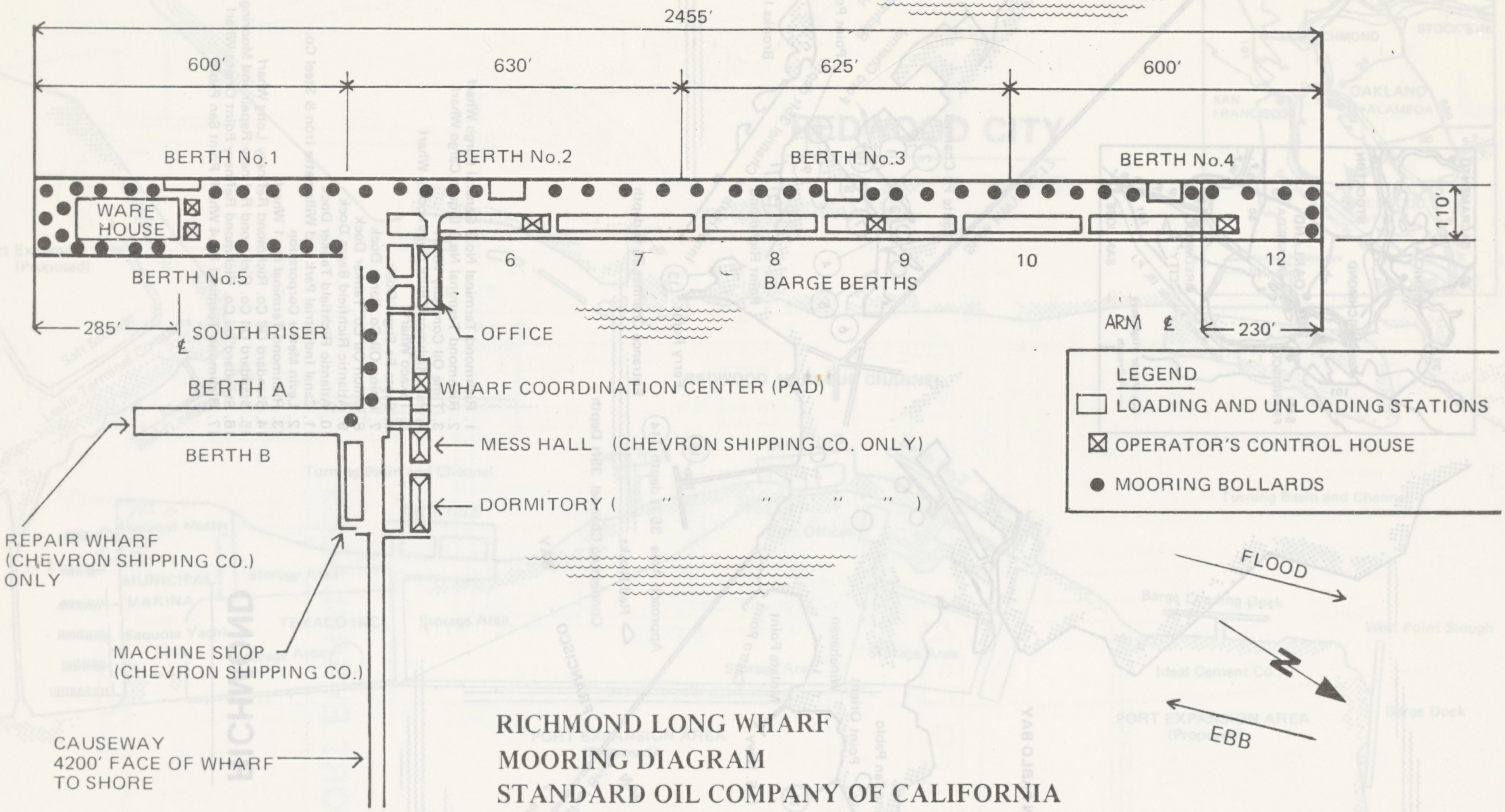
RICHMOND


2455'
600'
630'
625'
600'
BERTH No.1
BERTH No.2
BERTH No.3
BERTH No.4
WARE HOUSE
110'
6
7
8
9
10
12
BERTH No.5
BARGE BERTHS
285'
SOUTH RISER ℄
OFFICE
ARM ℄
230'
BERTH A
WHARF COORDINATION CENTER (PAD)
BERTH B
MESS HALL (CHEVRON SHIPPING CO. ONLY)
DORMITORY (" " " ")
REPAIR WHARF (CHEVRON SHIPPING CO.) ONLY
MACHINE SHOP (CHEVRON SHIPPING CO.)
CAUSEWAY 4200' FACE OF WHARF TO SHORE
LEGEND
☐ LOADING AND UNLOADING STATIONS
☒ OPERATOR'S CONTROL HOUSE
● MOORING BOLLARDS
FLOOD
EBB

RICHMOND LONG WHARF
MOORING DIAGRAM
STANDARD OIL COMPANY OF CALIFORNIA

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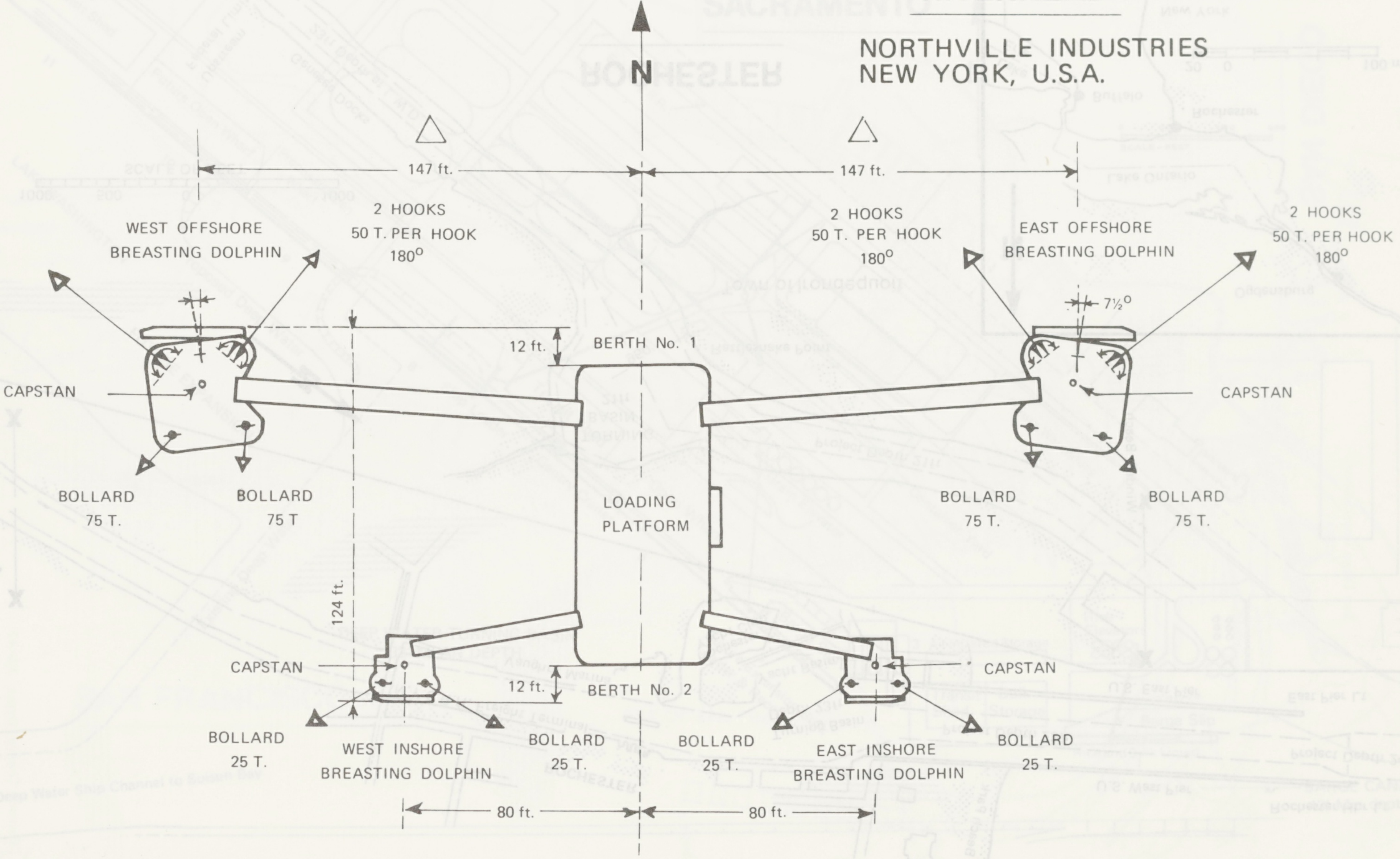
RIVERHEAD

NORTHVILLE INDUSTRIES
NEW YORK, U.S.A.


N
147 ft.
147 ft.
2 HOOKS
50 T. PER HOOK
180°
WEST OFFSHORE
BREASTING DOLPHIN
2 HOOKS
50 T. PER HOOK
180°
EAST OFFSHORE
BREASTING DOLPHIN
2 HOOKS
50 T. PER HOOK
180°
7½°
12 ft.
BERTH No. 1
CAPSTAN
CAPSTAN
BOLLARD
75 T.
BOLLARD
75 T
LOADING
PLATFORM
BOLLARD
75 T.
BOLLARD
75 T.
124 ft.
CAPSTAN
CAPSTAN
12 ft.
BERTH No. 2
BOLLARD
25 T.
WEST INSHORE
BREASTING DOLPHIN
BOLLARD
25 T.
BOLLARD
25 T.
EAST INSHORE
BREASTING DOLPHIN
BOLLARD
25 T.
80 ft.
80 ft.

ARRANGEMENT OF MOORING FITTINGS

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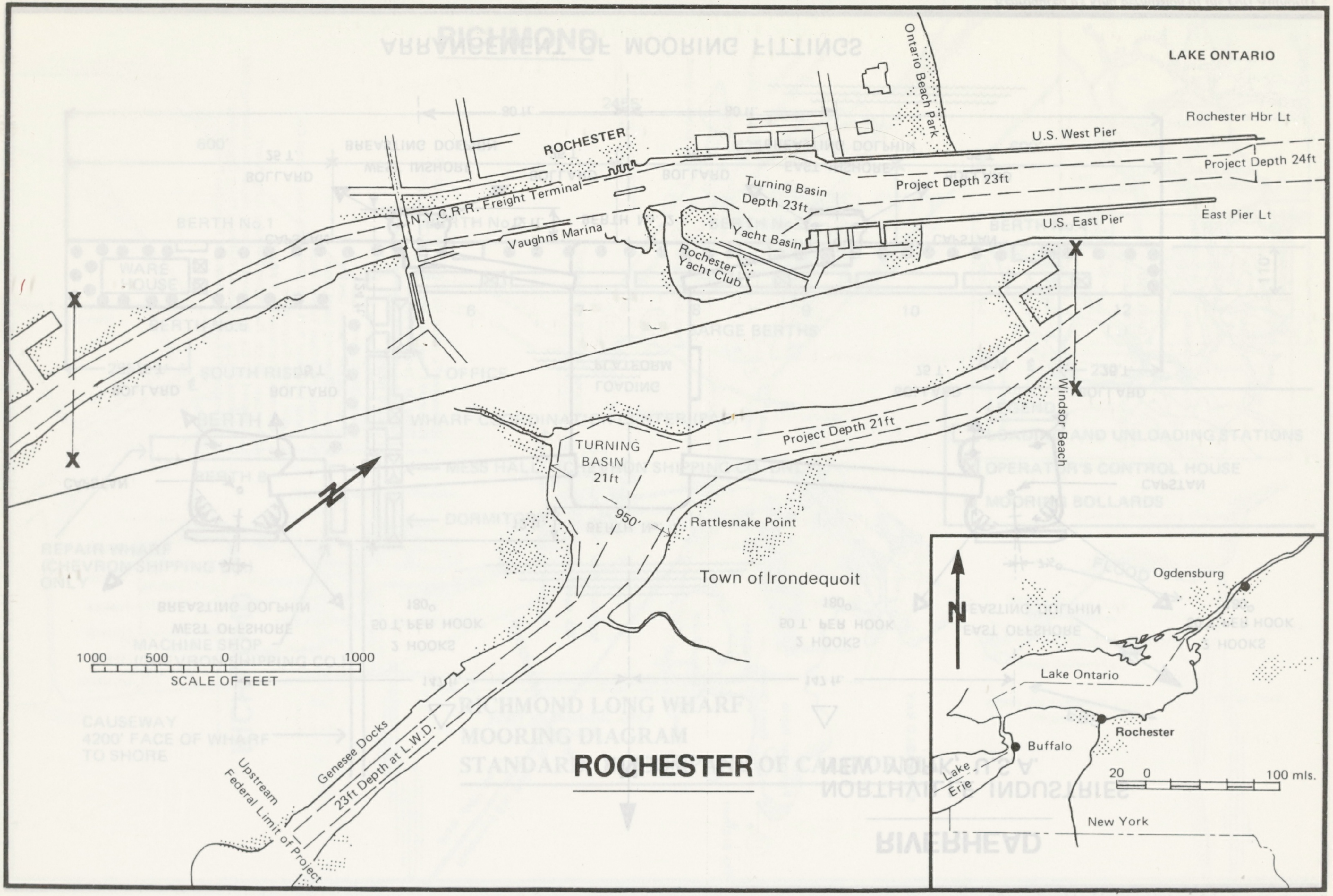
LAKE ONTARIO
Ontario Beach Park
Rochester Hbr Lt
U.S. West Pier
Project Depth 24ft
ROCHESTER
Project Depth 23ft
Turning Basin
Depth 23ft
N.Y.C.R.R. Freight Terminal
East Pier Lt
U.S. East Pier
Vaughns Marina
Yacht Basin
Rochester
Yacht Club
X
X
X
X
Windsor Beach
Project Depth 21ft
TURNING
BASIN
21ft
950'
Rattlesnake Point
Town of Irondequoit
1000
500
0
1000
SCALE OF FEET
Genesee Docks
23ft Depth at L.W.D.
Upstream
Federal Limit of Project
ROCHESTER
N
Ogdensburg
Lake Ontario
Rochester
Buffalo
Lake
Erie
20
0
100 mls.
New York

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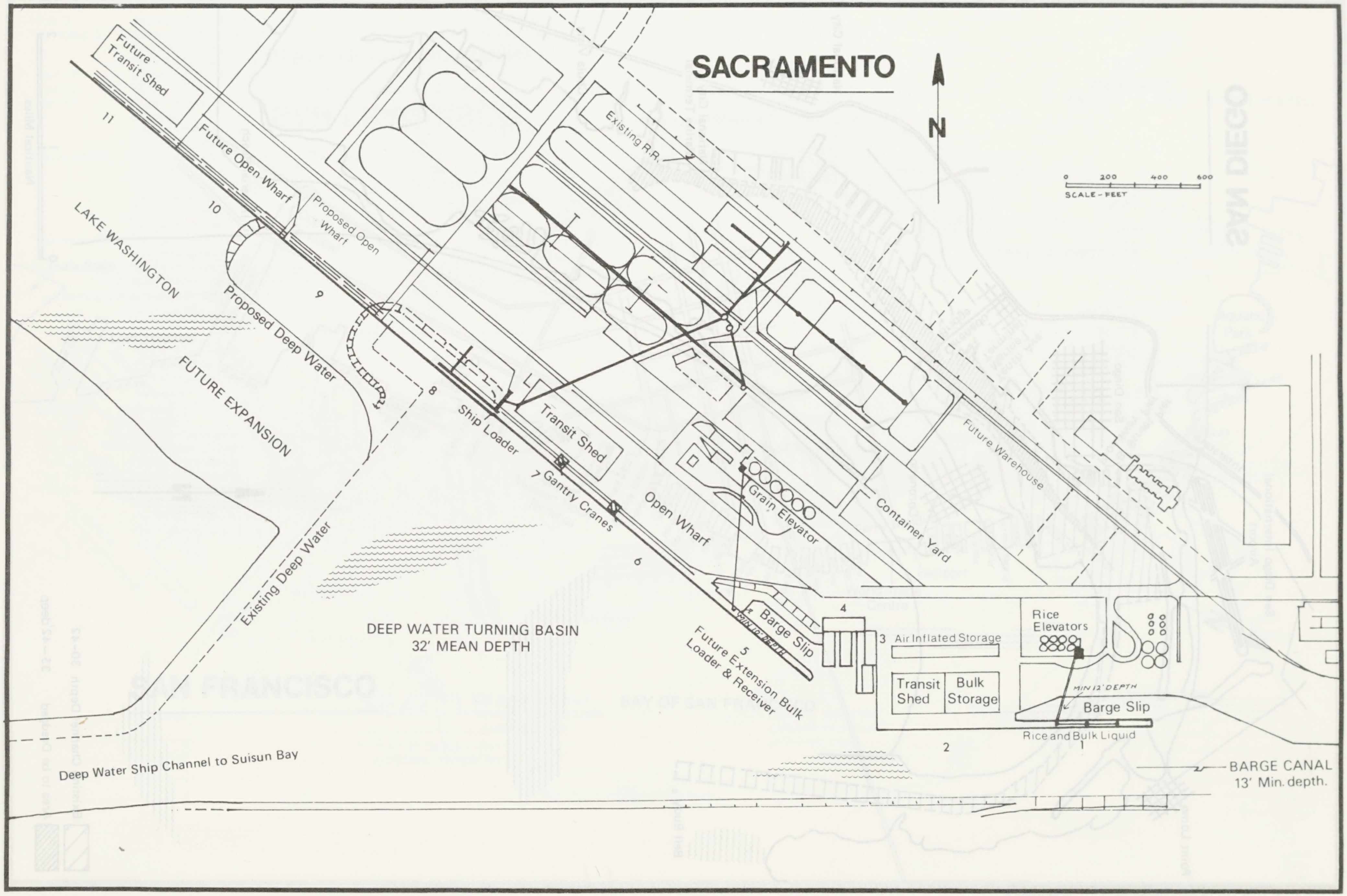
SACRAMENTO
N
0 200 400 600
SCALE - FEET
Future Transit Shed
11
Future Open Wharf
10
Proposed Open Wharf
LAKE WASHINGTON
9
Proposed Deep Water
FUTURE EXPANSION
8
Ship Loader
Transit Shed
7 Gantry Cranes
Open Wharf
6
Existing Deep Water
DEEP WATER TURNING BASIN
32' MEAN DEPTH
Deep Water Ship Channel to Suisun Bay
Existing R.R.
Future Warehouse
Grain Elevator
Container Yard
Barge Slip
MIN 12' DEPTH
5
Future Extension Bulk Loader & Receiver
4
3 Air Inflated Storage
Rice Elevators
Transit Shed
Bulk Storage
MIN 12' DEPTH
Barge Slip
Rice and Bulk Liquid
2
1
BARGE CANAL
13' Min. depth.

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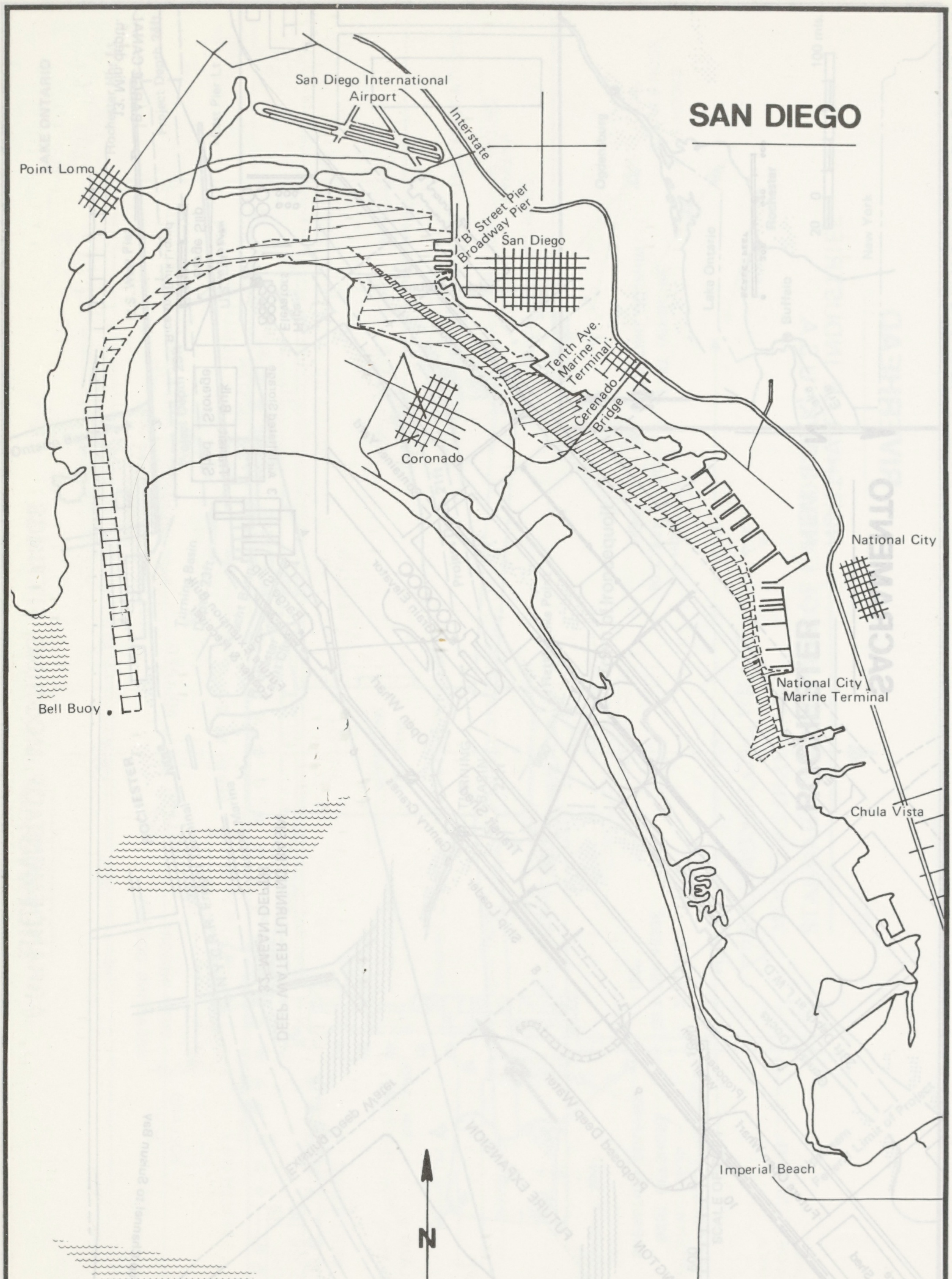
SAN DIEGO
San Diego International Airport
Interstate
Point Loma
'B' Street Pier
Broadway Pier
San Diego
Tenth Ave. Marine Terminal
Coronado
Cerenado Bridge
National City
National City Marine Terminal
Chula Vista
Imperial Beach
Bell Buoy
N
Existing Channel Depth 30-42'
Area to be Dredged 35-42' deep
0
1
2
Nautical Miles

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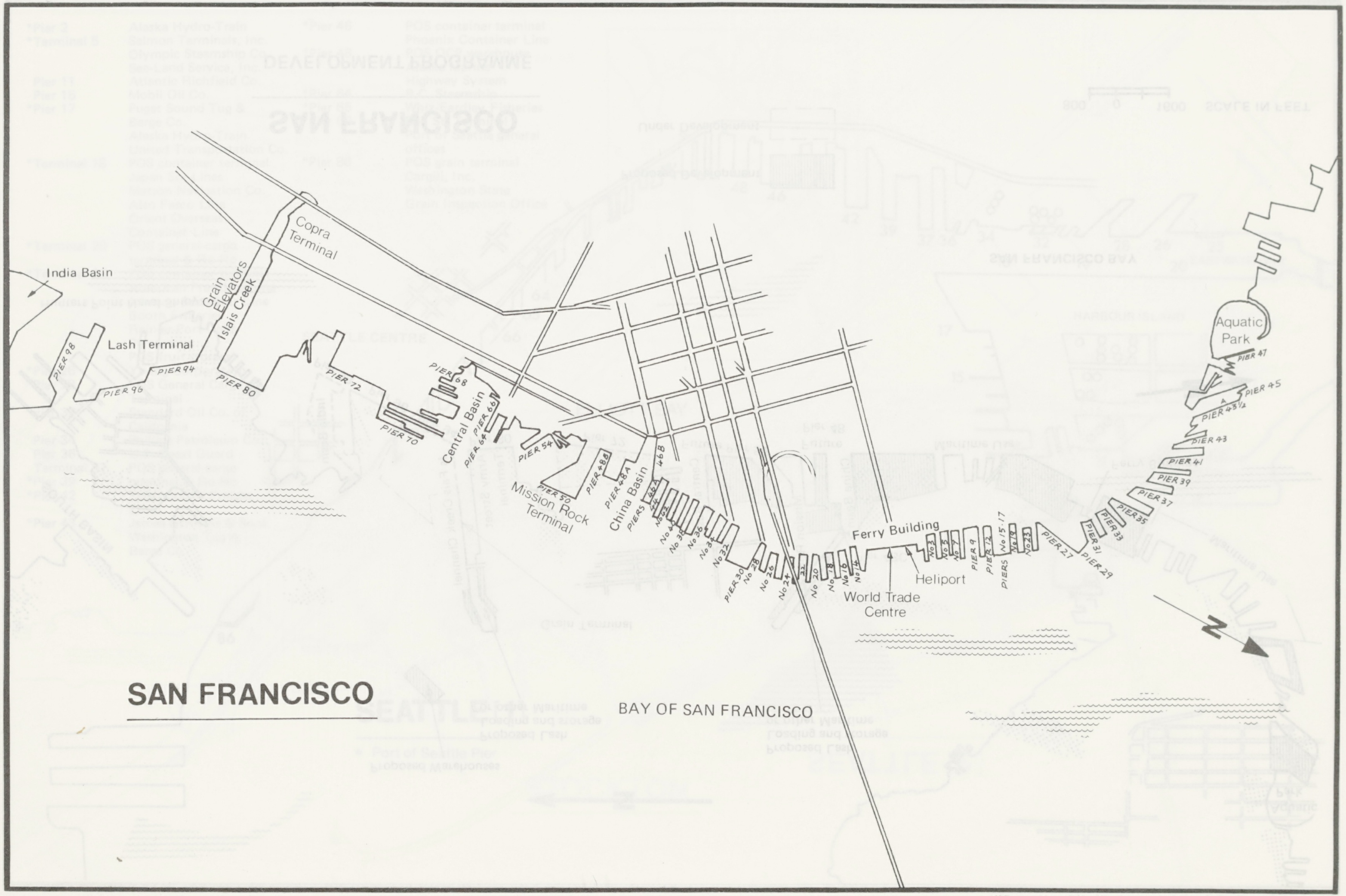
India Basin
Lash Terminal
PIER 98
PIER 96
PIER 94
PIER 80
Grain Elevators
Islais Creek
Copra Terminal
PIER 72
PIER 70
PIER 68
Central Basin
PIER 66
PIER 64
PIER 54
PIER 50
Mission Rock Terminal
PIER 48B
PIER 48A
China Basin
46B
46A
PIERS 44
No 42
No 40
No 38
No 36
No 34
No 32
PIER 30
No 28
No 26
No 24
22
No 20
No 18
No 16
No 14
Ferry Building
World Trade Centre
Heliport
No 3
No 5
No 7
PIER 9
PIER 12
PIERS No 15·17
No 19
No 23
PIER 27
PIER 29
PIER 31
PIER 33
PIER 35
PIER 37
PIER 39
PIER 41
PIER 43
PIER 43½
PIER 45
PIER 47
Aquatic Park
N
BAY OF SAN FRANCISCO

SAN FRANCISCO

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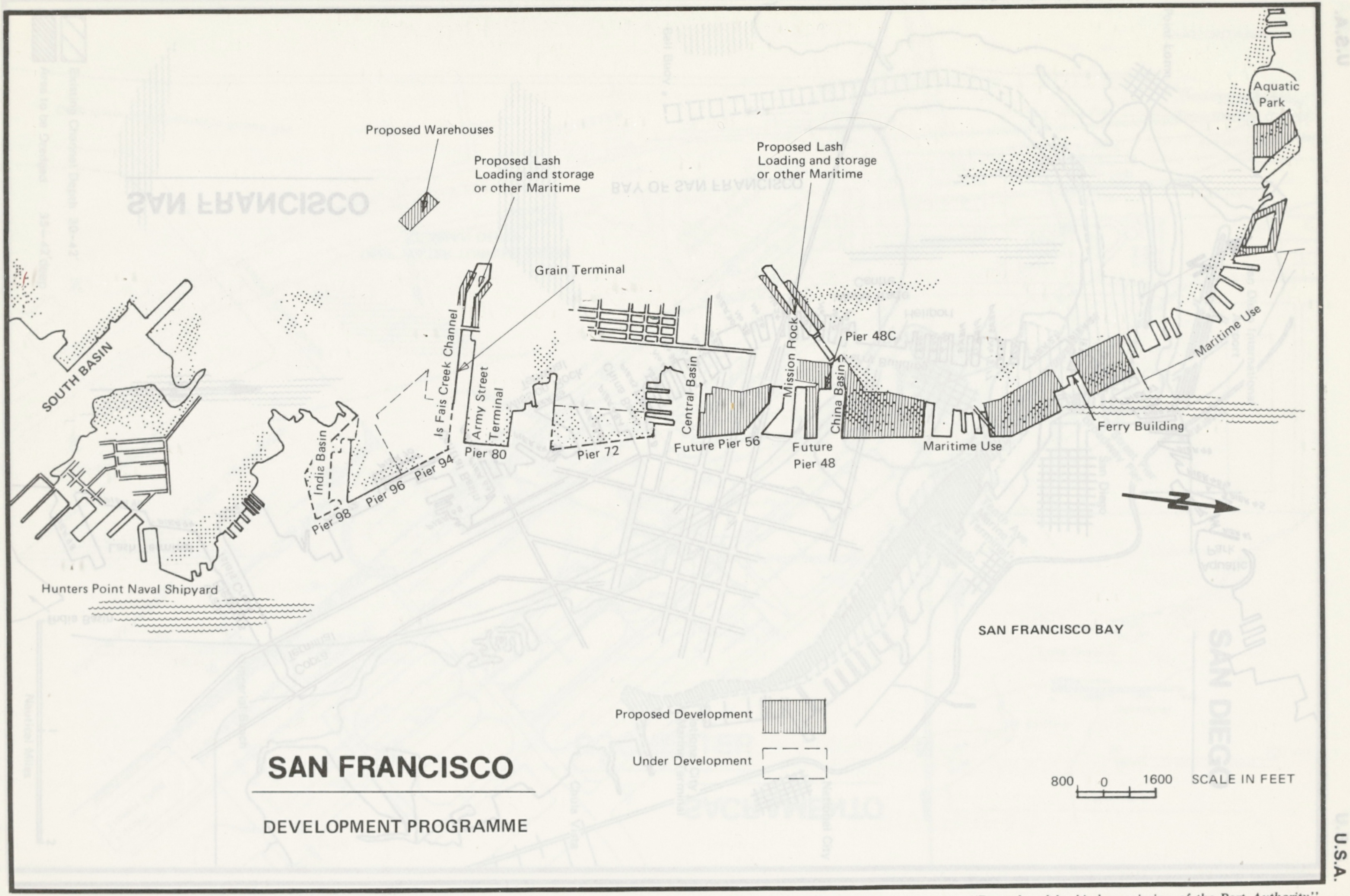
Proposed Warehouses
Proposed Lash Loading and storage or other Maritime
Grain Terminal
Proposed Lash Loading and storage or other Maritime
Aquatic Park
SOUTH BASIN
Is Fais Creek Channel
Army Street Terminal
Pier 80
Pier 94
Pier 96
Pier 98
India Basin
Pier 72
Central Basin
Future Pier 56
Mission Rock
Pier 48C
China Basin
Future Pier 48
Maritime Use
Ferry Building
Maritime Use
N
Hunters Point Naval Shipyard
SAN FRANCISCO BAY
Proposed Development
Under Development
800 0 1600 SCALE IN FEET

SAN FRANCISCO

DEVELOPMENT PROGRAMME

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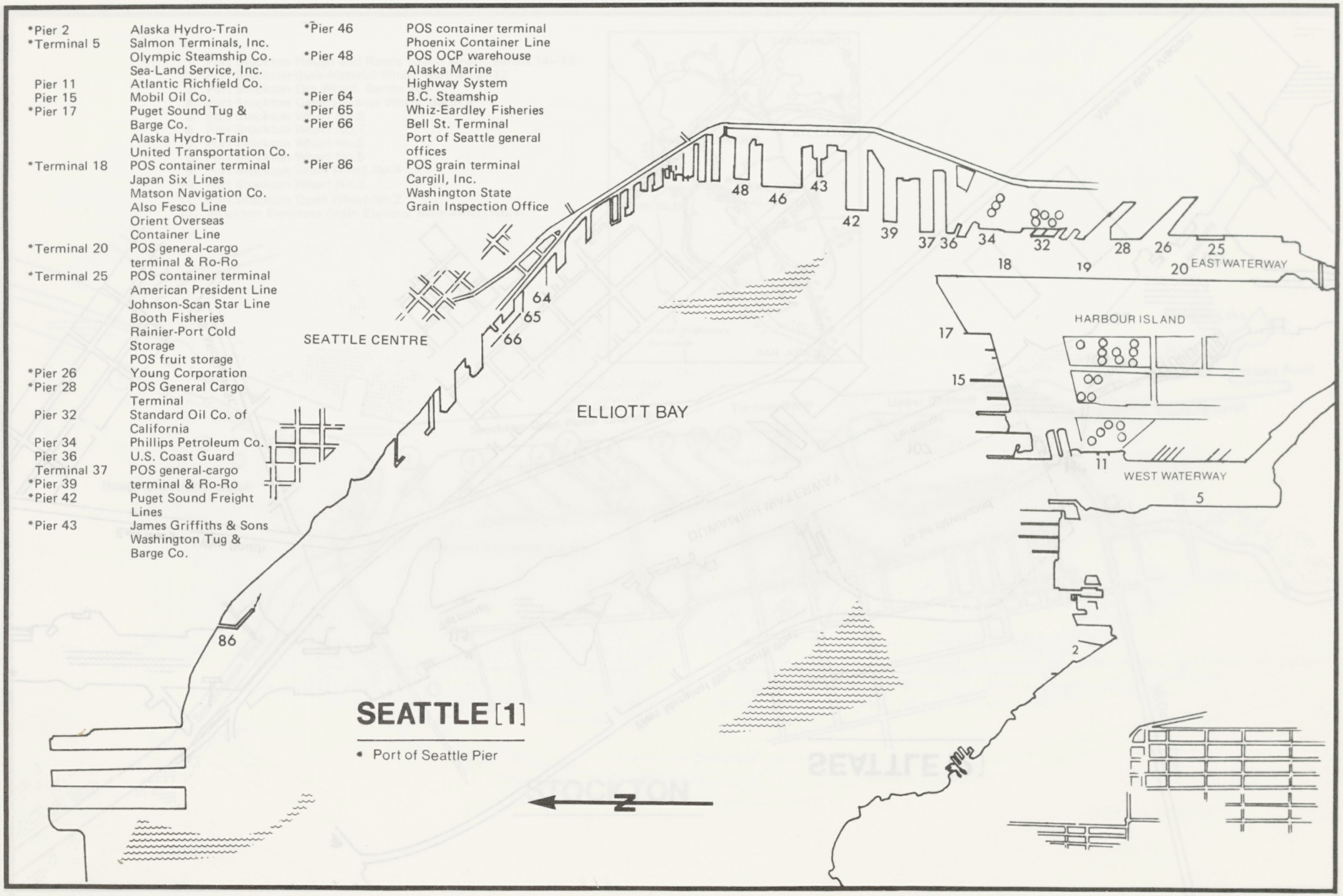
SEATTLE [1]

*Pier 2	Alaska Hydro-Train
*Terminal 5	Salmon Terminals, Inc. Olympic Steamship Co. Sea-Land Service, Inc.
Pier 11	Atlantic Richfield Co.
Pier 15	Mobil Oil Co.
*Pier 17	Puget Sound Tug & Barge Co. Alaska Hydro-Train United Transportation Co.
*Terminal 18	POS container terminal Japan Six Lines Matson Navigation Co. Also Fesco Line Orient Overseas Container Line
*Terminal 20	POS general-cargo terminal & Ro-Ro
*Terminal 25	POS container terminal American President Line Johnson-Scan Star Line Booth Fisheries Rainier-Port Cold Storage POS fruit storage
*Pier 26	Young Corporation
*Pier 28	POS General Cargo Terminal
Pier 32	Standard Oil Co. of California
Pier 34	Phillips Petroleum Co.
Pier 36	U.S. Coast Guard
Terminal 37	POS general-cargo terminal & Ro-Ro
*Pier 39	Puget Sound Freight Lines
*Pier 42	
*Pier 43	James Griffiths & Sons Washington Tug & Barge Co.
*Pier 46	POS container terminal Phoenix Container Line
*Pier 48	POS OCP warehouse Alaska Marine Highway System
*Pier 64	B.C. Steamship
*Pier 65	Whiz-Eardley Fisheries
*Pier 66	Bell St. Terminal Port of Seattle general offices
*Pier 86	POS grain terminal Cargill, Inc. Washington State Grain Inspection Office



* Port of Seattle Pier

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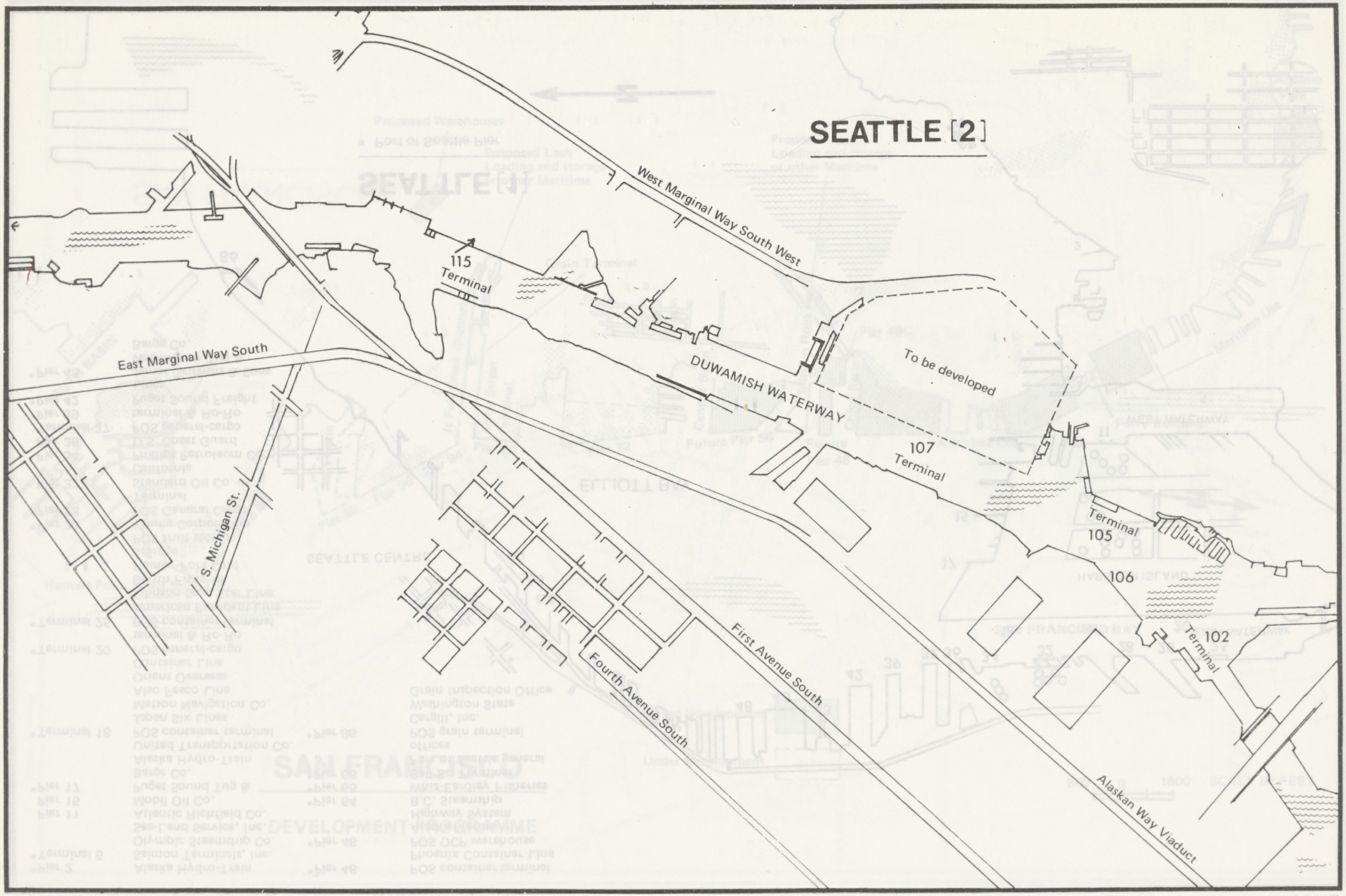
SEATTLE [2]


West Marginal Way South West
115
Terminal
East Marginal Way South
DUWAMISH WATERWAY
To be developed
107
Terminal
S. Michigan St.
Terminal
105
106
Terminal
102
First Avenue South
Fourth Avenue South
Alaskan Way Viaduct

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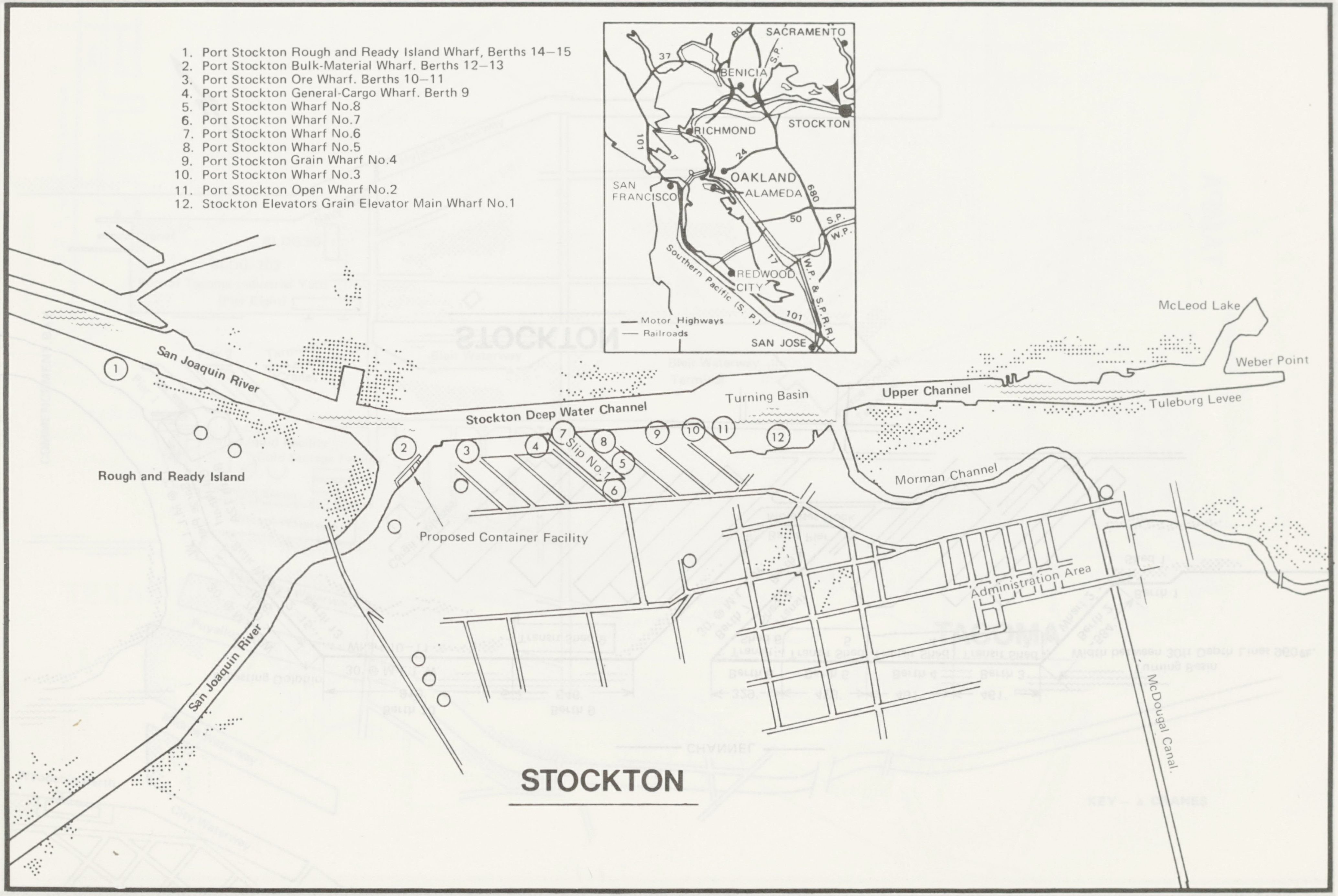
1. Port Stockton Rough and Ready Island Wharf, Berths 14–15
2. Port Stockton Bulk-Material Wharf. Berths 12–13
3. Port Stockton Ore Wharf. Berths 10–11
4. Port Stockton General-Cargo Wharf. Berth 9
5. Port Stockton Wharf No.8
6. Port Stockton Wharf No.7
7. Port Stockton Wharf No.6
8. Port Stockton Wharf No.5
9. Port Stockton Grain Wharf No.4
10. Port Stockton Wharf No.3
11. Port Stockton Open Wharf No.2
12. Stockton Elevators Grain Elevator Main Wharf No.1
SACRAMENTO
80
37
S.P.
BENICIA
STOCKTON
RICHMOND
101
24
OAKLAND
SAN FRANCISCO
ALAMEDA
680
50
S.P.
W.P.
17
Southern Pacific (S. P.)
REDWOOD CITY
W.P. & S.P.R.R.
101
SAN JOSE
Motor Highways
Railroads
McLeod Lake
Weber Point
Upper Channel
Tuleburg Levee
Turning Basin
Stockton Deep Water Channel
San Joaquin River
Rough and Ready Island
Slip No.1
Morman Channel
Proposed Container Facility
Administration Area
McDougal Canal
San Joaquin River
1
2
3
4
5
6
7
8
9
10
11
12
STOCKTON

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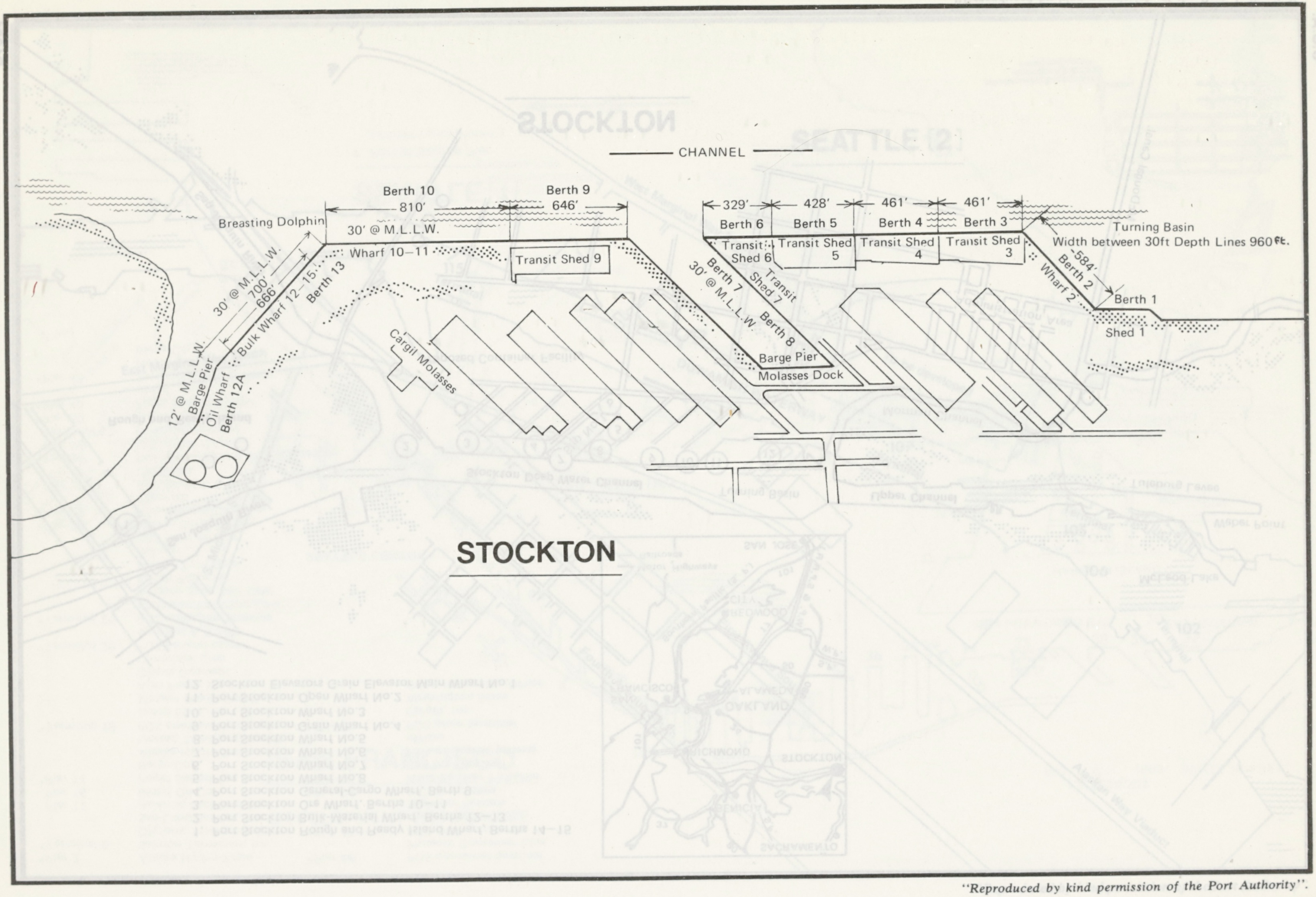
STOCKTON


CHANNEL
Berth 10
810'
Berth 9
646'
329'
428'
461'
461'
Berth 6
Berth 5
Berth 4
Berth 3
Breasting Dolphin
30' @ M.L.L.W.
Wharf 10–11
Transit Shed 9
Transit Shed 6
Transit Shed 5
Transit Shed 4
Transit Shed 3
Turning Basin
Width between 30ft Depth Lines 960ft.
584'
Berth 2
Wharf 2
Berth 1
Shed 1
30' @ M.L.L.W.
700'
666'
Bulk Wharf 12–15
Berth 13
Berth 7
30' @ M.L.L.W.
Transit Shed 7
Berth 8
Barge Pier
Molasses Dock
Cargill Molasses
12' @ M.L.L.W.
Barge Pier
Oil Wharf
Berth 12A

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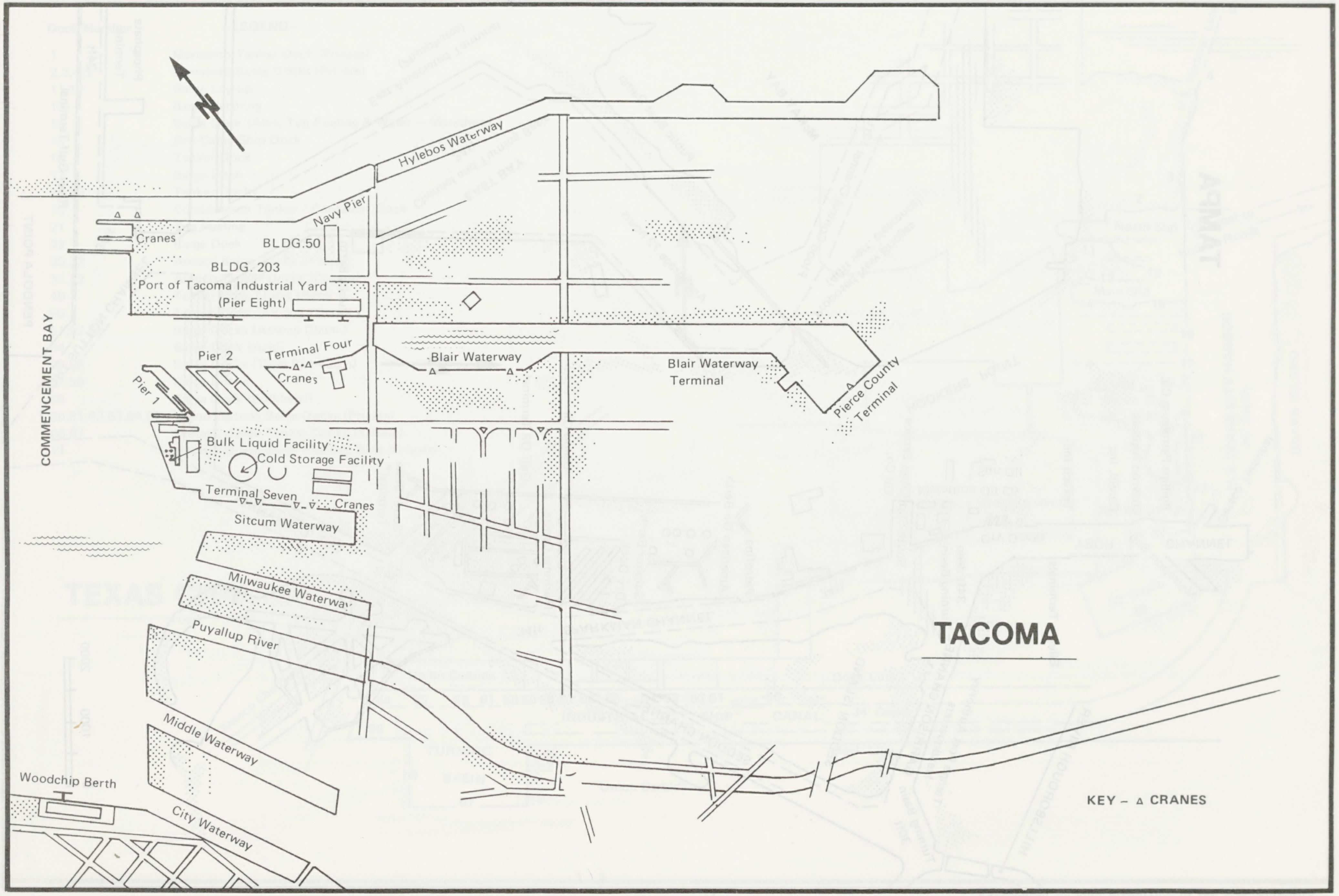
TACOMA


N
Hylebos Waterway
Navy Pier
Cranes
BLDG.50
BLDG. 203
Port of Tacoma Industrial Yard
(Pier Eight)
COMMENCEMENT BAY
Pier 2
Terminal Four
Cranes
Blair Waterway
Blair Waterway Terminal
Pierce County Terminal
Pier 1
Bulk Liquid Facility
Cold Storage Facility
Terminal Seven
Cranes
Sitcum Waterway
Milwaukee Waterway
Puyallup River
Middle Waterway
Woodchip Berth
City Waterway
KEY – Δ CRANES

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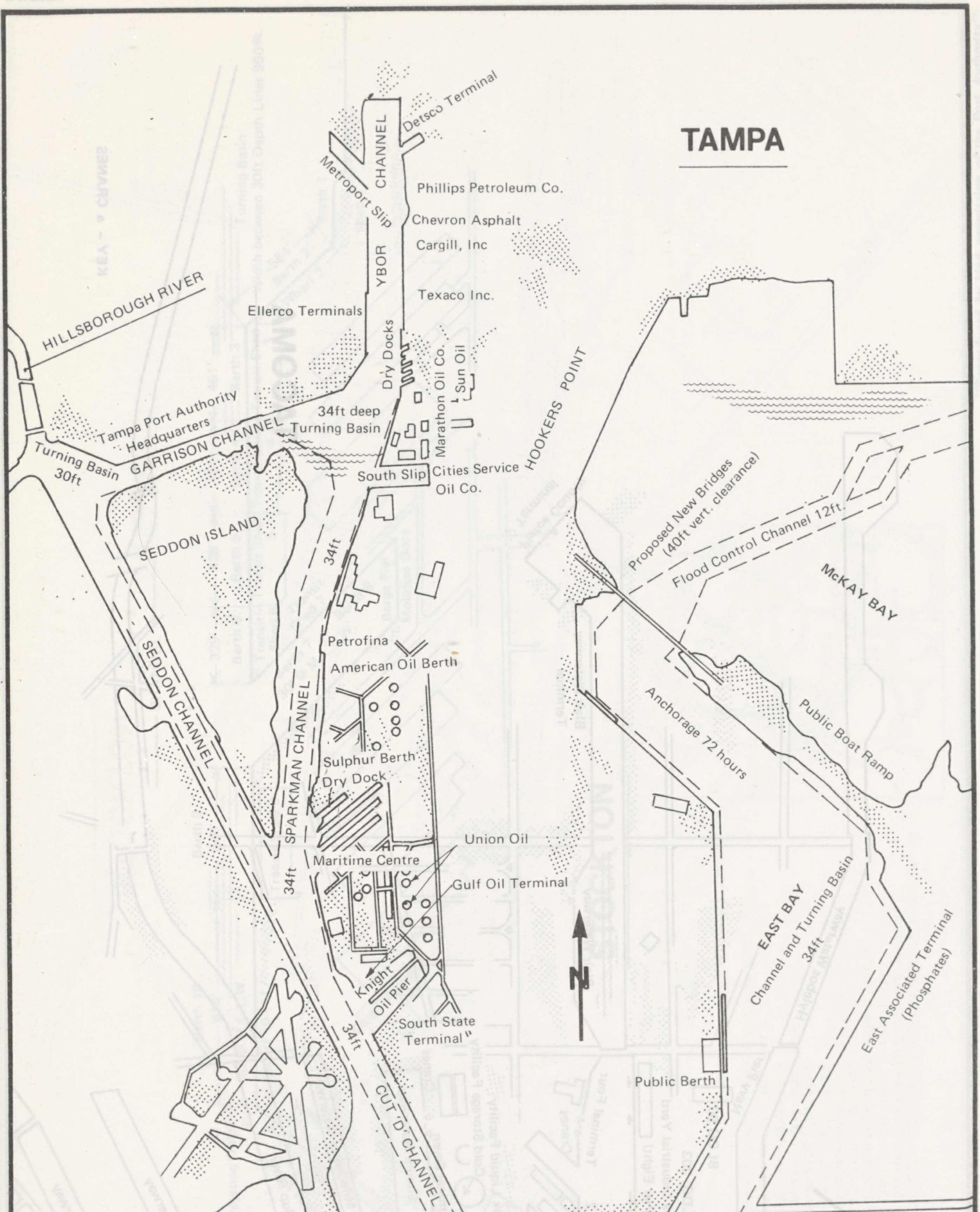
TAMPA
Detsco Terminal
YBOR CHANNEL
Metroport Slip
Phillips Petroleum Co.
Chevron Asphalt
Cargill, Inc
Texaco Inc.
Ellerco Terminals
HILLSBOROUGH RIVER
Dry Docks
Marathon Oil Co.
Sun Oil
Tampa Port Authority Headquarters
34ft deep Turning Basin
GARRISON CHANNEL
Turning Basin 30ft
South Slip
Cities Service Oil Co.
HOOKERS POINT
SEDDON ISLAND
34ft
Proposed New Bridges (40ft vert. clearance)
Flood Control Channel 12ft.
McKAY BAY
Petrofina
American Oil Berth
SEDDON CHANNEL
SPARKMAN CHANNEL
Anchorage 72 hours
Public Boat Ramp
Sulphur Berth
Dry Dock
Union Oil
Maritime Centre
34ft
Gulf Oil Terminal
N
EAST BAY
Channel and Turning Basin 34ft
East Associated Terminal (Phosphates)
Knight Oil Pier
South State Terminal
34ft
CUT 'D' CHANNEL
Public Berth
Phosphate Terminal
34ft
34ft
PORT SUTTON CHANNEL
River Gulf Terminal
PENDOLA POINT
0 1000 2000

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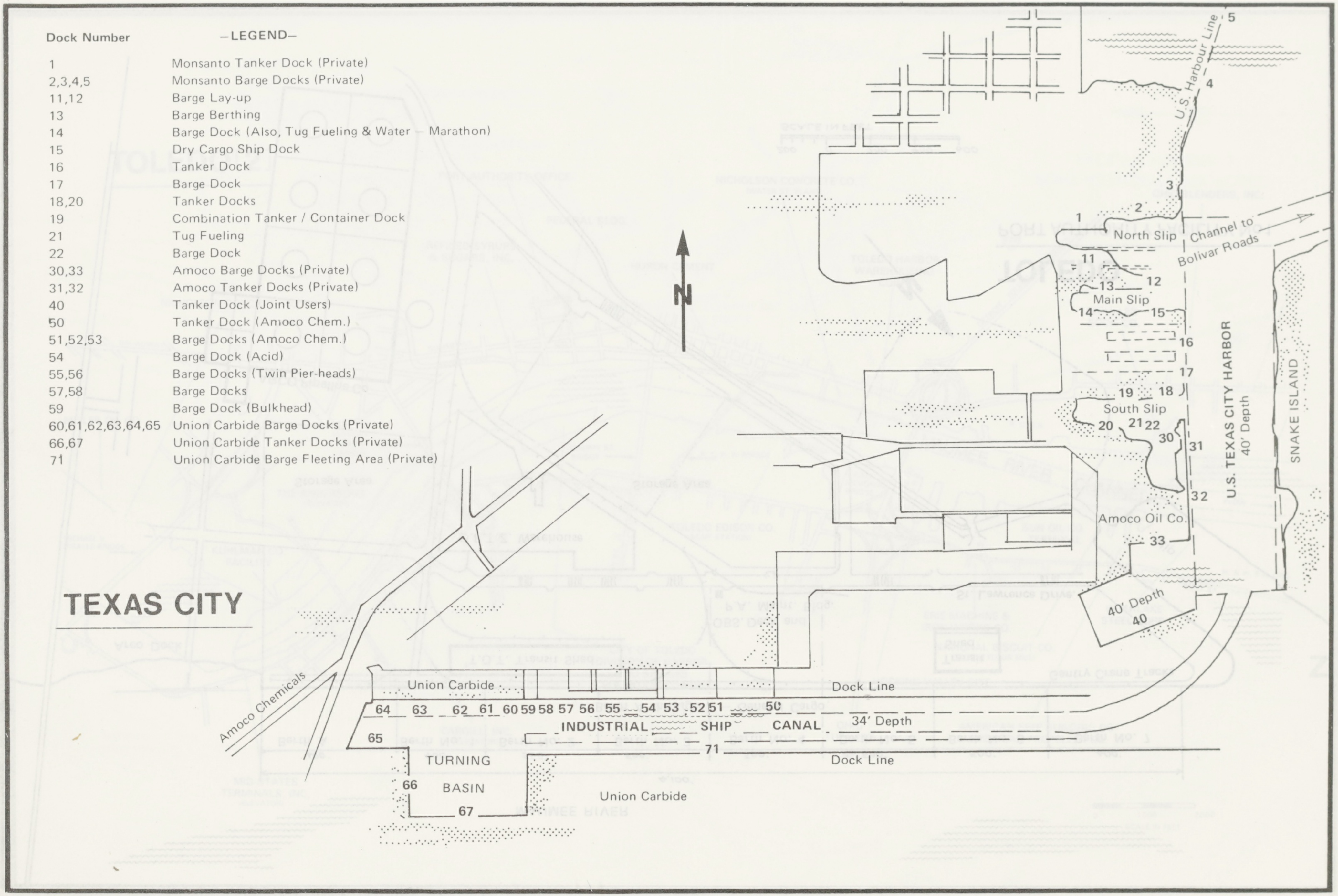
TEXAS CITY

Dock Number	–LEGEND–
1	Monsanto Tanker Dock (Private)
2,3,4,5	Monsanto Barge Docks (Private)
11,12	Barge Lay-up
13	Barge Berthing
14	Barge Dock (Also, Tug Fueling & Water – Marathon)
15	Dry Cargo Ship Dock
16	Tanker Dock
17	Barge Dock
18,20	Tanker Docks
19	Combination Tanker / Container Dock
21	Tug Fueling
22	Barge Dock
30,33	Amoco Barge Docks (Private)
31,32	Amoco Tanker Docks (Private)
40	Tanker Dock (Joint Users)
50	Tanker Dock (Amoco Chem.)
51,52,53	Barge Docks (Amoco Chem.)
54	Barge Dock (Acid)
55,56	Barge Docks (Twin Pier-heads)
57,58	Barge Docks
59	Barge Dock (Bulkhead)
60,61,62,63,64,65	Union Carbide Barge Docks (Private)
66,67	Union Carbide Tanker Docks (Private)
71	Union Carbide Barge Fleeting Area (Private)


N
U.S. Harbour Line
5
4
3
2
1
North Slip
Channel to
Bolivar Roads
11
12
13
Main Slip
14
15
16
17
19
18
South Slip
20
21
22
30
31
32
U.S. TEXAS CITY HARBOR
40' Depth
SNAKE ISLAND
Amoco Oil Co.
33
40' Depth
40
Union Carbide
Dock Line
64
63
62
61
60
59
58
57
56
55
54
53
52
51
50
34' Depth
65
INDUSTRIAL
SHIP
CANAL
71
Dock Line
TURNING
BASIN
66
67
Union Carbide
Amoco Chemicals

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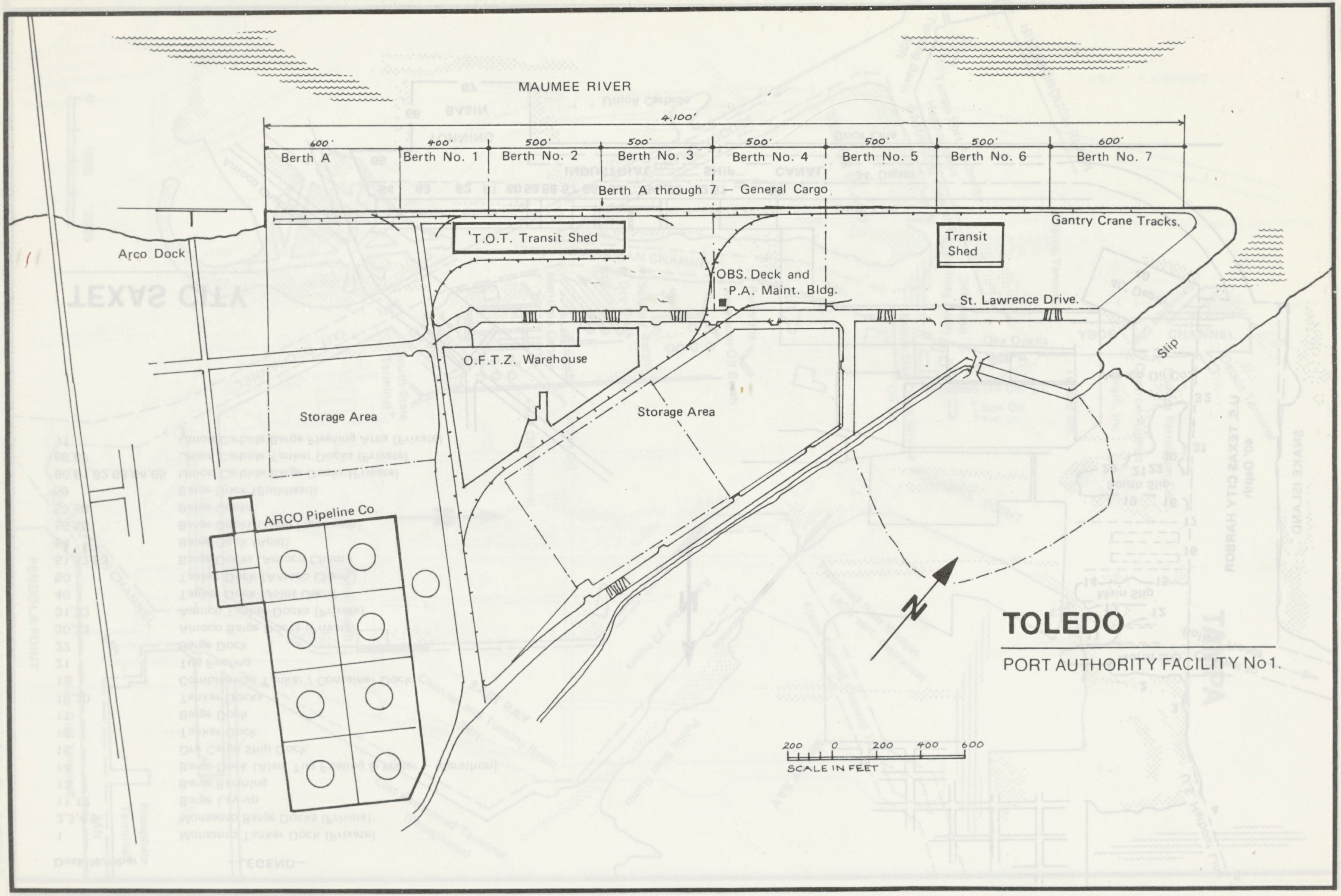
P1035

U.S.A.


MAUMEE RIVER
4,100'
600'
Berth A
400'
Berth No. 1
500'
Berth No. 2
500'
Berth No. 3
500'
Berth No. 4
500'
Berth No. 5
500'
Berth No. 6
600'
Berth No. 7
Berth A through 7 – General Cargo
Gantry Crane Tracks.
Arco Dock
T.O.T. Transit Shed
Transit Shed
OBS. Deck and
P.A. Maint. Bldg.
St. Lawrence Drive.
Slip
O.F.T.Z. Warehouse
Storage Area
Storage Area
ARCO Pipeline Co
N
200 0 200 400 600
SCALE IN FEET

TOLEDO

PORT AUTHORITY FACILITY No1.

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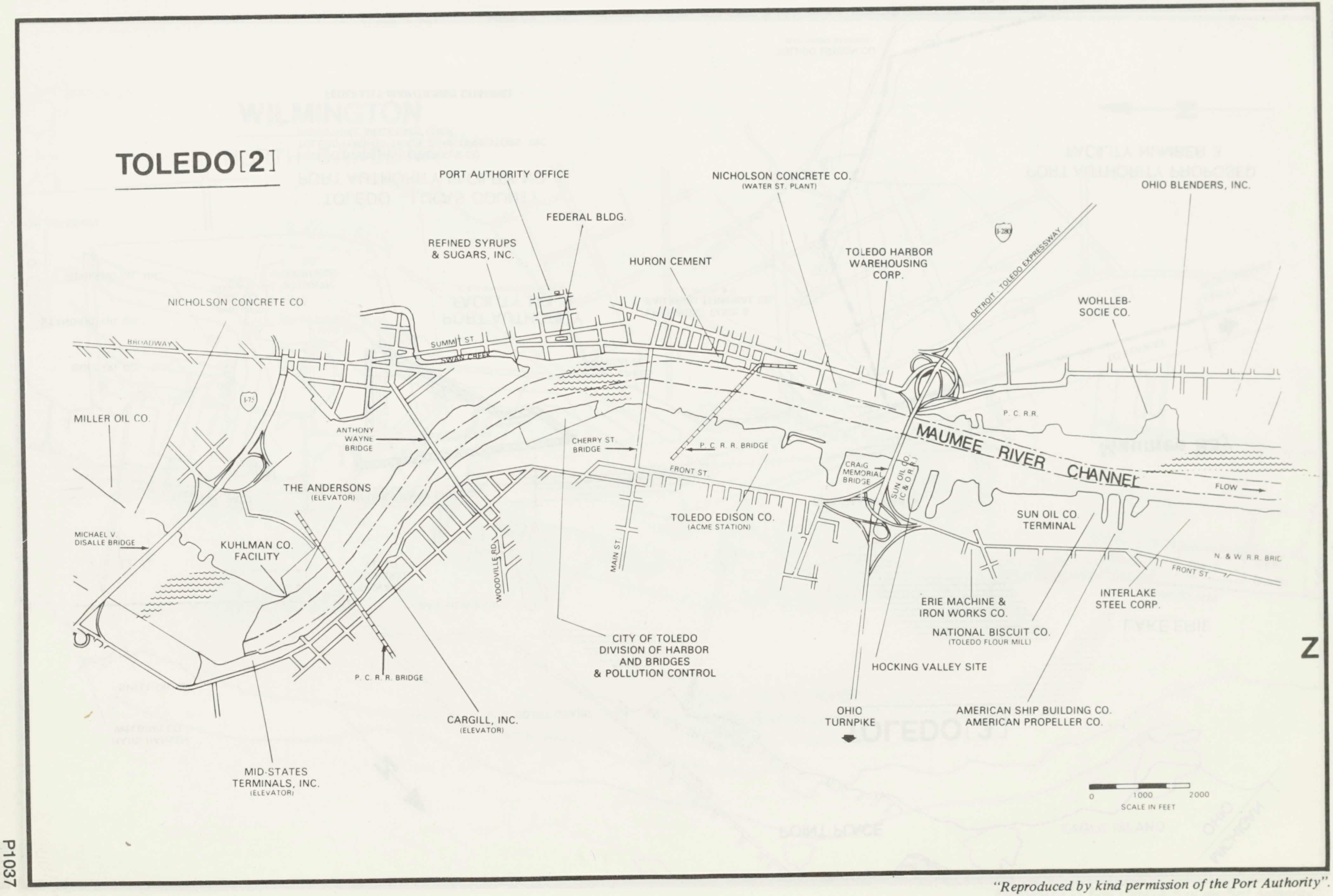
TOLEDO[2]


PORT AUTHORITY OFFICE
NICHOLSON CONCRETE CO.
(WATER ST. PLANT)
OHIO BLENDERS, INC.
FEDERAL BLDG.
REFINED SYRUPS
& SUGARS, INC.
HURON CEMENT
TOLEDO HARBOR
WAREHOUSING
CORP.
I-280
DETROIT - TOLEDO EXPRESSWAY
WOHLLEB-
SOCIE CO.
NICHOLSON CONCRETE CO
BROADWAY
SUMMIT ST.
SWAN CREEK
I-75
MILLER OIL CO.
ANTHONY
WAYNE
BRIDGE
CHERRY ST.
BRIDGE
P. C. R. R. BRIDGE
P. C. R.R.
MAUMEE RIVER CHANNEL
FLOW
CRAIG
MEMORIAL
BRIDGE
SUN OIL CO.
IC & O R.R.
FRONT ST.
THE ANDERSONS
(ELEVATOR)
TOLEDO EDISON CO.
(ACME STATION)
SUN OIL CO.
TERMINAL
MICHAEL V.
DISALLE BRIDGE
KUHLMAN CO.
FACILITY
WOODVILLE RD.
MAIN ST.
N. & W. R.R. BRIDGE
FRONT ST.
ERIE MACHINE &
IRON WORKS CO.
INTERLAKE
STEEL CORP.
NATIONAL BISCUIT CO.
(TOLEDO FLOUR MILL)
CITY OF TOLEDO
DIVISION OF HARBOR
AND BRIDGES
& POLLUTION CONTROL
P. C. R. R. BRIDGE
HOCKING VALLEY SITE
N
CARGILL, INC.
(ELEVATOR)
OHIO
TURNPIKE
AMERICAN SHIP BUILDING CO.
AMERICAN PROPELLER CO.
MID-STATES
TERMINALS, INC.
(ELEVATOR)
0
1000
2000
SCALE IN FEET

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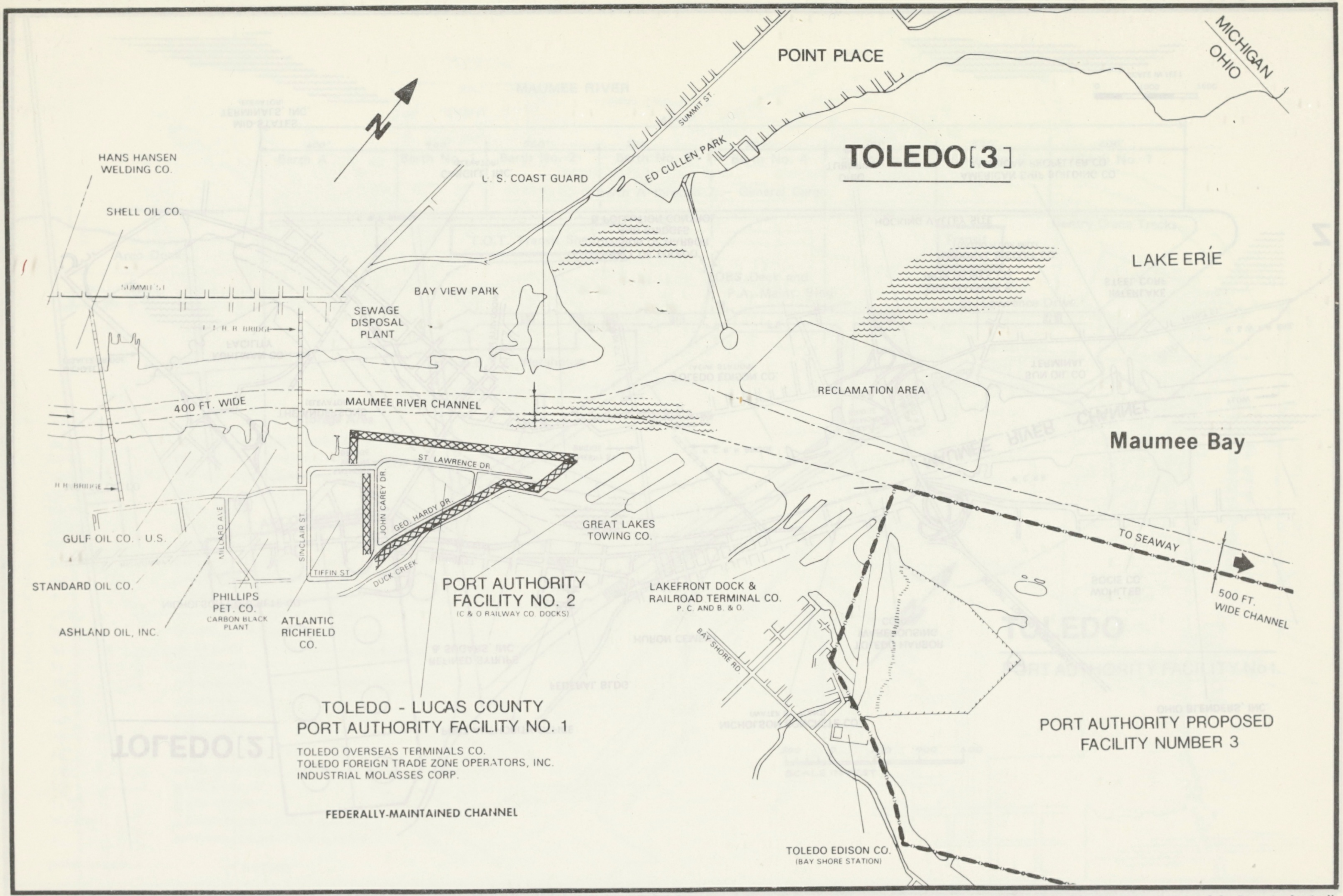
TOLEDO[3]
N
POINT PLACE
MICHIGAN
OHIO
SUMMIT ST.
ED CULLEN PARK
U. S. COAST GUARD
HANS HANSEN WELDING CO.
SHELL OIL CO.
SUMMIT ST
BAY VIEW PARK
SEWAGE DISPOSAL PLANT
L. T. R. R. BRIDGE
LAKE ERIE
RECLAMATION AREA
Maumee Bay
400 FT. WIDE
MAUMEE RIVER CHANNEL
ST. LAWRENCE DR.
R.R. BRIDGE
JOHN CAREY DR
GEO. HARDY DR.
GREAT LAKES TOWING CO.
GULF OIL CO. - U.S.
MILLARD AVE
SINCLAIR ST
TIFFIN ST.
DUCK CREEK
TO SEAWAY
500 FT. WIDE CHANNEL
STANDARD OIL CO.
PHILLIPS PET. CO.
CARBON BLACK PLANT
ATLANTIC RICHFIELD CO.
ASHLAND OIL, INC.
PORT AUTHORITY FACILITY NO. 2
(C & O RAILWAY CO. DOCKS)
LAKEFRONT DOCK & RAILROAD TERMINAL CO.
P. C. AND B. & O.
BAY SHORE RD
TOLEDO - LUCAS COUNTY PORT AUTHORITY FACILITY NO. 1
TOLEDO OVERSEAS TERMINALS CO.
TOLEDO FOREIGN TRADE ZONE OPERATORS, INC.
INDUSTRIAL MOLASSES CORP.
FEDERALLY-MAINTAINED CHANNEL
PORT AUTHORITY PROPOSED FACILITY NUMBER 3
TOLEDO EDISON CO.
(BAY SHORE STATION)

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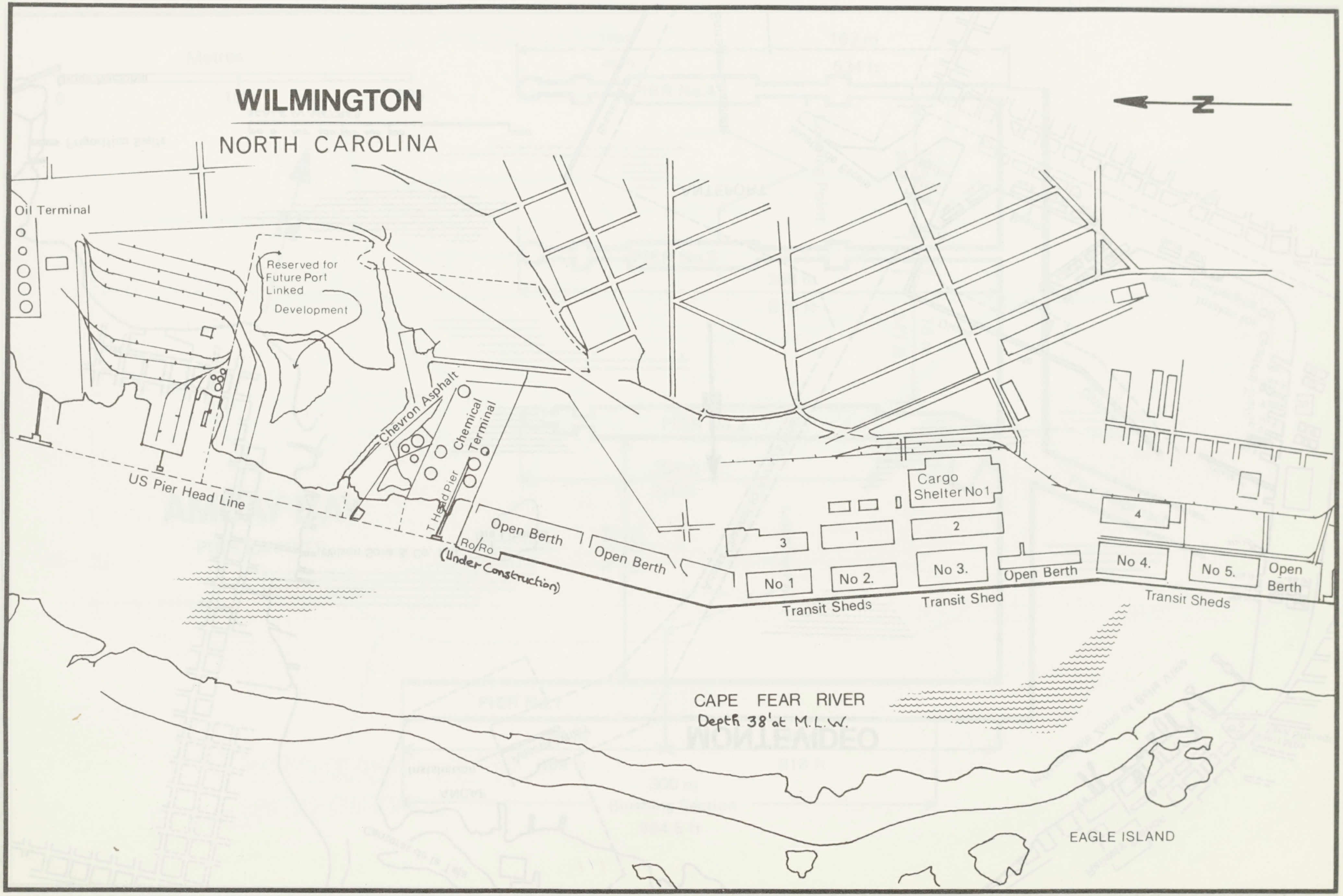
U.S.A.

WILMINGTON

NORTH CAROLINA


N
Oil Terminal
Reserved for Future Port Linked Development
Chevron Asphalt
Chemical Terminal
T Head Pier
US Pier Head Line
Ro/Ro
(Under Construction)
Open Berth
Open Berth
Cargo Shelter No1
3
1
2
4
No 1
No 2.
No 3.
Open Berth
No 4.
No 5.
Open Berth
Transit Sheds
Transit Shed
Transit Sheds
CAPE FEAR RIVER
Depth 38' at M.L.W.
EAGLE ISLAND

P1039

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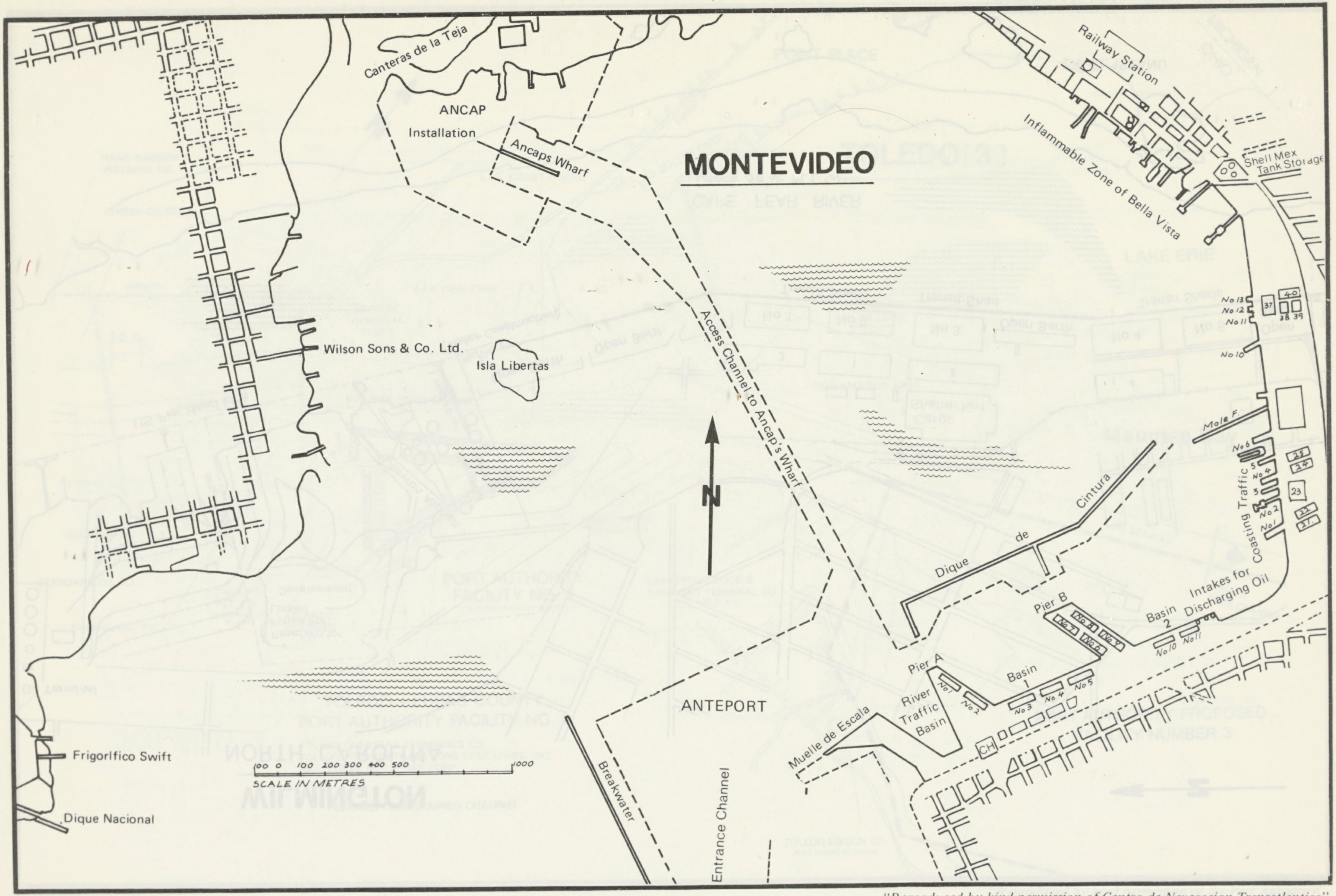
MONTEVIDEO
Canteras de la Teja
ANCAP
Installation
Ancaps Wharf
Railway Station
Inflammable Zone of Bella Vista
Shell Mex
Tank Storage
Wilson Sons & Co. Ltd.
Isla Libertas
Access Channel to Ancap's Wharf
N
No 13
No 12
No 11
No 10
37
40
38
39
Mole F
No 6
5
No 4
3
No 2
No 1
25
24
23
22
21
Coasting Traffic
Dique de Cintura
Pier B
No 7
No 8
No 9
No 10
No 11
Basin 2
Intakes for Discharging Oil
Pier A
No 1
No 2
Basin 1
No 3
No 4
No 5
River Traffic Basin
CH
ANTEPORT
Muelle de Escala
Breakwater
Entrance Channel
Frigorlfico Swift
Dique Nacional
100 0 100 200 300 400 500 1000
SCALE IN METRES

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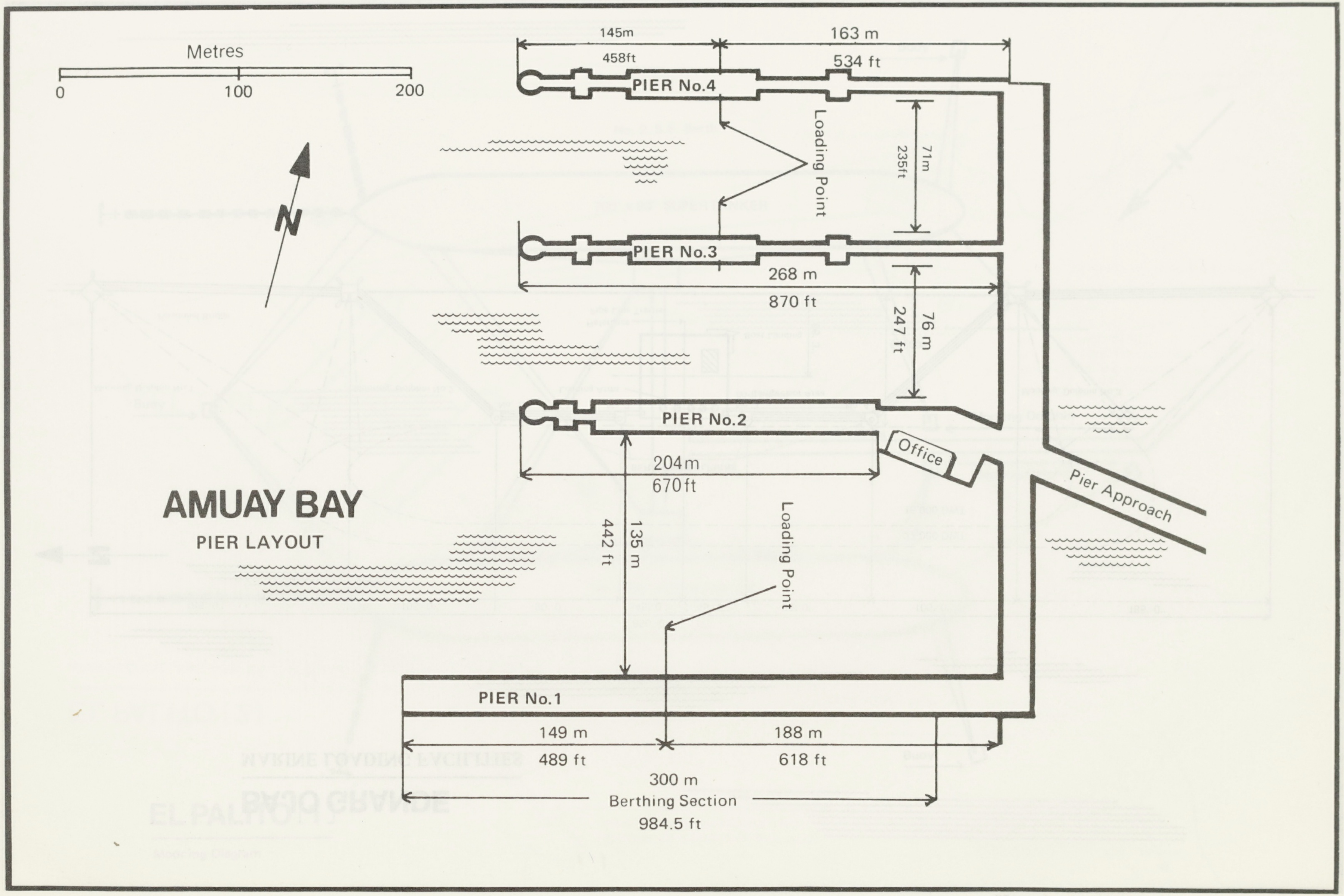

AMUAY BAY

PIER LAYOUT

Metres
0
100
200
N
145m
458ft
163 m
534 ft
PIER No.4
Loading Point
71m
235ft
PIER No.3
268 m
870 ft
76 m
247 ft
PIER No.2
Office
204m
670ft
Pier Approach
442 ft
135 m
Loading Point
PIER No.1
149 m
489 ft
188 m
618 ft
300 m
Berthing Section
984.5 ft

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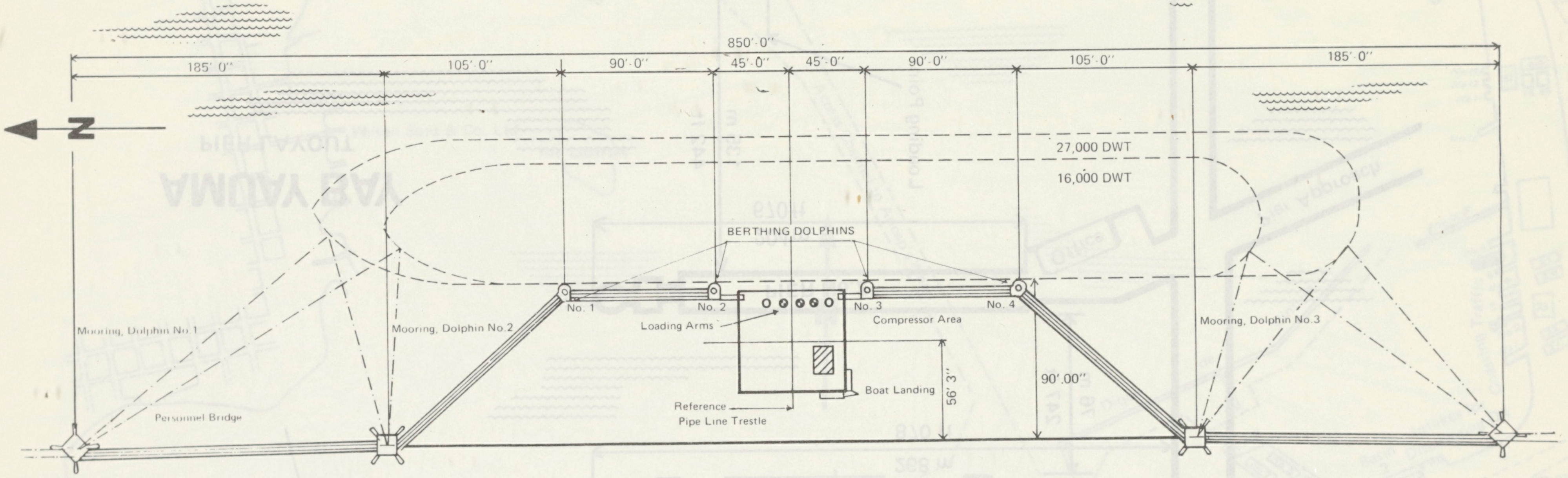
BAJO GRANDE

MARINE LOADING FACILITIES


850'-0"
185' 0"
105'-0"
90'-0"
45'-0"
45'-0"
90'-0"
105'-0"
185'-0"
N
27,000 DWT
16,000 DWT
BERTHING DOLPHINS
No. 1
No. 2
No. 3
No. 4
Loading Arms
Compressor Area
Mooring, Dolphin No.1
Mooring, Dolphin No.2
Mooring, Dolphin No.3
Personnel Bridge
Reference
Pipe Line Trestle
Boat Landing
56' 3"
90'.00"

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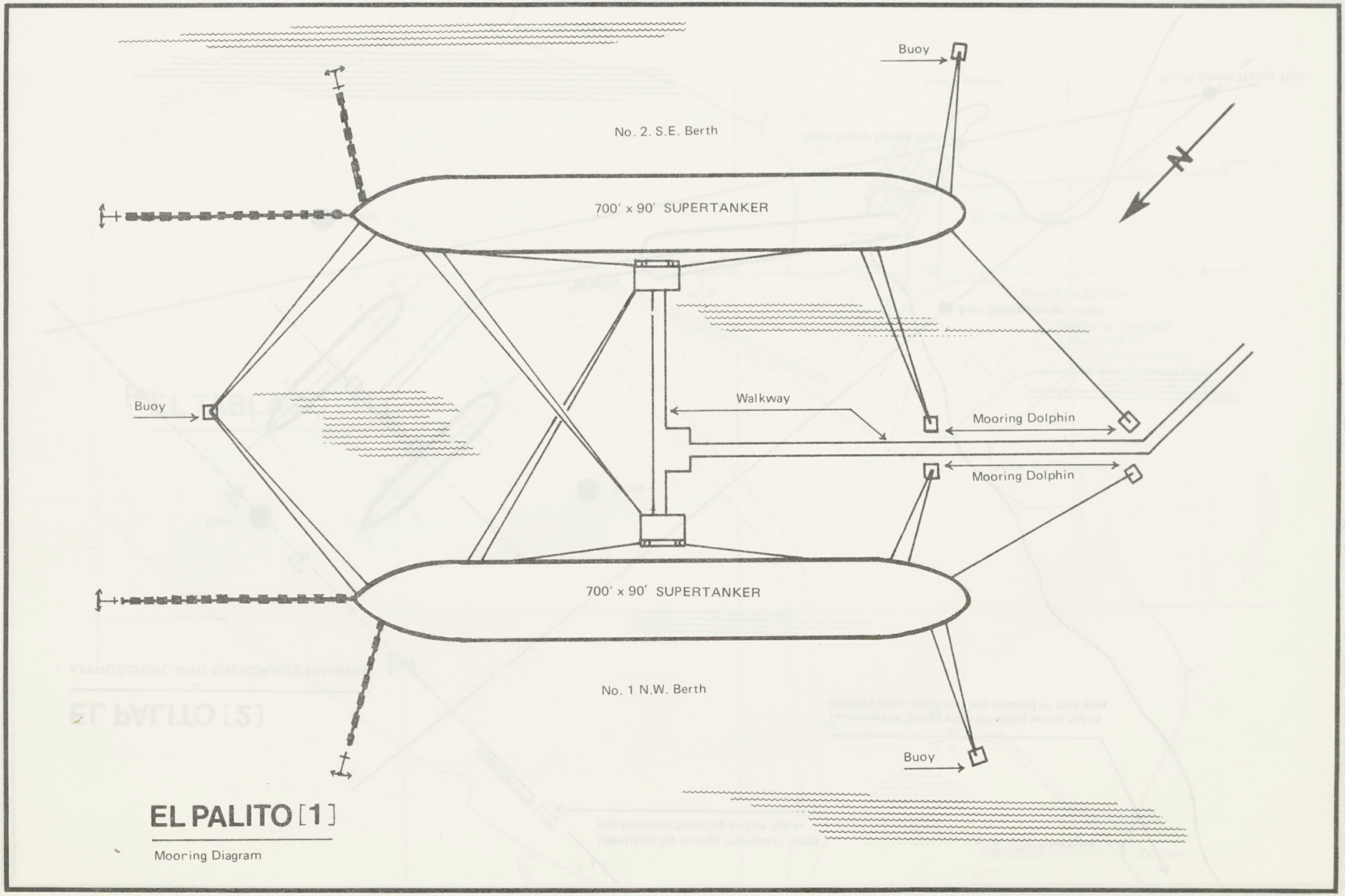
Buoy
No. 2. S.E. Berth
700′ x 90′ SUPERTANKER
N
Buoy
Walkway
Mooring Dolphin
Mooring Dolphin
700′ x 90′ SUPERTANKER
No. 1 N.W. Berth
Buoy

EL PALITO [1]

Mooring Diagram

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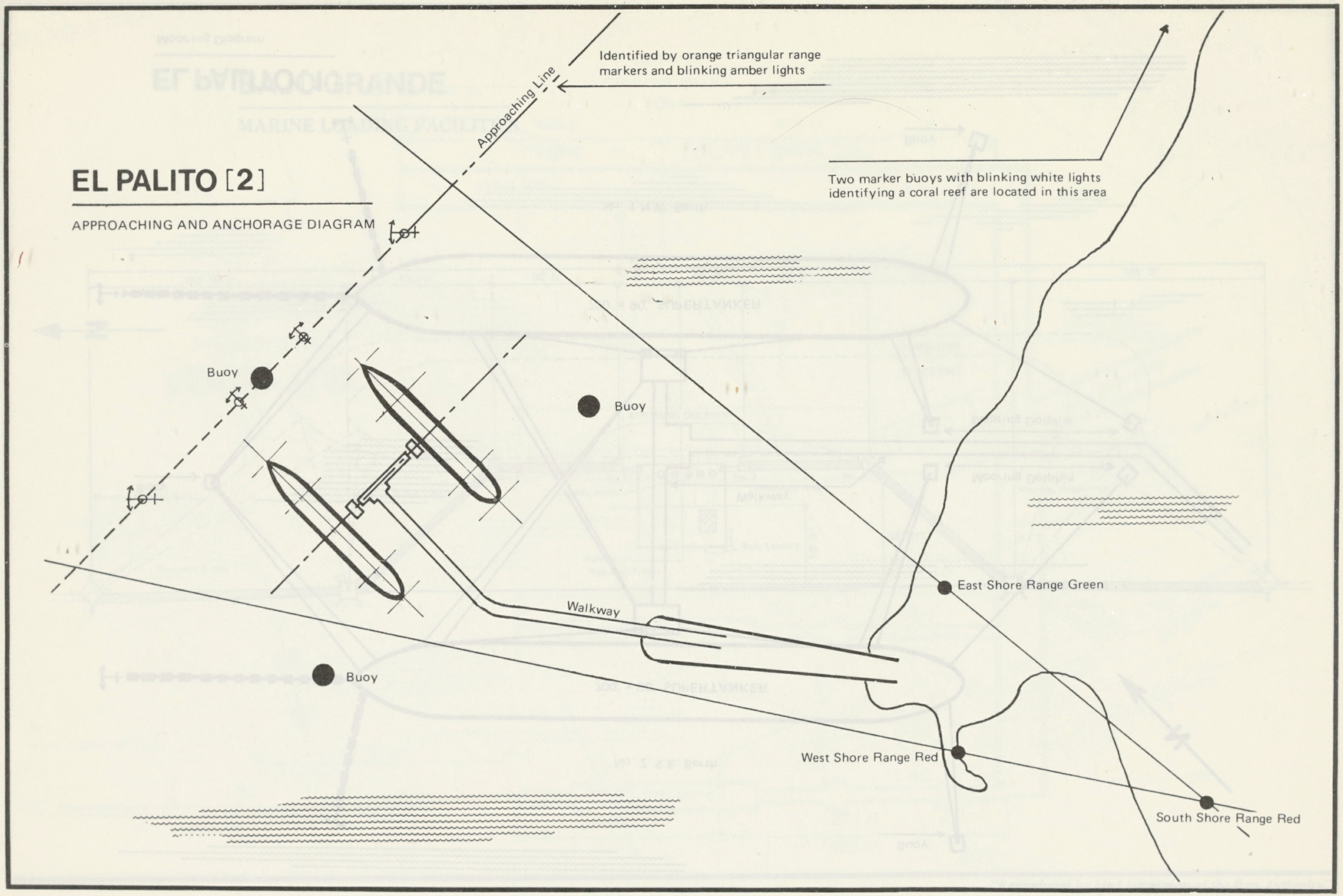
EL PALITO [2]

APPROACHING AND ANCHORAGE DIAGRAM


Approaching Line
Buoy
Buoy
Buoy
Walkway
East Shore Range Green
West Shore Range Red
South Shore Range Red

Identified by orange triangular range markers and blinking amber lights

Two marker buoys with blinking white lights identifying a coral reef are located in this area

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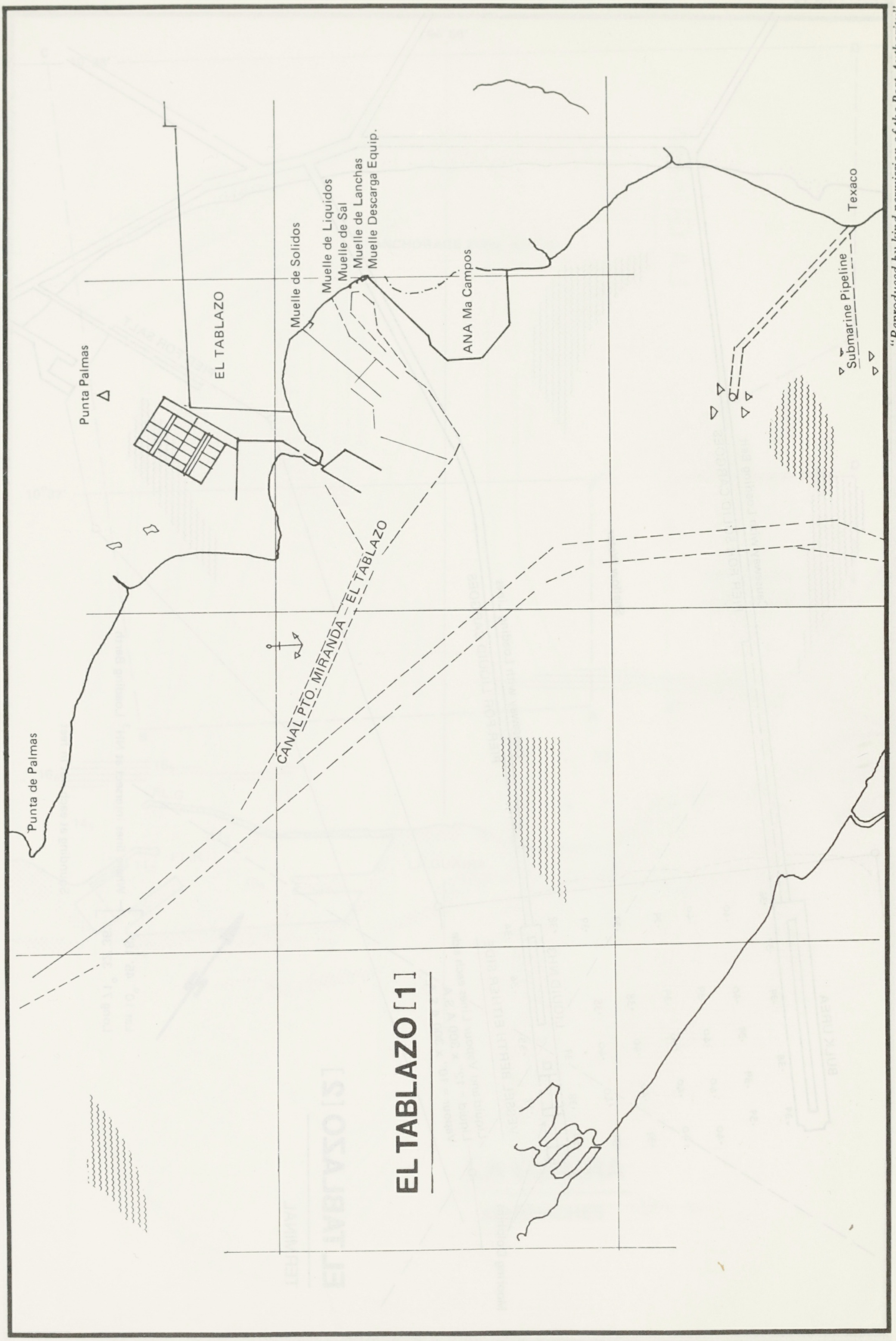
EL TABLAZO [1]


Punta de Palmas
Punta Palmas
EL TABLAZO
Muelle de Solidos
Muelle de Liquidos
Muelle de Sal
Muelle de Lanchas
Muelle Descarga Equip.
ANA Ma Campos
CANAL PTO. MIRANDA – EL TABLAZO
Texaco
Submarine Pipeline

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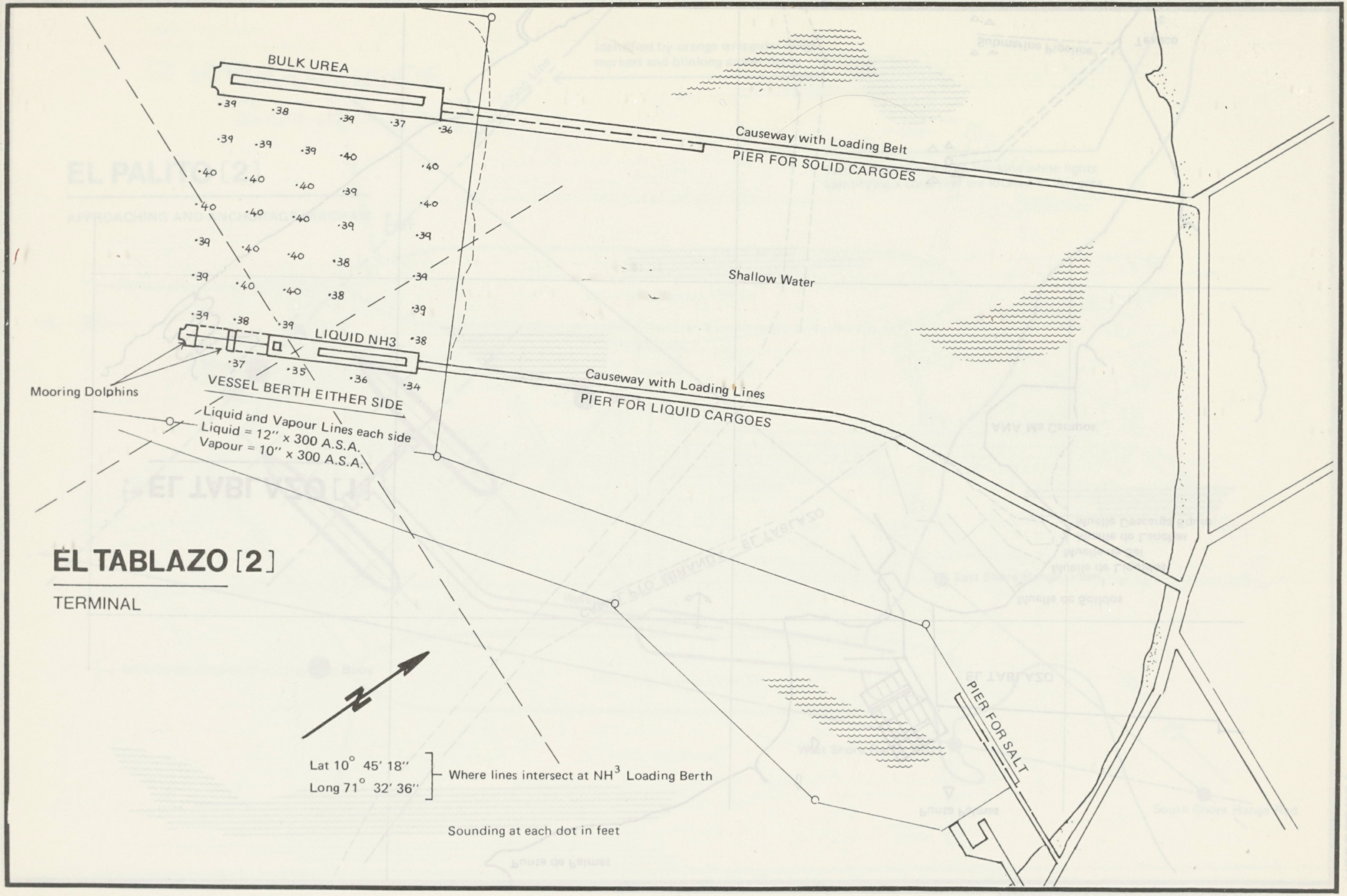
EL TABLAZO [2]

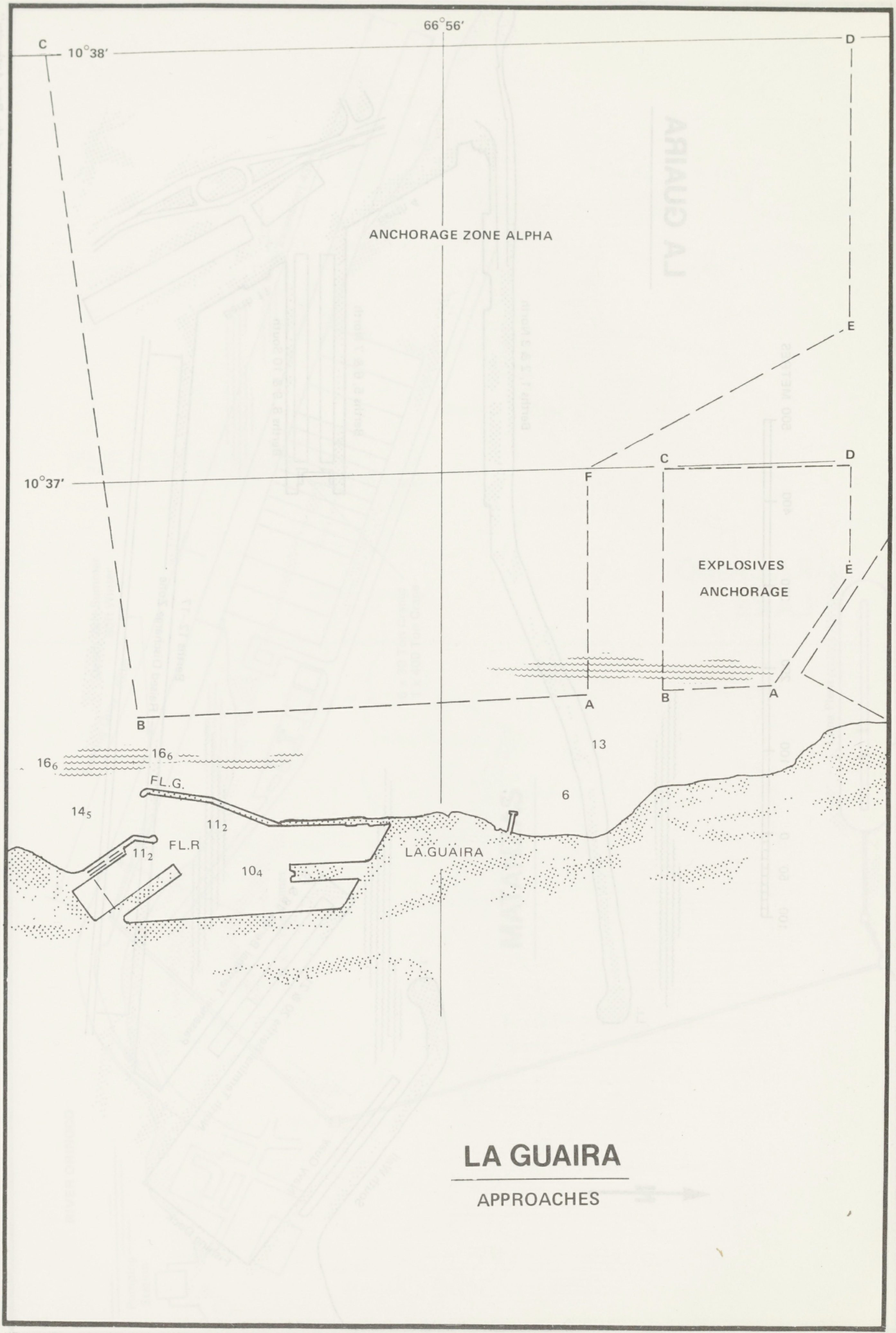
TERMINAL


BULK UREA
Causeway with Loading Belt
PIER FOR SOLID CARGOES
Shallow Water
LIQUID NH3
Mooring Dolphins
VESSEL BERTH EITHER SIDE
Causeway with Loading Lines
PIER FOR LIQUID CARGOES
Liquid and Vapour Lines each side
Liquid = 12" x 300 A.S.A.
Vapour = 10" x 300 A.S.A.
PIER FOR SALT
39
38
39
37
36
39
39
39
40
40
40
40
40
39
40
40
40
40
39
39
39
40
40
38
39
39
40
40
38
39
39
38
39
38
37
35
36
34

Lat 10° 45' 18"
Long 71° 32' 36" — Where lines intersect at NH^3 Loading Berth

Sounding at each dot in feet

Plan supplied by Ship's Master.


66°56′
C
10°38′
D
ANCHORAGE ZONE ALPHA
E
10°37′
F
C
D
EXPLOSIVES
ANCHORAGE
E
B
A
B
A
13
6
16₆
16₆
FL.G.
14₅
11₂
FL.R
11₂
10₄
LA.GUAIRA
LA GUAIRA
APPROACHES

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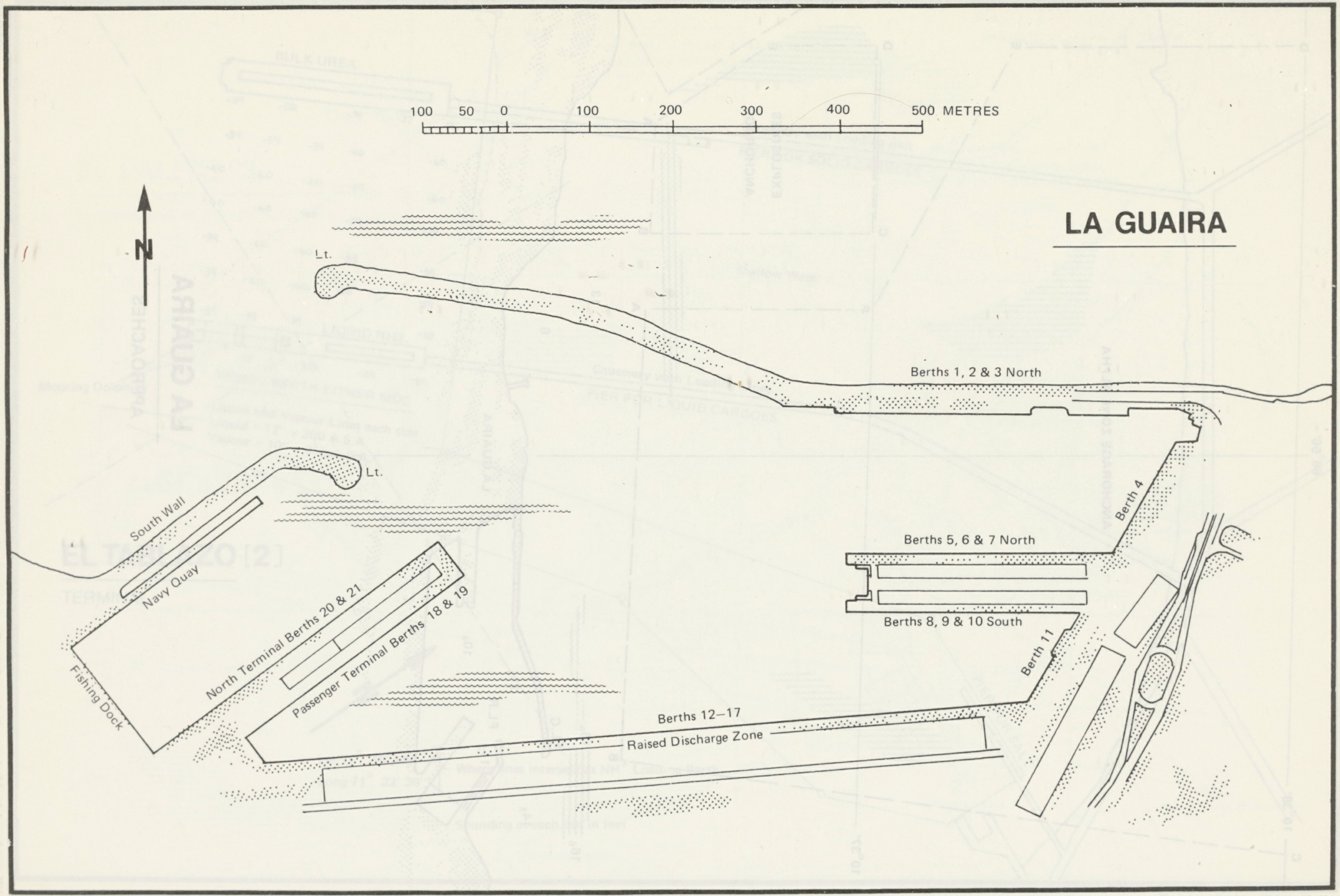
LA GUAIRA
100 50 0 100 200 300 400 500 METRES
N
Lt.
Lt.
Berths 1, 2 & 3 North
Berth 4
Berths 5, 6 & 7 North
Berths 8, 9 & 10 South
Berth 11
Berths 12–17
Raised Discharge Zone
South Wall
Navy Quay
Fishing Dock
North Terminal Berths 20 & 21
Passenger Terminal Berths 18 & 19

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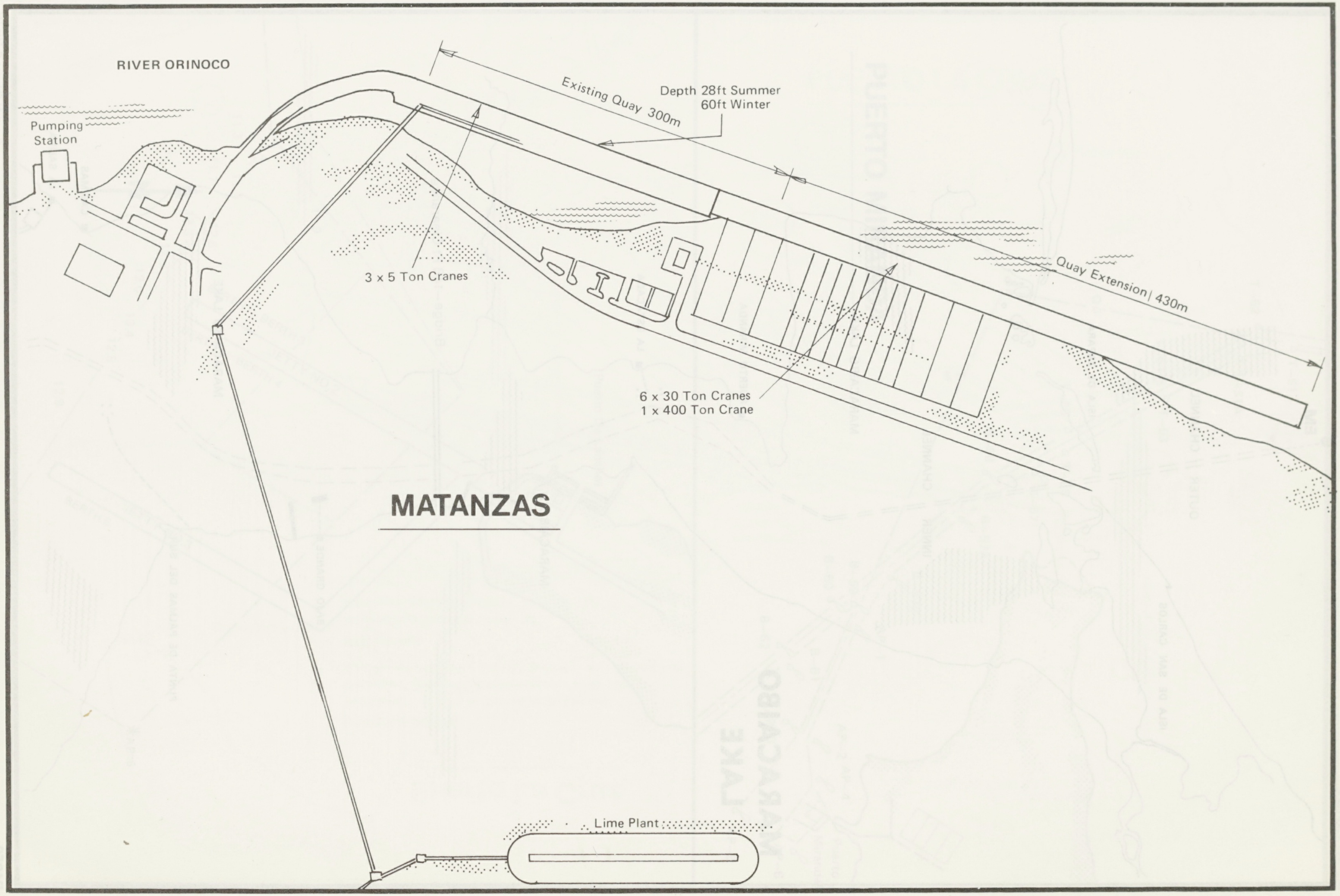
RIVER ORINOCO
Pumping Station
Existing Quay 300m
Depth 28ft Summer 60ft Winter
3 x 5 Ton Cranes
Quay Extension 430m
6 x 30 Ton Cranes
1 x 400 Ton Crane
MATANZAS
Lime Plant

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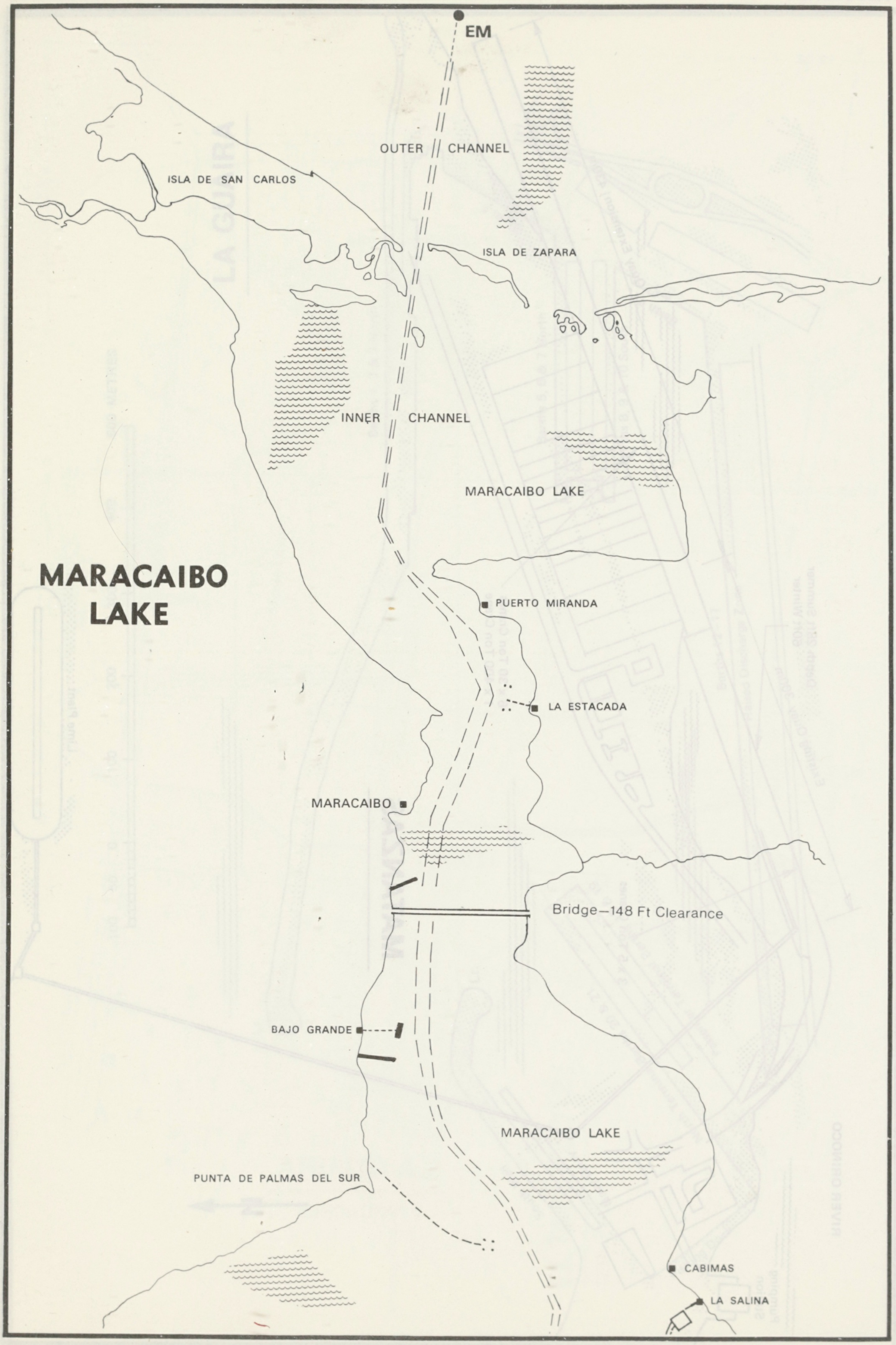
EM
OUTER CHANNEL
ISLA DE SAN CARLOS
ISLA DE ZAPARA
INNER CHANNEL
MARACAIBO LAKE
MARACAIBO LAKE
PUERTO MIRANDA
LA ESTACADA
MARACAIBO
Bridge—148 Ft Clearance
BAJO GRANDE
MARACAIBO LAKE
PUNTA DE PALMAS DEL SUR
CABIMAS
LA SALINA

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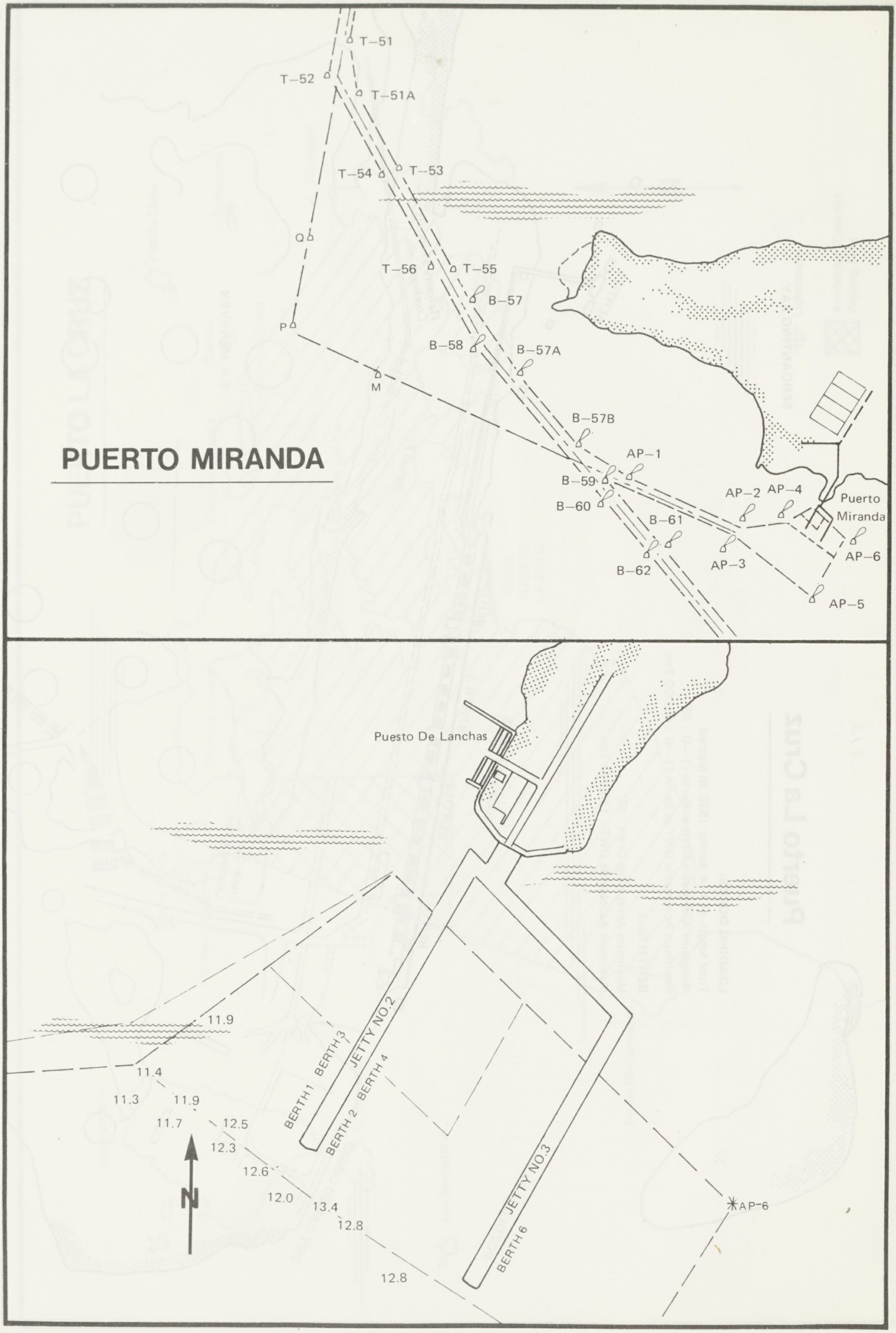
PUERTO MIRANDA


T–51
T–52
T–51A
T–54
T–53
Q
T–56
T–55
B–57
P
B–58
B–57A
M
B–57B
AP–1
B–59
B–60
AP–2
AP–4
Puerto Miranda
B–61
AP–6
B–62
AP–3
AP–5
Puesto De Lanchas
11.9
11.4
11.3
11.9
11.7
12.5
12.3
12.6
12.0
13.4
12.8
12.8
BERTH 1
BERTH 3
JETTY NO.2
BERTH 4
BERTH 2
JETTY NO.3
BERTH 6
AP–6
N

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Puerto La Cruz

LOADING DOCKS:

Total length of 1–4 Berths: (639.30 Metres)

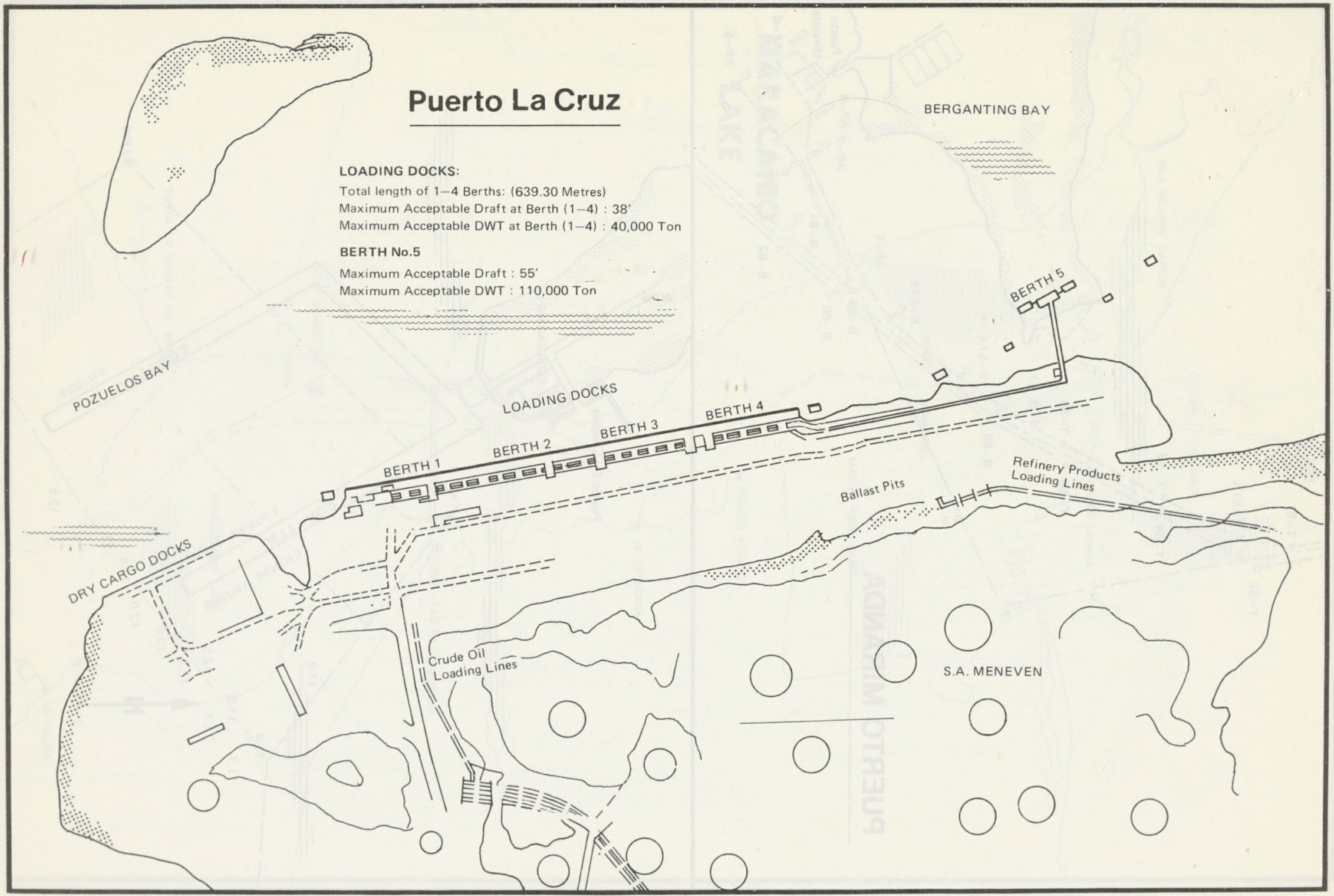
Maximum Acceptable Draft at Berth (1–4) : 38′

Maximum Acceptable DWT at Berth (1–4) : 40,000 Ton

BERTH No.5

Maximum Acceptable Draft : 55′

Maximum Acceptable DWT : 110,000 Ton


BERGANTING BAY
BERTH 5
POZUELOS BAY
LOADING DOCKS
BERTH 4
BERTH 3
BERTH 2
BERTH 1
Refinery Products
Loading Lines
Ballast Pits
DRY CARGO DOCKS
Crude Oil
Loading Lines
S.A. MENEVEN

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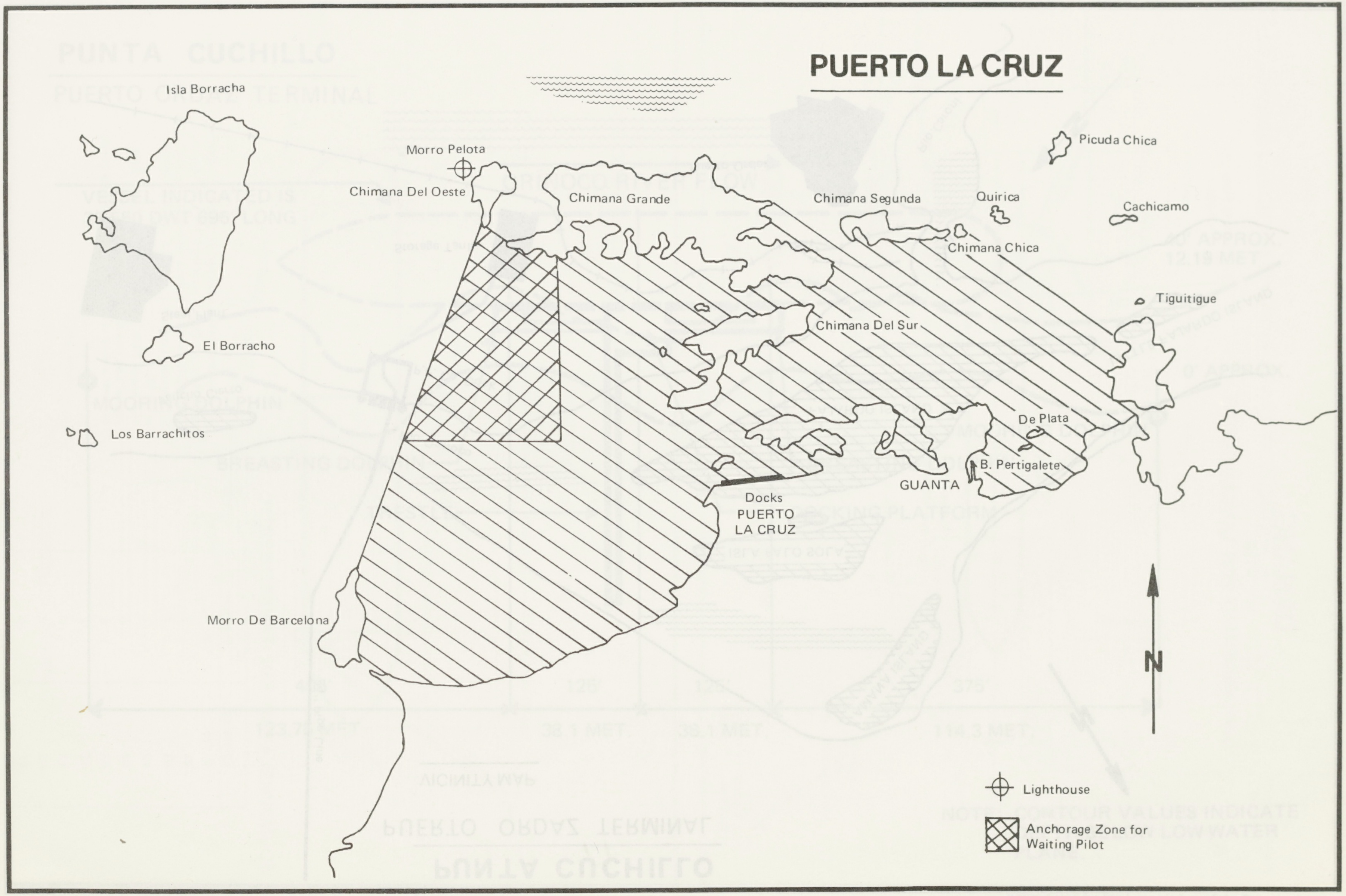
PUERTO LA CRUZ


Isla Borracha
Morro Pelota
Chimana Del Oeste
Chimana Grande
Chimana Segunda
Quirica
Picuda Chica
Cachicamo
Chimana Chica
Tiguitigue
Chimana Del Sur
El Borracho
Los Barrachitos
De Plata
B. Pertigalete
GUANTA
Docks
PUERTO
LA CRUZ
Morro De Barcelona
N
Lighthouse
Anchorage Zone for
Waiting Pilot

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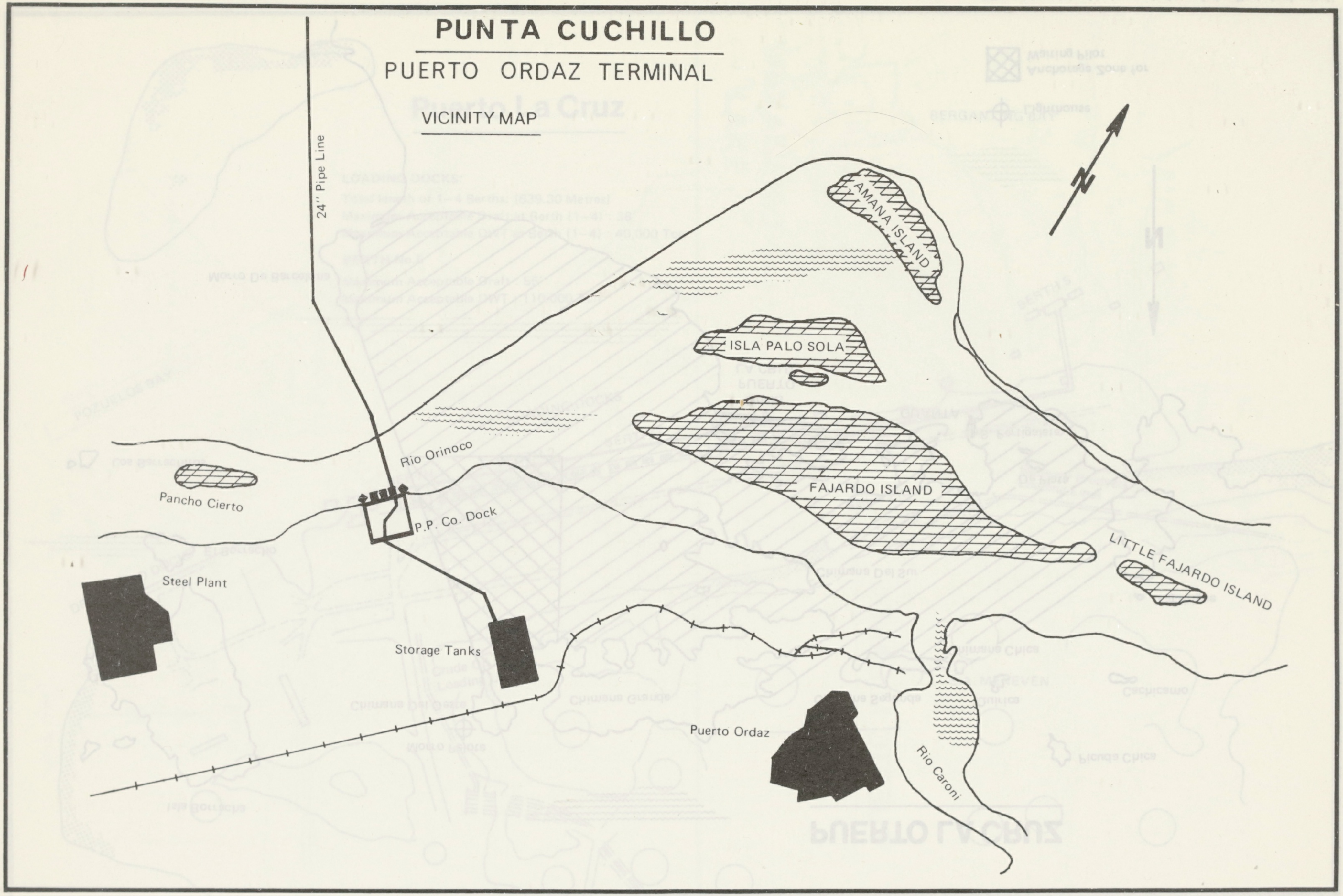
PUNTA CUCHILLO

PUERTO ORDAZ TERMINAL

VICINITY MAP


24" Pipe Line
AMANA ISLAND
ISLA PALO SOLA
FAJARDO ISLAND
LITTLE FAJARDO ISLAND
Rio Orinoco
Pancho Cierto
P.P. Co. Dock
Steel Plant
Storage Tanks
Puerto Ordaz
Rio Caroni
N

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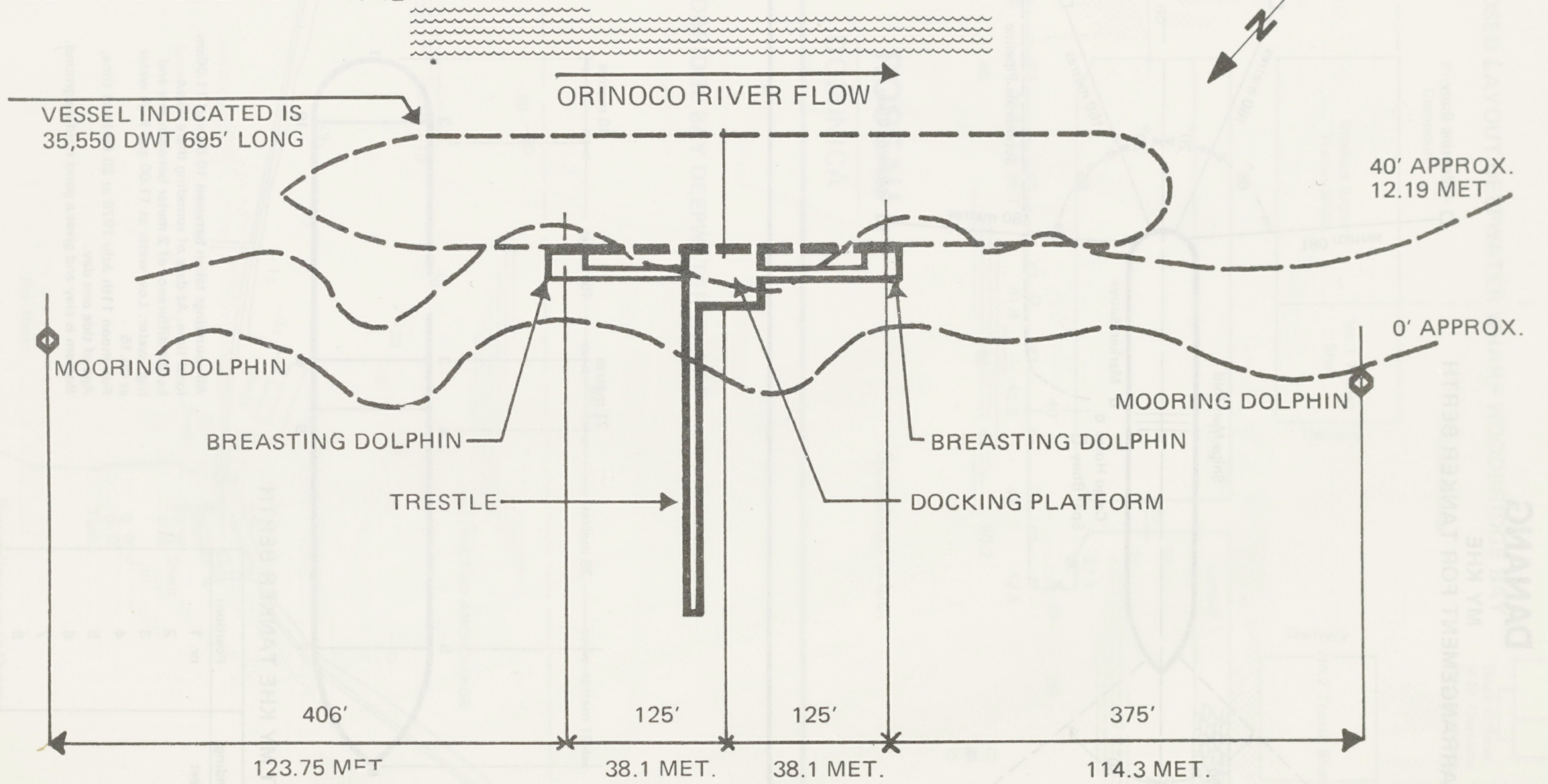
PUNTA CUCHILLO

PUERTO ORDAZ TERMINAL


ORINOCO RIVER FLOW
N
VESSEL INDICATED IS 35,550 DWT 695′ LONG
40′ APPROX. 12.19 MET
0′ APPROX.
MOORING DOLPHIN
MOORING DOLPHIN
BREASTING DOLPHIN
BREASTING DOLPHIN
TRESTLE
DOCKING PLATFORM
406′
123.75 MET
125′
38.1 MET.
125′
38.1 MET.
375′
114.3 MET.

NOTE: CONTOUR VALUES INDICATE DEPTH BELOW LOW WATER PLANE.

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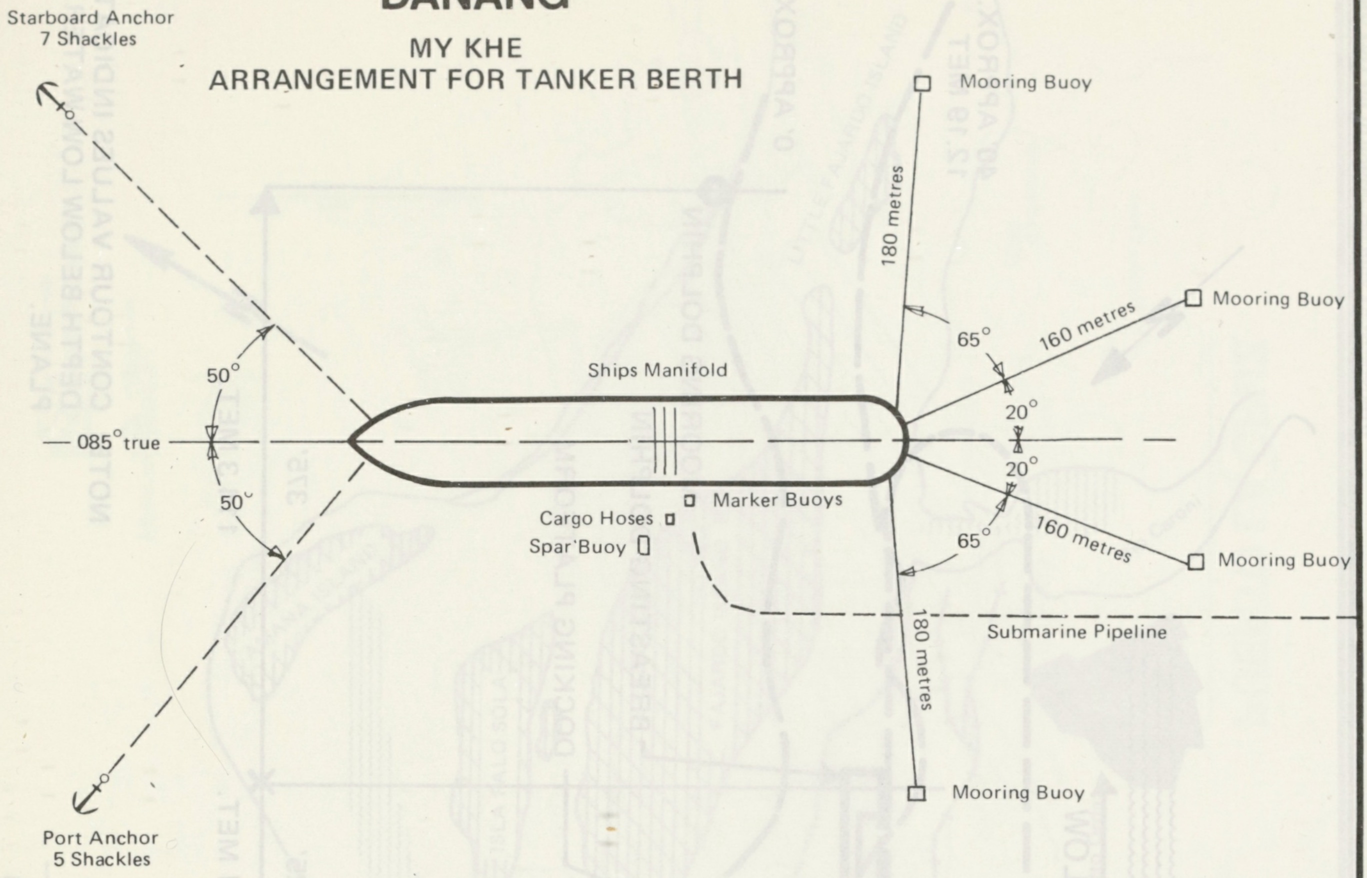
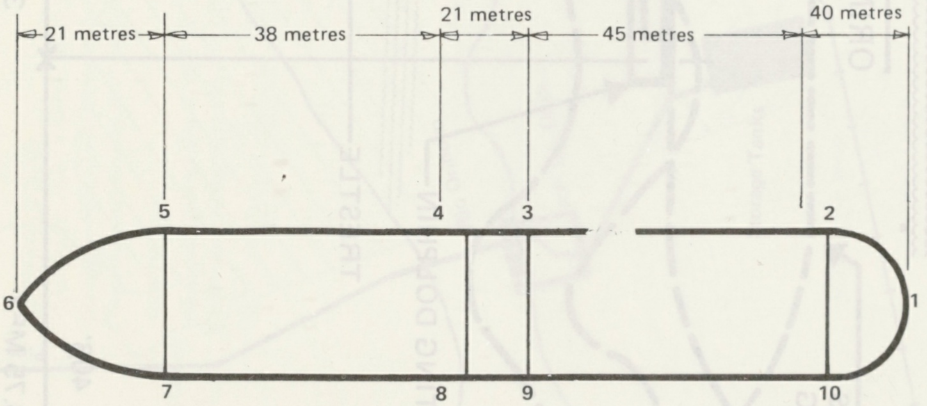
DANANG

MY KHE
ARRANGEMENT FOR TANKER BERTH


Starboard Anchor
7 Shackles
Mooring Buoy
180 metres
Mooring Buoy
65°
160 metres
50°
Ships Manifold
20°
085° true
20°
50°
Marker Buoys
Cargo Hoses
Spar Buoy
65°
160 metres
Mooring Buoy
Submarine Pipeline
180 metres
Mooring Buoy
Port Anchor
5 Shackles

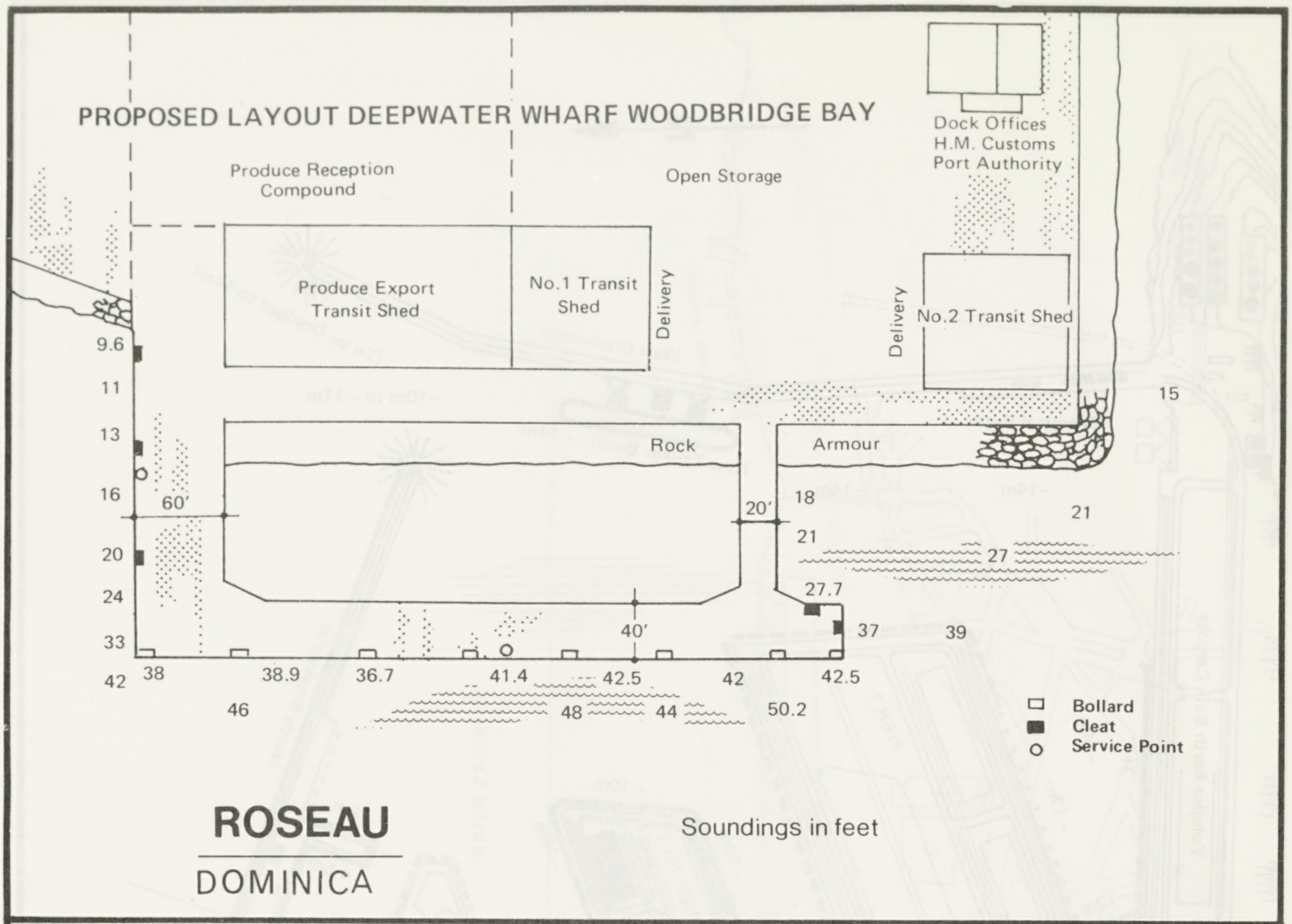

21 metres
38 metres
21 metres
45 metres
40 metres
5
4
3
2
6
1
7
8
9
10

SOUNDINGS AT MY KHE TANKER BERTH

Sounding:	Position:
40 feet	nr. 1
41	2
43	3
42	4
42	5
43	6
42	7
42	8
43	9
41	10

All soundings taken between 10.00 and 11.00am local time. At date of sounding there was a height difference of 2 meter between low and high water. Low water at 11.00 and high water at 06.15
Full moon 11th July 1976 at 20.09 local time,
Age of tide one day.
Bottom is clay and gives a good holding ground.

"Plan supplied by Ship's Master"



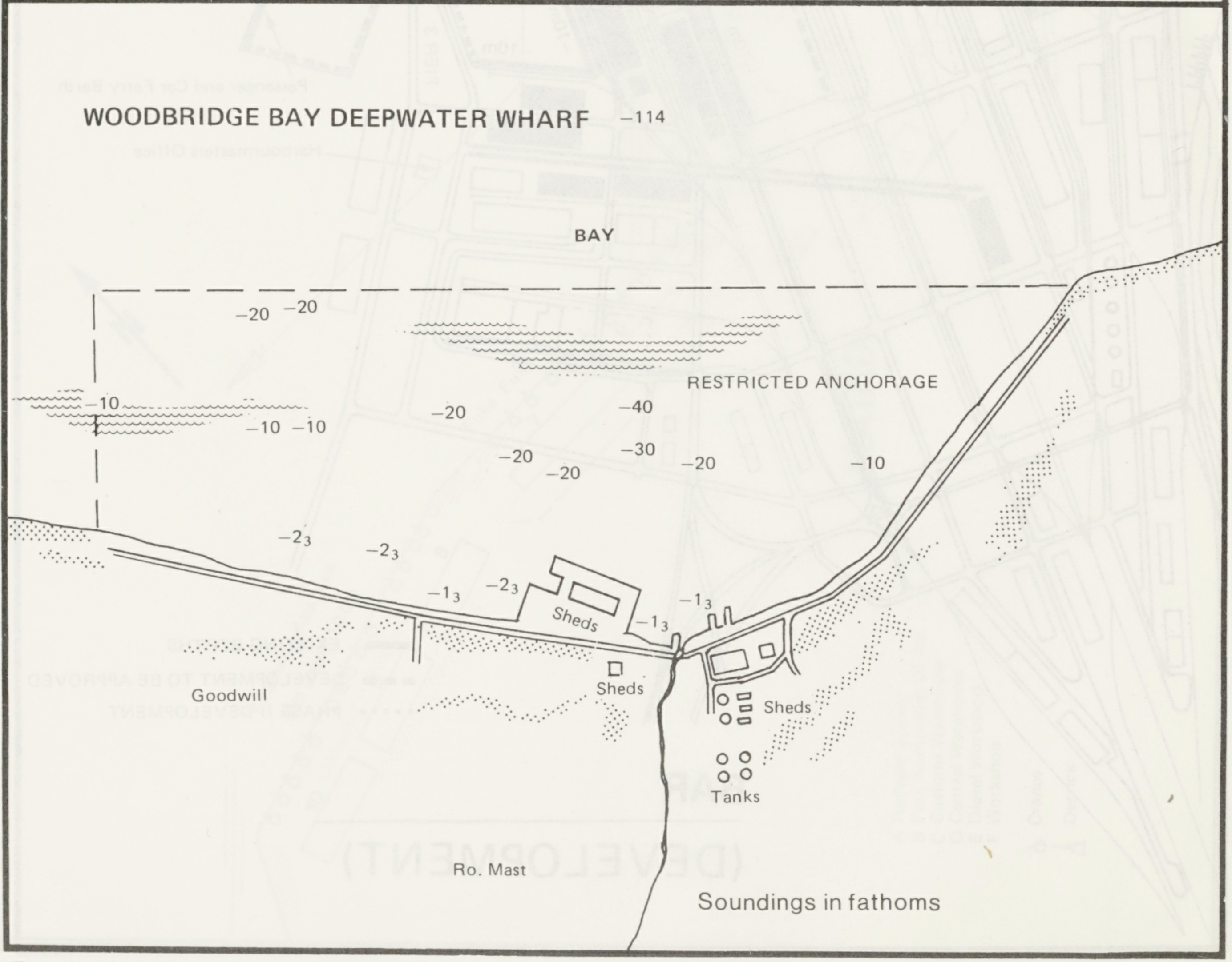
PROPOSED LAYOUT DEEPWATER WHARF WOODBRIDGE BAY

Produce Reception Compound
Open Storage
Dock Offices
H.M. Customs
Port Authority
Produce Export Transit Shed
No.1 Transit Shed
Delivery
Delivery
No.2 Transit Shed
Rock
Armour
9.6
11
13
16
60′
20
24
33
42
38
38.9
36.7
41.4
42.5
42
42.5
46
48
44
50.2
40′
20′
18
21
27.7
37
39
27
21
15
☐ Bollard
■ Cleat
○ Service Point

ROSEAU

DOMINICA

Soundings in feet



WOODBRIDGE BAY DEEPWATER WHARF

−114
BAY
−20
−20
−10
−10
−10
−20
−40
RESTRICTED ANCHORAGE
−30
−20
−20
−20
−10
-2_3
-2_3
-1_3
-2_3
Sheds
-1_3
-1_3
Sheds
Goodwill
Sheds
Tanks
Ro. Mast

Soundings in fathoms

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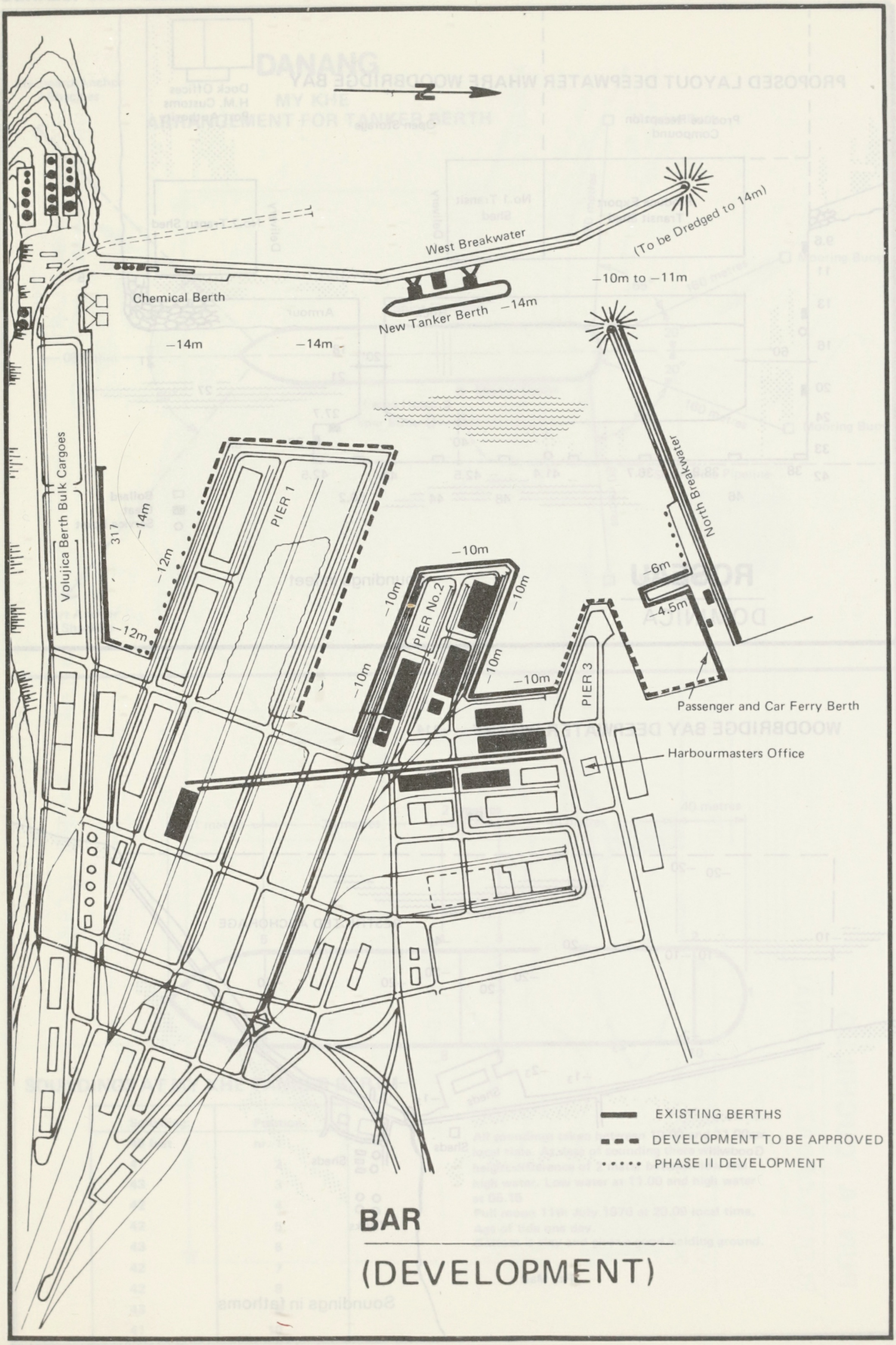
N
West Breakwater
(To be Dredged to 14m)
−10m to −11m
Chemical Berth
New Tanker Berth
−14m
−14m
−14m
North Breakwater
Volujica Berth Bulk Cargoes
317
−14m
−12m
−12m
PIER 1
−10m
−10m
PIER No.2
−10m
−10m
−10m
−10m
PIER 3
6m
4.5m
Passenger and Car Ferry Berth
Harbourmasters Office
EXISTING BERTHS
DEVELOPMENT TO BE APPROVED
PHASE II DEVELOPMENT

BAR

(DEVELOPMENT)

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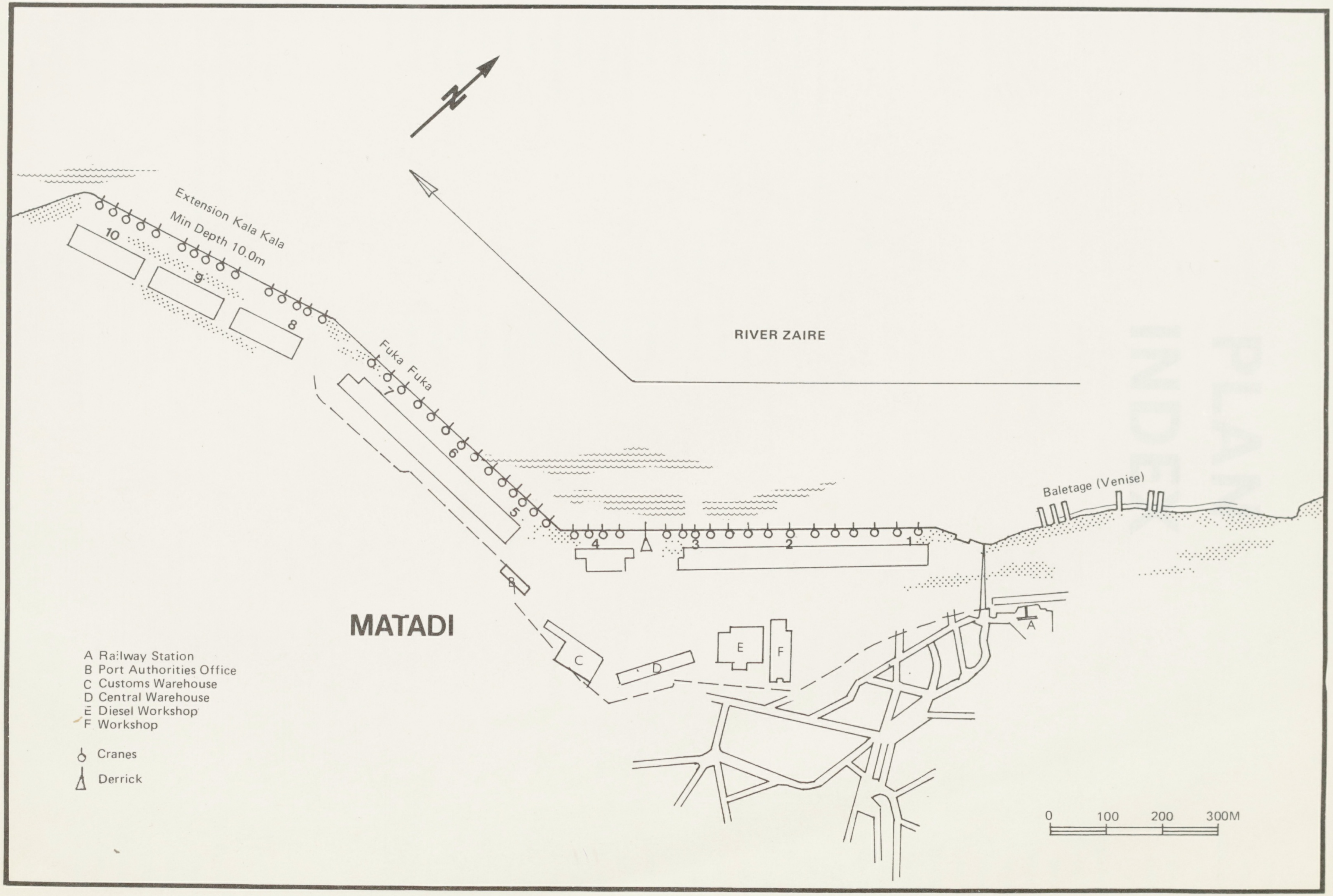
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RIVER ZAIRE
Extension Kala Kala
Min Depth 10.0m
10
9
8
Fuka Fuka
7
6
5
4
3
2
1
Baletage (Venise)
B
C
D
E
F
A
MATADI
A Railway Station
B Port Authorities Office
C Customs Warehouse
D Central Warehouse
E Diesel Workshop
F Workshop
Cranes
Derrick
0
100
200
300M

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LATE REPORTS and PLANS

Bahrain

MINA SULMAN:

BERTHING: *Mina Sulman Jetty extension:* Mina Sulman Deep Water Jetty has been extended in length by 505 ft. making the total length now 2,113 ft. The width of the extension is 100 ft., the same as that of the existing jetty.

The 2 new berths created by the extension are to be known as Extension North and Extension South.

A further extension will be added, approximately the same length and breadth, about May 1977.

Brazil

PORTO ALEGRE

AGENT: *New Telex Numbers:*

051–1054	CRWO BR
051–1622	CRWO BR
051–1452	CRWO BR

SAO LUIS

AGENT: *Amended address and particulars:*

Pedreiras Transportes Do Maranhao Ltda. Representacoes-Navegacao-Entidade Estivadora. Rua Dr. Tarquinio Lopes, 241-A End. Tel. PEDRA-Caixa Postal 250, Tel: 21393-23282, Telex: 982162-PTMA-Sao Luis-Maranhao-Brasil. Filial-Avenida Senador Leite No 11 End. Telegrafico: DESPACHANTE. TUTOIA-MARANHAO-BRASIL.

Bulgaria

THIS ENTRY SUPERSEDES ENTRY ON PAGE 121 OF THE MAIN TEXT.

BOURGAS (including Drujba): 42.30 N. 27.29 E.

Well protected port at inner end of Bourgas Bay, with good roads, anchorage.

DOCUMENTS:

Master's Declaration.
Cargo Plan.
Custom's Manifest.
Charter Party.
Deratization Certificate.
Health Condition Certificate for Crew Members.
Manifest and Consignment of Cargo.
Provision List.
Crew Lists.
Passenger List.
Crew Passports.

PILOTAGE: Pilotage in Inner Roads compulsory for vessels above 100 g.r.t. Application for Inner Roads Pilot must be made to Agents "Inflot" at least 2 hours prior to arrival (if incorrect ETA given – pilotage fee is doubled).

Outer Roads pilotage not compulsory. Vessels requiring Outer Roads pilotage must advise Agents "Inflot" at least 12 hours before time required and give position of required pick-up point.

Applications for Pilot should include Nationality and call letters; gross tonnage; date (2 figures); Time (4 figures) when Pilot required; Draft in metres (4 figures).

APPROACHES: Through fairway, depth of channel 29 ft. LW.

ANCHORAGE: Outer Roads. Vessels anchored must keep close watch on Roads Signal Station for orders given by flag or signal lamp. Vessel ordered by authorities to proceed to position 43° 39′ N., 27° 56′ E., for clearance and Pilot.

RESTRICTIONS: Arrival and sailing from oil port Drujba day and night, for fish port Slavianka and Western quay of Port Bourgas – permitted only in daylight.

RADIO: Bourgas-500 kHz. Port control VHF Channels 16 and 10. Pilots VHF Channel 14.

TUGS: Available and compulsory for vessels over 1,000 g.r.t. Tugs lines used.

BERTHING: Compulsory piloting for vessels over 50 g.r.t. Container handling facilities available. 2 berths available for bulk carriers, 10 berths for general cargo ships and 1 berth for passenger ships.

CRANES: Berths are equipped with electrical portal cranes with capacity from 3 to 32 tons.

STEVEDORES: Available. Liner ships and chartered vessels on liner terms are obliged to use stevedore and tallyman service.

MEDICAL: All facilities available.

TANKERS: Oil port Drujba. Height of quay 2 m.

Berthing: At the S.W. corner of the Bay there are 2 "T" shaped berths, max. depth 40 ft. There are mooring dolphins for vessels length 250 m.

Discharging: 2 × 8-in. hoses are connected to the pipe-line on the catwalk. Discharge rate 1,800 to 2,000 t.p.h. depending on the back pressure. The height limit of the hoses is about 54 ft. above sea level. The berth is protected from the prevailing N.E. wind.

Report received February 1977 states that the max. draft is 39 ft. – no length limitation. Max. draft at the Product berth (Gas Oil) is 23 ft.

DENSITY: 1012–1014.

FRESH WATER: Available through hose hydrants or ex-barge. 24 hours notice required.

FUEL: From VTO "Transimpex" tel. 45751. 72 hours notice required, diesel and gas oil available, also Shell and Castrol lubricants.

FIRE PRECAUTIONS: Constant day and night duty, and direct telephone connection with port fire service.

GANGWAY/DECK WATCHMEN: Vessels in Roads not permitted to have gangways down. Vessels alongside quay with lowered gangway must have manropes, safety net, life-buoys with rope of at least 30 m. length attached, an officer on duty at the gangway and must be lit at night.

OPENING/CLOSING HATCHES: According charter party.

CERTIFICATES:

Construction
Safety Radio
Classification
Hull and Machinery
Load-line
Cargo gear

CUSTOMS ALLOWANCE: Tobacco – 2 packets per crew member per day. Wines/spirits – for Master, as required, for crew – 1 opened bottle. No limits on board, no seals, crew are allowed to take 1 or 2 packets of cigarettes ashore.

IDENTIFICATION CARDS: Required. Crew members are given shore passes.

CONSULS: Turkey.

REPAIRS: Small repairs only.

REPATRIATION: Can be fulfilled if necessary. Replacement of crew by Bulgarian nationals is not possible.

SERVICES: Tank cleaning and removal of sludge.

TELEPHONES: Captain of the Port 42293; Pilots 47128; Customs House 42301; Bulgarian Shipping Register 47132; Shipping Agency "Inflot" 45506.

SHORE LEAVE: Allowed.

REGULATIONS: Given to Master on arrival.

DELAYS: Possible while waiting for Pilot owing to bad weather or waiting turn for berth.

TIME: GMT plus 2 hours.

HOLIDAYS: New Year (1st January); May Day (1st/2nd May); Day of Slavonic written language (24th May); Day of Freedom (9th/10th September); October Revolution (7th November). Time from 1300 hrs. on day before Sundays and Holidays until 0800 hrs. day after is non-working time, but loading and discharging carried out at overtime rates.

AIRPORT: Internal and International flights.

AUTHORITY: Region Port Administration, Bourgas.

AGENT: State Shipping Agency "Inflot". Cables: "Bolinflot", Telex: 083 509, Tel. 45506, 42879.

PORTS IN THE AREA OF PORT BOURGAS

Port Nessebar: Situated on 18 miles North-eastern of Bourgas in the Bourgas Bay. Available 2 berths for passenger and other small ships with draft up to 19 ft.

THIS ENTRY SUPERSEDES ENTRY ON PAGE 121-122 OF THE MAIN TEXT.

VARNA 43.12 N. 27.57 E.

Well protected port at inner end of Varna Bay.

DOCUMENTS:

Master's Declaration.
Cargo Plan.
Customs Manifest.
Charter Party.
Deratisation Certificate.
Health Condition Certificate for Crew Members.
Manifest and Consignment of Cargo.
Provision List.
Crew List.
Passenger List.
Crew Passports.

PILOTAGE: Pilotage in Inner Roads compulsory, but not compulsory for Outer Roads. Vessels requiring pilotage at Outer Roads must radio Agents "Inflot" 24 and 12 hours prior to arrival giving position of required pick-up point, also: name of vessel; nationality and call letters; g.r.t.; length; draft in metres (4 figures); date (2 figures); time (4 figures).

Pilot comes from Inner Port of Varna (there are no permanent pilot stations at Capes Emine or Caliacra). In bad weather impossible for pilot boat to reach Outer Roads and vessel will be so informed by Agents "Inflot" and instructed to proceed to anchorage in Varna Bay.

Pilot boat is a patrol boat with yellow funnel and letter "P". Carries international recognition signals by day and night.

APPROACHES: Through fairway, depth of channel 39 ft.

ANCHORAGES: Outer Roads in area East of meridian 27° 56′ E., beyond fairways. Vessels anchored must keep close watch on Roads Signal Station for orders given by flag or signal lamp.
RADIO: Radio Varna LZW-500 kHz. LZW-4–transmits 8607 kHz, receives 8447 kHz. LZW-5 – Transmits 13,078 kHz, receives 12,612 kHz. Port control VHF Channels 16 and 10; Pilots VHF Channel 14.
TUGS: Available and compulsory for vessels over 1,000 g.r.t. Tugs lines used.
BERTHING: Compulsory piloting for vessels over 50 g.r.t. Depths at quays up to 31 ft. 10 berths available for general cargo vessels, 1 berth for containers and 3 berths for passenger ships.
CRANES: Berths are equipped with electrical portal cranes with capacity from 3 to 32 tons, also 100 ton floating cranes are available.
Container Terminal: Loading and discharging of 10 ft., 20 ft., and 40 ft. containers. The necessary specialized loading and discharging equipment is available.
BRIDGES: When proceeding to and from Varna Lake, vessels pass under the new Asparuhov Bridge (45 m. above the water level).
STEVEDORES: Available. Liner ships and chartered vessels on liner terms are obliged to use stevedore and tallyman service.
MEDICAL: All facilities available.
TANKERS: 3 berths, draft 30, 28 and 18 ft.
DENSITY: 1013.
FRESH WATER: Available through shore hydrants or ex-barge. 24 hours notice required.
FUEL: From VTO "Transimpex", tel. 22927, No. 3 N. Vaptzarov str. 72 hours notice required. Bunker "C", diesel and gas oil available. Lubricants: Shell and Castrol – 48 hours notice required.
FIRE PRECAUTIONS: Constant day and night duty and direct telephone connection with port fire service.
GANGWAY/DECK WATCHMEN: Vessels in roads not permitted to have gangway down. Vessels alongside quay with lowered gangway must have manropes, safety-net, life-buoys with rope of at least 30 m. length attached, an officer duty at the gangway and must be lit at night.
OPENING/CLOSING HATCHES: In accordance with charter party.
CERTIFICATES:
- Construction.
- Safety Radio.
- Classification.
- Hull and Machinery.
- Load-line.
- Cargo Gear.

CUSTOMS ALLOWANCE: Tobacco: 2 packets per crew member per day. Wines/spirits: For Master, as required, for crew – 1 opened bottle. No limits on board, no seals, crew are allowed to take 1 or 2 packets of cigarettes ashore.
IDENTIFICATION CARDS: Required. Crew members are given shore passes.
CONSULS: U.S.S.R., D.D.R. Poland, Czechoslovakia, Cuba.
REPAIRS: All kinds of repairs possible in ship-repair yard.
DRY DOCKS: Suitable for vessels up to 30,000 d.w.t.
Floating Docks: 2 floating docks with lifting capacity of 4,500 tons and 12,500 tons respectively.
REPATRIATION: Can be fulfilled if necessary. Replacement of crew by Bulgarian nationals is not possible.
SERVICES: Tank cleaning and removal of sludge. Compass adjusting.
TELEPHONES: Captain of the Port 23479; Pilots 27023; Custom House 25532; Lloyd's representative 27167; Soviet Register 22651; Bulgarian Shipping Register 26122; State Shipping Agency "Inflot" 22669.
SHORE LEAVE: Allowed.
REGULATIONS: Given to Master on arrival.
DELAYS: Possible while waiting for Pilot owing to bad weather or waiting turn for berth.
TIME: GMT plus 2 hours.
HOLIDAYS: New Year (1st January), May Day (1st/2nd May), Day of Slavonic written language (24th May), Day of Freedom (9th/10th September), October Revolution (7th November). Time from 1300 hrs. on day before Sundays and holidays until 0800 hrs. day after is non-working time, but loading and discharging carried out at overtime rates.
AIRPORT: Internal and International Flights.
AUTHORITY: Port Administration.

AGENT: State Shipping Agency "Inflot". Cables: "Bolinflot", telex: 021516, tel. 22669, 22636, 25924.

NEW PORTS IN THE AREA OF PORT VARNA:
Port Varna-West: Situated 14 nautical miles from Port Varna. 4 berths available for bulk carriers, 2 berths for containers and 5 berths for general cargo vessels. Ships of max. 38 ft. draft proceed in one direction only, through 2 deep channels and Varna lake between them, with limitation in speed up to 6 knots. A container platform for loading and discharging of 20 ft. containers and specialized loading/discharging equipment available.
Port Balchik: Situated 18 nautical miles North of Port Varna, for ships with max. draft 24 ft. 1 berth for bulk carriers available. Entering and leaving the port with a Pilot commencing from the Outer Roads of Port Varna.
Port Topolly: Specialised port for wood materials. Situated on the Northern part of Varna lake, 8 nautical miles from Port Varna. 2 berths for ships with max. draft 15 ft. available.
Port of the Termo-electrical station Varna: Specialized port for coal, situated on the West part of Varna lake, 8.5 nautical miles from Port Varna. 2 berths for ships with max. draft 26 ft. available.

China

TSINGTAO

SHIPMASTERS REPORT: January 1977
Hereunder the text of Notice to Mariners issued by the Tsingtao Branch of the China Ocean Shipping Agency (PENAVICO) dated 20th February, 1973, which is sent to all incoming foreign vessels by telegram regarding Tsingtao Harbour Regulations:

> "Definite route must be taken when sailing in or out; from 35° 56′ 24″ N., 121° 05′ 00″ E. to 35° 56′ 44″ N., 120° 46′ 42″ E. course, 270° — 090° from 35° 43′ 15″ N., 120° 53′ 09″ E. to 35° 56′ 24″ N., 120° 46′ 42″ E. course 338° — 158° thence from 35° 56′ 24″ N., 120° 46′ 42″ E. course 283° — 103° to 36° 02′ 00″ N., 120° 15′ 56″ E. then alter course 000° — 180° proceed to Quarantine anchorage within the following four points:
>
> 36° 05′ 18″ N., 120° 15′ 34″ E.; 36° 05′ 18″ N., 120° 16′ 50″ E.; 36° 04′ 00″ N., 120° 16′ 22″ E.; 36° 04′ 00″ N., 120° 15′ 20″ E.
>
> Pilot station within the area:
>
> with the point 36° 02′ 00″ N., 120° 18′ 16″ E. as its centre and three cable length as its radius. Dropping and dragging anchor are strictly prohibited within the following areas.
>
> Within the four points:
>
> 36° 04′ 00″ N., 120° 14′ 00″ E.; 36° 03′ 12″ N.; 120° 17′ 00″ E.; 36° 03′ 27″ N., 120° 14′ 00″ E.; 36° 02′ 40″ N., 120° 16′ 56″ E.
>
> Within the four points:
>
> 36° 02′ 42″ N., 120° 20′ 00″ E.; 36° 00′ 48″ N., 120° 18′ 00″ E.; 36° 03′ 36″ N., 120° 23′ 16″ E.; 35° 59′ 48″ N., 120° 18′ 30″ E.
>
> Must advise ETA CHALIENTAO 24 hours before ship's arrival. When abeam CHALIENTAO on ship's entry should cable again immediately time abeam CHALIENTAO and accurate time arriving Pilot Station and awaiting Authorities instructions attentively. Proceeding on above mentioned route following stipulations should be observed:
>
> Ship's national flag and code flag should be flown in daytime. Dumping rubbish and pumping out oil and oily substance prohibited. If by some reasons the vessel needs to anchor Master should report to Harbour Authorities first for permission. In Harbour limits the prohibited articles should not be used. In case radar using is required for navigation should report to Harbour Authorities before using. Above mentioned regulations should be strictly complied with. Otherwise the vessel held responsible for all the consequences from the violation of the above. PENAVICO 20/2/73".

Pilot: A total of four Pilots board together with Inspection Team from a tug (black hull, white superstructure) at the Pilot Station. Pilots usually handle vessels very carefully and speak little English.
Piers: The bulk handling piers are equipped with shore cranes (their capacity unknown) but are poorly fendered.
Tugs: A large number of modern (and likely powerful) tugs were noted, ships lines always used.
VHF: The Port is equipped with VHF (most likely at Harbour Master's Office) and the ship's set is handled by the Pilots. After berthing it is prohibited to use it.
Tide: The rise of the tide is considerable (no figures available) and all piers seem to be well protected by any wind.
Ice: Melting ice was noted on approaching the piers (mid January 1977).
Traffic: Heavy traffic was noted there both in ocean-going and medium-sized tonnage.

Colombia

TUMACO:

PILOTAGE: Entrance to the port can only be made during day by vessels with a max. draft of 19–20 ft., due to the bar between buoys 2 & 3.

For the Tumaco Terminal vessels are boarded by the Pilot at No. 1 Sea buoy.
RADIO: Ships must communicate with the Texaco Head Office in Bogota, who will then inform the Terminal. The Terminal can be reached using VHF Channel 16 at a range of up to 30 miles.
TANKERS: Vessels moor to 7 buoys, using both anchors, Ships Head 255° T Max. size 55,000 d.w.t.

Manifold connections are 12 in., although 10 and 8 in. reducers are available. Hoses are connected on the starboard side.

The Mooring Master will remain on board throughout, and accommodation must be provided. Fresh water not available.

Congo (People's Republic of)

POINTE NOIRE:

RESTRICTIONS: Sailing possible from the Ore berth from 1 hour before to 1 hour after high water.

BERTHING:

Quay "D": No change.
Quay "G": Berth G.1 Length 210 m. Max. draft 34 ft. 04 in.
Berth G.2 Length 150 m. Max. draft 34 ft. 04 in.
Berth G.3 Length 160 m. Max. draft 34 ft. 04 in.
Mole "I": No change.
Lighter Berth: Length 360 m. Max. draft 12 ft.
Potash Wharf: 4 miles Southward of Pointe Noire. Max. draft 44 ft.

CONSULS: France only. Tel. 94.00.02–94.00.03.

Egypt (United Arab Republic)

AIN SUKHNA: 29.35 N. 32.23 E.

SHIPMASTER'S REPORT: (January 1977)

Location: The Suez Terminal Ain Sukhna is located on the Western side of the Gulf of Suez, approximately 20 miles South of Suez Bay itself. It is the Southern Terminal of the Arab Petroleum Pipelines Company.

Some of the information to follow may prove to be of a temporary nature since from verbal information obtained, this vessel was part of the 1,000,000 tons of crude oil required by the Arab Petroleum Pipelines in conjunction with Builders Consortium for testing purposes and commissioning of the project.

The Ain Sukhna Terminal will then serve the newly completed Trans-Egypt pipe-line terminating in the Mediterranean to the West of Alexandria.

It is understood that both Terminals and the strip covering the pipe-lines is to become a Free Zone thus dispensing with Customs and a number of other formalities.

Approaches: The anchorage for Ain Sukhna is located approximately 4 miles South-east of the berths and anchorage area is bounded by the following co-ordinate positions:

A	29° 35′ North	32° 25.6′ East
B	29° 32.5 North	32° 27.6′ East
C	29° 31′ North	32° 25.4′ East
D	29° 33.4′ North	32° 23.4′ East

with an average depth of 40 m. and a sandy bottom.

SBM Mooring Facilities: 3 SBM points are located in the following positions:

A	29° 35.3′ North	32° 23.6′ East
B	29° 34.2′ North	32° 22.7′ East
C	29° 35.3′ North	32° 22.3′ East

All SBM's are painted bright yellow and were originally planned to flash their respective identifications A-B-C in morse code. This is also part of the information received, but are in fact marked by an ordinary Flash every 16 to 18 seconds.

The Pilot and Berthing Masters, one acting in each capacity, are Italian and experienced tanker people. They are currently employed by the Builders of the terminal and are presently engaged in training their Egyptian substitutes who will take over all piloting and berthing duties at a later date.

It appears this vessel was the second unit to visit the terminal and all piloting and berthing operations were performed in a cool and efficient manner. Also while the commissioning of the terminal project is in progress an Egyptian Marine Superintendent, employed by Arab Petroleum Pipelines remains on board with the Pilot and Berthing Masters during the vessel's stay in the berth. This, together with the trainees, etc., may not always be convenient for vessels with limited accommodation. A total of 5 bunks in 4 cabins was required by the shore team.

A tug named *Fish* of 2,400 h.p. used as a workboat and for firefighting purposes, flying the French Flag and French manned remains in attendance during mooring operations, and can be called upon to push should this become necessary.

Operations: Since no information to the contrary was obtained it is envisaged that the terminal will operate round the clock, weather and other circumstances permitting.

Radio Facilities: During the voyage ships send their cables to SUMED CAIRO using Alexandria Radio and for the present ETAs and such were confirmed on a daily basis. It is envisaged that at some later date the normal 72, 48 and 24 hours confirmations prior to arrival will be maintained.

A 500 watt transmitter is to come into operation at Ain Sukhna in the very near future with a range of 500 km. and operating on the 2182 kc/s frequency. This will be the Pipelines own transmitter and manned on a 24 hour basis.

For the present Ain Sukhna Marine is to be called on VHF Channel 16 when vessels come within 50 miles radius from the terminal to confirm berthing information and procedures.

The Suez Agency MINSHIP is also contacted via Alexandria Radio. Sumed Cairo does not relay messages or copies to MINSHIP.

Port Papers; The documents and forms required are as for other Egyptian Ports but it is expected that these may be reduced upon the Pipeline becoming fully operational and in a Free Zone. Customs formalities might end but some sort of relationship with Suez might remain for Port Clearance purposes.

Agency: Agency work and formalities are covered by the EL MENIA Shipping Agency of the Canal Shipping Agencies Company at Suez. Cable address is MINSHIP SUEZ. Telephone numbers: Suez 2639, 2801 and 3085 which is the El Menia Offices.

According to information received, facilities for bunkers, water and most other requirements are not available at Ain Sukhna. The Agency however has given verbal assurances to the contrary, and claims the usual services are obtainable from Suez, such as repatriation, provisions and stores, doctor as well as bonded stores. A limited amount of fresh vegetables have been obtained which appear to be of good quality and reasonably priced. According to information from the chandler, *anything* can be obtained providing sufficient notice of the requirements is received, via the Agency. Repatriation for personnel sounds interesting since it would or could cut airflights and accommodation costs to the Persian Gulf for vessels employed on the Ain Sukhna run.

Requirements for Mooring – Cargo hose connections: The SBM moorings consist of 2 buoy lines. The vessel requires to have ready 2 normal good mooring ropes with sufficient good lashing. The vessels mooring lines are taken one at a time through the centre lead by mooring boat and are then attached by lashing to the buoy lines, and hove on board in the usual way. Good stoppers also are required.

The moorings are belayed on bitts on each side of the forecastle.

Each of the 3 berths is equipped with 2 × 24 in. floating hoses, similar to the Juaymah berths, but are each fitted with a floating "Y" piece to which further 16 hoses are connected. The last 4 lengths are approximately 100 ft. long and are hove on board on the port side. This requires a derrick and fittings capable of lifting 10 tons. Ships personnel do all the connecting and provides all gear and equipment such as good strops (3 in.), gaskets, bolts and spanners for normal 16 in. ASA connections.

At this stage the similarity between Juaymah and Ain Sukhna connection of hoses ends. The Ain Sukhna connections do not have the short angled spool piece so that the ships manifold and the hose flanges are at an angle of about 15 to 20 degrees, and require to be brought parallel by brute force. Time required connecting hoses at Ain Sukhna – 5 hours and some minutes. This was a considerable improvement on the connecting time of the previous vessel which required in excess of 7 hours.

The hose connections problem has been discussed with the Terminal.

Cargo: At the present time all cargo tanks are gauged and checked for water on arrival and gauged again on completion of the discharge or ballasting of tanks, for 'Dry Certificate' purposes. It is understood that when operations become normal, the gauging, etc., by shore staff will be dispensed with, and ships figures for arrival will be accepted without check so that vessels can remain inerted during all phases of operations at the terminal.

Possible changes being evaluated:

1. Changing the 2 SBM mooring lines to 1 single line ending in a length of chain suitable for use, and making fast to the Smith Towing Bracket.
2. Dispensing with 2 of the 4 × 16-in. connections. During tests the difference in the discharge rate attained by using 2 hoses as compared to using the 4 appeared to be insignificant.

Ellice Islands

FUNAFUTI: 08.31 S. 179.13 W.

DOCUMENTS:

Customs: Boarding of ships after radio pratique granted.
Clearance from the Last Port.
Crew List.
List of Passengers.
Stores' Lists.
Ship's Inward Report
List of Unmanifested Cargo.
Crews' Stores.
Manifest and Bill of Lading

Health: Radio pratique to be granted within 24 hours before arrival.
Vaccinations Against Cholera.
Vaccinations Against Smallpox (can be done).

Immigration:
Crew List.
Passenger List.
Next Port of Call.
Final Destination.
Passport.

PILOTAGE: No Pilots and no pilot boat. Local Master available on 1 month prior notice.

Chart: See Chart BA 2983. Fongafale Anchorage main anchorage.

RESTRICTIONS: None

MAX. SIZE: See "Te Puapua Passage". Max. Depth 15 m. 250 ft. wide at low water.

HEALTH: Radio pratique available.

RADIO: Funafuti Radio (ZJU) on 6204 kHz.

TUGS: None.

BERTHS: None.

CRANE: Manual 3 ton crane on jetty.

STEVEDORES: Available on 24 hours notice, discharge rate low.

MEDICAL: Hospital Radio advice available.

TANKERS: Must provide own discharge lines. No residue discharge facilities. Light diesel only available. No tanker berth.

DENSITY: Sea Water.

FRESH WATER: Max. 60,000 gallons in wet season, little or none in dry season, by tank on work boat.
FUEL: Light diesel only. Max. 5,000 gallons by drums (44 gallons).
FIRE PRECAUTIONS: No special precautions other than normal for tankers.
CONSULS: None.
REPAIRS: None.
SURVEYORS: None.
WATCHMEN: Not required.
HATCHES: By stevedores or crew.
CUSTOMS ALLOWANCE: 200 cigarettes and 1 bottle of spirit.
REPATRIATION: Air service to Fiji and Tarawa.
AIRPORT: 0.25 mile from jetty, fortnightly service. Special charters by arrangement.
TIME: GMT plus 12 hours.
HOLIDAYS: New Year (1st January); Public Holiday (3rd January); Good Friday (8th April); Easter Friday (9th April); Easter Monday (11th April); Queen's Birthday (11th June); Public Holiday (13th June); Bank Holiday (1st August); Tuvalu Day (1st October); Public Holiday (3rd October); Prince of Wales Birthday (31st October); Christmas Day (25th December); Boxing Day (26th December); Public Holiday (27th December).
POLICE/AMBULANCE/FIRE: No telephone. By messenger.
TELEPHONE: None.
SERVICES: None.
SHORE LEAVE: Allowed after clearance.
IDENTIFICATION CARDS: Not required.
REGULATION: No sullage, ballast, tank residue, etc., to be discharged in lagoon.
DELAYS: Unpredictable, depending on whether other ships in port.
DEVELOPMENTS: Plans to construct a new deep sea wharf is under consideration but largely dependent on the availability of grant in aid funds.
AUTHORITY: No independent Port Authority. All enquiries should be made to *Ministry of Home Affairs.*

Ghana

GENERAL:

HEALTH: *Pratique procedure:*

1. The Port Health Officer or authorised officer shall grant to a ship as soon as the following conditions shall have been properly complied with:—
   (a) The Master shall complete accurately to the best of his knowledge and belief a Maritime Declaration of Health Form.
   The Declaration shall be countersigned by a ship's surgeon if one is carried and shall be delivered to the Port Health Officer or authorised officer.
   (b) The answers to the questions in the Declaration shall clearly indicate the absence of any infectious disease on board during the voyage or on arrival of the ship, and that the ship has not called at any infected area or had direct contact during the voyage with any ship from any infected area or having on board any case of infectious disease, and shall satisfy that Port Health Officer or authorised officer that the granting of pratique shall not be attended by any danger.
   (c) The Master or any other person on board including a ship's surgeon, if one is carried, shall accurately and, completely answer any other questions put to him by the Port Health Officer or authorised officer in regard to the sanitary condition of the ship, the health of the passengers and crew or of any ship with which there has been direct contact during the voyage, and shall furnish any such officer with all such information and assistance as he may reasonably require.
2. In the event of any suspected disease or fever on board a ship before arrival at the port and any other circumstances requiring the attention of the Port Health Officer, the Master shall:—
   (a) If the ship is equipped with a suitable radio transmitting apparatus and is due to arrive at a radio receiving port, send before arrival, either directly to the Port Health Officer or through an Agent approved by him, a radio message to that effect.
   (b) If the ship is not so equipped or is due to arrive elsewhere than at a radio receiving port, notify the Port Health Officer immediately on arrival of the presence on board of such infectious disease, or suspected conditions.
   Any radio message sent shall:—
   (a) embody such of the items of information as are applicable;
   (b) be sent so as to reach the Port Health Officer not more than 12 hours, and not less than 4 hours, before the expected arrival of the ship;
   (c) if it is in code, conform with the section relating to standard quarantine messages of the 1931 International Code of Signals.
3. Any ship arriving at its first port of call in Ghana from a foreign port shall be deemed to have come from an infected local area, and shall be required to comply with the provisions as to flags and signal lights as prescribed until granted free pratique by the Port Health Officer or authorised officer.

The following signals are to be shown on arrival within 3 miles of land, by vessels requiring or required to show their state of health:—
   (a) in the daytime i.e. during the whole of the time between sunrise and sunset.
      (i) "Q" flag signifying "my ship is 'healthy' and I request free pratique" or;
      (ii) "Q" flag over first substitute ("QQ") signifying "my ship is 'suspect', i.e. I have had a case or cases of infectious disease more than 5 days ago, or there has been unusual mortality among the rodents on board my ship" or;
      (iii) "Q" flag over 'L' flag ("QL") signifying "my ship is infected" i.e. I have had a case or cases of infectious disease less than 5 days ago!
   (b) by night i.e. during the whole of the time between sunset and sunrise, a red light over a white light, the lights being not more than 6 ft. apart shown at the peak or where the signal can best be seen from the shore, and exhibited only when the ship is within the presence of a port signifying "I have not received free pratique".
   (c) Any ship displaying the appropriate signal in accordance with the provisions of paragraph (3) above shall, as soon as practicable, be visited by the Port Health Officer or authorised officer, who shall grant pratique or take such other steps as may be necessary before granting pratique.
4. A ship which has been granted free pratique at its first port of call in Ghana which has not been declared an infected area shall not be required to obtain further pratique at another port in Ghana.

Vaccination requirements in respect of persons arriving in Ghana

All officers, crew and passengers of every ship arriving at any port in Ghana shall be in possession of valid Certificates of vaccinations against smallpox, yellow fever and cholera.

Where a person arrives at any port in Ghana and is unable to produce a valid Certificate as required, the Port Health Officer or the authorised officer shall require such person to be vaccinated on the spot or to present himself at a place or places for the purposes of being vaccinated.

Under no circumstances should any officer, crew or passenger disembark if he is not in possession of any valid Certificate against smallpox, yellow fever and cholera.

THIS ENTRY SUPERSEDES ENTRY ON PAGE 307 OF THE MAIN TEXT.

TAKORADI: 04.53 N. 01.45 W. (See Plan)

PORT LIMITS: Are shown on Admiralty Chart 3102 and covers an area of about 1.5 to 2 miles outside harbour entrance.
DOCUMENTS:
Ghana Customs:
2 Stores Lists.
2 Lists Crew Personal Effects.
1 Bill of Health.
6 Crew Lists with dates smallpox and yellow fever inoculations.
6 Passengers Lists or 'Negative'.
6 Vessel's Itinerary Lists.
1 Freighted Cargo List.
1 Unfreighted Cargo List.
1 Set Bills of Lading.
1 Clearance from last Port.
Immigration Officer:
1 Crew List.
1 List Port of Call.
1 List of Passengers, if any.
All crew and Passengers Passports.
Advice to Immigration of any stowaway.
PILOTAGE: Pilotage compulsory for ships berthing alongside or on the moorings. Pilot boards within port limits. International code signals used. Pilotage for entering vessels from 0600–1800 hrs. and for leaving vessels from 0600–2300 hrs.
ANCHORAGE: Vessels may anchor outside the harbour without Pilot. Depth at moorings 22 ft. to 40 ft.
RESTRICTIONS: Depth at harbour entrance 35 ft. MLW.
MAX. SIZE: Up to 28 ft. draft for berthing alongside. Up to 33 ft. at buoys. Also see "Tankers".
HEALTH: See "General – Health".
RADIO: Radio Takoradi. The station is a Coast Station and only operates on H.F. and M.F. equipment. The call sign for this station is 9GA.
VHF: Signal station Channel 14. 24 hour service for all information with regard to Pilots, berthing, etc.
RADAR: No radar services available.
TUGS: Tugs normally join the vessel outside port entrance. Tugs assistance is compulsory to be ordered through Signal Station. 2 tugs available of 1,350 h.p.
BERTHING: Additional coir springs from shore required at all berths.

Cargo discharging and/or loading at the buoy berths is by ships' own gear.

Berth	*Length Vessel*	*Max. Draft*
Manganese	500 (Max. 520)	28 ft. 0 in.
2 Wharf	500	26 ft. 0 in.
3 Wharf	500	26 ft. 0 in.
4 Wharf	600	28 ft. 0 in.
5 Wharf	250	28 ft. 0 in.
6 Wharf	500	29 ft. 0 in.
Bauxite	505	30 ft. 6 in.
Oil Wharf	600	29 ft. 3 in.
1 Buoys	550/610	F.32 ft. 6 in. A.34 ft. 0 in. (If 610 ft. 0 in. ship max. 27 ft. 6 in.)
2 Buoys	550	F.30 ft. 6 in. A.31 ft. 0 in.
3 Buoys	570	27 ft. 0 in.
4 Buoys	520	F.27 ft. 0 in. A.30 ft. 0 in.
5 Buoys	510	F.24 ft. 0 in. A.27 ft. 0 in.
6 Buoys	480	F.24 ft. 0 in. A.26 ft. 0 in.
7 Buoys	450	F.23 ft. 0 in. A.25 ft. 0 in.
8 Buoys	400	F.21 ft. 0 in. A.22 ft. 0 in.
9 Buoys	340	18 ft. 0 in.

CRANES: There are 35 Portal Cranes at the Port. Out of these 15 cranes of 3 tons each and 1 crane of 15 tons lifting capacity are at the wharf berths for loading and discharging vessels. The remaining 19 cranes – 6 of 10 tons, 1 of 7 tons, 1 Butters crane of 15 tons and 9 of 3 tons are placed at the West Wharf to cater for the loading and discharging of logs and other commodities. Two of 5 tons are at the Cargo Platform to load and discharge other commodities. In addition there are 20 gantries for loading and discharging sawn timber.

There are no cranes at the buoy berths and ships are expected to use their own gear. Also, there are no floating cranes at this Port.

BULK CARGO FACILITIES: There are 2 berths specifically meant for the loading of dry-bulk cargo – manganese ore and bauxite. In the case of grain, coal, fertilisers, sulphurs, copra, etc., discharge can be done at any of the wharf berths. The loading rate of manganese ore is approximately 333 long tons per hour; and the loading rate of bauxite is 330 long tons per hour.

SPECIALISED CARGO HANDLING FACILITIES: The port does not have container or ro/ro handling facilities.

BRIDGES: There are no bridges at the port.

STEVEDORES: Berthing meetings are held daily between the Port Authority and all Port Operators with the view to determining ETA and EDD of vessels to enable the stevedoring companies to arrange for gangs and determine the relevant rates and charges.

Normal working hours: weekdays 0700 hrs. to 1200 hrs. and 1400 hrs. to 1700 hrs. Saturdays 0700 hrs. to 1200 hrs.

Gangs required for Sunday work should be ordered before 1130 hrs. previous day. For weekday work, gangs should be ordered before 1500 hrs. previous day.

MEDICAL: It is absolutely necessary for the Agents to be notified in advance of the required medical attention so that necessary arrangements for medical exercise be carried out immediately on the vessel's arrival. Also see "General – Health".

TANKERS: Oil tankers moor on the North side of Lee breakwater. 1 berth suitable for ships of 600 ft. length, draft 29 ft.

Pipe-line: 805 m. long, pipe size 8 in. for all grades of petroleum and Bitumen.

Discharge Rate:

Petroluem	–	Premium Mogas	150 t.p.h.
		Regular Mogas	150 t.p.h.
		A.G.O.	200 t.p.h.
		Kerosene	200 t.p.h.
Bitumen	–	80/110–142 cu. m. per hour	
		60/70 –154 cu. m. per hour.	
		12/18 –337 cu. m. per hour.	

DENSITY: Salt water.

FRESH WATER: There is fresh water at all wharf berths and delivery is by means of water hydrant and/or water barge of 448,000 gallons capacity. Fresh water is also delivered at the buoy berths by water barges. The rate of delivery is as follows:–

By hydrant – 11,000 gallons per hour.
By barge – 11,000 gallons per hour.

FUEL: 2 grades available, Fuel and Gas Oil. Advance notice is necessary.

Fuel – 1,500 gallons per second through pipe-lines.
Gas Oil – 37.8 gallons per second through mobile tanker.

FIRE PRECAUTIONS: 6 firemen ordered to standby with fire engine. "No Smoking" notices are posted at considerable distances from the tankers.

CONSULS: There are no consuls in this Port. High Commissioners and Ambassadors are in Accra.

REPAIRS: Minor repairs can be effected, slipway for vessels up to 500 tons. Small drydock for vessels up to 100 ft. length.

DRY DOCK: There is no large drydock in this port but there is 1 small drydock capable of accommodating vessel of 100 ft. long, 25 ft. wide and 8.5 ft. draft.

SURVEYOR: Lloyds representation only operates in this Port.

GANGWAY/DECK WATCHMEN: Provision of Gangway, Deck and Hatch Watchmen is absolutely necessary to prevent stealing, pilferage and smuggling on board ships.

HATCHES: Hatches are normally opened and closed by the stevedoring gangs or, at times, by the ship's crew.

CUSTOMS ALLOWANCE: Quantity permitted for each member of the crew to be held Out of Bond is as follows: Tobacco 100 grammes; Spirit 0.75 litres; Wine 0.75 litres.

CARGO GEAR: Load/discharge is affected by the Port Authority's shore gear. There is 1 heavy lift crane of 15 tons capacity which is used for heavy lifts. Where the cargo exceeds the lifting capacity of the shore crane, the ship's jumbo derrick is sometimes used.

REPATRIATION: The Immigration Department is responsible for signing on and off on the advice of the shipping company.

AIRPORT: The distance of the airport from the Port is approximately 2 miles. It is served by regular airline to and from the capital city of Accra; and the number of flights is 2 per week.

TIME: The Greenwich Meridian Time is applied to this Port as the Greenwich Meridian passes through this country.

HOLIDAYS: The holidays at the Port are as follows; New Year's Day (1st January); Redemption Day (13th January); Independence Day (6th March); Good Friday (non-working day); Holy Saturday; Easter Monday; Republic Day (1st July); Christmas Day (25th December) (non-working day); Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Telephone 999 for all 3 services.

TELEPHONES: Presently no arrangements exist for installing telephone on board ships.

SERVICE: There is no special service for tank cleaning, tank-washing or compass adjustment.

SHORE LEAVE: Every member of the crew is free to go ashore at any time of the day or night after the Immigration Officer has issued shore passes to that effect on the ship's arrival.

IDENTIFICATION: Seamen's Book or Passport is sufficient to identify any seaman.

REGULATION: Ship's are not allowed to discharge on board explosives or petroleum without prior approval of the Port Manager. Ships are not allowed to berth after 1800 hrs.

DELAY: Delays in berthing a ship occur when all berths are occupied; delays also occur when repairs are being carried out on any of the berths.

AUTHORITY: Ghana Railway and Ports Authority.

Greece

KALI LIMENES:

SHIPMASTERS REPORT: December 1976

Pilotage: Pilot boards about 1 mile South of Aghios Pavlos.

Anchorage: Half a mile E.N.E. of Mavronissi, depth of water 30 ft.

Max. Size: According to Pilot; 100,000 d.w.t. in ballast and max. draft 44 ft.

Pumping Rate: Fuel – 1,000 t.p.h., diesel – 200 t.p.h.

ETA: Send ETA 48 hours in advance through Radio Athens. The bunker station can be reached direct on 2320 kHz.

Indonesia

BEKAPAI TERMINAL: 01.01 S. 117.29 E.

LOCATION: The Terminal is situated about 50 miles N.E. of Balikpapan on East Coast of Kalimantan, Indonesia at position 01° 00′ S., 117° 30′ E., in Makassar Strait.

Sea Terminal: The terminal consists of 2 floating storages, 1 being the Oil Storage Barge (O.S.B.) "Wapiti" and the second the tanker "Jarena".

(1) "Wapiti" is permanently moored on a Single Buoy Mooring (SBM) by 2 mooring lines. The location of the SBM is 01° 00.7′ S., 117° 29′ E., in about 32 m. of water.

The Bekapai oil comes from the production platform through the SBM and 2 strings of floating hoses into the "Wapiti".

Export tankers moor along starboard side of "Wapiti" where pneumatic fenders are fitted.

(2) "Jarena" is also permanently moored by 2 mooring lines on a standard buoy located at position: 01° 01′ S., 117° 27′ E. in about 32 m. of water.

"Jarena" receives oil from Handil field by shuttle vessels coming alongside and discharging into this tanker.

Export tankers also moor along starboard side of "Jarena" where pneumatic fenders are installed.

OPERATOR: Total Indonesie, 3rd Floor, Borobudur Offices, Jalan Lapangan Banteng Selatan 1, Tromolpos 10/JKT. Telex: 44108 Jakarta, Phone: 52577, 52578, 52579. Jakarta – Indonesia.

DOCUMENTS: Indonesian Immigration, Customs and Port Officials will board the vessel to grant clearance.

Customs, Immigration and Harbour Master will require the following for inspection:

3 Crew Lists.
1 Crew Declaration of Personal Belongings.
1 Ship's Store List (inventory).
3 Passenger Lists (if any).
1 Cargo Manifest for Transit Cargo with a summary.
Clearance from the Last Port of Call.
Valid Passport and/or Seaman's Certificate for all Crew Members.
Smallpox Vaccination Certificate for all crew members or passengers of date not exceeding 3 years.
Certificate of Inoculation against any contagious diseases.

ARRIVAL AND DEPARTURE REQUIREMENTS:

Procedure for Appointing Agent: Owner should cable/telex: PERTAMINASHIP JAKARTA. The cable/telex should appoint Pertamina as Agent to attend the tanker at Bekapai and should be sent 1 week prior to vessel's arrival.

The above procedure is applicable to vessels whose Operators do not have a long term agreement with Pertamina.

Flag Dispensation/Agency Permit: Each foreign tanker entering Indonesia for lifting from Bekapai Terminal must have been granted flag dispensation/security clearance prior to entering Indonesian waters.

At the same time application should be made for Provisional Pratique through the Directorate of Quarantine and, if granted, a cable advice is sent to the Harbour Authorities.

Port Health Clearance is issued prior to the tanker's arrival and is also valid for departure clearance. If Provisional Pratique is not granted a Port Health Officer will be provided. All of the foregoing is arranged through and by the General Agent.

It is vital that TOTAL INDONESIE, Jakarta receives the following information by telex 7 days before vessel's arrival, in order to apply for flag dispensation/security clearance through the General Agent.

1. Name and address of owners.
2. Name of vessel and radio call sign.
3. Flag.
4. D.W.T. G.R.T. and N.R.T. of vessel.
5. Name of Master.
6. Number of Crew.
7. Last foreign port of Call and ETD.
8. Consignee.
9. Destination(s) after Loading.
10. ETA Bekapai Terminal.
11. Quantity and grade to be loaded.

If arriving from a foreign port, the following documents may be required for granting pratique: Certificate of Registry; Ship's Construction Certificate; Load Line Certificate; Life Safety Equipment Certificate; Safety Radio/Telephone/Telegraph Certificate; Cargo Gear Certificate and De-Ratting or Exemption Certificate.

Crude oil loading documents will be prepared at the Bekapai Terminal and when the vessel has been loaded, the documents will be completed and final clearance formalities will be carried out on board.

Outward clearance.

A tanker will be considered clear to depart Bekapai Terminal when the crude oil loading documents have been delivered to the Master.

FLAGS: In accordance with practice in Indonesian ports, the vessel's national flag, the Indonesian courtesy ensign, quarantine, immigration, pilot, and call sign flags must be displayed by all vessels approaching Bekapai. These signals shall be displayed continuously until clearance is granted.

The signals are as follows:

Sunrise to Sunset: Quarantine Flag "Q".
Sunset to Sunrise: Signal lights (red over white).

The "N" flag should be flown until the Immigration Officer boards the ship. The "G" flag should be flown until the Mooring Master boards. The vessel should also fly its call sign (signal letters). This signal may, however, be hauled down after the vessel is secured to the OSB. It must be flown again when the vessel is sailing and kept flying until after the vessel is clear of the anchorage area and the Berthing Master has left. As soon as the Mooring Master boards, the "G" flag should be replaced by the "H" flag. The tanker may fly the "P" flag if it is going to sail within 24 hours.

PILOTAGE: A Mooring Master will board the vessel in the anchorage area and advise the Master on all manoeuvres relative to berthing and unberthing and connecting the hoses.

Vessels are requested to make a lee and have an accommodation ladder long enough to reach the Mooring Master's launch. At night, adequate lighting should be provided.

NAVIGATION AIDS:

S.B.M.: The S.B.M. buoy is equipped with a radar reflector and at night shows a white light flashing at a rate of 60 flashes per minute. (0.3 seconds on and 0.7 seconds off.).

O.S.B. "Wapiti" and storage tanker "Jarena": The O.S.B. "Wapiti" and the "Jarena" are equipped during night with normal anchor lights for a tanker: one white light at the bow; one red light on main mast and one white light at the stern.

Oil Platforms: Oil Platforms show at night a white light flashing 2 short and 1 long flash (Letter U).

ANCHORAGE: If vessels are obliged, or instructed to anchor, they should do so in the recommended anchorage area which is centered at position: 0° 59.2′ S., 117° 26′ E., and has a radius of 1 mile. Water depth is between 30 to 35 m. While at anchor they should exercise vigilance and keep in touch with the Terminal by VHF at all times.

MAX. SIZE:

Minimum size: The minimum size tanker acceptable at the terminal will be:

The "T2" class or equivalent of not less than 17,000 d.w.t. for the "Wapiti".

The 30,000 d.w.t. class for the "Jarena".

Maximum size: The maximum size tanker acceptable at the terminal will be:

60,000 d.w.t. with a max. length of 230 m. for the "Wapiti". The maximum distance from the bow to the loading manifold that is acceptable for export tankers mooring alongside "Wapiti" is 375 ft. 80,000 d.w.t. with a max. length of 295 m. for the "Jarena". For part cargo liftings an exception can be made for tankers up to a max. of 100,000 d.w.t., provided:

(a) the length of the tanker does not exceed the acceptable maximum length of 295 m.
(b) the stern of the export tanker does not exceed the stern of "Jarena" by more than 50 m. when the manifolds are facing each other.

RADIO: *Advice of Arrival:* 72 hours prior to arrival at the Terminal, vessels should advise the company of their ETA by cable sent via Pertamina's coastal radio stations at Jakarta/Merak/Balikpapan. They should also confirm or amend them when they are 48 hours, and again when 24 hours, distant from the Terminal.

Total Indonesia cable address: Totalindo Balikpapan. Attention: Wapiti Jarena and Totalindo Jakarta. Attention: Shipcoord.

Communication for Contacting Agent: Pertamina Jakarta radio/PK12 (owned and operated by PERTAMINA).

Frequency kHz	*Hours* GMT	*Keep Watch* kHz
452*	H24	500
8626	0200–0300, 0400–0500, 0700–0800, 1030–1200, 1400–1500, 1800–2000, 2200–2300.	8356–8374
12980	0000–0200, 0300–0400, 0500–0700, 0800–1030, 1200–1400, 1500–1800, 2000–2200, 2300–2400.	12534–12561
VHF Ch. 9/16/19	0000–1500.	Ch. 16

*Call/Reply

Pertamina Merak radio/PKQ (owned and operated by PERTAMINA)

Frequency kHz	*Hours* GMT	*Keep Watch* kHz
452*	0000–0400, 0800–1000, 1200–1400	500
8626	0100–0200, 0900–1030, 1500–1600, 2300–2400	8356–8374
4361.6	0000–0100, 0200–0300, 0800–0900	2182, 4066, 4063 A3J/A3H
6518.6	0300–0400, 1200–1400	2182, 6204 A3J/A3H
VHF Ch.16/19/24/26	H24	Ch.16

*Call/reply.

Pertamina Balikpapan radio/PKN2 (Owned and operated by PERTAMINA).

Frequency kHz	*Hours* GMT	*Keep Watch* kHz
4415	H24	2182
6520	H24	8249 ASJ/A3H
VHF Ch.16/19	H24	Ch.16

Note: All messages destined to "PERTAMINASHIP" can be sent to either PK12, PKQ or PKN2.

Details of Cable: The following information should be included in the cable:

1. Name of vessel and radio call sign.
2. ETA and date in local time (GMT plus 8 hours).
3. Cargo requirements.
4. Deballast time.
5. Maximum loading rate.
6. If there is any sickness aboard or clean bill of health.
7. Last port of call.
8. Any hull, bulkhead, valve or pipe-line leaks on vessel which could affect loading or cause pollution.
9. Distance in metres from bow to vessel's loading manifold.
10. Flange dimensions of vessel's manifold connection, if not to ANSI B 16.5, BS 1560, series 150 or equivalent.

VHF: Vessels equipped with VHF radio telephone should contact "WAPITI" and/or "JARENA" on the International Maritime Mobile Service Channel 9, 16 or 19 (156-80 mc/s) from 0000–2400 hrs. GMT. "WAPITI" radio call sign is PKN-23. "JARENA" radio call sign is LATH.

BERTHING:

Procedure when berth is available on arrival: A vessel for which the berth is available on arrival will be boarded by a Mooring Master in the anchorage area and, providing that the vessel is in all respects ready to commence loading (except for the necessary deballasting), the Notice of Readiness will be received as soon as tendered to the terminal by the Master of the vessel.

If the vessel is not in all respects ready to proceed to the berth, with main engines fully manoeuvrable, mooring ropes on deck, windlasses, winches, etc., in good working order and readiness, it will not be accepted until the Mooring Master is satisfied that all these conditions are met.

Procedure when instructed to anchor on arrival: A vessel which has been instructed by Bekapai Terminal to anchor on arrival should, after doing so, inform, the Terminal of the precise arrival time. According to the practice of the Terminal, receipt of the Notice of Readiness will coincide with this arrival time, providing:

(a) That it is within the hours of daylight–deemed to be from 0600 hrs local time to 1800 hrs., local time.
(b) That it is not a Public Holiday or Sunday, unless the vessel is actually handled on that day.
(c) That the Terminal is open.
(d) That cargo is available in accordance with accepted loading date.

In addition to clauses (a), (b) and (c), above, vessels will not be accepted when arriving at an unreasonable time ahead of their last advised ETA. It is not the practice of the Terminal to keep Pilots (Mooring Masters) on station in the anchorage. Bekapai Terminal maintains a continuous listening watch on Channel 16 VHF.

Draft Requirement: Vessels arriving at Bekapai Marine Terminal should have the following draft:

D.w.t.	*Fore*	*Aft.*
17,000– 22,000	12 ft.	20 ft.
22,000– 32,000	16 ft.	24 ft.
32,000– 45,000	18 ft.	26 ft.
45,000– 60,000	19 ft.	27 ft.
60,000–100,000	22 ft.	28 ft.

LOADING:

Hoses Lifting Derricks – Deck Winches: On port side.

Ship's booms and deck winches must be capable of operating with a S.W.L. in excess of 3 tons for a tanker mooring alongside of "WAPITI" and 5 tons for a tanker mooring alongside of "JARENA". Vessels with inadequate hose lifting equipment will be rejected. Power must be kept on deck winches in case adjustments to mooring lines are found to be necessary.

Manifold sizes: The hoses at the terminal are 12 in. in diameter.

The minimum size manifold connection acceptable will be 8 in. for the "WAPITI" and 12 in. for the "JARENA".

The terminal is equipped with flanged spools to connect with manifolds different from 12 in. diameter.

Tanker's manifolds should terminate in ASA 150 flanges. Unless the terminal is given adequate notice, tankers equipped with manifold flanges of other sizes or ratings will be rejected.

Grades of crude oil available: There are 2 grades of Crude Oil available at Bekapai Marine Terminal, namely, Bekapai Crude Oil and Handil Crude Oil.

Bekapai Crude Oil is available at "WAPITI" and Handil Crude Oil is available at "JARENA".

Vessels lifting Bekapai Crude are not required to heat the oil during voyage to the discharge port.

Vessels lifting Handil Crude are required to be equipped with heating coils.

It is recommended as from commencement of loading of Handil Crude the vessel should endeavour to heat the oil at a temperature of 120° F minimum up until the time the vessel discharges its cargo at the unloading port.

Any protests by the Master concerning the quantity of cargo should be made before departure and any resulting investigation should be made before the vessel sails.

Work Crew Service: Mooring and un-mooring, lifting, lowering, connecting and disconnecting hoses will be done by a Terminal work crew under the direction of the Mooring Master. Assistance from ship's personnel in connecting the hoses and in operating windlasses, winches, etc., will be required.

Loading Rate: Maximum loading rate will be about 20,000 barrels (3,000 metric tons) per hour. It is recommended that vessels take maximum flow with due regard to safety in order to expedite turn around time as well as to provide ballast as quickly as possible.

Care should be taken not to overload, as there is no possibility whatever of pumping back into the "WAPITI" or the "JARENA". When vessels are equipped with permanent ballast tanks, the ballast in these tanks should be retained on board until the vessel has taken on board sufficient cargo to be manoeuvrable. Vessels not so equipped should examine the possibility of safely loading and discharging ballast simultaneously, as such practice improves turn around time as well as reducing the possibility of breaking out of the berth in bad weather in completely light condition.

BALLAST:

Adequate Ballast: Due to the exposed location of the crude oil loading berth, vessels are required to carry sufficient ballast for safe handling, having due regard to existing weather and sea conditions. A vessel found by the Mooring Master to be not adequately ballasted will be rejected.

Pollution: Owners and Masters are responsible to observe International convention laws and Indonesian Government regulations concerning pollution of the sea, having particular regard for this area of the Macassar Strait.

Clean Ballast: As there are no ballast discharging facilities, vessels must arrive at the Terminal with clean ballast, ensuring that all pipe-lines, pumps and strainers have been flushed out prior to arriving.

The Mooring Master will inspect ship's ballast on boarding and has the power to reject any vessel that he deems would cause pollution of the sea area, in which case the vessel must proceed to sea and return only when ballast is completely free of oil. Any vessel rejected because of dirty ballast will automatically nullify its notice of readiness and will lose any priority of position for loading. Ballast discharge should not be commenced without the prior agreement of the Mooring Master.

Bilges: Bilges must not be discharged while at the Terminal.

Inspection during Loading: At night the sea area around the vessel shall be adequately lighted, as frequent inspection by the Mooring Master will be made during the discharge of ballast. Any pollution, whatsoever, will be cause for rejection. Similarly, any hull leaks causing pollution during loading will be cause for rejection and the vessel will not be reaccepted unless satisfactory evidence of repairs has been certified by a qualified surveyor.

Cargo hose connections should be inspected during loading, drip-pans should be placed under the manifold, all unused cargo connections should be blanked off, sea-valves should be closed and lashed upon completion of deballasting and all scuppers must be securely plugged.

CUSTOMS ALLOWANCE: Cigarettes, cigars, tobacco, matches, spirits, wine, beers, perfume, arms, ammunition and possibly other items have to be locked up under customs seal from time of arrival of ship in port until time of leaving territorial waters. Each person is allowed to bring in 200 cigarettes or the equivalent in grams of tobacco or cigars. Special allowances are made for the Master under special circumstances.

The Customs Officer will seal the stores.

SERVICES: There are no facilities of any kind at Bekapai.

There are no engineering repair shops.

No fresh water.
No bunkers available.
No provisions or stores.
No crane or barge service.
No shore leave.
No crew changes.
No Consulates available.
No clinic available.

GENERAL:

Floating Logs: Masters are advised to keep careful watch on the approaches for semi-submerged or floating logs which may become hazardous to safe navigation.

Safety; Every vessel which berths at the Terminal shall remain under the charge of the Master who will take all steps necessary to preserve the safety and security of such vessel, crew, and Terminal personnel who may board in the execution of their various duties.

The Master of every vessel at anchor in the designated anchorage, or secured to the "WAPITI" and/or to the "JARENA", shall ensure that all parts of the vessel to which any person may be lawfully required to proceed, are properly illuminated. Efficient and easy means of access shall be provided and such access shall be adequately illuminated between sunset and sunrise.

No person(s) shall be permitted to board or leave the vessel other than by the gangway or other proper means provided for this purpose. The Mooring Master may require the vessel to unmoor at any time he deems it necessary for the vessel, the "WAPITI" and/or the "JARENA", or for infringement of Port Regulations. Unsatisfactory conditions will be reported to the company's Marine Superintendent, who is empowered to reject a vessel for future calls, unless the reported deficiencies have been remedied. Sufficient crew members must be immediately available at all times to assist with any or all operations on board the vessel at the Terminal.

No repairs of any sort will be permitted in the Terminal Area.

Transistor radio sets or other electrical appliances may not be used in hazardous petroleum area.

Smoking will not be permitted on deck while in berth and will be permitted only in the places approved by the Mooring Master.

Tanker's Engines: Being on open roadstead, vessels must keep engines on standby during their stay in the berth. No repairs to main engines may be undertaken while in berth.

Only the automatic turning gear should be used. If it should become necessary to turn the propellor(s) at revolutions greater than the minimum obtained by the automatic turning gear, application must be made to the Mooring Master in order to ensure that there is no inconvenience to do so.

The Mooring Master's written permission must be obtained before any such increase in revolutions.

AGENCY: Pertamina Shipping Directorate, 32-34, Jalan Jos Sudarso, P.O. Box 327, Tanjung Priok, Jakarta, Indonesia. Cable address: Pertaminaship Jakarta. Phone numbers: 290312-290322 (11 lines), Ext. 225 & 315 & 425. Telex number: 42885 Jakarta.

SENIPAH TERMINAL: 01.03 S. 117.13 E.

OPERATOR: Total Indonesie.

LOCATION: The Sea Terminal consists of a SBM (Single Buoy Mooring), loading berth also known as "mono-buoy". Berth is located in position Lat. 1° 03′ 05″ S., Long. 117° 13′ 13″ E.

The Terminal is situated about 45 km, N.E. of Balikpapan on East Coast of Kalimantan, Indonesia, at position 0° 58′ 05″ S., 117° 08′ 27″ E.

DOCUMENTS: Indonesian Immigration, Customs, and Port Officials will board the vessel to grant clearance and will require the following for inspection:

3 Crew Lists.
1 Crew Declaration of Personal Belongings.
1 Ship's Store List (inventory).
3 Passenger Lists (if any).
1 Cargo Manifest for Transit Cargo with a summary.
Clearance from the Last Port of Call.
Valid Passport and/or Seaman's Certificate for all Crew Members.
Smallpox Vaccination Certificates for all crew members or passengers of date not exceeding 3 years.
Certificate of Inoculation against any contagious diseases.

If arriving from a foreign port, the following documents may be required for granting pratique: Certificate of Registry; Ship's Construction Certificate; Load Line Certificate; Life Safety Equipment Certificate; Safety Radio/Telephone/Telegraph Certificate; Cargo Gear Certificate and De-Ratting or Exemption Certificate.

Crude oil loading documents will be prepared at the Senipah Terminal and when the vessel has been loaded, the documents will be completed and final clearance formalities will be carried out on board.

Procedure for Appointing Agent:

Owner should cable/telex: PERTAMINASHIP JAKARTA.

The cable/telex should appoint Pertamina as Agent to attend the tanker at Senipah and should be sent 7 days prior to vessel's arrival.

The above procedure is applicable to vessels whose Operators do not have a long term agreement with Pertamina.

Flag Dispensation/Agency Permit:

Each foreign tanker entering Indonesia for lifting from Senipah Terminal must have been granted flag dispensation/security clearance prior to entering Indonesian waters.

At the same time application should be made for Provisional Pratique through the Directorate of Quarantine and, if granted, a cable advice is sent to the Harbour Authorities.

Port Health Clearance is issued prior to the tanker's arrival and is also valid for departure clearance. If Provisional Pratique is not granted a Port Health Officer will be provided. All of the foregoing is arranged through and by the General Agent.

It is vital that TOTAL INDONESIE, Jakarta receives the following information by telex 7 days before the vessel's arrival in order to apply for flag dispensation/security clearance through the General Agent.

1. Name and address of owners.
2. Name of Vessel and radio call sign.
3. Flag.
4. D.W.T., G.R.T. and N.R.T. of vessel.
5. Name of Master.
6. Number of Crew.
7. Last foreign port of call and ETD.
8. Consignee.
9. Destination(s) after Loading.
10. ETA at Senipah Terminal.
11. Quantity and grade to be loaded.

FLAGS: In accordance with practice in Indonesian ports, the vessel's national flag, the Indonesian courtesy ensign, quarantine, immigration, pilot and call sign flags must be displayed by all vessels approaching Senipah. These signals shall be displayed continuously until clearance is granted.

The signals are as follows: Sunrise to Sunset: Quarantine Flag "Q" Sunset to Sunrise: Signal lights (red over white).

The "N" flag should be flown until the Immigration Officer boards the ship. The "G" flag should be flown until the Mooring Master boards. The vessel should also fly its call sign (signal letters). This signal may, however, be hauled down after the vessel is secured to the SBM. It must be flown again when the vessel is sailing and kept flying until after the vessel is clear of the anchorage area and the Berthing Master has left. As soon as the Mooring Master boards, the "G" flag should be replaced by the "H" flag. The tanker may fly the "P" flag if it is going to sail within 24 hours.

PILOTAGE: *Procedure when berth is available on arrival.*

A vessel for which the berth is available on arrival will be boarded by a Mooring Master in the anchorage area and, providing that the vessel is in all respects ready to commence loading (except for the necessary deballasting) the notice of readiness will be acknowledged as soon as tendered to the terminal by the Master of the vessel.

If the vessel is not in all respects ready to proceed to the berth, with main engines fully manoeuverable, 6 mooring ropes on forecastle head, windlasses, winches, etc., in good working order and readinesss, it will not be accepted until the Mooring Master is satisfied that all these conditions are met.

The Mooring Master will advise the Master on all manoeuvres to berthing and unberthing and connecting the hoses.

Vessels are requested to make a lee and have an accommodation ladder long enough to reach the Mooring Master's launch.

At night, adequate lighting should be provided.

When Mooring Master boards all mooring and hose equipment will be lifted on board from the mooring launch.

NAVIGATION AIDS:

S.B.M. The S.B.M. has a 360° white light, flashing 6 times per minute, visible for 5 miles under an atmospheric transmissivity of 0.85. This operates from sunset to sunrise.

The floating hose has 3 marker beacons along the string, placed one at every 7 sections of hose. This light is mounted in a vertical position on one of the hose flanges. The 90 mm. lamp has a flashing rate of between 20–60 flashes per minute, and is visible at up to 1,850 m. (1 nautical mile).

Oil platforms: Oil platforms of Bekapai oil field which are situated approximately 17 miles East by North of Senipah SBM, show at night a white light flashing, 2 short and 1 long flash (letter U).

Marking buoys: The submarine pipe-line bringing the oil from Bekapai field to the Terminal, as well as the recommended anchorage area, are intended to be marked in the future.

The buoys to be used for this purpose are presently under study.

ANCHORAGE: If vessels are obliged, or instructed to anchor, they should do so in the recommended anchorage area which is centred at positon: 1° 05′ 29″ S., 117° 15′01″ E. and has a radius of 1 mile. Water depth is between 40 to 45 m. While at anchor they should exercise vigilance and keep in touch with the Terminal by VHF at all times.

Procedure when instructed to anchor on arrival: A vessel which has been instructed by Senipah Terminal to anchor on arrival should, after doing so, inform the Terminal of the precise anchoring time. According to the practice of the Terminal acknowledgement of the Notice of readiness will coincide with this anchoring time, providing:

a) That it is within the hours of daylight – deemed to be from 0600 hrs. local time to 1800 hrs. local time.
b) That it is not a Public Holiday or Sunday, unless the vessel is actually handled on that day.
c) That the Terminal is open.
d) That cargo is available in accordance with accepted loading date.

In addition to clauses (a), (b) and (c), above, vessels will not be accepted when arriving at an unreasonable time ahead of their last advised ETA. It is not the practice of the Terminal to keep Pilots (Mooring Masters) on station in the anchorage area. Senipah Terminal maintains a continuous listening watch on VHF (Channel 16 or 12).

MAX. SIZE:

Minimum size: Minimum size tanker acceptable at the Terminal is 50,000 d.w.t. However, on an exceptional basis, it will be possible to accommodate tankers of 33,000 d.w.t. minimum size.

Maximum size: Maximum size tanker acceptable lifting a full cargo will be 125,000 d.w.t.

Tankers of a larger size may be accommodated in the future, provided that Senipah is their first port of loading and that they load a part cargo only. These limits are at present under study.

Draft requirement on arrival: Vessels arriving at Senipah Marine Terminal should have the following draft:

	d.w.t.	Fore	Aft
Under	60,000	19 ft.	27 ft.
Over	60,000	22 ft.	28 ft.

RADIO: *Advice of Arrival:* 72 hours prior to arrival at the Terminal, vessels should advise the Company of their ETA by cable sent via Pertamina's coastal radio stations at Jakarta/Merak/Balikpapan. They should also confirm or amend them when they are 48 hours, and again when 24 hours, distant from the Terminal.

Total Indonesie cable address: Totalindo Balikpapan. Attention: Senipah Marine Terminal and Totalindo Jakarta. Attention: Shipcoord.

Communication for Contacting Agent: PERTAMINA Jakarta radio/PK12 (owned and operated by PERTAMINA).

Frequency kHz	Hours GMT	Keep Watch kHz
452*	H24	500
8628	0200–0300, 0400–0500, 0700–0800, 1030–1200 1400–1500, 1800–2000, 2200–2300.	8356–8374
12980	0000–0200, 0300–0400, 0500–0700, 0800–1030, 1200–1400, 1500–1800, 2000–2200, 2300–2400.	12534–12561
VHFCh. 9/16/19	0000–1500.	Ch.16

*Call/Reply

PERTAMINA Merak radio/PKQ (owned and operated by PERTAMINA).

Frequency kHz	Hours GMT	Keep Watch kHz
452*	0000–0400, 0800–1000, 1200–1400.	500
8626	0100–0200, 0900–1030, 1500–1600, 2300–2400.	8356–8374
4361.6	0000–0100, 0200–0300, 0800–0900.	2182, 4066 4063 A3J/A3H
6518.6	0300–0400, 1200–1400.	2182, 6204 A3JA3H
VHF Ch.16/19/24/26	H24	Ch.16

*Call/Reply

PERTAMINA Balikpapan radio/PKN2 (owned and operated by PERTAMINA).

Frequency kHz	Hours GMT	Keep Watch kHz
4415	H24	2182
6520	H24	8249 A3J/A3H
VHF Ch.16/19	H24	Ch.16

Note: All messages destined to "PERTAMINASHIP" can be sent to either PK12, PKQ or PKN2.

Details of Cable: The following information should be included in the cable;

1. Name of vessel and radio call sign.
2. ETA and date in local time (GMT plus 8 hours).
3. Cargo requirements.
4. Deballast time.
5. Maximum loading rate.
6. If there is any sickness aboard or clean bill of health.
7. Last port of call.
8. Any hull, bulkhead, valve or pipe-line leaks on vessel which could affect loading or cause pollution.
9. Distance in metres from bow to vessel's loading manifold.
10. Flange dimensions of vessel's manifold connection, if not to ASA series 150 or equivalent.

VHF: Vessels equipped with VHF Radio Telephone should contact terminal on international mobile service Channel 16 (156.80 mc/s) and then communicate on Channel 12 from 0000–2400 hrs. GMT.

Other Channels used are 6–9–19.

The language of the Terminal is English, French, and Indonesian.

BERTHING: The SBM is approximately 6 miles (11.1 km) offshore in approximately 28 m. of water.

The SBM is served by 2 submarine lines of 26 in. diameter. Two strings of 20 in. hose connect the SBM to submarine line header. Two 20 in. floating hose strings reduced to 12 in. are connected to Tanker for loading purposes. Hoses are lifted up and connected individually on port side. For quick connection/disconnection to ships manifold hose ends are fitted with "Camlocks".

Work Crew Service: Mooring, unmooring, lifting, lowering, connecting and disconnecting hoses will be done by ship's crew under the direction of the Mooring Master and assistance of Terminal crew.

Accommodation and meals: The company Mooring/Loading Master and his crew (3 to 4 persons) stay on board the tanker during the time of the operations. Free accommodation and meals of the same standards as those of the Tanker's officers (for the Mooring Master) and of the Tanker crew (for company crew) must be provided.

Tanker's Engines: Being on open roadstead, vessels must keep engines on standby during their stay in berth. No repairs to main engines may be undertaken while in berth.

Only the automatic turning gear should be used. If it should become necessary to turn the propellor(s) at revolutions greater than the minimum obtained by the automatic turning gear, application must be made to the Mooring Master in order to ensure that there is no inconvenience to do so.

The Mooring Master's written permission must be obtained before any such increase in revolutions.

LOADING:

Loading Rate: Maximum loading rate will be nearly 40,000 barrels (6,000 metric tons) per hour. It is recommended that vessels take maximum flow with due regard to safety in order to expedite turn around time as well as to provide ballast as quickly as possible.

Care should be taken not to overload, as there is no possibility whatever of pumping back to Terminal. When vessels are equipped with permanent ballast tanks, the ballast in these tanks should be retained on board until the vessel has taken on board sufficient cargo to be manoeuvrable. Vessels not so equipped should examine the possibility of safely loading and discharging ballast simultaneously, as such practice improves turn around time as well as reducing the possibility of breaking out of the berth in bad weather in completely light condition.

Hose Lifting Derricks – Deck Winches: Ship booms and deck winches must be capable of operating with a SWL of 5 tons for tankers to be secured to the SBM. Vessels with inadequate hose lifting equipment will be rejected. Power must be kept on deck winches in case adjustments to mooring lines are found to be necessary.

Manifold sizes: The hoses at the terminal are 12 in. in diameter. The minimum size manifold connection acceptable will be 8 in. Terminal is equipped with flanged reducers to connect 8 in. – 10 in. and 16 in. manifolds.

Tanker manifolds should terminate in ASA series 150. Unless terminal is given adequate notice, tankers equipped with other sizes or ratings will be rejected.

Grades of crude oil available: There are 2 grades of Crude Oil available at Senipah Marine Terminal, namely, Bekapai Crude Oil and Handil Crude Oil. Vessels lifting Bekapai Crude are not required to heat the oil during voyage to the discharge port.

Vessels lifting Handil Crude Oil are required to be equipped with heating coils.

It is recommended, as from commencement of loading of Handil Crude, the vessel should endeavour to heat the oil at a temperature of 120°F minimum up until the time the vessel discharges its cargo at the unloading port.

In case a vessel has to load 2 parcels of cargo (i.e. 1 Handil 1 Bekapai), loading must be stopped between the two parcels for line flushing with the second grade of oil.

Outward clearance: A tanker will be considered clear to depart Senipah Terminal when the crude oil loading documents have been delivered to the Master.

Any protests by the Master concerning the quantity of cargo should be made before departure and any resulting investigation should be made before the vessel sails.

BALLAST:

Adequate ballast: Due to the exposed location of the crude oil SBM berth, vessels are required to carry sufficient ballast for safe handling, having due regard to existing weather and sea conditions. A vessel found by the Mooring Master to be not adequately ballasted will be rejected.

Pollution: Owners and Masters are responsible to observe International convention laws and Indonesian Government regulations concerning pollution of the sea, having particular regard for this area of the Macassar Strait.

Clean ballast: As there are no ballast discharging facilities, vessels must arrive at the Terminal with clean ballast, ensuring that all pipe-lines, pumps and strainers have been flushed out prior to arriving.

The Mooring Master will inspect ship's ballast on boarding and has the power to reject any vessel that he deems would cause pollution of the sea area, in which case the vessel must proceed to sea and only when ballast is completely free of oil. Any vessel rejected because of dirty ballast will automatically nullify its notice of readiness and will lose any priority of position for loading. Ballast discharge should not be commenced without the prior agreement of the Mooring Master.

Bilges: Bilges must not be discharged while at the Terminal.

Inspections during loading: At night the sea area around the vessel shall be adequately lighted, as frequent inspection by the Mooring Master will be made during the discharge of ballast. Any pollution, whatsoever, will be cause for rejection. Similarly, any hull leaks causing pollution during loading will be cause for rejection and the vessel will not be reaccepted unless satisfactory evidence of repairs has been certified by a qualified surveyor.

Cargo hose connections should be inspected during loading, drip-pans should be placed under the manifold, all unused cargo connections should be blanked off, sea-valves should be closed and lashed upon completion of deballasting and all scuppers must be securely plugged.

CUSTOMS ALLOWANCE: Cigarettes, cigars, tobacco, matches, spirits, wine, beers, perfume, arms, ammunition and possibly other items have to be locked up under customs seal from time of arrival of ship in port until time of leaving territorial waters. Each person is allowed to bring in 200 cigarettes or the equivalent in grams of tobacco or cigars. Special allowances are made for the Master under special circumstances.

The Customs Officer will seal the stores.

SERVICES: There are no facilities of any kind at Senipah:

There are no engineering repair shops.
No fresh water.
No bunkers available.
No provisions or stores.
No crane or barge service.
No shore leave.
No crew changes.
No consulates available.
No clinic available.

GENERAL:

Floating Logs: Masters are advised to keep careful watch on the approaches for semi-submerged or floating logs which may become hazardous to safe navigation.

AGENCY: Pertamina Shipping Directorate, 32-34, Jalan Jos Sudarso, PO Box 327, Tanjung Priok, Jakarta, Indonesia. Cable address: Pertaminaship Jakarta. Phone numbers: 290312–290322 (11 lines), Ext. 225 and 315 and 425. Telex number: 42885 Jakarta.

Iran

KHARG ISLAND (KHARG TERMINAL):

BERTHING: The Sea Island has been extended to the Northward to create two new berths, 14 and 15.

Berth	*Depth of water (m.)*	*Maximum capacity (d.w.t.)*	*Loading and bunker arms*	*Height limits ship's manifold in metres above chart datum*
14	25.9	300,000	2×16-in. 4×16-in.	6.1 – 28.3
15	27.4	500,000	2×16-in. 4×24-in.	6.1 – 33.5

Loading Arms: Luceat – quick coupling.

Effective Loading Rate: Berth No. 14 – 16,000 t.p.h. Berth No. 15 – 30,000 t.p.h.

SAFETY:

Amendment to Safety Regulations and Safety Inspections.

To keep Safety Regulations and Safety Inspections in line with current world-wide practice, the following new Rules will be put in force immediately.

1. At least 50% of the crew including sufficient senior officers shall be available on board at all times to deal with emergencies.
2. Two dry powder extinguishers plus one fire hose to be available at the manifold at all times.
   Note: This is especially important before connecting lines.
3. Present funnel deck hoses, now only required at inside berths, are now required on all berths including Sea Island.

SHIPMASTER'S REPORT: February 1977:

There are now 4 loading berths on the Sea Island. There are also maximum displacement limits for coming alongside these berths ballasted or with part cargo. On the inside berths the top limit is 175,000 tons and the outside berths it is 250,000 tons displacement. I think these figures are right, but they should be checked.

Also the outside (seaward) berths can supply 16 in. reducers for loading cargo. Both seaward berths have a maximum depth of 106 ft.

For berthing at No. 15, vessel used 10 lines each end – 2 head/stern lines, 4 breasts and 2 springs. The ship is 330,000 d.w.t. We used 4 tugs, 1 each end on the hook and 2 pushing at the side. I feel Mariners could be warned that these tugs have very heavy wires which takes time and plenty of men to handle.

We also found that we needed 3 Crew Lists.

Ships cannot be berthed if the wind is N.W.'ly over 20 knots.

LAVAN ISLAND:

EARLY SAILING PROCEDURE:

Notice to Masters – Early Sailing Procedure:

In order to minimize delays to tankers awaiting official documentation after loading at Lavan Island, an Early Sailing System is now in force.

The following documents are prepared in advance, **except for cargo figures,** and presented by the ship's Agent to the Master for his signature upon the ship's arrival at the loading dock.

(A) Nos...... Originals & Nos...... Copies LAPCO/IMINOCO Bill of Lading.

(B) Nos......Originals & Nos......Copies LAPCO/IMINOCO Certificate of Origin and Cargo Manifest.

(C) Nos......Originals & Nos......Copies LAPCO IMINOCO Tanker Time and Loading Report.

(D) Nos......Originals & Nos...... Copies LAPCO/IMINOCO Report of Cargo and Ship's Ullages.

(E) Masters Receipt for Documents covering both pre-signed and onsite prepared forms.

Documents for Master's use, and for the consignee care of the Master will be retained on board. All other pre-signed documents to be returned by the Agent to the LAPCO Terminal Office.

Official cargo figures will be passed to the Master by radio **within 1 hour** of his departure. Advice of quantities loaded should be inserted by the Master on the 'Bill of Lading' and 'Certificate of Origin' forms as prior indicated.

Hand written copies of items (C) and (D) will be passed to the Master for his reference.

In cases of disagreement on cargo figures, the Master may,

(1) 'Note Protest' by cable or telex.

(2) Authorise the ship's Agent to 'Note Protest' on his behalf.

(3) Pass a written 'Note of Protest' to the Berthing Master who will acknowledge receipt on behalf of the Terminal.

LAPCO appreciates the co-operation of Masters, Owners, Shippers and Consignees in agreeing to implement this system.

SIRRI ISLAND: Approx. 30 miles West of Abu Musa.

Only barge jetties available for discharging barges and to accommodate supply vessel. This so called "Port for Supply Vessels" is located on South-eastern part of the island where the loading terminal will be constructed.

All cargo for Sirri Island consequently has to be discharged onto barges in open-sea and barges towed to above port for discharge.

Stevedores from Sharjah, Dubai and Abu Dhabi allowed to work cargo for Sirri.

Iraq

GENERAL

TANKERS: Please note that as from 1st January 1977 all correspondence, cables, and telexes concerning tankers calling Iraqi terminals to be directed to following addresses.

Postal address; The General Enterprise for Maritime Agencies.
Cable address; Tankers Basrah. Tankers Fao.
Telex No.: 7009.
Telephone No.: 216081.

Cables for arrival should be addressed to both "Tankers" Basrah and "Tankers" Fao.

Japan

SHIMIZU:

SHIPMASTERS REPORT: December 1976.

Vessel 250,000 d.w.t., proceeding to Tonen Sea Berth.

Suggest "End of Passage" about 10–15 miles North of Omea Saki Light. Fairly high density traffic, particularly South of entrance to Suraya Wau.

Suraya Wau can be entered at any time day or night.

Pilot boards 1,500 m. 043° from Fukiai Light.

Deep draft signals to be displayed including the red flashing light.

Berthing/unberthing during daylight hours only.

Four tugs used, all with own lines with eye on the bitts. Vessel berthed port-side alongside heading 016° (T). Moorings used: 4 headlines, 3 breast lines and 2 springs, similar moorings required aft. Excellent shore gangway provided. Loading arms: 4×16-in. Chicksan.

A spill boom is placed around the vessel whilst alongside. Safety and pollution regulations placed onboard on arrival. Tape recording of the Terminal regulations played over the ships P.A. system before discharge commences. The Terminal representatives hold a safety meeting on board prior to discharge with the Master, Chief Engineer and Chief Officer.

Ullaging is witnessed by shore staff, samples and water dips taken.

Shore liberty boat arranged by Agent, journey ashore takes about 15 minutes.

Kuwait

SHUAIBA

AGENT: *Tankers:* See "Mina-al-Ahmadi".

Lebanon

SIDON:

GENERAL:

Berth No. 1 has been taken out of service and all mooring buoys have been removed. The submarine line and the spar buoy are still there.

Both the white and the red seabuoy are missing.

No crude oil has been shipped from the Sidon Terminal since January 1975.

Mexico

PUERTO MADERO: ALSO SEE PAGE 592 IN MAIN TEXT.

SHIPMASTERS REPORT: February 1977.

DOCUMENTS:

10 Spanish Crew List (7 Certified).
12 Passenger List (5 Certified).
6 Store List (6 Certified).
6 Priced Shop List.
6 Cargo Manifest (8 Certified with Bills of Lading for Puerto Madero Cargo).
6 Arrival Reports.
2 Health Part 1 and 2.
2 Crew Customs Manifest.

All the above papers were taken.

Officials: Immigration Officer boarded *with the Pilot,* checked all I.D. Cards and Passports against the Crew List.

15 People boarded on arrival, all in uniforms, i.e. Army, Navy, Police, Quarantine and Port Captain.

All bonded lockers were sealed as well as the beer room. All store rooms were checked.

Meals were provided for 11 people. 2 Customs Guards remained on board at all times, a room is required for them at night.

PILOTAGE: Compulsory. Pilot boards from a large, black hulled launch with a red superstructure, about 0.5 miles off the entrance.

Pilot speaks good English.

APPROACHES: New light structure, painted in red and white bands, and lying 0.3 miles North of entrance is conspicuous from seaward.

This light is expected to be in operation as from mid-February 1977, and will have the characteristics of the old one, lying 1 mile North, viz. Flash every 30 seconds. 2 rubble breakwaters 350 m. apart with red and green lights at their seaward ends are also conspicuous on Radar. All ranges into the port are marked with beacons and lights.

Turning basin is 280 m. in diameter, with a depth of approx. 10 m.

1 tug of 800 h.p. assists berthing, which is difficult. Berthing and unberthing should not be attempted during hours of darkness, nor when sea breeze is so strong as to hinder the attempt, Tidal streams outside the port are influenced by the wind. Tidal information is based on Standard Port of La Union, with a Secondary Port of Champerico, Guatemala, being used for Puerto Madero.

ANCHORAGE: Anchorage may be obtained off the Port S.S.W. of the entrance about 0.5 to 1.5 miles off in mud, good holding ground.

Vessel arrived off the port in late January.

A heavy swell may however be experienced with a passage of a "Tehuantepecer" or of a Tropical Revolving Storm passing far out in the Pacific.

Depths in the roadstead may be between 12 to 16 m.

MAX. SIZE: Max. size of vessel handled LOA 145 m. Beam 22 m. Draft 7.5 m.

RADIO: Advise ETA 48 and 24 hours prior to arrival via any Mexican Coastal station.

TUGS: One tug of 800 h.p. assists in docking and undocking.

BERTHING: One wharf at present in use, of 150 m. length, bulkhead type well fendered, depth alongside 10 m. on completion of dredging programme. Proposal for dredging out another wharf at right angles to the first also of 150 m. length and 10 m. depth, this to take place within the next 2 years.

1 Naval facility wharf in side channel and basin, pier 60 m. in length, depth alongside approx. 5 to 6 m.

Fishing pier also 60 m. long depth alongside 4 to 5 m. No other details known.

Cargo Handling: Ship's Gear, supplemented by 2 conveyor belt systems suitable for cartoned or boxed cargo.

Cranes: None, but mobile tower cranes may be obtained from Tapachula given sufficient notice.

MEDICAL: Medical services available at Tapachula and San Benito, the Hospital will accept seamen.

FRESH WATER: Fresh water laid on to principal pier, approx. delivery 12 t.p.h. Should be treated before drinking.
FUEL: Fuel pipe-line is built below principal wharf, but as yet, January 1977, is not connected to any fuel terminal. Fuel Oil may be obtained by road transport for the time being.
REPAIRS: Only minor repairs at present.
COMMUNICATIONS: Road Service to Tapachula, thence Air Services are readily available to Mexico City, thence to all parts of the world.

Plans are in hand to build a large Airport complex near to Puerto Madero.

No port radio as yet, but future plans call for a Radio Station, and eventually Port Office will have VHF facilities.
SERVICES: Provisions available from Tapachula if notice given. Deratting not available.
CONSULS: There is a British Consul at Tapachula.
AUTHORITY: Empresa de Services Portuarios de Puerto Madero SA de CV.

Netherlands Antilles

BRASIL: (See "Bonaire Terminal" Page 611 of the Main Text).
SHIPMASTERS REPORT: January 1977
Documents:
5 Crew Lists.
3 Stores Lists.
3 Personal Effects Lists.
1 Vaccination List.

Immigration Officer acts on behalf of Quarantine service. State of health on board to be given in 72 hour ETA message.
Services:
Fresh water by truck from Kralendijk and very expensive. Very limited quantities of shipchandlery supplies. No deck or engine stores. Gas, Oil Limited and by drums only. Bunker "C" only. Lube Oil limited to some brands and limited supply by drums. Water and fuel oil chemical treatment available. Radio Holland Service Engineer available. Repair men can be flown in from Curacao. Very limited laundry service. If required at least 4 days notice advisable. Tankers from Mediterranean, Africa and Gulf should give ETA's10 and 5 days as well as 72/48/24 hours, any of which to give arrival draft F & A, number and diameter of connections, any condition affecting loading or discharging, ballast quantity, clean or otherwise and slops quantity, Pilot advised that 10 days longest, so far, that vessel waited off for berth. Have adequate fresh water on board for this contingency.

Berthing: No. 1 Jetty: Least depth alongside 110 ft. Loading/discharging Chiksans 2 × 24 in. and 2 × 12 in. Max. Size 500,000 d.w.t.

No. 2 Jetty: Least depth alongside 60 ft. Loading/Discharging Chiksans 3 × 12 in. Max. size 80,000 d.w.t. Product handled: Crude. Max. pressure; 125 p.s.i.

VHF contact with BOPEC on Channel 16 at 25 miles, then stand-by on Channel 13 for instructions. On berth VHF supplied to maintain shore contact with control who pass messages to Agent at Kralendijk.

Immobilising of engines or transfer of bunkers not permitted on berth.

Port side alongside always.

Nigeria

GENERAL

Documents: The Port Authorities have to be provided with 7 copies of the Cargo Manifest 14 days before the vessel berths, otherwise berthing will not be possible.

In the near future 12 copies of the Cargo Manifest and 5 copies of the Freighted Manifest will be required.

Saudi Arabia

JEDDAH

DOCUMENTS: *Cargo Documents:*

1. All vessels calling at Jeddah Port are, from 1st March, 1977, required to produce 5 copies of Manifest in English and 10 copies in Arabic, together with 2 copies of a complete Cargo Stowage plan and 2 copies of Hazardous Goods List to the Customs Authority Jeddah Port. These documents shall be presented as early as possible as no permission to discharge will be granted until the completeness and accuracy of the documents have been checked.
2. All cargo for Jeddah discharge shall be manifested in the name of the vessel actually carrying the cargo to Jeddah. Where transhipment has taken place the name and port of loading of the original carrier shall be incorporated in the Manifest and the relevant Bill of Lading.
3. All Manifests lodged in the port of Jeddah shall be identical copies of the same Master Manifest. Should supplementary Manifests or corrected Manifests need to be lodged the same number of copies in both languages as the original Manifest shall be produced.
4. In respect of barge carrying vessels the Manifests, Stowage Plans and Hazardous Cargo Lists shall be accompanied by a list stating the registered number of each barge to be off-loaded. This shall be produced prior to the discharge of barges from mother ship.
5. All parties are asked for their co-operation in respect of the depositing of all the above mentioned documents in order that the congestion free situation in Jeddah Port may be maintained.

Sweden

KLINTEHAMN: 57.23 N. 18.11 E.

Harbour is being rebuilt and expected to be ready in Spring 1977. Quay will then be 330 m. and depth 5 m. Depth on entrance 5.5 m.

The most unfavourable winds are South — West. The harbour is however to be considered as good and safe.

Most products are loaded/discharged with mobile cranes.

Documents needed are Nationality Certificate, Bill of Measurement, Passenger List, Crew List, Derat Certificate, Ships and Crew Declaration.

Pilot Station at Visby. Pilots have VHF and operate on Channel 16.

Bunkers and water can be obtained.

United Arab Emirates

PORT RASHID

BERTHING: 4 new berths (Berths No's 20, 21, 22 and 23) are now operational. However, as no sheds are available in these new berths, only vessels with direct delivery cargo will be berthed.

United Kingdom

HOUND POINT: 56.00 N. 03.22 W.

SHIPMASTERS REPORT: MARCH 1977.

Vessel called at Hound Point Terminal for the purpose of loading Forties Crude Oil (North Sea Oil). The terminal is operated by B.P. Position of terminal Lat. 56° 00′ 20″ N., Long. 03° 21′ 45″ W.
DOCUMENTS:
1 Health Declaration.
1 Crew List.
1 Passenger List.
1 Crew's Effects List.
1 Stores List.
All valid Certificates.
Note: Vessels arriving from North European Ports and coastal arrivals need not present Health Declaration.
PILOTAGE: Pilotage in Firth of Forth is compulsory. Contact "Inchkeith Pilot" VHF Channel 16. Pilot boards large vessels in vicinity of Fairway Buoy 56° 03.5′ N., 03° 00′ W. as there is limited depth and manoeuvring space at normal Pilot boarding ground East of Inchkeith.
ANCHORAGE: When vessel has to wait for Pilot, berth or tide, "Forth Navigation Service" will assign anchorage which are numbered "A1" to "A4". These anchorages are in a line E.S.E. to S.W. of Fairway Buoy. Good holding ground at anchorages.
RESTRICTIONS: Vessels will be berthed at slack water — flood or ebb — only. The same accounts in most cases for unberthing.
MAX. SIZE: Vessels up to 300,000 d.w.t. can berth at Hound Point Terminal with no defined restriction on length overall. Vessels berth starboard side alongside, heading east.
HEALTH: Radio pratique not available.
RADIO: *Arrival advice:* For advance notice refer to Charterer's instructions. In our case ETA was given to Agent upon sailing from Rotterdam.
VHF: Hound Point Terminal operates VHF Channel 9; B.P. Grangemouth VHF Channel 16 (calling) and Channel 19.
TUGS: 4 tugs of about 3,000 h.p. each available. Tugs ropes are used.
BERTHING: Hound Point Terminal is a Sea Island in the Firth of Forth about 13 miles from Fairway Buoy. The approach channel from Fairway Buoy to berth is marked by buoys and has a guaranteed min. depth of 66 ft. at LWST.

Maximum of 4 loading arms of 16 in. available for deballasting and/or loading. Loading rate about 8,000 t.p.h. by gravity and with 2 arms connected. This rate decreases as tank level drops.

When 4 arms are connected loading rate can be as high as 18,000 t.p.h. by means of booster pumps.

Facilities to receive any amount of dirty ballast are available. Discharge through 16 in. loading arms into 24 in. line with minimum of 5 kg/sq.cm. back pressure.

No need to prepare ship's derricks unless stores are taken on board. API of cargo about 36.7.

DENSITY: 1020 – 1025.

REPAIRS: Minor repairs available through Leith or Grangemouth.

SERVICES: No fuel, diesel or water available. Doctor/Medical available but advance notice to Agent recommended in order to make appointments. Provisions are available from Edinburgh/Leith and are delivered by launch.

TIME: GMT in Winter. GMT plus 1 hour in Summer.

GENERAL: Outside the Firth of Forth, clear of the land on the South side, streams are weak, spring rate up to 1 knot, but at spring tide the velocity at the terminal is up to 3.5 knots (Refer to Tidal Stream Atlas).

AUTHORITY: Forth Ports Authority, Leith.

SHARPNESS and GLOUCESTER: 51.43 N. 02.29 W.

The Port of Gloucester comprises the wet docks at Sharpness and Gloucester which are connected by a ship canal named "The Gloucester and Berkeley Canal".

PORT LIMITS: Sharpness Dock entrance.

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ship's Report by Master.
1 Home Office Form 1B.6.
1 Stores Lists.
1 Certificate of Deck Cargo Tonnage.
1 Grain Certificate.
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List.
1 Landing Card for each passenger.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate (British ships only).

In addition Manifests and Bills of Lading are usually sent to Agent direct from loading port.

PILOTAGE: Pilotage is compulsory. Masters of vessels bound for the Ports of Gloucester, Sharpness, Chepstow and Lydney requiring the services of a Pilot at the Barry Roads Station must give at least 24 hours of their intended arrival at the Pilot Station. Failure to give this notice could lead to a vessel being delayed. Draft and G.R.T. are also required. Masters who expect their passage time to be less than 24 hours should send advice from their sailing port with gross tonnage, draft, speed and ETA. Masters of vessels bound for Chepstow should also state mast height above the appropriate water line and whether masts can be lowered. (Vertical clearance limited by Bridge to 52 ft. (15.8 m) above M.H.W.S.)

Vessels are boarded at Barry Roads by the Cardiff Pilot Cutter which is equipped with VHF. Radio contact with the Cardiff Pilot Cutter should be made not later than 1 hour before arrival at Breaksea L.V. In fog ships sound "9" (4 longs, 1 short). Pilot replies the same. Masters can send ETA's direct to the Pilotage Agent, Sharpness. Telephone Sharpness 323.

Dock Pilots: Dock Pilots are available, not compulsory but advisable for berthing in Sharpness Dock, transit of the Sharpness Canal and in Gloucester Dock.

ANCHORAGES: Barry Roads afford good anchorage in moderate weather for vessels awaiting a Pilot.

RESTRICTIONS: Three feet water clearance over outer sill for vessels of maximum draft 21 ft. 6 in. Neap tides impose certain restrictions.

Note: The River Severn at Sharpness dries out at low water.

MAX. SIZE: Maximum Length — no restriction. Maximum beam — 55 ft. Maximum draft — 21 ft. 6 ft.

HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either the Port Doctor or an Officer of HM Customs depending on where the ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area and coastal vessels need not present Declaration, but when there is sickness on board Port Health Authority must be informed.

RADIO: Niton Radio, Lands End Radio, Ilfracombe Radio.

RADAR/VHF: No port radar service. Sharpness Radio Channels 16 and 14. Range normally within pilotage waters only.

TUGS: *(River):* Larger vessels normally pick up tugs off Avonmouth if required by Pilot. *(Dock Tugs):* Not suitable for river work. Two tugs available in Sharpness Dock and for use between Sharpness and Gloucester if required. All tugs take ships lines.

BERTHING: Max. draft 21 ft. 6 ins. Fresh Water. Range of dock level 9 in.

Available Berths: 10 to 14 berths depending on ship length. This includes a Container berth and a scrap berth. Available length of Quay — 12,000 ft.

Cargo Equipment and Methods: Cranes 8 × 3-tons, 2 × 6-tons (3 × 6-tons for 1977) all Portal and 1 Scotch Derrick of 32 tons. Grabs, Slings and Pallets, etc. Load/discharge by shore gear.

BULK CARGO FACILITIES: 2 grain silos, 1 floating suction plant, 1 fixed suction plant.

STEVEDORES: British Waterways Board.

MEDICAL: Absolutely necessary for Agent to have as much notice as possible if any medical attention is required. All facilities available.

DENSITY: 1000/1003.

FRESH WATER: Available by stand pipe, 20 t.p.h. at 50 p. per ton (1976).

FUEL: Through Agents, 12 hours notice, most grades available.

FIRE PRECAUTIONS: According to local laws available on request.

CONSULS: See "Bristol"

REPAIRS: All types of deck and engine repairs are possible.

DRY DOCK: 360 ft. by 47 ft. by 14 ft. over blocks.

SURVEYORS: Most Societies are available.

GANGWAY/DECK WATCHMEN: Ships personnel, but watchmen can be arranged if necessary.

HATCHES: Opened by ship's crew.

CUSTOMS ALLOWANCE: Tobacco — Home Trade, equivalent to 0.25 lb. tobacco. Foreign Trade, equivalent to 0.5 lb. tobacco. Wine and/or Spirits — Officer, equivalent of 1 quart of wine per day. Crew, equivalent of 1 bottle of wine in 4 days.

REPATRIATION: All arrangements through Agents.

AIRPORT: London or Birmingham within 2 hours. Local taxi service available.

TIME: BST is GMT plus 1 hour. GMT in winter months.

HOLIDAYS: Easter (varies). Spring Bank Holiday (last Monday in May). August Bank Holiday (varies, usually last Monday in August). Christmas Day (25th December), Boxing Day (26th December). Work can usually be arranged on these holidays although unusual to work 25th/26th December.

POLICE/AMBULANCE/FIRE: Telephone 999 ask for service required.

TELEPHONE: No ship to shore connection. Public telephone kiosks available.

SERVICES: Taxi. Laundry. Ship chandlery.

SHORE LEAVE: Possible.

IDENTIFICATION CARDS: Not necessary unless being repatriated.

REGULATIONS: British Waterways Board Byelaws 1962.

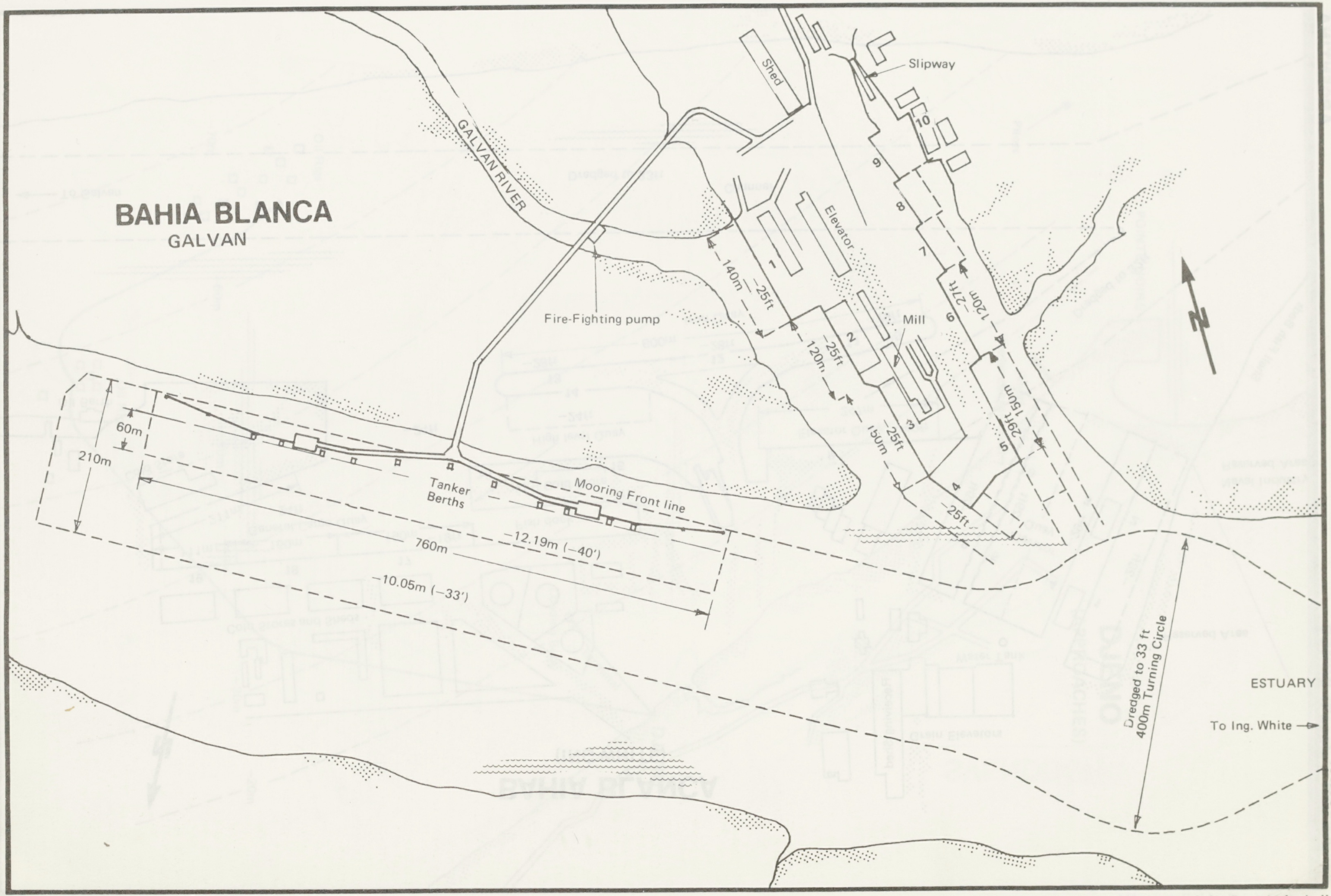
GENERAL:

Gloucester and Berkeley Canal and Gloucester Dock:

Maximum size of Vessel: Length 190 ft. Beam 29 ft. 6 in. draft 11 ft. 6 ins.

BRIDGES: 16 swing bridges between Sharpness and Gloucester. No mast height restrictions.

AUTHORITY: British Waterways Board, Dock Office, Sharpness.


BAHIA BLANCA
GALVAN
GALVAN RIVER
Shed
Slipway
10
9
8
7
6
5
4
3
2
1
Elevator
Mill
140m
−25ft
120m
−25ft
160m
−25ft
120m
−27ft
150m
−29ft
−25ft
Fire-Fighting pump
N
60m
210m
Tanker Berths
Mooring Front line
760m
−12.19m (−40′)
−10.05m (−33′)
Dredged to 33 ft
400m Turning Circle
ESTUARY
To Ing. White

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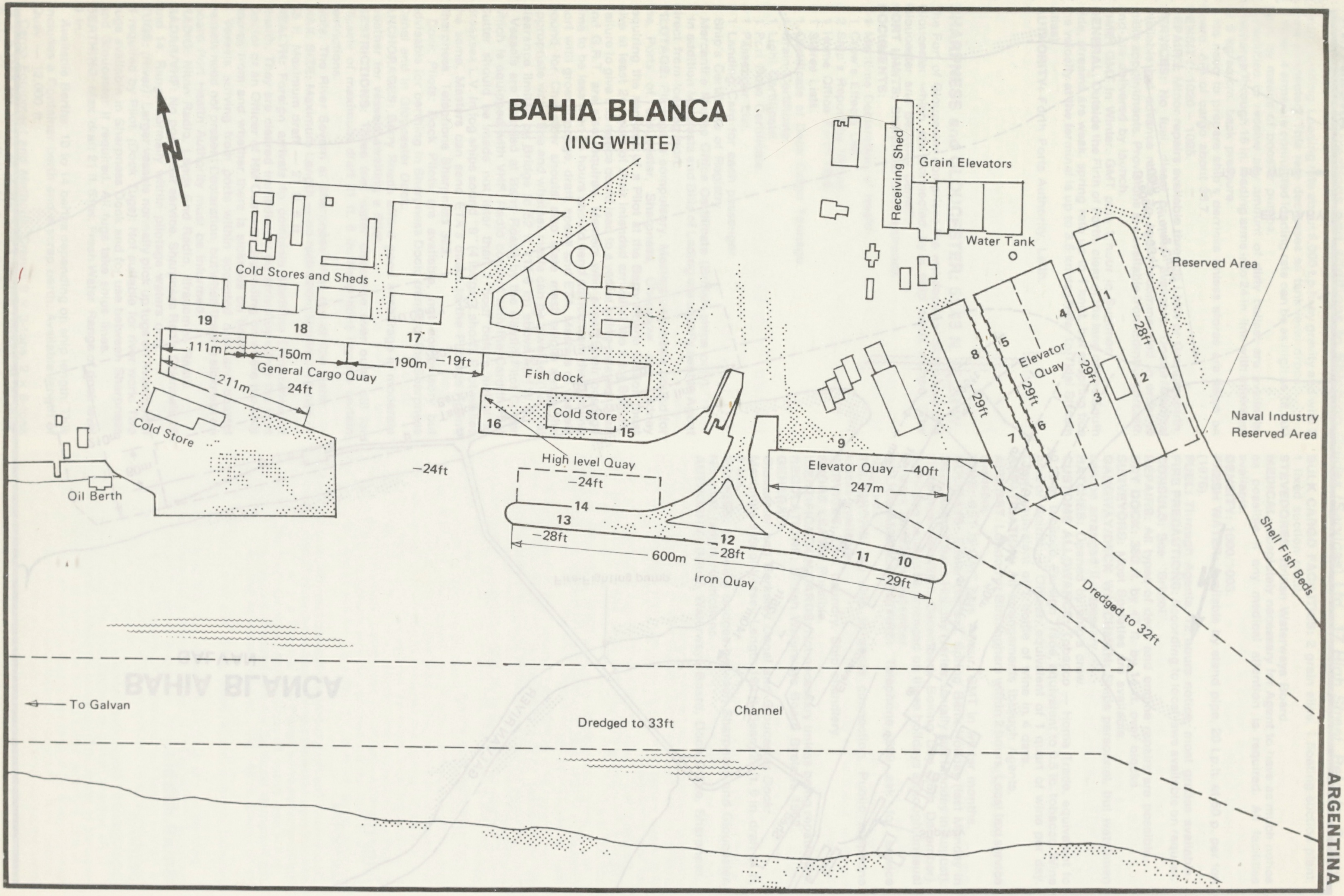
BAHIA BLANCA
(ING WHITE)
N
Receiving Shed
Grain Elevators
Water Tank
Reserved Area
Cold Stores and Sheds
19
18
17
111m
150m
190m
–19ft
General Cargo Quay
Fish dock
211m
24ft
Cold Store
Cold Store
16
15
High level Quay
–24ft
–24ft
14
13
–28ft
600m
12
–28ft
Iron Quay
11
10
–29ft
9
Elevator Quay
–40ft
247m
1
2
3
4
5
6
7
8
–28ft
–29ft
–29ft
–29ft
Elevator Quay
Naval Industry Reserved Area
Shell Fish Beds
Dredged to 32ft
Oil Berth
To Galvan
Dredged to 33ft
Channel

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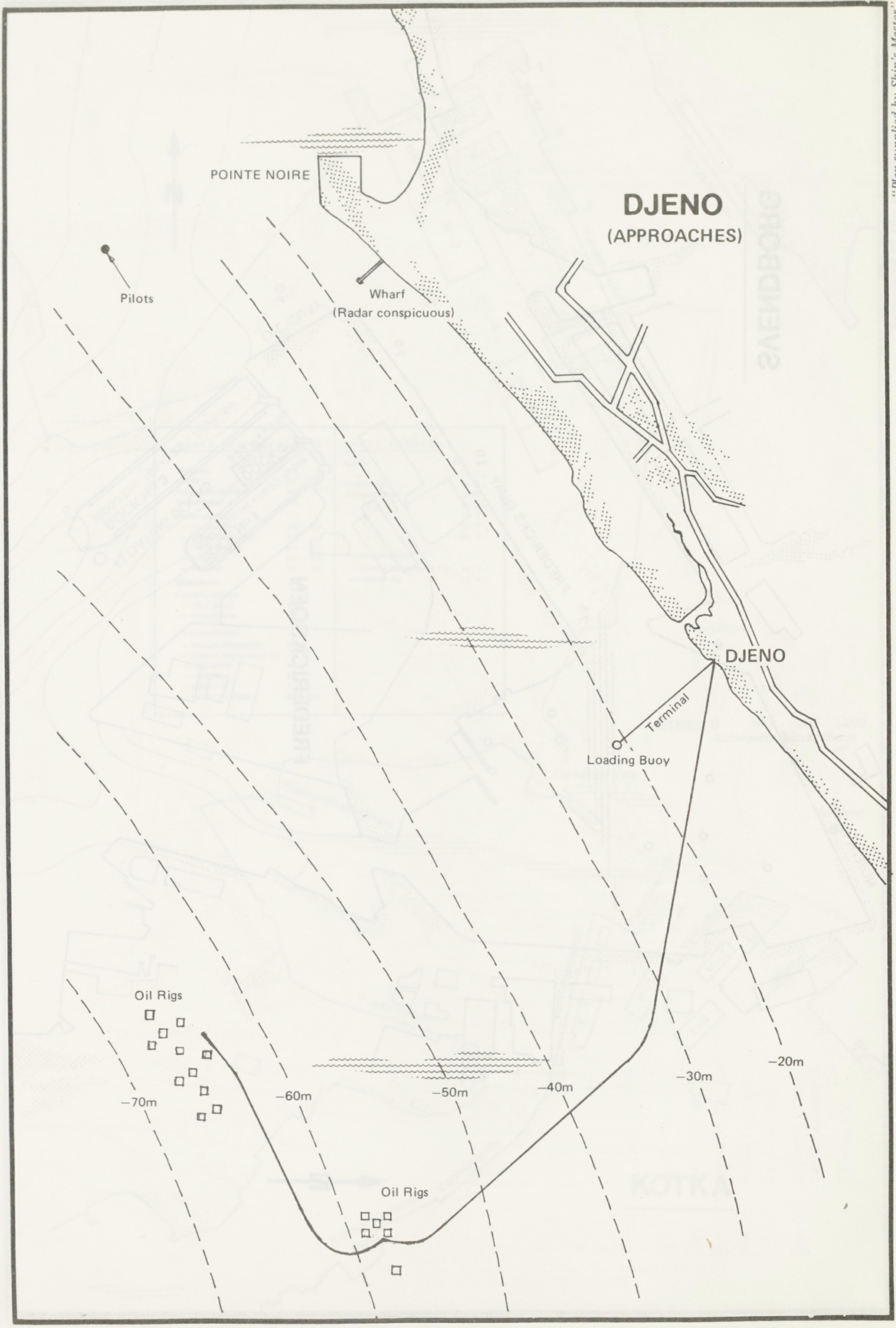
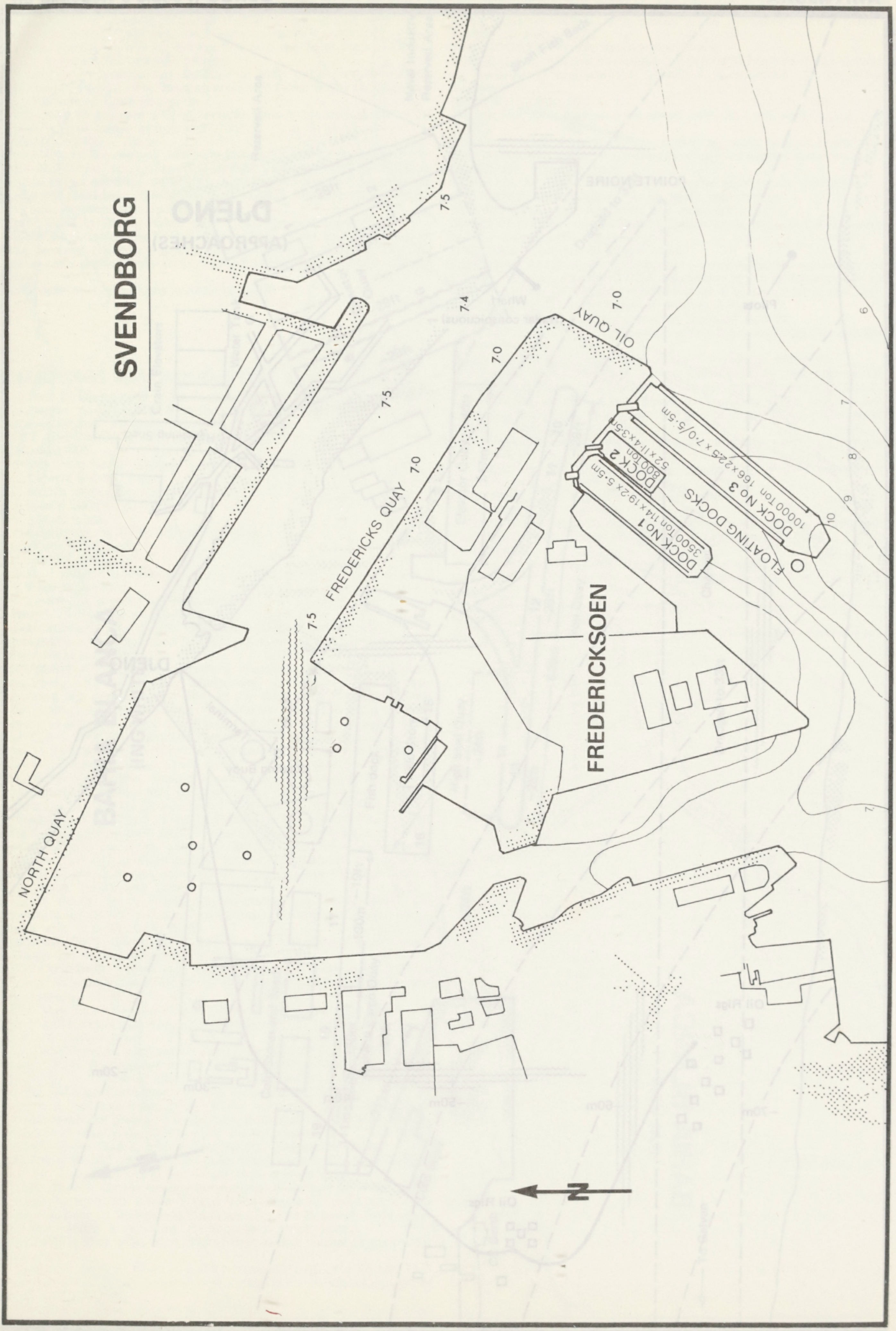

DJENO
(APPROACHES)
POINTE NOIRE
Pilots
Wharf
(Radar conspicuous)
DJENO
Terminal
Loading Buoy
Oil Rigs
Oil Rigs
–70m
–60m
–50m
–40m
–30m
–20m

"Plan supplied by Ship's Master"


SVENDBORG
NORTH QUAY
FREDERICKS QUAY
OIL QUAY
FREDERICKSOEN
FLOATING DOCKS
DOCK No 1
3500 Ton 114x19·2x5·5m
DOCK 2
800 Ton
52x11.4x3.5m
DOCK No 3
10000 Ton 166x22.5x7.0/5.5m
7·5
7·5
7·0
7·5
7·0
7·4
7·0
7·5
6
7
8
9
10
7
N

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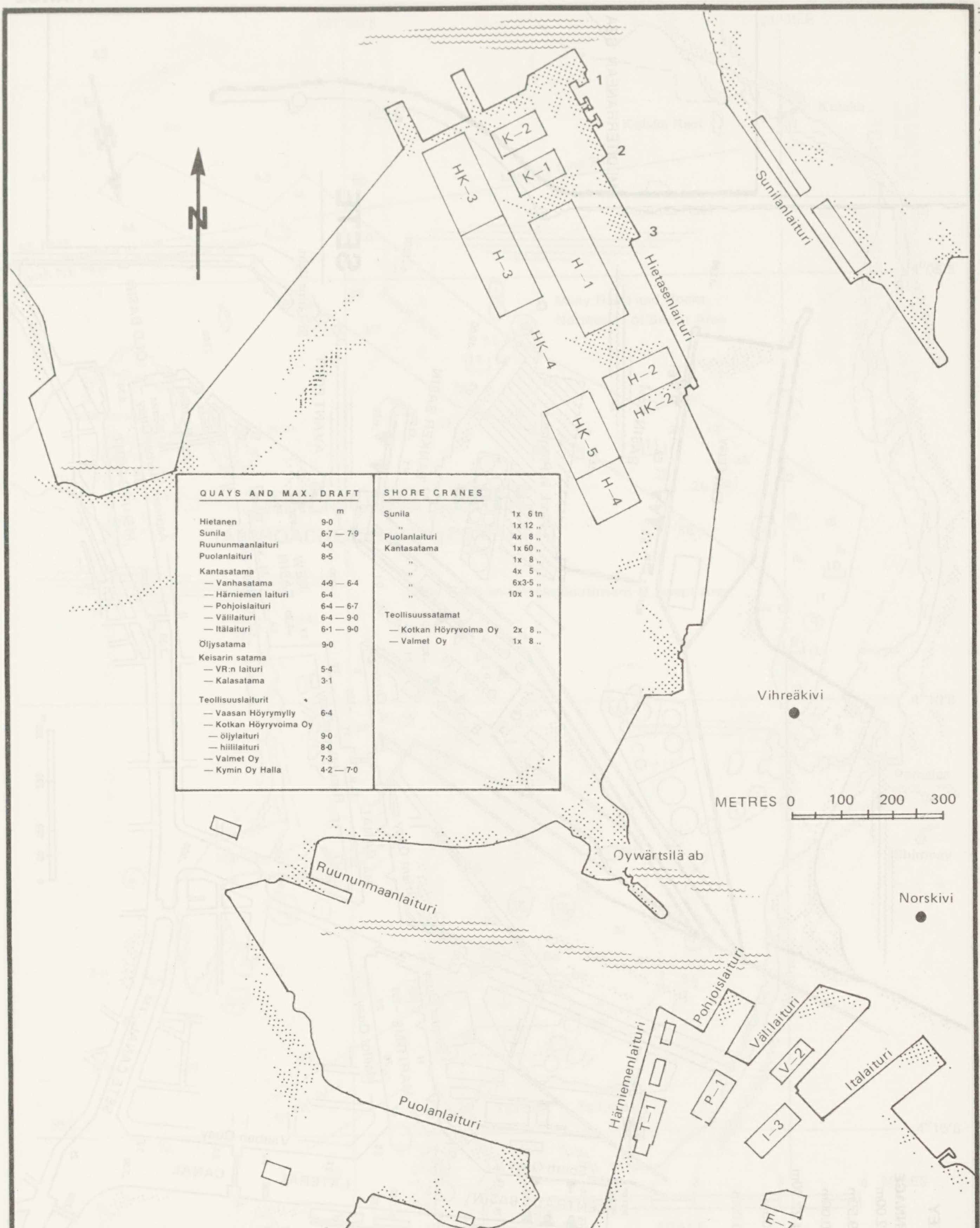
1
2
3
K–2
K–1
HK–3
H–3
H–1
HK–4
H–2
HK–2
HK–5
H–4
N
Hietasenlaituri
Sunilanlaituri
Vihreäkivi
METRES 0 100 200 300
Oywärtsilä ab
Norskivi
Ruununmaanlaituri
Pohjoislaituri
Välilaituri
V–2
Härniemenlaituri
P–1
T–1
I–3
Italaituri
E–7
Puolanlaituri
Vanhasatama
Kalarannanlaituri

KOTKA

QUAYS AND MAX. DRAFT	m
Hietanen	9·0
Sunila	6·7 — 7·9
Ruununmaanlaituri	4·0
Puolanlaituri	8·5
Kantasatama	
— Vanhasatama	4·9 — 6·4
— Härniemen laituri	6·4
— Pohjoislaituri	6·4 — 6·7
— Välilaituri	6·4 — 9·0
— Itälaituri	6·1 — 9·0
Öljysatama	9·0
Keisarin satama	
— VR:n laituri	5·4
— Kalasatama	3·1
Teollisuuslaiturit	
— Vaasan Höyrymylly	6·4
— Kotkan Höyryvoima Oy	
— öljylaituri	9·0
— hiililaituri	8·0
— Valmet Oy	7·3
— Kymin Oy Halla	4·2 — 7·0

SHORE CRANES	
Sunila	1x 6 tn
,,	1x 12 ,,
Puolanlaituri	4x 8 ,,
Kantasatama	1x 60 ,,
,,	1x 8 ,,
,,	4x 5 ,,
,,	6x3·5 ,,
,,	10x 3 ,,
Teollisuussatamat	
— Kotkan Höyryvoima Oy	2x 8 ,,
— Valmet Oy	1x 8 ,,

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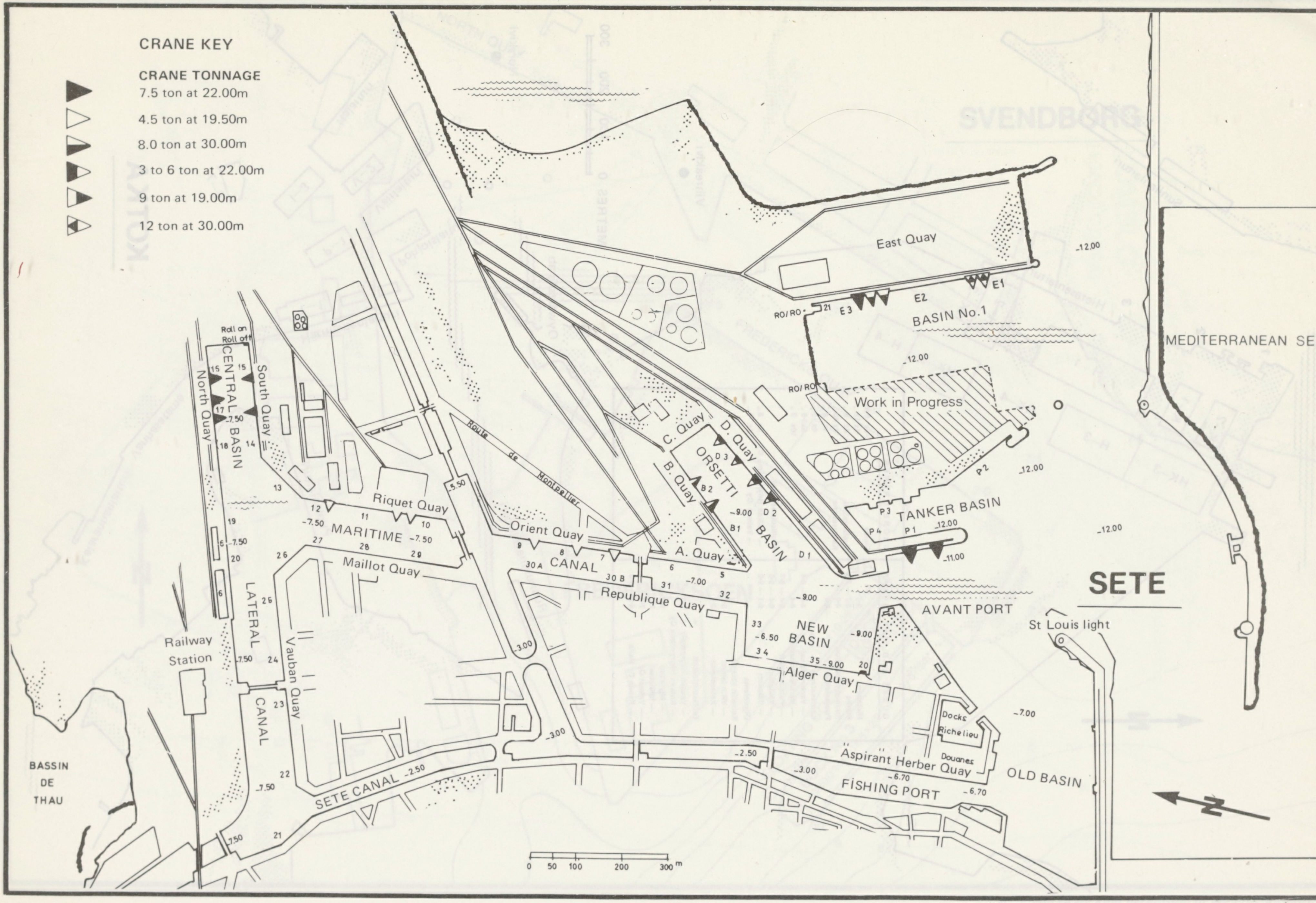
CRANE KEY
CRANE TONNAGE
7.5 ton at 22.00m
4.5 ton at 19.50m
8.0 ton at 30.00m
3 to 6 ton at 22.00m
9 ton at 19.00m
12 ton at 30.00m
East Quay
E1
E2
E3
RO/RO
21
BASIN No.1
-12.00
MEDITERRANEAN SEA
Work in Progress
C. Quay
D. Quay
D 3
ORSETTI
B. Quay
B 2
D 2
-9.00
B 1
BASIN
D 1
P 2
P 3
P 4
P 1
TANKER BASIN
-11.00
A. Quay
5
Roll on
Roll off
CENTRAL BASIN
North Quay
South Quay
15
17
18
14
-7.50
13
12
Riquet Quay
11
10
MARITIME
27
28
29
26
Maillot Quay
Route de Montpellier
-5.50
Orient Quay
9
8
7
30 A
CANAL
30 B
6
31
-7.00
32
Republique Quay
SETE
AVANT PORT
St Louis light
NEW BASIN
33
-6.50
34
35
20
Alger Quay
19
20
LATERAL
25
Railway Station
24
Vauban Quay
23
CANAL
-3.00
Docks
Richelieu
Douanes
-2.50
Aspirant Herber Quay
OLD BASIN
FISHING PORT
-6.70
BASSIN DE THAU
22
SETE CANAL
21
0
50
100
200
300 m

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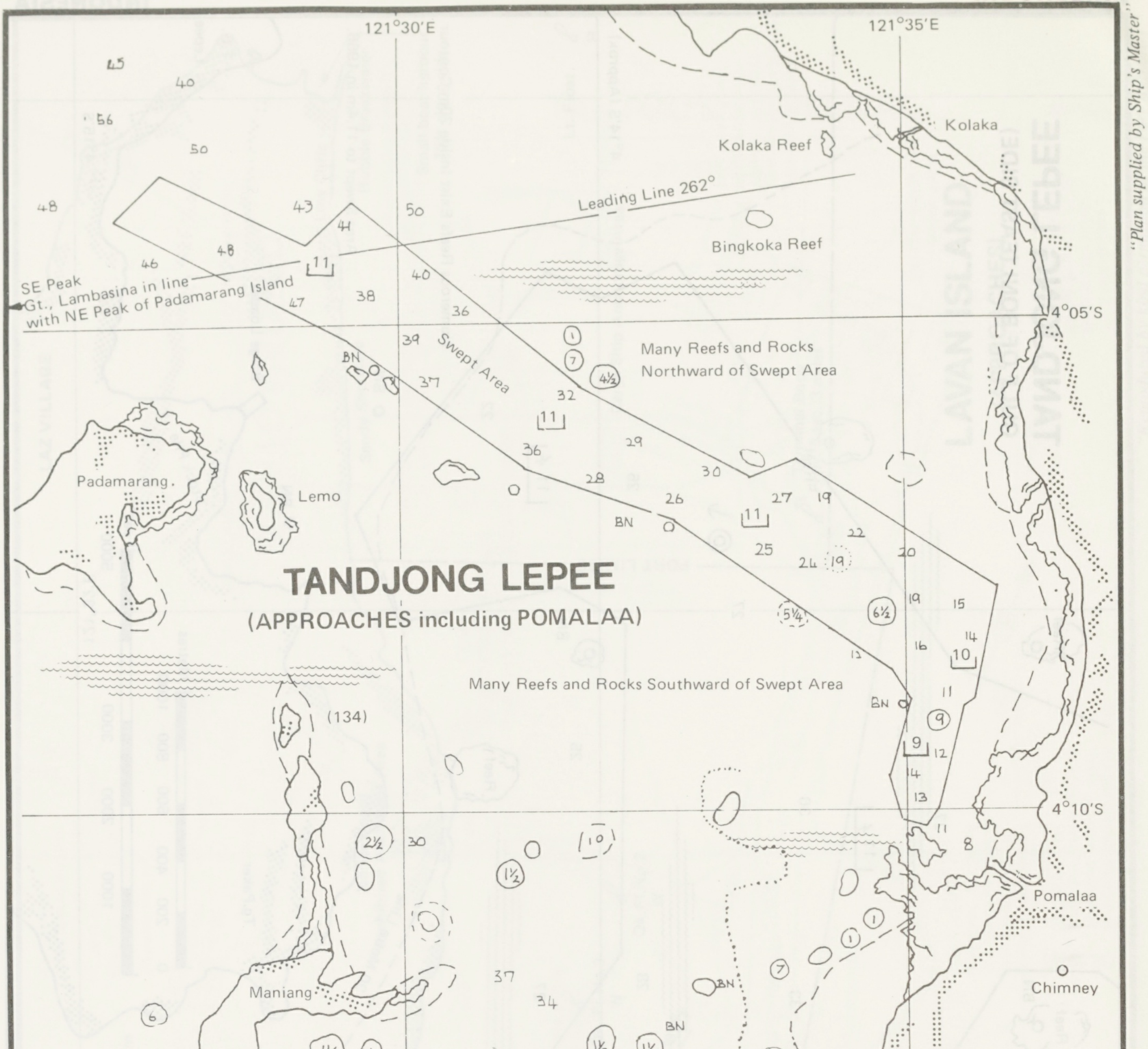


TANDJONG LEPEE

(APPROACHES including POMALAA)

121°30'E
121°35'E
4°05'S
4°10'S
4°15'S
Kolaka
Kolaka Reef
Bingkoka Reef
Leading Line 262°
SE Peak Gt., Lambasina in line with NE Peak of Padamarang Island
Many Reefs and Rocks Northward of Swept Area
Swept Area
Padamarang.
Lemo
Many Reefs and Rocks Southward of Swept Area
(134)
Maniang
Pomalaa
Chimney
Tg.Pakar
Tg.Lepee
BN
0
1
2
3
4 MILES
SCALE

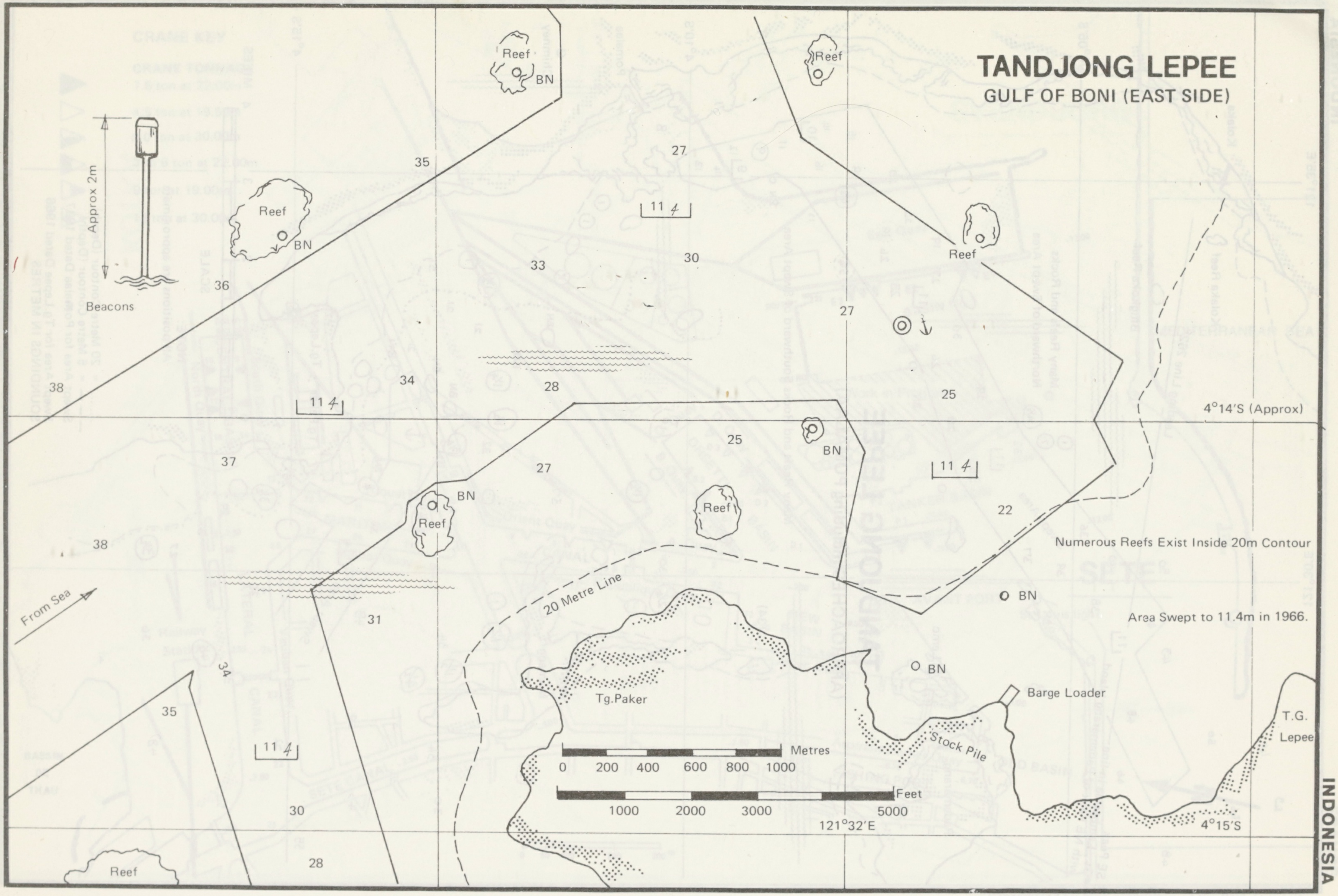
NOTE:
All positions are approximate

.... = 20 Metre Contour (Depth)
– – – = 5 Metre Contour (Depth)
Swept Area for Pomalaa Dated 1937
Swept Area for Tg.Lepee Dated 1966
SOUNDINGS IN METRES

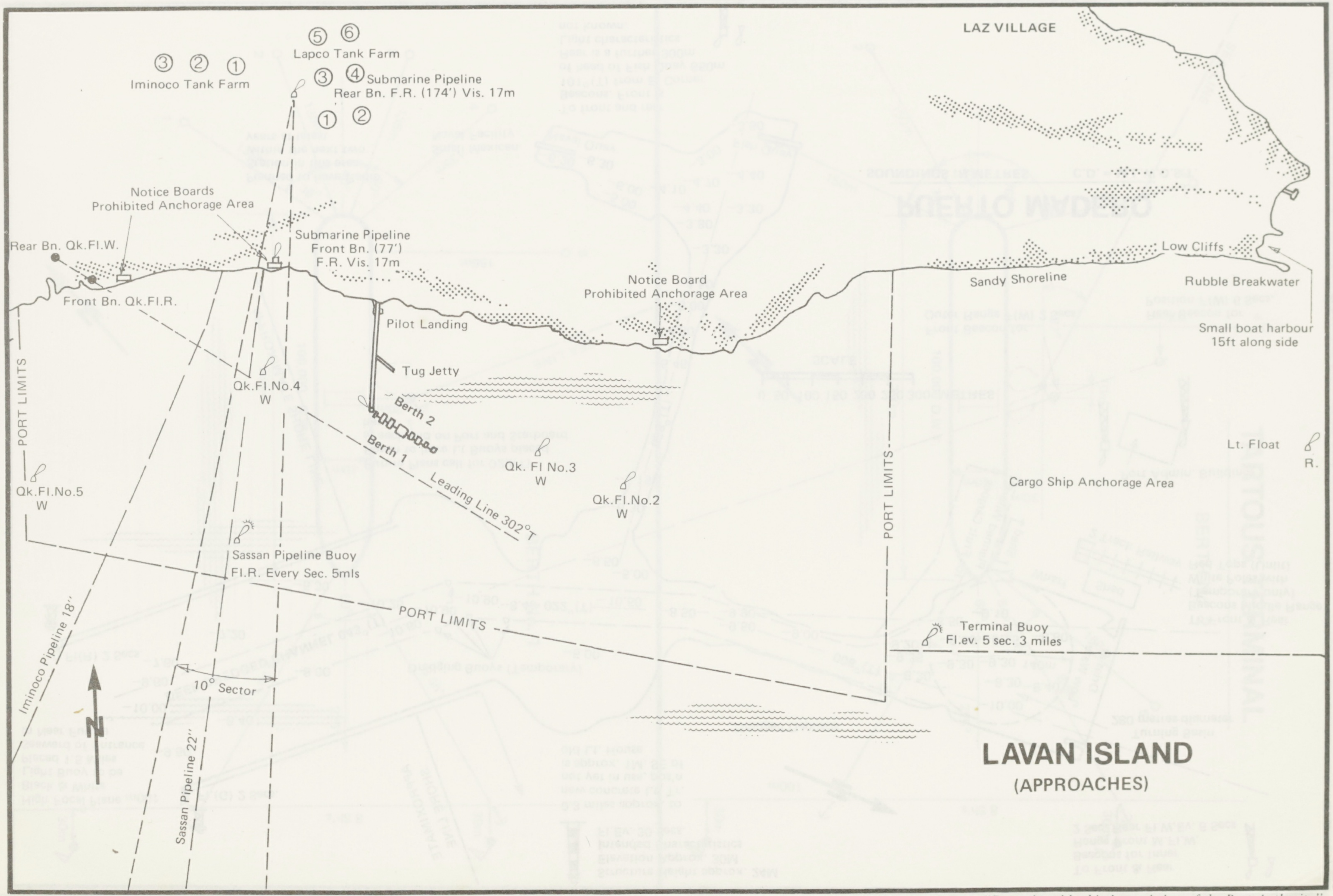
"Plan supplied by Ship's Master"

TANDJONG LEPEE

GULF OF BONI (EAST SIDE)


Approx 2m
Beacons
Reef
BN
35
36
38
37
34
33
30
27
28
25
22
31
30
28
11 4
From Sea
20 Metre Line
Tg.Paker
Stock Pile
Barge Loader
T.G. Lepee
4°14'S (Approx)
4°15'S
121°32'E
Numerous Reefs Exist Inside 20m Contour
Area Swept to 11.4m in 1966.
Metres
0
200
400
600
800
1000
Feet
1000
2000
3000
5000

"Plan supplied by Ship's Master"


LAZ VILLAGE
⑤ ⑥
Lapco Tank Farm
③ ② ①
Iminoco Tank Farm
③ ④
Submarine Pipeline
Rear Bn. F.R. (174') Vis. 17m
① ②
Notice Boards
Prohibited Anchorage Area
Submarine Pipeline
Front Bn. (77')
F.R. Vis. 17m
Rear Bn. Qk.Fl.W.
Front Bn. Qk.Fl.R.
Notice Board
Prohibited Anchorage Area
Low Cliffs
Sandy Shoreline
Rubble Breakwater
Small boat harbour
15ft along side
Pilot Landing
Tug Jetty
Qk.Fl.No.4
W
Berth 2
Berth 1
Leading Line 302°T
Qk.Fl No.3
W
Qk.Fl.No.2
W
Lt. Float
R.
Cargo Ship Anchorage Area
PORT LIMITS
PORT LIMITS
PORT LIMITS
Qk.Fl.No.5
W
Sassan Pipeline Buoy
Fl.R. Every Sec. 5mls
Terminal Buoy
Fl.ev. 5 sec. 3 miles
10° Sector
Iminoco Pipeline 18"
Sassan Pipeline 22"
N

LAVAN ISLAND
(APPROACHES)

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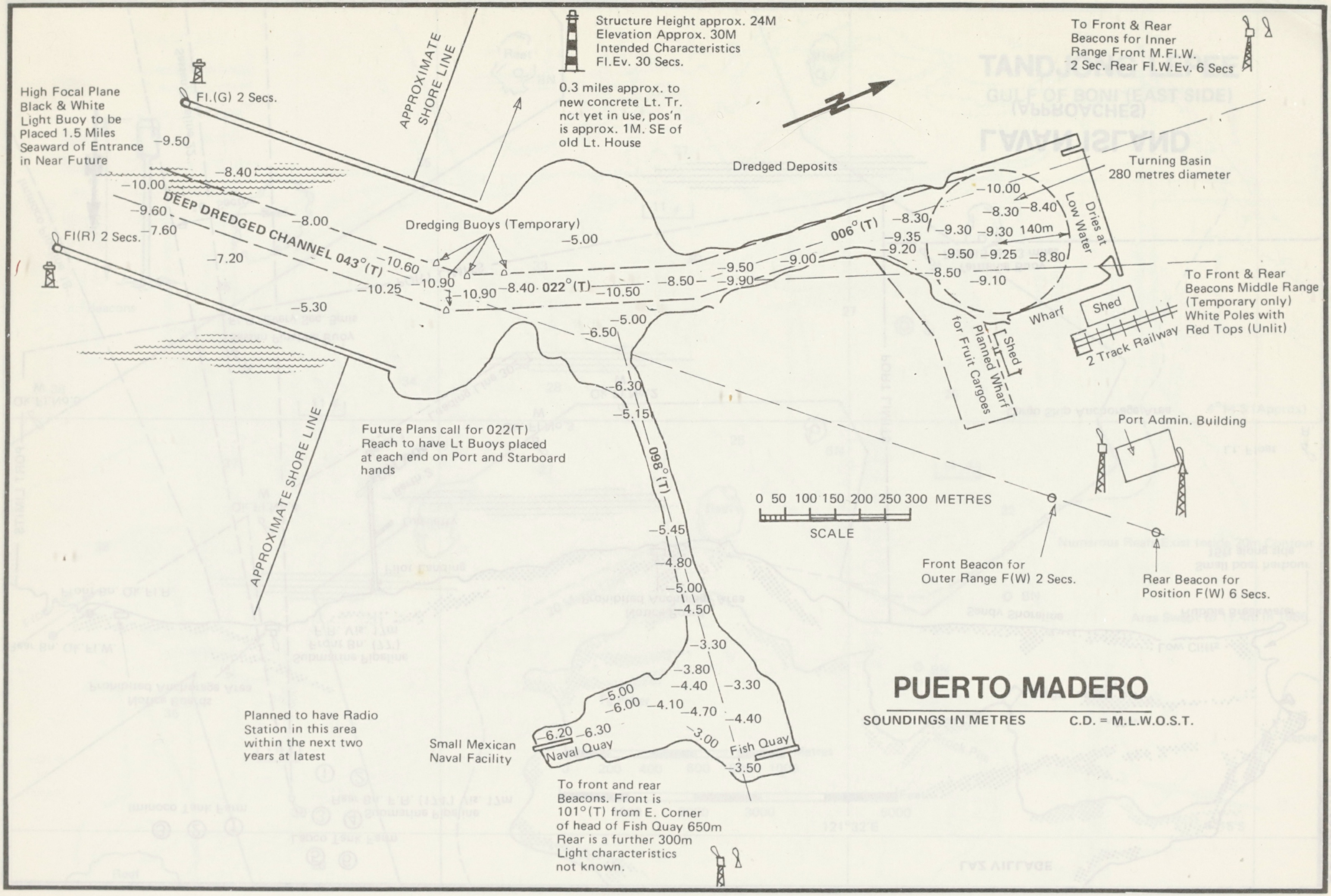
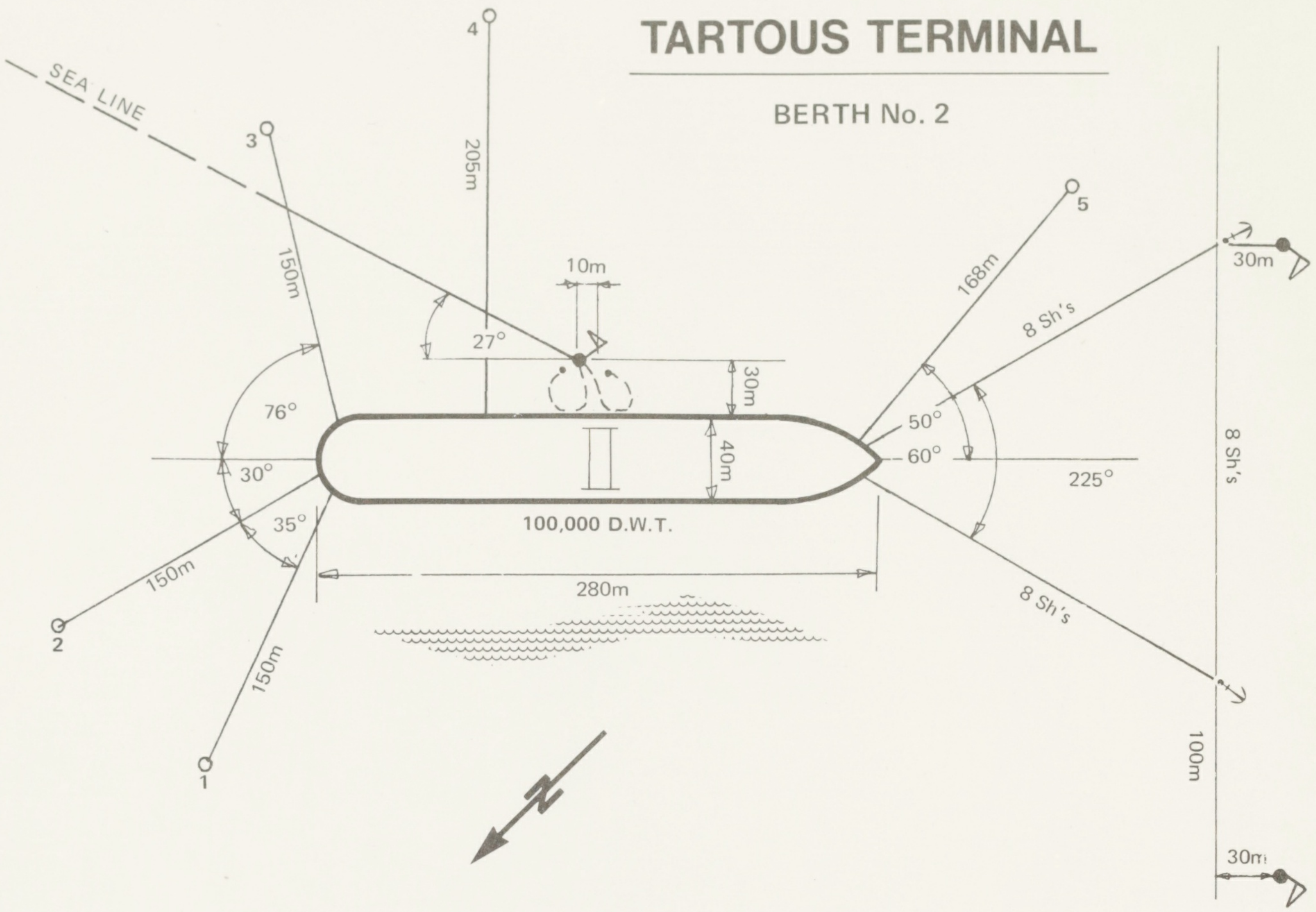
IRAN


PUERTO MADERO
SOUNDINGS IN METRES
C.D. = M.L.W.O.S.T.
Structure Height approx. 24M
Elevation Approx. 30M
Intended Characteristics
Fl.Ev. 30 Secs.
0.3 miles approx. to new concrete Lt. Tr. not yet in use, pos'n is approx. 1M. SE of old Lt. House
To Front & Rear Beacons for Inner Range Front M.Fl.W. 2 Sec. Rear Fl.W.Ev. 6 Secs
High Focal Plane Black & White Light Buoy to be Placed 1.5 Miles Seaward of Entrance in Near Future
Fl.(G) 2 Secs.
Fl(R) 2 Secs.
APPROXIMATE SHORE LINE
APPROXIMATE SHORE LINE
Dredged Deposits
Turning Basin 280 metres diameter
DEEP DREDGED CHANNEL 043° (T)
Dredging Buoys (Temporary)
022° (T)
006° (T)
098° (T)
140m
Dries at Low Water
Wharf
Shed
Shed
2 Track Railway
Planned Wharf for Fruit Cargoes
To Front & Rear Beacons Middle Range (Temporary only) White Poles with Red Tops (Unlit)
Port Admin. Building
Future Plans call for 022(T) Reach to have Lt Buoys placed at each end on Port and Starboard hands
0 50 100 150 200 250 300 METRES
SCALE
Front Beacon for Outer Range F(W) 2 Secs.
Rear Beacon for Position F(W) 6 Secs.
Planned to have Radio Station in this area within the next two years at latest
Small Mexican Naval Facility
Naval Quay
Fish Quay
To front and rear Beacons. Front is 101°(T) from E. Corner of head of Fish Quay 650m Rear is a further 300m Light characteristics not known.
-9.50
-8.40
-10.00
-9.60
-7.60
-8.00
-7.20
-10.60
-10.90
-10.25
-10.90
-8.40
-10.50
-5.00
-8.50
-9.50
-9.90
-9.00
-5.30
-5.00
-6.50
-10.00
-8.30
-8.40
-8.30
-9.30
-9.30
-9.35
-9.20
-9.50
-9.25
-8.80
-8.50
-9.10
-6.30
-5.15
-5.45
-4.80
-5.00
-4.50
-3.30
-3.80
-4.40
-3.30
-5.00
-6.00
-4.10
-4.70
-4.40
-6.20
-6.30
-3.00
-3.50

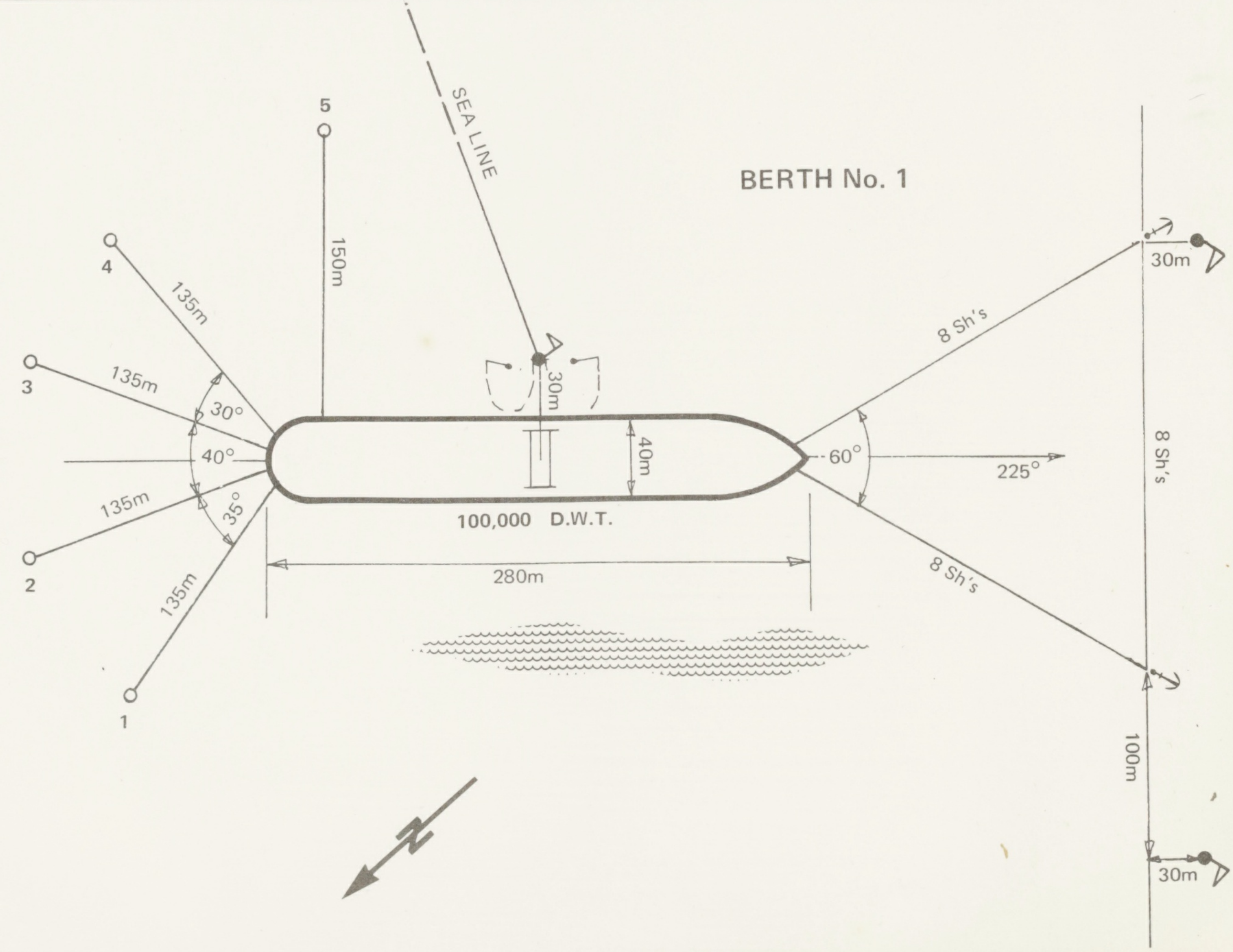
"Plan supplied by Ship's Master"

TARTOUS TERMINAL

BERTH No. 2


SEA LINE
4
205m
3
150m
10m
27°
30m
76°
30°
35°
40m
100,000 D.W.T.
280m
150m
2
150m
1
5
168m
8 Sh's
30m
50°
60°
225°
8 Sh's
8 Sh's
100m
30m

BERTH No. 1


SEA LINE
5
150m
4
135m
3
135m
30°
40°
35°
135m
2
135m
1
30m
40m
100,000 D.W.T.
280m
8 Sh's
30m
60°
225°
8 Sh's
8 Sh's
100m
30m

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